UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended: December 31, 2021

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _______ to ________

Commission file number: 001-36062

Sisecam Resources LP

(Exact name of registrant as specified in its charter)

Delaware	**46-2613366**
(State or other jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

Five Concourse Parkway
Suite 2500
Atlanta, Georgia 30328
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: **(770) 375-2300**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common units representing limited partnership interests	SIRE	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☒	Non-accelerated filer ☐	Smaller reporting company ☐
			Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2). Yes ☐ No ☑

The aggregate market value, as of June 30, 2021, of the common units held by non-affiliates of the registrant, based on the reported closing price of such units on the New York Stock Exchange on such date ($14.50 per common unit), was approximately $75.3 million.

The registrant had 19,788,208 common units and 399,000 general partner units outstanding at March 10, 2022, the most recent practicable date.

Documents Incorporated by Reference: None

SISECAM RESOURCES LP
ANNUAL REPORT ON FORM 10-K
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References in this Annual Report on Form 10-K (“Report”) to the “Partnership,” “SIRE,” “we,” “our,” “us,” or like terms refer to Sisecam Resources LP (formerly known as Ciner Resources LP) and its subsidiary, Sisecam Wyoming LLC (formerly known as Ciner Wyoming LLC), which is the consolidated subsidiary of the Partnership and referred to herein as “Sisecam Wyoming.” Sisecam Chemicals Resources LLC ("Sisecam Chemicals" formerly known as Ciner Resources Corporation) is 60% owned by Sisecam Chemicals USA Inc. ("Sisecam USA") and 40% owned by Ciner Enterprises Inc. References to “our general partner” or “Sisecam GP” refer to Sisecam Resource Partners LLC (formerly known as Ciner Resource Partners LLC), the general partner of Sisecam Resources LP and a direct wholly-owned subsidiary of Sisecam Chemicals Wyoming LLC ("SCW LLC" formerly known as Ciner Wyoming Holding Co.), which is a direct wholly-owned subsidiary of Sisecam Chemicals. Sisecam Chemicals is a 60%-owned subsidiary of Sisecam USA, which is a direct wholly-owned subsidiary of Türkiye Şişe ve Cam Fabrikalari A.Ş, a Turkish corporation ("Şişecam Parent") which is an approximately 51%-owned subsidiary of Turkiye Is Bankasi Turkiye Is Bankasi ("Isbank"). Şişecam Parent is a global company operating in soda ash, chromium chemicals, flat glass, auto glass, glassware glass packaging and glass fiber sectors. Şişecam Parent was founded 86 years ago, is based in Turkey and is one of the largest industrial publicly-listed companies on the Istanbul exchange. With production facilities in four continents and in 14 countries, Sisecam is one of the largest glass and chemicals producers in the world. Ciner Enterprises Inc. is a direct wholly-owned subsidiary of WE Soda Ltd., a U.K. Corporation (“WE Soda”). WE Soda is a direct wholly-owned subsidiary of KEW Soda Ltd., a U.K. corporation (“KEW Soda”), which is a direct wholly-owned subsidiary of Akkan Enerji ve Madencilik Anonim Şirketi (“Akkan”). Akkan is directly and wholly owned by Turgay Ciner, the Chairman of the Ciner Group (“Ciner Group”), a Turkish conglomerate of companies engaged in energy and mining (including soda ash mining), media and shipping markets. All of our soda ash processed is sold to various domestic and international customers.

We include cross references to captions elsewhere in this Report where you can find related additional information. The following table of contents tells you where to find these captions.

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CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This Report contains, and our other public filings and oral and written statements by us and our management may include, statements that constitute “forward-looking statements” within the meaning of the United States securities laws. Forward-looking statements include the information concerning our possible or assumed future results of operations, reserve estimates, business strategies, financing plans, competitive position, potential growth opportunities, potential operating performance, the effects of competition and the effects of future legislation or regulations. Forward-looking statements include all statements that are not historical facts and in some cases may be identified by the use of forward-looking terminology such as the words “believe,” “expect,” “plan,” “intend,” “seek,” “anticipate,” “estimate,” “predict,” “forecast,” “project,” “potential,” “continue,” “may,” “will,” “could,” “should” or the negative of these terms or similar expressions. Examples of forward-looking statements include, but are not limited to, statements concerning cash available for distribution and future distributions, if any, and such distributions are subject to the approval of the board of directors of our general partner and will be based upon circumstances then existing. We have based our forward-looking statements on management’s beliefs and assumptions and on information currently available to us.

Forward-looking statements involve risks, uncertainties and assumptions. You should not put undue reliance on any forward-looking statements. After the date of this Report, we do not have any intention or obligation to update any forward-looking statement, whether as a result of new information or future events, and expressly disclaim any obligation to do so except as required by applicable law.

The risk factors discussed in Item 1A. “Risk Factors” and the factors discussed in Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations” could cause our actual results to differ materially from those expressed in forward-looking statements. These factors should not be construed as exhaustive and there may also be other risks that we are unable to predict at this time. All forward-looking statements included in this Report are expressly accompanied and qualified in their entirety by these cautionary statements.

PART I

Item 1. B*usiness*

Overview

The Partnership was formed in April 2013 by SCW LLC. The Partnership owns a controlling interest comprised of 51.0% membership interest in Sisecam Wyoming, which is one of the largest and lowest cost producers of natural soda ash in the world, serving a global market from our facility in the Green River Basin of Wyoming. Our facility has been in operation for more than 50 years.

The following table sets forth certain operating data regarding our business:

	Year Ended December 31,				
	2021	2020	2019	2018	2017
Operating and Other Data:	(thousands of short tons, except for ratio data)				
Trona ore consumed	4,251.2	3,653.8	4,157.0	4,018.3	4,001.3
Ore to ash ratio[1]	1.56: 1.0	1.60: 1.0	1.51: 1.0	1.54: 1.0	1.50: 1.0
Ore grade[2]	86.3 %	86.6 %	86.6 %	85.8 %	88.4 %
Soda ash volume produced	2,720.5	2,279.3	2,752.0	2,613.4	2,666.9
Soda ash volume sold	2,813.5	2,221.9	2,759.1	2,613.2	2,705.4

(1) Ore to ash ratio expresses the number of short tons of trona ore used to produce one short ton of soda ash and liquor and includes our deca rehydration recovery process. In general, a lower ore to ash ratio results in lower costs and improved efficiency.
(2) Ore grade is the percentage of raw trona ore that is recoverable as soda ash free of impurities. A higher ore grade will produce more soda ash than a lower ore grade.

Trona, a naturally occurring soft mineral, is also known as sodium sesquicarbonate and consists primarily of sodium carbonate, or soda ash, sodium bicarbonate and water. We process trona ore into soda ash, which is an essential raw material in flat glass, container glass, detergents, chemicals, paper and other consumer and industrial products. The vast majority of the world's accessible trona reserves are located in the Green River Basin. According to historical production statistics, approximately 30% of global soda ash is produced by processing trona, with the remainder being produced synthetically through chemical processes. The processing of soda ash from trona is the cheapest manner in which to produce soda ash. The costs associated with procuring the materials needed for synthetic production are greater than the costs associated with mining trona for trona-based production. In addition, trona-based production consumes less energy and produces fewer undesirable by-products than synthetic production.

Our principal executive offices are located at Five Concourse Parkway, Suite 2500, Atlanta, Georgia 30328, and our telephone number is (770) 375-2300. We make available, free of charge on our website at www.ciner.us.com our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the U.S. Securities and Exchange Commission ("SEC"). A hard copy of this annual report on Form 10-K may also be requested free of charge by emailing investorrelations@ciner.us.com.

Our website also includes certain governance documents and policies such as our Code of Conduct, our Supplier Code of Conduct, our Corporate Governance Guidelines, our Internal Reporting and Whistleblower Protection Policy, our Insider Trading Policy and the charters of our Audit Committee and Conflicts Committee. The information on our website, or information about us on any other website, is not incorporated by reference into this Report. The SEC maintains an internet site at www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Change in Control of Sisecam Chemicals

On December 21, 2021, Ciner Enterprises (which was the indirect owner of approximately 74% of the common units in the Partnership and 100% of the general partner), completed the following transactions pursuant to the definitive agreement which Ciner Enterprises entered into with Sisecam USA, a direct subsidiary of Şişecam Parent on November 20, 2021 ("Purchase Agreement"):

- Ciner Enterprises converted Ciner Resources Corporation into Sisecam Chemicals Resources LLC, a Delaware limited liability company ("Sisecam Chemicals"), and Ciner Wyoming Holding Co., a direct wholly-owned subsidiary of Sisecam Chemicals, into Sisecam Chemicals Wyoming LLC ("SCW LLC"), with SCW LLC in turn then directly owning approximately 74% of the common units in the Partnership and 100% of the general partner (collectively, the "Reorganization Transactions");

- subsequent to the Reorganization Transactions, Ciner Enterprises sold to Sisecam USA, and Sisecam USA purchased, 60% of the outstanding units of Sisecam Chemicals owned by Ciner Enterprises for a purchase price of $300 million (the “Sisecam Chemicals Sale”); and
- at the closing of the Sisecam Chemicals Sale, Sisecam Chemicals, Ciner Enterprises, and Sisecam USA entered into a unitholders and operating agreement (the “Sisecam Chemicals Operating Agreement”) (collectively such transactions, the “CoC Transaction”).

Pursuant to the terms of the Sisecam Chemicals Operating Agreement, Sisecam USA and Ciner Enterprises have a right to designate six directors and four directors, respectively, to the board of directors of Sisecam Chemicals. In addition, the Sisecam Chemicals Operating Agreement provides that (i) the board of directors of the general partner (the “MLP Board”) shall consist of six designees from Sisecam USA, two designees from Ciner Enterprises and three independent directors for as long as the general partner is legally required to appoint such independent directors and (ii) the Partnership’s right to appoint four managers to the board of managers of Sisecam Wyoming (the “Wyoming Board”) shall be comprised of three designees from Sisecam USA and one designee from Ciner Enterprises. Each of Sisecam USA and Ciner Enterprises shall vote all units over which such unitholder has voting control in Sisecam Chemicals to elect to the board of directors any individual designated by Sisecam USA and Ciner Enterprises. The Sisecam Chemicals Operating Agreement also requires the board of directors of Sisecam Chemicals to unanimously approve certain actions and commitments, including without limitation taking any action that would have an adverse effect on the master limited partnership status of the Partnership or any of its subsidiaries. As a result of Sisecam USA’s and Ciner Enterprise’s respective interests in Sisecam Chemicals and their respective rights under the Sisecam Chemicals Operating Agreement, each of Ciner Enterprises and Sisecam USA and their respective beneficial owners may be deemed to share beneficial ownership of the approximate 2% general partner interest in the Partnership and approximately 74% of the common units in the Partnership owned directly by SCW LLC and indirectly by Sisecam Chemicals as parent entity of SCW LLC.

Our Competitive Strengths

We believe that the following competitive strengths better enable us to execute our business strategies and to achieve our objective of generating and growing cash available for distribution to our unitholders:

Safety Is a Value and the Most Important Part of Our Business. We pride ourselves on our safety record, and we are continually one of the leaders in the U.S. mining industry in relation to low incident rates and workplace injuries. We maintain a rigorous safety program, which includes training, site audits and hazard identification. Sisecam Chemicals and its affiliates, our employees and all contractors who operate our assets or work at our facility are involved in our safety programs. As a direct result of this commitment, we have achieved many recognitions such as the Sentinels of Safety by the National Mining Association, The Industrial Minerals Association-North America Safety Achievement Award (Large Category) five times, most recently in September of 2021 at the Fall Industrial Minerals Association-North America Conference, Safe Sam Award by the Wyoming Mining Association two times, most recently June 2021, and the Wyoming State Mine Inspector’s Large Mine award multiple times. During the year ended December 31, 2021, our facility had one lost work day injury and three recordable injuries as reported by Mine Safety and Health Administration (“MSHA”). We also boast and support some of the best rescue teams in the country. In 2021, our Mine Rescue team competed in the Southwest Wyoming Mutual Aid competition. With 15 teams in attendance, Sisecam’s Mine Rescue team made a clean sweep of the competition including, overall champion, while also placing first in the field, team tech, bench and first aid competition. There were, however, no surface rescue contests or national mine rescue contests in 2021 due to coronavirus (“COVID-19”).

Cost Advantages of Producing Soda Ash from Trona. We believe that as a producer of soda ash from trona, we have a significant competitive advantage compared to the synthetically produced soda ash manufactured in other parts of the world. The manufacturing and processing costs for producing soda ash from trona are lower than other manufacturing techniques partly because the costs associated with procuring the materials needed for synthetic production are greater than the costs associated with mining trona for trona-based production. In addition, trona-based production consumes less energy and produces fewer undesirable by-products than synthetic production. We believe the average cost of production per short ton of soda ash (before freight and logistics costs) from trona, directly in relationship with the production methods, has a significant cost advantage when compared to synthetic production. In addition, synthetic producers of soda ash incur additional costs associated with storing or disposing of, or attempting to resell, the by-products the synthetic processes produce. Even after taking into account the higher freight costs associated with our soda ash exports, we believe we can be cost competitive with synthetic soda ash operations in most parts of the world, which are typically located closer to customers than we are. Today, we estimate that roughly 30% of global production is produced from trona-based sources, while the remainder is produced using various synthetic methods.

Synergies created from Ciner Group and Sisecam Group. The Partnership is partly owned indirectly by the Ciner Group, which is one of the largest global producers of natural soda ash derived from trona-based sources. We are one of the lowest cost producers of soda ash in the global market that has historically seen demand for soda ash exceed supply of soda ash. In addition, Şişecam Parent and its subsidiaries (the “Sisecam Group”) and the Ciner Group (collectively “Sponsors”), have international logistics experience and operating assets that assist the Partnership. As previously discussed and disclosed in the later sections of this Form 10-K, Sisecam Chemicals terminated its ANSAC membership at the end of day on December 31, 2020 to improve access to customers and gain control over placement of its sales in the international marketplace. As of January 1, 2021, Sisecam Chemicals began

managing the Partnership's sales and marketing efforts for exports with the ANSAC exit being complete. With the ability to leverage our Sponsors' logistics expertise and extensive global presence and network, we have adequately replaced these net ANSAC sales.

Sisecam Group has undertaken major efforts to become an international company with its growing production power, reputable brand image, high product quality and value-creating sustainable growth approach. The company is currently one of the world's leading glass and soda ash producers with production operations located in 14 countries on four continents and more than 22,000 employees. Sisecam Group records sales in over 150 countries around the globe.

In 1969, Sisecam Group began producing soda ash and has made significant inroads to expand its investment portfolio in existing and adjacent markets ever since. Today, Sisecam Group has 2.5 million tons of soda production capacity excluding the Partnership. Sisecam Group has more than 50 years of soda production experience and nearly 85 years of industrial mining experience. It also has more than 16 years of cogeneration plant knowledge. Research and development activities conducted by Sisecam Group regarding soda and its derivatives can be utilized in the Partnership, and we believe those efforts could provide a competitive advantage for our U.S. operations. We also believe that the lean operations and continuous improvement activities of Sisecam Group can create synergies and opportunities for further optimization in the U.S.

Sisecam Group has long-standing relationships with many global customers. Sisecam Group generates 70% of its soda revenue, excluding from the Partnership, through international sales. With such extensive access to global soda markets, we believe Sisecam Group will significantly contribute to building and amplifying the sales capabilities of the Partnership. The Partnership’s customer relationships can be expanded by leveraging Sisecam Group’s existing sales networks and customer portfolios, which we believe will facilitate securing and servicing accounts, especially those in the international market.

With its extensive experience in the soda market and technical fields, along with the Sisecam Group’s significant investment history in various forms (e.g., greenfield, joint venture and sole ownership), we believe that Sisecam Group will positively contribute to the U.S. operations.

Substantial Reserve Life from Significant Reserves. Our reserve estimate, as of December 31, 2021, was prepared by Hollberg Professional Group (“HPG”), an independent mining and geological consulting firm. As of December 31, 2021, HPG estimated we had proven and probable reserves of approximately 220.0 million short tons of trona, which is equivalent to 119.1 million short tons of soda ash. Based on our current mining rate of approximately 4.0 million short tons of trona per year, we believe we have enough proven and probable trona reserves to continue mining trona using current methods in excess of 50 years. Please see Item 1, Business, “Summary of Trona Resources and Trona Reserves” and “Risk Factors-Risks Inherent in our Business and Industry - *Our reserve* and resource *data are estimates based on assumptions that may be inaccurate and are based on existing economic and operating conditions that may change in the future, which could materially and adversely affect the quantities and value of our reserves and resources*” for more information.

Certain Operational Advantages Compared to Other U.S. Trona-Based Producers. We believe we have certain operational advantages over other soda ash producers in the Green River Basin due to the operational characteristics of our facilities as described below. These advantages are manifested in our high productivity and efficiency rates.

- *Location of our mining beds and high purity trona.* Our mining beds are located 800 to 1,100 feet below the surface, which is significantly closer to the surface than the mining beds of other operators in the Green River Basin. The relatively shallow depth of our beds compared to other Green River Basin trona mines contributes to favorable ground conditions and improved mining efficiency. We have a competitive advantage because we can mine the trona and roof bolt simultaneously on our continuous miner equipment. In addition, the trona in our mining beds has a higher concentration of soda ash as compared to the trona mined at other locations in the Green River Basin, which is typically imbedded or mixed with greater amounts of halite and other impurities. Our trona ore is generally composed of approximately 80% to 89% pure trona.
- *Advantageous facility layout.* Our surface site includes a high-capacity network of ponds that we use to recapture soda ash lost in processing trona through a process we introduced in 2009 called deca rehydration (“deca”). While other producers in the Green River Basin also utilize deca rehydration, our pond complex enables us to spread deca-saturated water over a large surface area, which facilitates evaporation and access to the resulting deca. Additionally, we can transfer water from one pond to another, a process we call “de-watering,” leaving the first pond dry. De-watering enables us to use front loaders and other hauling equipment to move dry deca from that “de-watered” pond to our processing facility. Other producers in the area instead need to utilize costly dredging techniques to extract deca from their ponds, and the recovered deca is wet, and therefore requires more energy to process than dry deca. Introducing dry deca into our process has also reduced our energy consumption per short ton of soda ash produced. At our current utilization rates, we will deplete our deca supply in 2024. Please read “Risk Factors-Risks Inherent in Our Business and Industry-*Our deca stockpiles will substantially deplete by 2024 and our production rates will decline approximately 200,000 short tons per year if we do not make further investments*” for more information about this process.

  Partly due to these operational advantages over other domestic producers, we believe we have the most efficient soda ash production facility in the Green River Basin both in terms of short tons of soda ash produced per employee and in energy

consumed per short ton of soda ash produced. In 2021, we used approximately 4.0 MMBtus of energy per short ton of soda ash processed, as compared to an average of 5.5 MMBtus of energy for the other three operators in the Green River Basin according to the Wyoming Department of Environmental Quality ("WDEQ") and our internal estimates. For the year ended December 31, 2021, we produced approximately 6,072 short tons of soda ash per employee.

Stable Domestic Customer Relationships. We have more than 70 domestic customers in industries such as flat glass, container glass, detergents, chemicals and other consumer and industrial products. We have long-term relationships with many of our customers due to our competitive pricing, reliable shipping and high-quality soda ash. For the year ended December 31, 2021, the majority of our domestic net sales were made to customers with whom we have done business for over ten years and their contracts are typically for one to three year periods. We believe that these relationships promote more stable cash flows.

Experienced Management and Workforce. Our facility has been in continuous operation for more than 50 years. We are able to build on the collective knowledge gained from our experience during this period to continually improve our operations and introduce innovative processes. In addition, many members of Sisecam Wyoming's senior management team have more than 15 years of relevant industry experience. Our executives lead a highly productive workforce with an average tenure of approximately 12 years. We believe our institutional knowledge, coupled with the relative seniority of our workforce, engenders a strong sense of teamwork and collegiality, which has led to one of the safest and most efficient operations in the industry today.

Our Business Strategies

Our primary business objective is to generate stable cash flows through consistent growth in the production of soda ash, allowing us to make quarterly cash distributions to our common unitholders while growing our business. To achieve our objective, we intend to execute the following key business strategies:

Capitalize on Expected Growth in Demand for Soda Ash. Since 2013, we have invested just over $79.3 million for debottlenecking projects that have improved our annual production capacity by approximately 320,000 tons of soda ash per year. In connection with the CoC Transaction, we believe we have further opportunities to debottleneck our facility and are incorporating several of these in our holistic approach as we further explore whether to proceed with the Green River Expansion Project that, should we decide to proceed, we believe could increase production levels up to approximately 3.5 million tons of soda ash. We believe that as one of the leading low-cost producers of trona-based soda ash, we are well-positioned to capitalize on the expected worldwide growth of soda ash. While consumption of soda ash within the United States is expected to remain relatively flat in the near future, overall worldwide demand for soda ash, based on third-party historical production statistics and estimates, was 62.7 million metric tons (equivalent to approximately 69.1 million short tons) in 2021 and was forecasted to be 66.1 million metric tons (equivalent to approximately 72.9 million short tons) in 2022. The soda ash market is currently projected to recover from slow demand in 2020 due to the COVID-19 pandemic and grow to almost 72.0 million metric tons (equivalent to approximately 79.4 million short tons) in 2026, which represents a compounded annual growth rate of 2.8%. The ANSAC exit allowed Sisecam Chemicals to improve access to customers and gain control over placement of its sales in the international marketplace in 2021. This enhanced view of the global market allows Sisecam Chemicals to better understand supply/demand fundamentals thus allowing better decision making for its business. Sisecam Chemicals continues to optimize its distribution network leveraging strengths of existing distribution partners while expanding as our business requires in certain target areas. Please read "Customers" below for a discussion about our withdrawal from ANSAC.

Continuous Improvement Initiatives to Lower our Operating Expenses and Increase Utilization. We have been building a culture of continuous improvement. For example, several initiatives have been undertaken to reduce our overall costs to produce soda ash and increase the overall output of the facility. In 2021, the Continuous Improvement initiatives were able to transform ideas from employees into multiple projects throughout the site that resulted in an overall savings of approximately $1 million.

Leverage our Sponsors' Capability to Build a Global Soda Ash Brand. Both of our Sponsors' platforms include unique low cost technology, logistics assets including ports and bulk ships, and world class cost competitive production assets geographically located to serve most key markets around the world. In addition, upon Sisecam Chemicals' termination from ANSAC (as discussed further under "Customers" below), Sisecam Chemicals is marketing soda ash directly into international markets that are currently being served by ANSAC and is utilizing the logistics expertise and extensive global presence and network that has already been established by the Sponsors.

Build a Global Soda Ash Brand. Sisecam Chemicals leveraged Ciner Group's distribution network upon the ANSAC exit in 2021. Sisecam Chemicals adapted this model to best serve its own requirements in the target markets of our soda ash sales. Sisecam Chemicals built relationships and established its own reputation as a seller in these markets by negotiating agreements and demonstrating supply capabilities with large and midsize consumers directly selling through distribution. These direct relationships allowed Sisecam Chemicals to establish its customer base for current and future sales.

Maintain Financial Flexibility. We intend to maintain a disciplined financial policy and conservative capital structure by balancing the funding of expansion capital expenditures and acquisitions with internally generated operating cash flows and external

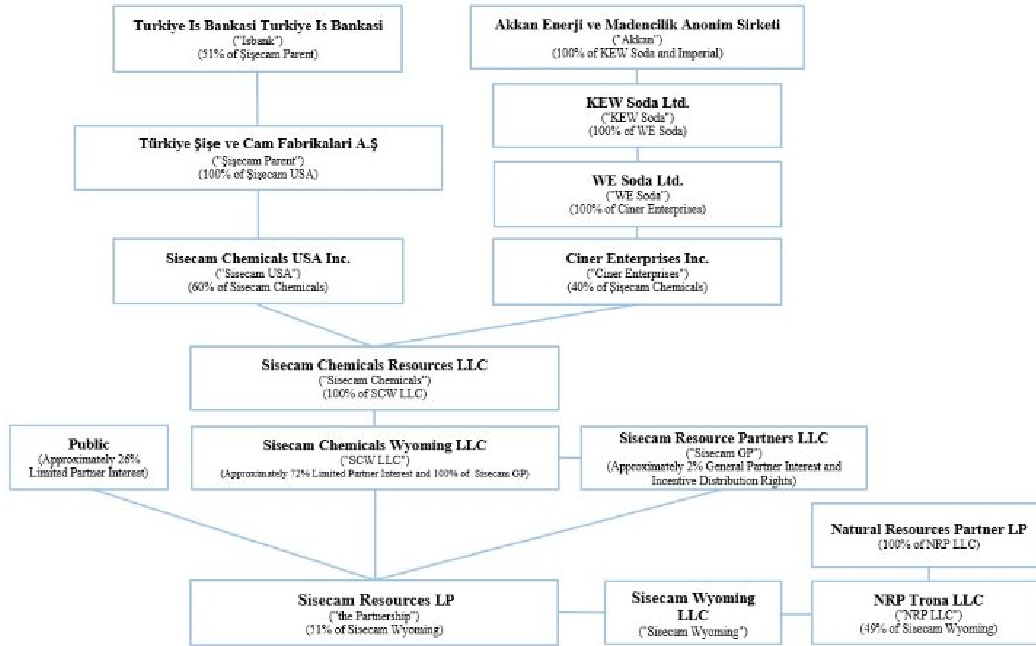
financing sources, including commercial bank borrowings. See Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources - Debt” for additional information.

Expand Operations Strategically. In addition to capacity expansions and process improvements at our current facility, we plan to grow our business through various methods as they become available to us. This would include acquisitions of other businesses that are involved in mining and processing minerals, such as soda ash, and logistics assets that could improve our efficiencies and grow our cash flows. See Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Green River Expansion Project” for additional information.

We can provide no assurance that we will be able to utilize our strengths described above. For further discussion of the risks that we face, see Item 1A, “Risk Factors.”

Our Organizational Structure

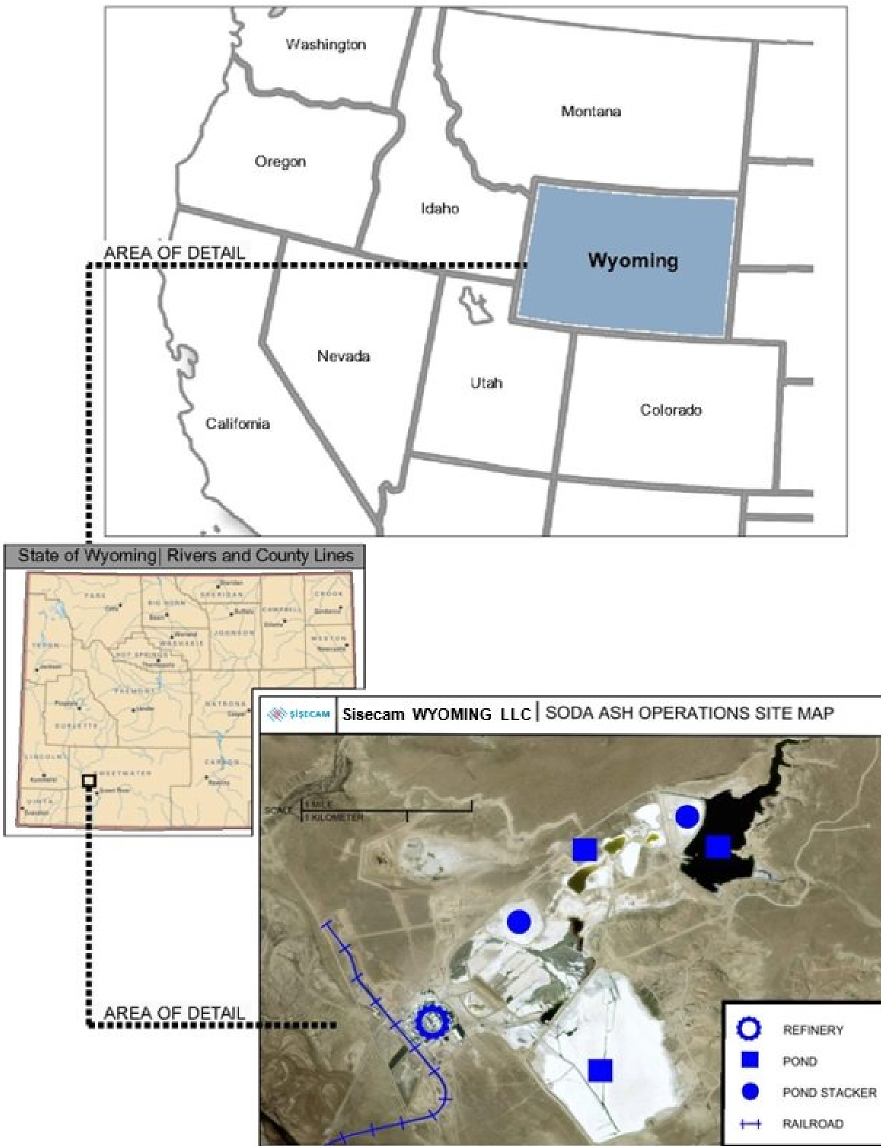
The following chart depicts our ownership structure as of March 14, 2022 and approximate ownership percentages:



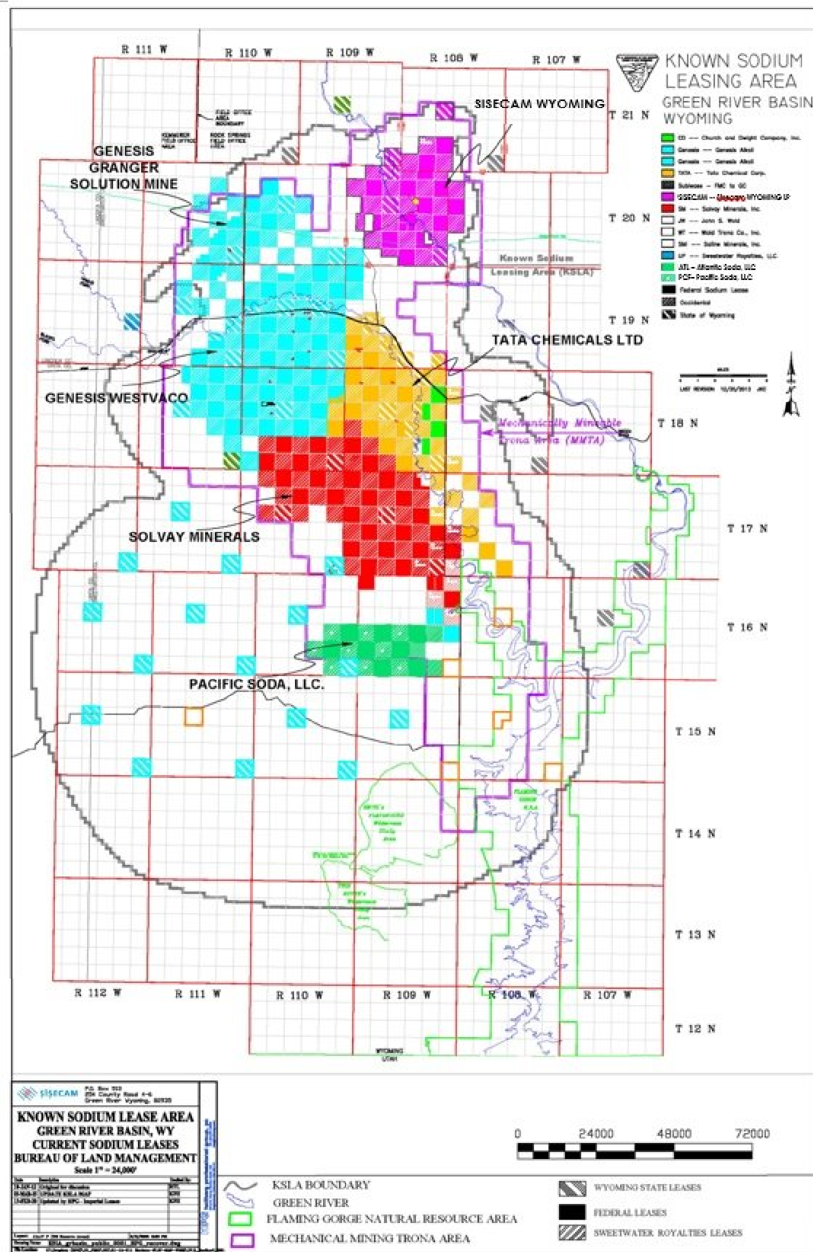
Our Operations

Our Green River Basin surface operations are situated on approximately 2,360 acres in Wyoming (of which, 880 acres are owned), and our mining operations consist of approximately 23,500 acres of leased and licensed subsurface mining area. Our facility is accessible by both road and rail. We use seven large continuous mining machines and fourteen underground shuttle cars in our mining operations. Our processing assets consist primarily of material sizing units, conveyors, calciners, dissolver circuits, thickener tanks, drum filters, evaporators and rotary dryers.

The following map provides an aerial overview of our surface operations:



The following map shows the known sodium leasing area within the Green River Basin, including the boundaries of our leased and licensed subsurface mining area:

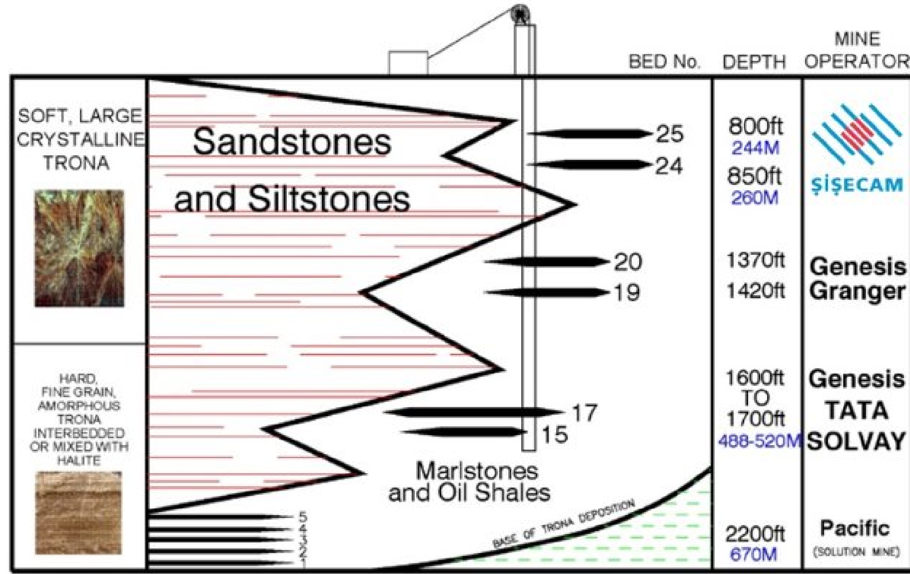


The Green River Basin geological formation holds the largest, and one of the highest purity, known deposits of trona ore in the world. Our reserves contain trona deposits having a purity between 80% to 89% by weight, which means that insoluble impurities and water make up approximately 11% to 20% of our trona.

Our mining leases and license are located in two mining beds, designated by the U.S. Geological Survey as beds 24 and 25, at depths of 800 to 1100 feet, respectively, below the surface. Mining these beds affords us several competitive advantages. First, the

depth of our beds is shallower than other actively mined beds in the Green River Basin, which allows us to use a continuous mining technique to mine trona and roof bolt the ceiling simultaneously. In addition, mining two beds that are on top of one another allows for production efficiencies because we are able to use a single hoisting shaft to service both beds.

The following graphic shows a cross-section of the strategic areas of the Green River Basin where we mine trona:



Source: Management.

We remove insoluble materials and other impurities by thickening and filtering the liquor. We then add activated carbon to our filters to remove organic impurities, which can cause color contamination in the final product. The resulting clear liquid is then crystallized in evaporators, producing sodium carbonate monohydrate. The crystals are then drawn off and passed through a centrifuge to remove excess water. We then dry the resulting material in a product dryer to form anhydrous sodium carbonate, or soda ash. The resulting processed soda ash is then stored in on-site storage silos to await shipment by bulk rail or truck to distributors and end customers. Our storage silos can hold up to 58,900 short tons of processed soda ash at any given time. Our facility is in good working condition and has been in service for more than 50 years.

Deca Rehydration. The evaporation stage of our trona ore processing produces a precipitate and natural by-product called deca. Deca, short for sodium carbonate decahydrate, is one part soda ash and ten parts water. Solar evaporation causes deca to crystallize and precipitate to the bottom of the four main surface ponds at our Green River Basin facility. In 2009, we implemented a process called deca rehydration, which enables us to recover soda ash from the deca-rich purged liquor as a by-product of our refining process. We capture the soda ash contained in deca by allowing the deca crystals to evaporate in the sun and separating the dehydrated crystals from the soda ash. We then blend the separated deca crystals with partially processed trona ore at the dissolving stage of our production process described above. This process enables us to reduce our waste storage needs and convert what is typically a waste product into a usable raw material. Please read "Risk Factor-Risks Inherent in Our Business and Industry-*Our deca stockpiles will substantially deplete by 2024 and our production rates will decline approximately 200,000 short tons per year if we do not make further investments*" for more information about this process.

Energy Consumption. We believe we have one of the most efficient mining and soda ash production surface operations in the world. During 2021, we used approximately 4.0 MMBtus of energy in the form of electricity and natural gas to produce each short ton of soda ash. In addition, we believe this to be the lowest energy consumption of any soda ash producer in North America. We and other producers of soda ash in the Green River Basin benefit from relatively low cost and stable supply of natural gas in Wyoming, which further enhances our competitive cost advantage over other regions of the world. To reduce the impact of the volatility in natural gas prices, we hedge a portion of our natural gas consumption requirements, which enables us to set the price for a portion of our forecasted natural gas purchases. During the first quarter of 2020, we completed construction of a natural gas-fired turbine co-generation facility that is capable of providing roughly one-third of our electricity and steam demands at our mine in the Green River Basin. This co-generation facility began operating in March 2020 and provided 172.6 million kWh of electricity which saved the

Partnership $4.4 million in 2021 based on average purchased electricity costs and gas costs. In a normal production environment the facility is expected to provide us over 180.0 million kWh of electricity annually.

Shipping and Logistics. All of our soda ash is shipped by rail or truck from our Green River Basin operations. For the year ended December 31, 2021, we shipped over 90% of our soda ash to our customers initially via a single rail line owned and controlled by Union Pacific Railroad Company ("Union Pacific"), and our plant receives rail service exclusively from Union Pacific. Our agreement with Union Pacific expires on December 31, 2025 and there can be no assurance that it will be renewed on terms favorable to us or at all. If we do not ship at least a significant portion of our soda ash production on the Union Pacific rail line during a twelve-month period, we must pay Union Pacific a shortfall payment under the terms of our transportation agreement. For the year ended December 31, 2021, we assisted the majority of our domestic customers in arranging their freight services. During 2021, we had no shortfall payments and do not expect to make any such payments in the future. Sisecam Chemicals leases a fleet of more than 2,200 hopper cars that serve as dedicated modes of shipment to our domestic and international customers. For non ANSAC exports, we ship our soda ash on unit trains primarily to Longview, Washington for bulk shipments. For the year ended December 31, 2021, ANSAC provided logistics and support services for a portion of our export sales primarily out of Portland, Oregon and Longview, Washington. From these ports, our soda ash is loaded onto ships for delivery to ports all over the world. For domestic sales, Sisecam Chemicals provides similar services.

Customers

Our largest customer was ANSAC for the year ended December 31, 2021 and the sales to ANSAC accounted for approximately 21.1% of our net sales. The significant volume of sales to ANSAC for the year ended December 31, 2021 was primarily related to the terms of the ANSAC exit settlement agreement. No other individual customer accounted for more than 10% of our net sales.

For customers in North America, Sisecam Chemicals, on our behalf, typically enters into contracts, having terms ranging from one to three years. Under these contracts, our customers generally agree to purchase either minimum estimated volumes of soda ash or a certain percentage of their estimated soda ash requirements at a fixed price for a given calendar year. Although we do not have a "take or pay" arrangement with our customers, substantially all of our sales are made pursuant to written agreements and not through spot sales. In 2021, we had more than 70 domestic customers and in general, we have long-term relationships with the majority of our customers, meaning we have been a supplier to them for more than ten years.

Our customers, including end users to whom ANSAC makes sales overseas, consist primarily of:

- Glass manufacturing companies, which account for 50% or more of the consumption of soda ash around the world; and
- The majority of the remainder is comprised of chemical and detergent manufacturing companies.

Historically, by design and prior to Sisecam Chemicals' exit from ANSAC, ANSAC managed most of our international sales, marketing and logistics, and as a result, was our largest customer for the years ended December 31, 2020 and 2019, accounting for 45.4% and 60.4%, respectively, of our net sales. ANSAC takes soda ash orders directly from its overseas customers and then purchases soda ash for resale from its member companies pro rata based on each member's allocated volumes. ANSAC is the exclusive distributor for its members to the markets it serves. The ANSAC exit allowed Sisecam Chemicals to improve access to customers and gain control over placement of its sales in the international marketplace in 2021. This enhanced view of the global market allows Sisecam Chemicals to better understand supply/demand fundamentals thus allowing better decision making for its business. Sisecam Chemicals continues to optimize its distribution network leveraging strengths of existing distribution partners while expanding as our business requires in certain target areas.

Leases and License

We are party to several mining leases and one license, as noted in the table below, which give us subsurface mining rights. Some of our leases are renewable at our option upon expiration. We pay royalties to the State of Wyoming, the U.S. Bureau of Land Management and Sweetwater Royalties LLC, a subsidiary of Sweetwater Trona OpCo LLC and the successor in interest to the license with the Rock Spring Royalty Company, LLC ("RSRC"), an affiliate of Occidental Petroleum Corporation (formerly an affiliate of Anadarko Petroleum Corporation). The royalties are calculated based upon a percentage of the value of soda ash and related products sold at a certain stage in the mining process. These royalty payments may be subject to a minimum domestic production volume from our Green River Basin facility. We are also obligated to pay annual rentals to our lessors and licensor regardless of actual sales. In addition, we pay a production tax to Sweetwater County, and trona severance tax to the State of Wyoming that is calculated based on a formula that utilizes the volume of trona ore mined and the value of the soda ash produced. We have a perpetual right to continue operating under these leases and license as long as we maintain continuous mining operations and we intend to continue renewing the leases and license as has been historical practice.

The royalty rates we pay to our lessors and licensor may change upon our renewal or renegotiation of such leases and license. On June 28, 2018, Sisecam Wyoming amended its License Agreement, dated July 18, 1961 (the "License Agreement"), with a predecessor in interest to Sweetwater Royalties LLC, to, among other things, (i) extend the term of the License Agreement to July 18, 2061 and for so long thereafter as Sisecam Wyoming continuously conducts operations to mine and remove sodium minerals from the

licensed premises in commercial quantities; and (ii) set the production royalty rate for each sale of sodium mineral products produced from ore extracted from the licensed premises at eight percent (8%) of the net sales of such sodium mineral products. Any increase in the royalty rates we are required to pay to our lessors and licensor, or any failure by us to renew any of our leases and license, could have a material adverse impact on our results of operations, financial condition or liquidity, and, therefore, may affect our ability to distribute cash to unitholders. On December 11, 2020, the Secretary of the Interior authorized an industry-wide royalty reduction from currently set rates by establishing a 2% federal royalty rate for a period of ten years for all existing and future federal soda ash or sodium bicarbonate leases. This change by the Secretary of the Interior reduced the rates on our mineral leases with the U.S. Government from 6% to 2% as of January 1, 2021 and for the following ten years. This 4% rate reduction saved over $6.5 million in royalty fees based on our mining operations in 2021.

The following is a summary of the material terms of our leases and our license as of December 31, 2021:

Name of Lessor or Licensor	Number of Leases or Licenses as of December 31,2021	Total Approximate Acreage as of December 31, 2021	Expiration Date Range	Renewals	Year of Commencement	Royalty Rate
License with Sweetwater Royalties LLC	1	12,439 acres	2061	License will renew so long as we continuously conduct operations to mine and remove sodium minerals from the licensed premises in commercial quantities.	1961	8% of net sales
Leases with the U.S. Government	4	7,934 acres	2027-2028	These leases will renew so long as we file an application for renewal with the Department of the Interior, Bureau of Land Management, within 90 days of expiration of the leases[(1)]	1961	2% of gross output
Leases with the State of Wyoming	5	3,079 acres	2029	No contractual right to renewal, but leases have been historically renewed for consecutive 10-year periods	1969	6% of gross value

(1) Renewals are typically for ten-year periods.

The foregoing descriptions of the material terms of our leases and our license do not purport to be complete descriptions of our leases and our license, and are qualified in their entirety by reference to the full text of the leases and license, as amended copies of which have been filed or incorporated by reference as exhibits to this Report. See Part IV, Item 15, “Exhibits and Financial Statement Schedules— Exhibit Index” for more information.

Trona Resources and Trona Reserves

Information concerning our mining property and estimated mineral resources and mineral reserves in this Annual Report on Form 10-K has been prepared in accordance with the requirements of subpart 1300 of Regulation S-K, which first became applicable to us for the fiscal year ended December 31, 2021. These requirements differ significantly from the previously applicable disclosure requirements of SEC Industry Guide 7. Among other differences, subpart 1300 of Regulation S-K requires us to disclose our mineral resources, in addition to our mineral reserves, at our mining property as of the end of our most recently completed fiscal year. The information that follows is derived, for the most part, from, and in some instances is an extract from the technical report summary prepared by Hollberg Professional Group (HPG) in compliance with Item 601(b)(96) and subpart 1300 of Regulation S-K. Portions of the following information are based on assumptions, qualifications and procedures, that are not fully described herein. Reference should be made to the full text of the technical report summary prepared by HPG attached as Exhibit 96.1 and incorporated herein by reference and made a part of this Report on Form 10-K. We have used the term “trona” as in “trona resources” and “trona reserves” interchangeably with “mineral.”

Hollberg Professional Group (HPG) has conducted an independent technical review of the lands held by Sisecam Chemicals referred to as the “Big Island Mine,” which is located in the area commonly referred to as the Know Sodium Lease Area (the “KSLA”) near the town of Green River, Sweetwater County. The KSLA is where trona thickness exceeds 1-meter, extends for over 300 km^2, and is greater than 80% grade. The U.S. Geological Survey recognizes 25 trona beds of economic importance (at least 1 meter in thickness and 300 km^2 in areal extent) within the Green River Basin. Identified in ascending order, the trona beds are numbered 1 through 25 from the oldest (stratigraphically lowest) to the youngest (stratigraphically highest). Sisecam Wyoming has approximately 23,612 acres of trona under lease made up of approximately 7,934 Federal acres, 3,079 State acres, and 12,439 private acres. Sisecam Chemicals has mineral resources and mineable reserves in the shallowest mechanically minable Trona Beds 24 and 25, at depths of 800 and 1,100 feet below the surface, respectively. See also certain maps and graphics of our property set forth under “Our Operations.”

HPG estimated the total of the Big Island Mine’s remaining leased and licensed proven and probable trona reserves as 220.0 million short tons and the total of the measured and indicated in-place trona resources inclusive of reserves as 162.3 million short tons

as of December 31, 2021. The cutoff grade of greater than 75% trona and thickness greater than 6 feet is applied to estimate the trona resources based upon successful mining and processing of the lower grade trona Beds 19, 20 and 21 which were considered viable mining prospects by Texas Gulf Soda Ash (TGSA). The mineral resource inclusive of the mineral reserves is that portion of the ore body that is considered either economically viable for mining and can be converted to reserves or of economic interest but considered outside the current economic limits. This is the material considered of economic interest that has the potential to be converted to reserves. Our trona resources are categorized as "Measured mineral resources," "Indicated mineral resources," and "Inferred mineral resources," which are defined as follows:

- *Measured mineral resources* - Mineral resources for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.

- *Indicated mineral resources* - Mineral resources for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply the modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve. (The modifying factors are the factors that a qualified person must apply to indicated and measured mineral resources and then evaluate in order to establish the economic viability of mineral reserves. A qualified person must apply and evaluate modifying factors to convert measured and indicated mineral resources to proven and probable mineral reserves. These factors include but are not restricted to mining; processing; metallurgical; infrastructure; economic; marketing; legal; environmental compliance; plans, negotiations, or agreements with local individuals or groups; and governmental factors. The number, type and specific characteristics of the modifying factors applied will necessarily be a function of and depend upon the mineral, mine, property, or project.)

- *Inferred mineral resources* - Mineral resources for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project and may not be converted to a mineral reserve.

The following is a summary of the recoverable trona reserves for beds 24 and 25 as of December 31, 2021:

(In millions of short tons except percentages) [2]

Reserve Category	Proven mineral reserves		Probable mineral reserves		Total mineral reserves	
	Amount	Grade [1]	Amount	Grade [1]	Amount	Grade [1]
Lower Bed 24	64.0	86.0 %	83.2	85.8 %	147.3	85.9 %
Upper Bed 25	33.4	83.7 %	39.3	84.1 %	72.7	83.9 %
Total [3]	97.4	85.2 %	122.6	85.2 %	220.0	85.2 %

(1) Numbers have been rounded; totals may not sum due to rounding.
(2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
(3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.

Our reserves are subject to leases with the State of Wyoming and the U.S. Bureau of Land Management and a license with Sweetwater Royalties LLC. See "Leases and License" above for a summary of these leases and our license, including expiration date ranges.

The following table presents our estimated proven and probable trona reserves by license and leases at December 31, 2021:

(In millions of short tons except percentages) [2]

Reserve Category	Proven mineral reserves		Probable mineral reserves		Total mineral reserves	
	Amount	Grade [1]	Amount	Grade [1]	Amount	Grade [1]
License with Sweetwater Royalties LLC	48.6	85.3 %	59.4	85.2 %	108.0	85.3 %
Leases with the U.S. Government	40.9	84.9 %	44.6	85.0 %	85.5	85.0 %
Leases with the State of Wyoming	7.9	86.8 %	18.6	86.1 %	26.5	86.4 %
Total [3]	97.4	85.2 %	122.6	85.2 %	220.0	85.2 %

(1) Numbers have been rounded; totals may not sum due to rounding.
(2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
(3) The point of reference is ROM ore delivered to the processing facilities including mining losses and dilution.

The following is a summary of the measured, indicated, and inferred mineral resources exclusive of reserves for trona beds 24 and 25 as of December 31, 2021:

(In millions of short tons except percentages and thickness) [2]

Resource Category	Measured mineral resources		Indicated mineral resources		Measured + Indicated mineral resources			Inferred mineral resources	
	Amount	Grade [1]	Amount	Grade [1]	Amount	Grade [1]	Thickness (ft)	Amount	Grade [1]
Lower Bed 24	44.8	88.7 %	54.1	86.9 %	98.9	87.7 %	8.5	0.05	90.0 %
Upper Bed 25	29.4	85.0 %	34.1	87.3 %	63.4	86.2 %	7.5	—	— %
Total [3]	74.2	87.2 %	88.2	87.0 %	162.3	87.1 %		0.05	90.0 %

(1) Numbers have been rounded; totals may not sum due to rounding.
(2) Based on a 6-foot minimum thickness and a 75% minimum grade cut-off.
(3) The point of reference is in-place inclusive of impurities and insoluble content.

The Company has not previously disclosed estimates of measured mineral resources, indicated mineral resources or inferred mineral resources for periods prior to fiscal year 2021 for comparison.

HPG estimated proven and probable reserves of approximately 220.0 million short tons of trona, which is equivalent to 119.1 million short tons of soda ash as of December 31, 2021. Based on our current mining rate of approximately 4.0 million short tons of trona per year, we have enough proven and probable trona reserves to continue mining trona using current methods in excess of 50 years. For comparison, Sisecam Wyoming's staff estimated proven and probable reserves of approximately 208.2 million short tons, which is equivalent to 113.4 million short tons of soda ash as of December 31, 2020. The increase of estimated proven and probable reserves of approximately 11.8 million short tons, or 5.7%, as of December 31, 2021 was primarily due to the updated staged LOM mine plan from 8-ft Isopach to 7-ft Isopach during the year ended December 31, 2021. (Isopach is a line drawn on a map connecting all points of equal thickness of a particular geologic formation.)

The mineral reserve is the economically mineable part of a measured or indicated mineral resource, which includes diluting materials and allowances for losses that may occur when the material is mined or extracted. Our trona reserves are categorized as "Proven mineral reserves" and "Probable mineral reserves," which are defined as follows:

- *Proven mineral reserves* - The economically mineable part of a measured mineral resource and can only result from conversion of a measured mineral resource.
- *Probable mineral reserves* - The economically mineable part of an indicated and, in some cases, a measured mineral resource.

In determining the reserve parameters and assumptions HPG considered the following circumstances (actual results could differ from these assumptions):

- Sisecam Wyoming's 60 year long history and economics of mining the deposit and producing soda ash;
  - The 170.1 million short tons of trona ore produced from these two beds;
- The projected long life of the mine and resulting likely changes in economics, mining, and processing methods over the projected 40-year mine life used in this technical summary. This 40-year mine life consideration is based on the specific

assumptions in this technical summary, including assumptions related to projected timing and estimated cost of two-seam mining, timing of related capital expenditures and sales price projections and estimates related to future availability of deca;

- Sisecam Wyoming's current processing facilities' capabilities and projected future changes to these facilities.
- The economics associated with Sisecam Wyoming's current mining equipment and history of "high grading" the thickest portions of the deposit;
- Sisecam Wyoming's current mining equipment limitations and required future changes to these systems; and
- HPG's knowledge of operating and managing other trona and potash mines.

In determining the reserves, HPG made certain assumptions regarding the remaining life of the Big Island Mine, including, among other things, that:

- the cost of products sold per short ton will remain consistent with Sisecam Wyoming's cost of products sold for the five years ended December 31, 2021;
- the weighted average net sales per short ton of $188/ton will remain consistent with Sisecam Wyoming's average net sales for the five years ended December 31, 2021;
- Sisecam Wyoming's mining costs will remain consistent with 2021 levels with two-seam mining costs 30% higher for the two-seam production (the Partnership estimates that this increase would not impact its overall production cost by more than 1% and thus would not have a material overall impact to the Partnership's production costs);
- Sisecam Wyoming's processing costs will remain consistent with 2021 levels and rise in 10-years to account for lower grade material;
- Sisecam Wyoming will achieve an annual mining rate of approximately 5.0 million short tons of trona in 2024 and beyond;
- Sisecam Wyoming will process soda ash with a 90% rate of recovery, without accounting for the deca rehydration process;
- the ore to ash ratio for the stated trona reserves is 1.835:1.0 (short tons of trona run-of-mine to short tons of soda ash);
- The run-of-mine ore estimate contains dilution from the mining process;
- Sisecam Wyoming will continue to conduct only conventional mining using the room and pillar method and a non-subsidence mine design;
- Sisecam Wyoming will, in approximately 10 years, make necessary modifications to the processing facilities to allow localized mining of 75% ore grade in areas where the floor seam or insoluble disruptions have moved up into the mining horizon causing mining to be halted early due to processing facility limitations;
- Sisecam Wyoming will, within one year, conduct two-seam mining, in production panels which means to perform continuous mining on Bed 24 beneath historically mined production panels of Bed 25 with interburden thickness of approximately 35-feet;
- Sisecam Wyoming will, in approximately 20 years, make necessary equipment modifications to operate at a seam height of 7-feet, the current mining limit is 9-feet;
- Sisecam Wyoming has and will continue to have valid leases and license in place with respect to the reserves, and that these leases and license can be renewed for the life of the mine based on their extensive history of renewing leases and license;
- Sisecam Wyoming has and will continue to have the necessary permits to conduct mining operations with respect to the reserves; and
- Sisecam Wyoming will maintain the necessary tailings storage capacity to maintain tailings disposal between the mine and surface placement for the life-of-mine.

Our estimates of mineral resources and mineral reserves will change from time to time as a result of mining activities, analysis of new engineering and geologic data, modification of mining plans or mining methods and other factors. For additional information, see Item 1A, Risk Factors, "Risks Inherent in our Business and Industry" for more information regarding risks surrounding our reserves.

Internal Controls Disclosure over Trona Resources and Trona Reserves

We have internal controls over the trona resources and trona reserves estimation processes that result in reasonable and reliable estimates aligned with industry practice and reporting regulations. Annually, qualified persons and other employees review the estimates of trona resources and trona reserves and the supporting documentation, and based on their review of such information recommend approval to use the trona resources and trona reserves estimates to our senior management. Our controls utilize management systems, including, but not limited to, standardized procedures, workflow processes, supervision and management approval, internal and external reviews and audits, reconciliations, and data security covering record keeping, chain of custody and data storage. Our systems also cover sample preparation and analysis, data verification, trona processing, metallurgical testing, recovery estimation, mine design and sequencing, and trona resource and reserve evaluations, with environmental, social and regulatory considerations.

These controls and other methods help to validate the reasonableness of the estimates. The effectiveness of the controls are reviewed periodically to address changes in conditions and the degree of compliance with policies and procedures. For additional information regarding the risks associated with our estimates of trona resources and reserves, see Item 1A, Risk Factors, "Risks Inherent in our Business and Industry-Our reserve and resource data are estimates based on assumptions that may be inaccurate and are based on existing economic and operating conditions that may change in the future, which could materially and adversely affect the quantities and value of our reserves and resources."

Competition

Soda ash is a commodity natural resource traded globally with numerous producers and consumers worldwide. We compete with both North American and international soda ash producers. There are two ways to consider how we compete: (1) versus our fellow North American competitors; and (2) versus our worldwide competitors. Against our principal North American competitors, which include subsidiaries of Genesis, Solvay and Tata in the Green River Basin and Searles Valley Minerals in California, we believe we have a number of competitive advantages, including operational advantages that improve our relative cost position, life of our mineral reserves, our strong safety record, customer relationships and an experienced management team and workforce. Against our principal worldwide competitors, Solvay and various Chinese producers virtually all of their production is manufactured from synthetic processes and we believe, as a producer of soda ash from trona, we have competitive advantages when compared to synthetic producers, even after considering the fact that we generally have higher logistics costs to move the soda ash from Wyoming to regions around the world. The costs associated with procuring the materials needed for synthetic production are greater than the costs associated with mining trona. In addition, trona-based production consumes less energy and produces fewer undesirable by-products than synthetic production. See "Our Competitive Strengths" above for additional information.

Insurance

Because all of our operations are conducted at a single facility, an event such as an explosion, fire, equipment malfunction or severe weather conditions could significantly disrupt our trona mining or soda ash production operations and our ability to supply soda ash to our customers. These hazards can also cause personal injury and loss of life, pollution or environmental damage and suspension of our surface and subsurface operations. To mitigate this risk, our Sponsors and/or their affiliates maintain, on our behalf, property, casualty and business interruption insurance in amounts and with coverage and deductibles that we believe are adequate for our current operations. We regularly evaluate our policy limits and deductibles as they relate to the overall cost and scope of our insurance coverage to account for changes or growth in our business.

Environmental Matters

Our mining and processing operations, which have been conducted at our Green River Basin facility since 1962, are subject to strict regulation by federal, state, and local authorities with respect to protection of the environment. We have a rigorous compliance program to ensure that our facilities comply with environmental laws and regulations. However, we are involved from time to time in administrative and judicial proceedings and inquiries relating to environmental matters. Modifications or changes in enforcement of existing laws and regulations or the adoption of new laws and regulations in the future, particularly with respect to environmental or climate change, or changes in the operation of our business or the discovery of additional or unknown environmental contamination, could require expenditures that might be material to our results of operations or financial condition.

We summarize below certain environmental laws applicable to us that regulate discharges of substances into the air and water, the management and disposal of hazardous and non-hazardous substances and wastes, the clean-up of contaminated sites, the protection of groundwater quality and availability, plant and wildlife protection, and climate change. Our failure to comply with any of the below laws may result in the assessment of administrative, civil and criminal penalties, the imposition of clean-up and site restoration costs and liens, the issuance of injunctions to limit or cease operations, the suspension or revocation of permits and other enforcement measures that could have the effect of limiting production from our operations.

Wyoming Department of Environmental Quality ("WDEQ")

Our operations are subject to oversight by the Land Quality Division of Wyoming Department of Environmental Quality ("WDEQ"). Our principal mine permit issued by the Land Quality Division, requires the Partnership to provide financial assurances for our reclamation obligations for the estimated future cost to reclaim the area of our processing facility, surface pond complex and

on-site sanitary landfill. The Partnership provides such assurances through a third-party surety bond (the "Surety Bond"). According to the annual recalculation and submittal, the Surety Bond amount was $41.8 million and $36.2 million at December 31, 2021 and 2020, respectively. The amount of such assurances that we are required to provide is subject to change upon annual recalculation according to Department of Environmental Quality's Guideline 12, annual site inspection and subsequent evaluation/approval by the WDEQ's Land Quality Division.

Clean Air Act

The federal Clean Air Act and comparable state laws restrict the emission of air pollutants from many sources. Under the Clean Air Act, our facility has been issued a Title V operating permit, which regulates emissions to air from our operations. In particular, our operations are subject to technology-based standards pursuant to the Clean Air Act's New Source Performance Standards for Nonmetallic Mineral Processing Plants, which limit particulate matter emissions. Under associated Clean Air Act regulations our operation is also subject to Best Available Control Technology ("BACT") requirements. In addition, our boilers are subject to technology-based standards pursuant to the Clean Air Act's National Emission Standards for Hazardous Air Pollutants for Major Source: Industrial, Commercial and Institutional Boilers and Process Heaters, which were published in final form in November 2015. These laws and regulations may require us to obtain pre-approval for the construction or modification of certain projects or facilities expected to produce or significantly increase air emissions, obtain and strictly comply with stringent air permit requirements or utilize specific equipment or technologies to control emissions of certain pollutants.

Clean Water Act

The Federal Water Pollution Control Act, which we refer to as the Clean Water Act, and comparable state laws impose restrictions and controls regarding the discharge of pollutants into regulated waters. The discharge of pollutants into regulated waters is prohibited, except in accordance with the terms of a permit issued by the federal Environmental Protection Agency (EPA) or the state. We do not discharge any wastewater from our operations into the Green River, the nearest river system to our Green River Basin facility. However, the discharge of storm water runoff from our facility is governed by a general permit issued by the WDEQ. In particular, the general permit requires our compliance with a Storm Water Pollution Prevention Plan. We periodically monitor groundwater wells at our processing facility, most of which are proximate to our surface pond complex, for salinity, conductivity and other parameters pursuant to permits issued by the WDEQ. Permitted interceptor trenches are used to collect saline groundwater to minimize impact to the Green River.

Resource Conservation and Recovery Act

The federal Resource Conservation and Recovery Act ("RCRA"), and analogous state laws, impose requirements for the careful generation, handling, storage, treatment and disposal of nonhazardous and hazardous solid wastes. Based on the amount of hazardous waste our operations generate (less than 100 kilograms per month), we have been classified under RCRA as a conditionally exempt small quantity generator.

Comprehensive Environmental Response, Compensation, and Liability Act

The federal Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") (otherwise known as "Superfund"), and comparable state laws impose liability in connection with the release of hazardous substances into the environment. CERCLA imposes liability, without regard to fault or the legality of the original conduct, on certain classes of persons that are considered to have contributed to the release of a hazardous substance into the environment. These persons include the current and past owner or operator of the disposal site or the site where the release occurred and those who disposed or arranged for the disposal of the hazardous substances at the site where the release occurred. Under CERCLA, such persons may be subject to joint and several liability for the costs of cleaning up the hazardous substances that have been released into the environment and for damages to natural resources. Wyoming's Environmental Quality Act also creates the potential for liability in connection with the release of hazardous substances into the environment and has been construed to impose liability without regard to fault. We have not received notice that we are a potentially responsible party at any Superfund site.

Climate Change Legislation and Regulations

In response to findings that emissions of carbon dioxide, methane and other greenhouse gases, or GHGs, present an endangerment to public health and the environment, the EPA has adopted rules requiring the monitoring and annual reporting of GHG emissions from specified sources, including soda ash processors like us. We are monitoring and reporting GHG emissions from our operations, and we believe we are in compliance with the rules. In the past, the U.S. Congress has considered, but not enacted, legislation that would impose requirements to reduce emissions of GHGs. The State of California has enacted regulations establishing a so-called GHG "cap-and-trade" system designed to reduce GHG emissions. Our operations are not currently subject to any federal or state requirement to reduce GHG emissions. Although it is not possible at this time to predict how legislation or new regulations that may be adopted to address GHG emissions would impact our business, any such future laws and regulations limiting, or otherwise imposing a tax or financial penalty for, emissions of GHGs from our equipment and operations might be material to our results of operations or financial condition.

Mining and Workplace Safety

We believe our commitment to safety and reliability is an integral component to our fulfillment of our corporate responsibility and long term success. Through rigorous training, sharing of expertise within the Partnership, continuous monitoring and promoting a culture of excellence in operations, we continuously strive to keep our workforce, the communities in which we operate and the environment safe.

Our focus on safety is also evident in our response to the COVID-19 pandemic. We continue to closely monitor the impact of the outbreak of COVID-19 and all governmental actions in response thereto on all aspects of our business, including how it impacts our employees. We have taken strong proactive steps to keep the safety of our teams and their families as the priority. We have been executing and continue to execute on a comprehensive plan to help prevent the spread of the virus in our work locations, and it appears to be having a positive impact. This plan includes multiple layers of protection for our employees, including but not limited to, social distancing, working from home for certain employees, increased sanitation, restricted contractor and visitor access, temperature checks on employees, all contractors and third-party vendors, travel restrictions, mask wearing requirements, and daily communication with our teams. We have conducted proactive quarantining and contact tracing from the early days of this pandemic and require self-reporting of any illness, and other measures in keeping with the Centers for Disease Control and Prevention guidance and best practices. We have also prepared strong contingency plans for all our operations with specific actions based on absentee rates. While we have not utilized any such plans to date as they have not been needed, they are continuously refined in case needed. We have encouraged employees to consider getting vaccinated. We anticipate a re-opening of society when the virus plateaus and diminishes, and we have completed re-entry plans to implement as they become appropriate. We are using data to guide our actions rather than firm dates, and our teams are kept up to date on these plans. Our focus prior to and during this pandemic has been the safety of our teams and this will continue to be our priority as we scale our operations back to normal as the data guides us to do so. We continue to actively monitor and adhere to applicable local, state, federal, and international governmental guidelines and actions to better ensure the safety of our employees.

MSHA is the primary regulatory organization governing safety matters associated with trona ore mining. Accordingly, MSHA regulates underground mines and the industrial mineral processing facilities associated with trona ore mines. MSHA administers the provisions of the Federal Mine Safety and Health Act of 1977 and enforces compliance with that statute’s mandatory safety and health standards. As part of MSHA’s oversight, representatives perform at least four unannounced inspections annually for our entire facility, as well as spot check every five days in our underground facility due to our Green River Basin facility being classified as a gassy mine. For 2021, we averaged 0.55 citations per inspection day, which is below the industry average of 1.06 citations per inspection day.

We also are subject to the requirements of the U.S. Occupational Safety and Health Act (“OSHA”), and comparable state statutes that regulate the protection of the health and safety of workers. In addition, the OSHA Hazard Communication Standard requires that information be maintained about hazardous materials used or produced in operations and that this information be provided to employees, state and local government authorities and the public.

Our Green River Basin facility maintains a rigorous safety program. Sisecam Chemicals and its affiliates’ employees and contractors who operate our assets are required to complete 40 hours of initial training, as well as eight-hour annual refresher sessions. These training programs cover all of the potential site-specific hazards present at the facility. As a direct result of our commitment to safety, the Green River Basin facility has had an exceptional safety record in recent years. During the year ended December 31, 2021, our facility had one lost workday injury and three recordable injuries as reported by MSHA. During the five years ended December 31, 2021, our Green River Basin facility averaged 0.8 lost workday injuries per year and averaged 4.2 recordable injuries per year as reported by MSHA.

Human Capital

The success of our company is a direct result of our people, our values, and our culture. We believe in the potential of each individual, and we grow our potential into results through training and development.

Employees/Labor Relations

The personnel who operate our assets are employees of Sisecam Chemicals and its affiliates; and the Partnership does not have any employees. Under the joint venture agreement governing Sisecam Wyoming, Sisecam Wyoming reimburses us for the time and cost of employees who operate our assets and for support provided to Sisecam Wyoming. As of December 31, 2021 and 2020, Sisecam Chemicals and its U.S. affiliates had approximately 499 and 489 full-time employees, of which 448 and 444 are employees who operate the mine at our facility in the Green River Basin, respectively. None of these employees was covered by a collective bargaining agreement as of December 31, 2021. We consider our relations with our employees to be favorable.

In addition, under the Services Agreement, dated October 25, 2015, among the Partnership, our general partner and Sisecam Chemicals (the “Services Agreement”), Sisecam Chemicals has agreed to provide the Partnership with certain corporate, selling, marketing, and general and administrative services, in return for which the Partnership has agreed to pay Sisecam Chemicals an annual management fee and reimburse Sisecam Chemicals for certain third-party costs incurred in connection with providing such services.

Employee Development and Training

Our learning, training, and development strategy is founded upon the pillars of safety, leadership, and skills development. Each of these pillars has its own objectives, strategy, and measurements for success.

- Safety: "Safety is a value, not just a priority. It's how we do business, it's who we are." We believe this, we live it, and our culture of safety training is founded on it. Every new employee participates in safety training that is specific to their work environment. Wyoming employees also participate in annual safety refresher training. Training is the vehicle we use to align our safety expectations and practices with our vision for a Zero Incident Mindset.
- Leadership: Our leaders play a critical role in building our culture. Our commitment to employee development raises employee engagement, buy-in and advances our performance. Leadership is not an assignment, a job, or a title. Leadership is a choice and we equip our leaders with tools and skills to effectively lead our employees and grow our business. These skills and tools are taught and practiced in a series of formal leadership courses that address the unique needs and challenges of our business.
- Skills Development: Skills development has 3 subcategories:
  - Career Progression
  - Maintenance Apprenticeships
  - Education Assistance

Safety

We pride ourselves on our safety record, and we are continually one of the leaders in the U.S. mining industry in relation to low incident rates and workplace injuries. We maintain a rigorous safety program, which includes training, site audits and hazard identification. Sisecam Chemicals and its affiliates, our employees and all contractors who operate our assets or work at our facility are involved in our safety programs. As a direct result of this commitment, we have achieved many recognitions such as the Sentinels of Safety by the National Mining Association, The Industrial Minerals Association-North America Safety Achievement Award (Large Category) five times, most recently in September of 2021 at the Fall Industrial Minerals Association-North America Conference, Safe Sam Award by the Wyoming Mining Association two times, most recently June 2021, and the Wyoming State Mine Inspector's Large Mine award multiple times. During the year ended December 31, 2021, our facility had one lost work day injury and three recordable injuries as reported by MSHA. We also boast and support some of the best rescue teams in the country. In 2021, our Mine Rescue team competed in the Southwest Wyoming Mutual Aid competition. With 15 teams in attendance, Sisecam's Mine Rescue team made a clean sweep of the competition including, overall champion, while also placing first in the field, team tech, bench and first aid competition. There were, however, no surface rescue contests or national mine rescue contests in 2021 due to COVID-19.

See Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, "Recent Developments," "COVID-19" for our more information relating to our responses to COVID-19.

Glossary of Industry Terms

Industry terms are defined in the Glossary of Industry Terms, included at the end of this Report.

ITEM 1A. ***Risk Factors***

Limited partner interests are inherently different from the capital stock of a corporation, although many of the business risks to which we are subject are similar to those that would be faced by a corporation engaged in a similar business. You should carefully consider the following risk factors together with all of the other information included in this Report in evaluating an investment in our common units.

If any of the following risks were to occur, our business, financial condition, results of operations and our ability to distribute cash could be materially adversely affected. In that case, we might not be able to make distributions on our common units, the trading price of our common units could decline, and you could lose all or part of your investment.

Summary of Risk Factors Described Herein

Risks Inherent in our Business and Industry

- Soda ash prices have been and in the future may be volatile, which may negatively affect our financial position and operations.
- Increases in freight costs or natural gas prices or interruptions in our supply could increase our costs significantly and adversely affect our results of operations and negatively impact our competitive cost position.
- All of our operations are conducted at one facility and due to our lack of product diversification, adverse developments in the soda ash industry would adversely affect our business.
- For the year ended December 31, 2021, over 90% of our soda ash was shipped via rail, and we rely on one rail line to service our facility under a contract that expires in 2025.
- A significant portion of the demand for soda ash comes from glass manufacturers and other industrial end users whose businesses can be adversely affected by economic downturns, including due to the COVID-19 pandemic and related variants and other viruses and/or diseases.
- If the percentage of our international sales increases as a percentage of total sales, our gross margin could decrease and the average trade credit payment period of our customers could increase, which could adversely affect our financial position.
- Our deca stockpiles will be substantially depleted by 2024 and our production rates will decline by approximately 200,000 short tons per year if we do not make further investments.
- Sisecam Chemicals, on our behalf, typically enters into contracts and arrangements with our customers that have terms of one to three years, and our customers are not obligated to purchase any specific amount of soda ash from us; we are also exposed to trade credit risk in the ordinary course of business activities.
- Increased use of glass substitutes and recycled glass may affect demand for soda ash, which could adversely affect our business.
- We face intense competition, including from companies that have greater capital resources and more diversified operations.
- Our reserve data are estimates based on assumptions that may be inaccurate and are based on existing economic and operating conditions that may change in the future, which could materially and adversely affect the quantities and value of our reserves.
- A cyber-attack on or other failure of our technology infrastructure could negatively affect our operations.
- The extent to which the COVID-19 pandemic may directly or indirectly impact us is uncertain and cannot be predicted with confidence, but could have a material adverse effect on our business.
- Defects in title or loss of any leasehold interests in our properties could limit our ability to conduct mining operations.
- We may not achieve the acquisition component of our growth strategy.
- Mining development, exploration, and processing operations pose numerous hazards and uncertainties.
- We may be unable to obtain, maintain, or renew permits necessary for our operations.
- Equipment upgrades, equipment failures, and deterioration of assets may lead to production issues.
- We may record impairment charges on our assets, including our reserves that would adversely impact our operations.
- A shortage of skilled workers could reduce our labor productivity and increase our costs.
- Our business is subject to inherent risk, including risk relating to natural disasters or other severe weather conditions, and our insurance coverage for such risks may not be adequate or available to us. If an accident or event occurs that is not fully insured, it could materially affect our business.
- We may be subject to litigation, the disposition of which could have a material adverse effect on our results of operations.
- Expansion or improvement of our existing facilities may not result in revenue increases and will be subject to regulatory, environmental, political, legal, and economic risks, which could adversely affect our results of operations and financial condition.
- We conduct our operations through a joint venture, which subjects us to additional risks.
- We are subject to stringent environmental laws and regulations that may expose us to significant costs and liabilities.

- The adoption of climate change legislation at the global, federal, state or local level could result in increased operating costs and reduced demand for the soda ash we produce.
- We are subject to strict laws and regulations regarding employee and process safety, and failure to comply therewith could have a material adverse effect on our results of operations, financial condition and ability to distribute cash to unitholders.
- Failure to maintain effective quality control systems at our facilities could have a material adverse effect on our business.
- Our inability to acquire, maintain, or renew financial assurances related to the reclamation and restoration of mining property could have a material adverse effect on our business, financial condition and results of operations.
- Federal and state regulatory agencies have the authority to order our mine to be temporarily or permanently closed under certain circumstances, which could materially and adversely affect our ability to meet our customers' demands.

Risks Related to Our Indebtedness and Liquidity

- We may not have sufficient cash from operations following the establishment of cash reserves and payment of fees and expenses to enable us to pay any quarterly distribution on our units.
- Restrictions in the agreements governing Sisecam Wyoming's indebtedness, including the Sisecam Wyoming Credit Facility and the Sisecam Wyoming Equipment Financing Arrangement, could limit our operations and adversely affect our business.
- Our level of indebtedness may increase, reducing our financial flexibility.
- The amount of cash we have available for distribution to holders of our units depends primarily on our cash flow and not solely on profitability, which may prevent us from making cash distributions during periods when we record net income.

Risks Inherent in an Investment in Us

- CoC Transaction could significantly and adversely affect our results of operations because of difficulties related to integration, the achievement of synergies and other challenges.
- Sisecam Chemicals, which is owned by Sisecam USA and Ciner Enterprises, indirectly owns and controls our general partner, which has sole responsibility for conducting our business and managing our operations. Our general partner and its affiliates have conflicts of interest with us and our unitholders.
- We currently do not have a majority of independent directors on the board of directors of our general partner.
- Operating performance and current and anticipated capital needs may affect the amount distributed to unitholders and our partnership agreement does not contain a requirement for us to pay distributions to our unitholders.
- Our partnership agreement restricts the remedies available to unitholders for certain actions taken by our general partner and our general partner intends to limit its liability regarding our obligations.
- Our general partner and its indirect equityholders, including Sisecam USA, and Ciner Enterprises, are not restricted in their ability to compete with us.
- Holders of our common units have limited voting rights and are not entitled to appoint our general partner or its directors.
- Even if holders of our common units are dissatisfied, they cannot initially remove our general partner without its consent.
- Our general partner interest or the control of our general partner may be transferred to a third party without unitholder consent.
- Our general partner has a limited call right that may require unitholders to sell common units at an undesirable time or price.
- We may issue additional units, including units ranking senior to common units, without unitholder approval.
- Cost reimbursements due to our general partner and its affiliates for services provided to us or on our behalf will reduce our earnings and therefore our ability to distribute cash to our unitholders.
- Your liability may not be limited if a court finds that unitholder action constitutes control of our business.
- Unitholders may have liability to repay distributions and may be personally liable for the obligations of the partnership.
- The New York Stock Exchange does not require a partnership like us to comply with certain governance requirements.
- The market price of our common units could be adversely affected by sales of substantial amounts of our common units in the public markets, including sales by our existing unitholders.
- Our unitholders who fail to furnish certain information requested by our general partner or are not eligible citizens are not entitled to receive distributions or allocations of income or loss on their common units, which will be subject to redemption.

Tax Risks to Common Unitholders

- Our tax treatment depends on our status as a partnership for U.S. federal income tax purposes, as well as our not being subject to a material amount of entity-level taxation by individual states; the tax treatment of publicly traded partnerships or an investment in our common units could be subject to potential legislative, judicial or administrative changes and differing interpretations, possibly on a retroactive basis.
- Unitholders are required to pay taxes on their respective shares of our income even if they do not receive any cash distributions.
- Tax gain or loss on the disposition of our common units could be more or less than expected.

Risks Inherent in our Business and Industry

Soda ash prices have been and in the future may be volatile, and lower soda ash prices will negatively affect our financial position and results of operations.

Our only product is soda ash, and the market price of soda ash directly affects the profitability of our operations. If the market price for soda ash declines, our revenue may decrease. Historically, the global market and, to a lesser extent, the domestic market for soda ash have been volatile, and those markets are likely to remain volatile in the future. In the past, we have reduced production to mitigate the impact of low soda ash prices. Volatility in soda ash prices can make it difficult to predict the cash we may have on hand at any given time, and a prolonged period of low soda ash prices may materially and adversely affect our financial position, liquidity (including our borrowing capacity under the $225.0 million senior secured revolving credit facility to which Sisecam Wyoming is a party (as amended, the “Sisecam Wyoming Credit Facility”)), ability to finance planned capital expenditures and results of operations.

Prices for soda ash may fluctuate in response to relatively minor changes in the supply of and demand for soda ash, market uncertainty and other factors beyond our control. These factors include, among other things:

- overall economic conditions;
- additional supply from suppliers selling into markets that we serve, including potential additional soda ash from affiliates of the Partnership;
- the level of customer demand, including in the glassmaking industry;
- changes to our customer relationships and customer sales as a result of the CoC Transaction (as defined below);
- the level of production and exports of soda ash globally;
- the level of production of materials used to produce soda ash, including trona ore or synthetic materials, globally;
- the cost of energy consumed in the production of soda ash, including the price of natural gas and electricity;
- the impact of our competitors changing their prices or increasing their capacity, exports and /or imports as applicable;
- domestic and foreign governmental relations, regulations and taxes; and
- political conditions or hostilities and unrest in regions where we export soda ash.

A substantial portion of our costs are attributable to transportation and freight costs. Increases in freight costs could increase our costs significantly and adversely affect our results of operations.

A significant amount of soda ash is sold inclusive of transportation costs, which make up a substantial portion of the total delivered cost to the customer. We transport our soda ash by rail and/or truck and, for exports, ocean vessel. As a result, our business and financial results are sensitive to increases in rail freight, trucking and ocean vessel rates. Increases in transportation costs, including increases resulting from emission control requirements, port taxes and fluctuations in the price of fuel, could make soda ash a less competitive product for glass manufacturers when compared to glass substitutes or recycled glass, or could make our soda ash less competitive than soda ash produced by competitors that have other means of transportation or are located closer to their customers. Our rail freight rates may increase year-over-year. Also, we may be unable to pass on our freight and other transportation costs in full because market prices for soda ash are generally determined by supply and demand forces.

An increase in natural gas prices, or an interruption in our natural gas supply, would negatively impact our competitive cost position when compared to other foreign and domestic soda ash producers.

We rely on natural gas as the main energy source in our soda ash production process, and therefore the cost of natural gas is a significant component of the total production cost for our soda ash. The monthly Northwest Pipeline Rocky Mountain Index natural gas settlement prices, over the past five years, have ranged between $1.29 and $6.34. For the years ended December 31, 2021, 2020, and 2019, the average monthly Northwest Pipeline Rocky Mountain Index natural gas settlement prices were $3.90, $2.07, and $2.59 per MMBtu, respectively. Furthermore, the price of natural gas could increase as a result of reduced domestic drilling and production activity. Drilling and production operations are subject to extensive federal, state, local and foreign laws and government regulations concerning, among other things, emissions of pollutants and greenhouse gases, hydraulic fracturing, and the handling of natural gas and other substances used in connection with natural gas operations, such as drilling fluids and wastewater. In addition, natural gas operations are subject to extensive federal, state and local taxation. More stringent legislation, regulation or taxation of natural gas drilling activity in the United States could directly curtail such activity or increase the cost of drilling, resulting in reduced levels of drilling activity and therefore increased natural gas prices.

Any material increase in natural gas prices could adversely impact our operations by making us less competitive with other soda ash producers who do not use natural gas as a key input. If U.S. natural gas prices were to increase to a level where foreign soda ash producers were able to improve their competitive position on a unit cost basis, this would negatively affect our competitive cost position.

All of our operations are conducted at one facility. Any adverse developments at our facility could have a material adverse effect on our results of operations and therefore our ability to make cash distributions to our unitholders.

Because all of our operations are conducted at a single facility, an event such as an explosion, substantial gas leak such as methane, fire, equipment malfunction or severe weather conditions that adversely affect our facility could significantly disrupt our trona mining or soda ash production operations and our ability to supply soda ash to our customers. For example, in the fourth quarter of 2016, MSHA required us to make temporary operational modifications, which caused us to lose a significant amount of ore production. While our affiliates maintain business interruption insurance on our behalf, our policy includes a time element deductible, per occurrence, and is subject to customary limitations and exclusions. Any sustained disruption in our ability to meet our obligations under our sales agreements could have a material adverse effect on our results of operations and therefore our ability to distribute cash to unitholders.

Due to our lack of product diversification, adverse developments in the soda ash industry would adversely affect our results of operations and our ability to make cash distributions to our unitholders.

We rely exclusively on the revenues generated from the production and sale of soda ash. An adverse development in the market for soda ash in U.S. or foreign markets would have a significantly greater impact on our operations and cash available for distribution to our unitholders than it would on other companies that have a more diverse asset and product base. Some of the soda ash producers with which we compete sell a more diverse range of products to broader markets.

For the year ended December 31, 2021, over 90% of our soda ash was shipped via rail, and we rely on one rail line to service our facility under a contract that expires in 2025. Interruptions of service on this rail line could adversely affect our results of operations and our ability to make cash distributions to our unitholders.

For the year ended December 31, 2021, we shipped over 90% of our soda ash from our facility on a single rail line owned and controlled by Union Pacific. Our current transportation contract with Union Pacific expires on December 31, 2025. For the year ended December 31, 2021 and 2020, we assisted the majority of our domestic customers in arranging their freight services. Rail operations are subject to various risks that may result in a delay or lack of service at our facility, including mechanical problems, extreme weather conditions, work stoppages, labor strikes, terrorist attacks and operating hazards. Moreover, if Union Pacific’s financial condition were adversely affected, it could decide to cease or suspend service to our facility. If we are unable to ship soda ash by rail, it would be impracticable to ship all of our soda ash by truck and it would be cost-prohibitive to construct a rail connection to the closest alternative rail line that is approximately 135 miles from our facility. Any delay or failure in the rail services on which we rely could have a material adverse effect on our financial condition and results of operations and our ability to make distributions to our unitholders. Moreover, if we do not ship at least a significant portion of our soda ash production on the Union Pacific rail line during a twelve-month period, we must pay Union Pacific a shortfall payment under the terms of our transportation agreement. During the years ended December 31, 2021 and 2020, we had no shortfall payments under the transportation agreement.

A significant portion of the demand for soda ash comes from glass manufacturers and other industrial end users whose businesses can be adversely affected by economic downturns.

A significant portion of the demand for soda ash comes from glass manufacturers and other industrial customers. Companies that operate in the industries that glass manufacturers serve, including the automotive, construction and glass container industries, may experience significant fluctuations in demand for their own end products because of economic conditions, changes in consumer demand, or increases in raw material and energy costs. In addition, many large end users of soda ash depend upon the availability of credit on favorable terms to make purchases of raw materials such as soda ash. As interest rates increase or if our customers’ creditworthiness deteriorates, this credit may be expensive or difficult to obtain. If these customers cannot obtain credit on favorable terms, they may be forced to reduce their purchases of soda ash. These and other factors may lead some customers to purchase less under or seek renegotiation or cancellation of their existing arrangements with us, which could have a material adverse effect on our results of operations and our ability to distribute cash to unitholders.

If the percentage of our international sales increases as a percentage of total sales, our gross margin could decrease and the average trade credit payment period of our customers could increase, which could adversely affect our financial position and our ability to distribute cash to our unitholders.

For the year ended December 31, 2021, our international sales of soda ash as a percentage of total sales was 48.8%. Our gross margin for international sales has historically been lower than our gross margin for domestic sales most of the time because

our average price of soda ash sold internationally has historically been lower than our average price of soda ash sold domestically. Lower margins could adversely affect our financial position and our ability to distribute cash to our unitholders.

We typically receive payment for our domestic sales quicker than we receive payment for our international sales. Therefore, an increase in our international sales and a decrease in domestic sales would extend the average time period for our receipt of payment for our soda ash, which could expose us to greater credit risk from our customers, increase our working capital requirements and negatively affect the amount of cash available for distribution to our unitholders.

Our deca stockpiles will be substantially depleted by 2024 and our production rates will decline by approximately 200,000 short tons per year if we do not make further investments.

In 2024, our deca stockpiles will be substantially depleted. In connection with the CoC Transaction, we are evaluating whether and when to pursue a potential Green River Expansion Project at the site that could offset this decline as well as provide additional soda ash production above our current rates. We cannot guarantee that any such investments will be executed successfully, in a timely manner or if at all to enable us to maintain our current rates of production.

Sisecam Chemicals, on our behalf, typically enters into contracts and arrangements with our customers that have terms of one to three years, and our customers are not obligated to purchase any specific amount of soda ash from us.

The terms of our customer contracts vary, including by geography. Most of our domestic contracts have terms of one to three years. Our international contracts are typically for one year or less. Moreover, some of our customer contracts are not exclusive dealing and almost none are take-or-pay arrangements. Additionally, we may lose a customer for any number of reasons, including as a result of a merger or acquisition, the selection of another provider of soda ash, business failure or bankruptcy of the customer or dissatisfaction with our performance or pricing. Loss of any of our major customers could adversely affect our business, results of operations and cash flow.

Increased use of glass substitutes and recycled glass may affect demand for soda ash, which could adversely affect our results of operations.

Increased use of glass substitutes or recycled glass in the container industry could have a material adverse effect on our results of operations and financial condition. Container glass production is one of the principal end markets for soda ash. Competition from increased use of glass substitutes, such as plastic and recycled glass, has had a negative effect on demand for soda ash. Demand for soda ash by the U.S. glass container industry has generally declined over the last ten years. However, international demand for glass containers is growing at close to World Gross Domestic Product rate. We believe that the use of containers made with alternative materials such as plastic and aluminum will continue to negatively affect the growth in domestic demand for soda ash in the U.S.

We are exposed to trade credit risk in the ordinary course of our business activities.

We extend credit to our customers as a normal part of our business and as such are subject to the credit risk of our customers, including the risk of loss resulting from nonpayment or nonperformance. Standard industry contract terms are net 30 days from the date of shipment for domestic U.S. customers and 120-150 days from the date of shipment for international customers. We have experienced nonperformance by our customers and counterparties in the past, and we may take reserves for accounts more than 90 days past due. Some of our customers and counterparties may be highly leveraged and subject to their own operating and regulatory risks. Our credit procedures and policies do not eliminate customer credit risk of existing or future customers. In addition, even if our procedures work as designed, our customers may experience unanticipated deterioration of their creditworthiness. Material nonpayment or nonperformance by our customers could have a material adverse effect on our financial condition and results of operations and on our ability to distribute cash to our unitholders.

We face intense competition, including from companies that have capital resources greater than ours and that have more diversified operations.

We face competition from a number of soda ash producers in the United States, Europe and Asia, some of which have greater market share and greater financial, production and other resources than we do. Some of our competitors are diversified global corporations that have many lines of business. For example, our affiliates are in the early stages of entering into agreements and evaluating opportunities that may result in producing new soda ash from one or more separate facilities in the U.S. in the future which may increase competition if developed. Some of our competitors have greater capital resources and may be in a better position to withstand a long-term deterioration in the soda ash market. Other competitors, even if smaller in size, may have greater experience and stronger relationships in their local markets. Competitive pressures could make it more difficult for us to retain our existing customers and attract new customers, which could have a material adverse effect on our business, financial condition, results of operations and ability to distribute cash to our unitholders. Competition could also intensify the negative impact of factors that decrease demand for soda ash in the markets we serve, such as adverse economic conditions, weather, higher fuel costs and taxes or other governmental or regulatory actions that directly or indirectly increase the cost or limit the use of soda ash. In

addition, China is the largest producer of synthetic soda ash in the world and historically has exported only a small percentage of its production. If Chinese producers, which we believe are supported by government subsidies, and other producers were to begin producing significantly more quantities of soda ash than are produced today then the supply of soda ash in the global market could materially increase and put downward pressure on pricing.

Unfavorable economic conditions may reduce demand for our products, which could adversely affect our results of operations.

Worldwide soda ash demand correlates to global economic growth. Worsening economic conditions or factors that negatively affect the economic health of the United States and other parts of the world into which we sell soda ash could reduce our revenues and adversely affect our results of operations. For example, during the COVID-19 pandemic in 2020, global economic growth and soda ash demand slowed and we experienced adverse results that resulted in our board of directors approving a suspension of our quarterly distribution for each of the quarters ended June 30, 2020, September 30, 2020, December 31, 2020, March 31, 2021, and June 30, 2021. We believe that deterioration of economic conditions or a prolonged period of economic weakness would have an adverse impact on our results of operations, business and financial condition, as well as our ability to distribute cash to our unitholders.

Our reserve and resource data are estimates based on assumptions that may be inaccurate and are based on existing economic and operating conditions that may change in the future, which could materially and adversely affect the quantities and value of our reserves and resources.

Our reserve and resource estimates may vary substantially from the actual amounts of minerals we are able to recover economically from our reserves. There are numerous uncertainties inherent in estimating quantities of reserves and resources, including many factors beyond our control. Estimates of reserves and resources necessarily depend upon a number of variables and assumptions, any one of which may, if incorrect, result in an estimate that varies considerably from actual results. These factors and assumptions relate to, among other aspects:

- future prices of soda ash, mining and production costs, capital expenditures and transportation costs;
- future mining technology and processes;
- the effects of regulation by governmental agencies; and
- geologic and mining conditions, which may not be identified by available exploration data and may differ from our experiences in areas where we currently mine.

Please read Item 1, “Business-Summary of Trona Resources and Trona Reserves” for more information including pertinent additional assumptions regarding our reserve estimates in this Report. Actual production, revenue and expenditures with respect to our reserves will likely vary from our estimates, and these variations may be material.

A cyber-attack on or other failure of our technology infrastructure could affect our business and assets, and have a material adverse effect on our financial condition, results of operations and cash flows.

We are becoming increasingly dependent on our technology infrastructure and certain critical information systems which process, transmit and store electronic information, including information we use to safely and effectively operate our respective assets and business. These information systems include data network and telecommunications, internet access, our websites, and various computer hardware equipment and software applications, including those that are critical to the safe operation of our soda ash production facility and other facilities and assets that we utilize. We have invested, and expect to continue to invest, significant time, manpower and capital in our technology infrastructure and information systems. These information systems are subject to damage or interruption from a number of potential sources including natural disasters, software viruses or other malware, power failures, cybersecurity threats to gain unauthorized access to sensitive information, cyber-attacks, which may render data systems unusable, and physical threats to the security of our assets and infrastructure or third-party facilities and infrastructure.

Additionally, our business is highly dependent on financial, accounting and other data processing systems. We process a large number of transactions on a daily basis and rely upon the proper functioning of computer systems. Furthermore, we rely on information systems across our operations, including the management of supply chain and various other processes and transactions. As a result, a disruption on any information systems at our soda ash production facility or other facilities and assets that we utilize, may cause disruptions to our operations and have a material adverse effect on our financial condition, results of operations and cash flows.

The potential for such security threats or system failures has subjected our operations to increased risks that could have a material adverse effect on our business. To the extent that these information systems are under our control, we have implemented measures such as virus protection software, vulnerability scans, 24/7 monitoring of network services and operating enterprise resource planning, payroll, and logistics systems in the cloud. However, security measures for information systems cannot be

guaranteed to be failsafe and implemented measures may not prevent delays or other complications that could arise from an information systems failure. If a key system was hacked or otherwise interfered with by an unauthorized user, or was to fail or experience unscheduled downtime for any reason, even if only for a short period, or any compromise of our data security or our inability to use or access these information systems at critical points in time could unfavorably impact the timely and efficient operation of our business, damage our reputation and subject us to additional costs and liabilities.

Cyber-attacks against us or others in our industry could result in additional regulations, and U.S. government warnings have indicated that infrastructure assets may be specifically targeted by certain groups. These attacks include, without limitation, malicious software, ransomware, attempts to gain unauthorized access to data, and other electronic security breaches. These attacks may be perpetrated by state-sponsored groups, “hacktivists”, criminal organizations or private individuals (including employee malfeasance). Current efforts by the federal government, such as the Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure executive order, and any potential future regulations could lead to increased regulatory compliance costs, insurance coverage cost or capital expenditures. We cannot predict the potential impact to our business, the soda ash production industry or certain infrastructure facilities, assets and services upon which we rely resulting from additional regulations.

Further, our business interruption insurance may not compensate us adequately for losses that may occur. We do not carry insurance specifically for cybersecurity events; however, certain of our insurance policies may allow for coverage for a cyber-event resulting in ensuing property damage from an otherwise insured peril. If we were to incur a significant liability for which we were not fully insured, it could have a material adverse effect on our financial position, results of operations and cash flows. In addition, the proceeds of any such insurance may not be paid in a timely manner and may be insufficient if such an event were to occur.

Our business may continue to be adversely affected by the COVID-19 outbreak or the outbreak of other contagious diseases.

Public health epidemics, pandemics or outbreaks of contagious diseases could adversely impact our business. For example, the impact of the ongoing COVID-19 pandemic (including the Delta and Omicron variants), continue to cause certain disruptions and volatility to the economy throughout the world, including the United States and markets to which our products have historically been exported, affecting changes in consumer behavior, pandemic fears and market downturns, and restrictions on business and individual activities. There have been extraordinary actions taken by international, federal, state, and local public health and governmental authorities to contain and combat the outbreak and spread of COVID-19 in regions throughout the world, including travel bans, quarantines, “stay-at-home” orders, and similar mandates for many individuals to substantially restrict daily activities and for many businesses to curtail or cease normal operations.

The extent to which COVID-19 will continue to impact our future financial condition, results of operations, liquidity and ability to make distributions to unitholders will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information that may emerge concerning the severity of the COVID-19 outbreak and government mandated actions, requests or orders taken to contain the spread of COVID-19 or treat its impact, among others. In particular, the outbreak and any preventative or protective actions that governments, the Partnership or its affiliates or customers, or third parties upon which we rely for essential supplies or logistics services may take in respect of the COVID-19 outbreak, may result in a period of operational disruption and a potential reduction in the availability of our workforce. COVID-19 could also have a material impact across a variety of our customers and customer segments, which could have a negative impact on the demand for our products.

In addition, the COVID-19 outbreak may continue to impact our ability to timely develop and execute, or to ultimately realize the expected benefits from, our potential Green River Expansion Project (if undertaken), due to, among other things, a decline in the worldwide demand for soda ash, the cost or availability of debt financing or reduced cash flows from our operations to fund the project or any inability to procure the services, materials and equipment necessary to complete the project. Further, a prolonged period of disruption in worldwide economic and financial markets could constrain our available sources of liquidity to fund our operations, negatively impact our ability to service our financial obligations to lenders under our credit facilities and financing arrangements and pay distributions to our unitholders.

Any resulting financial impacts to the Partnership as a result of COVID-19, or other similar outbreaks of contagious diseases, including impacts to our results of operations, liquidity and ability to make distributions to our unitholders, are not reasonably estimable and cannot be predicted with confidence, but could be material.

If we are not able to renew our leases and licenses, it will have a material adverse effect on us. Under the terms of our subsurface mining leases, we are required to make minimum royalty payments or annual rentals, and the royalty rates we are required to pay may change with little or no notice to us.

All of our reserves are held under leases with the State of Wyoming and the U.S. Bureau of Land Management and a license with Sweetwater Royalties LLC. As of December 31, 2021, none of our leases covering our acreage expire prior to 2027.

If we are not able to renew our leases, it will have a material adverse effect on our results of operations and cash available for distribution to unitholders. Each of those leases and the license requires that minimum royalties or annual rentals be paid regardless of production levels. If our operations do not meet production goals, then it could have an adverse effect on our ability to pay cash distributions due to the ongoing requirement to pay minimum royalty payments despite a lack of production and the corresponding net sales.

The royalty rates we pay to our lessors may change upon our renewal of such leases. Any increase in the royalty rates we are required to pay to our lessors, or any failure by us to renew any of our leases, could have a material adverse impact on our results of operations, financial condition, or liquidity, and, therefore, may affect our ability to distribute cash to unitholders.

Defects in title or loss of any leasehold interests in our properties could limit our ability to conduct mining operations on these properties or result in significant unanticipated costs.

All of our trona reserves are leased or licensed. A title defect in our leased, licensed or owned property or the loss of any lease or license upon expiration of its term, upon a default or otherwise could adversely affect our ability to mine the associated reserves and/or process the trona that we mine. In some cases, we rely on title information or representations and warranties provided by our lessors, licensor or grantor. We cannot rely on any such representations or warranties with respect to the surface land on which our facility is located because we acquired the surface land in 1991 by quitclaim deed. We have no title insurance for our interests in this property. Any challenge to our title or leasehold interests could delay our operations and could ultimately result in the loss of some or all of our interest in the property. From time to time we also may be in default with respect to leases or the license for properties on which we have mining operations. In such events, we may have to close down or alter significantly the sequence of such mining operations, which may adversely affect our future soda ash production and future revenues. If we mine on property that we do not own, lease or license, we could incur liability for such mining and be subject to regulatory sanction and penalties. Also, in any such case, the investigation and resolution of title issues would divert management’s time from our business, and our results of operations could be adversely affected. As a result, our results of operations, business and financial condition, as well as our ability to pay distributions to our unitholders may be materially adversely affected.

We may not achieve the acquisition component of our growth strategy.

Acquisitions are a component of our growth strategy. We can offer no assurance that we will be able to identify any acquisition opportunities, that we will be able to grow our business through acquisitions, or that any assets or business we acquire will perform in accordance with our expectations or that our assessment concerning the value, strengths and weaknesses of assets or business acquired will prove to be correct. We have not made any acquisitions in the past, and there are currently a limited number of producers in North America with businesses similar to ours and potentially legal and regulatory hurdles, such as extensive evaluation under antitrust laws to determine whether the acquisition would be permissible. In connection with future acquisitions, if any, we may incur debt and contingent liabilities, increased interest expense and amortization expense and significant charges relative to integration costs. In addition, our financial condition and results of operations would be adversely affected if we overpay for acquisitions.

Acquisitions involve a number of special risks, including:

- unforeseen difficulties extending internal control over financial reporting and performing the required assessment at the newly acquired business or assets;
- potential adverse short-term effects on operating results through increased costs or otherwise;
- diversion of management’s attention and failure to recruit new, and retain existing, key personnel of the acquired business or assets;
- failure to implement infrastructure, logistics and systems integration successfully; and
- the risks inherent in the systems of the acquired business and risks associated with unanticipated events or liabilities, any of which could have a material adverse effect on our business, financial condition and results of operations.

Mining development, exploration and processing operations pose numerous hazards and uncertainties that may negatively affect our business.

Mining and processing operations involve many hazards and uncertainties, including, among other things:

- seismic activity;
- ground failures;
- industrial accidents;

- environmental contamination or leakage, including gas leaks;
- fires and explosions;
- unusual and unexpected rock formations or water conditions;
- flooding and periodic interruptions due to inclement or hazardous weather conditions or other acts of nature; and
- mechanical equipment failure and facility performance problems.

These occurrences could damage or destroy our properties or production facilities, or result in personal injury or wrongful death claims, environmental damage to our properties or the properties of others, delays in, or prohibitions on, mining or processing, increased production costs, asset write downs, monetary losses and legal liability, which could have an adverse effect on our results of operations and financial condition. In particular, underground mining and related processing activities present inherent risks of injury to persons and damage to equipment. Our insurance policies provide limited coverage for some of these risks but will not fully cover these risks. Please read "Risk Factors—Risks Inherent in our Business and Industry—*Our business is subject to inherent risk, including risk relating to natural disasters, and our insurance coverage for such risks may not be adequate or available to us*. *If an accident or event occurs that is not fully insured, it could materially affect our business.*" Significant mine accidents could occur, potentially resulting in a mine shutdown or leading to liabilities, which could have a material adverse effect on our results of operations, financial condition and cash flows.

We may be unable to obtain, maintain or renew permits necessary for our operations, which could impair our ability to conduct our operations and limit our ability to make distributions to unitholders.

Our facility and operations require us to obtain a number of permits that impose strict regulations on various environmental and operational matters in connection with mining trona ore and producing soda ash. These include permits issued by various federal, state and local agencies and regulatory bodies. The permitting rules, and the interpretations of these rules, are complex, change frequently and are subject to discretionary interpretations by our regulators, all of which may make compliance difficult or impractical and may impair our existing operations or the development of future facilities. The public, including non-governmental organizations, environmental groups and individuals, have certain statutory rights to comment upon and submit objections to requested permits and environmental impact statements prepared in connection with applicable regulations and otherwise engage in the permitting process, including bringing citizen's lawsuits to challenge the issuance or renewal of permits, the validity of environmental impact statements or the performance of mining activities. If permits are not issued or renewed in a timely fashion or at all or are conditioned in a manner that restricts our ability to conduct our operations economically, our cash flows may decline, which could limit our ability to distribute cash to unitholders.

Equipment upgrades, equipment failures and deterioration of assets may lead to production curtailments, shutdowns or additional expenditures.

Our operations depend upon critical equipment that require scheduled upgrades and maintenance and may suffer unanticipated breakdowns or failures. As a result, our mining operations and processing may be interrupted or curtailed, which could have a material adverse effect on our results of operations.

As our mine ages and we deplete our trona reserves, in order to maintain current production rates in the near term, we expect to need to utilize a two seam mining technique, which could increase our mining cost slightly for the relevant portion of the production. In addition, our maintenance capital expenditures do not include actual or estimated capital expenditures for replacement of our trona reserves.

In addition, assets critical to our trona ore mining and soda ash production operations may deteriorate due to wear and tear or otherwise sooner than we currently estimate. Such deterioration may result in additional maintenance spending and additional capital expenditures. If these assets do not generate the amount of future cash flows that we expect, and we are not able to procure replacement assets in an economically feasible manner, our future results of operations may be materially and adversely affected.

If any of the equipment on which we depend were severely damaged or were destroyed by fire, abnormal wear and tear, flooding, or otherwise, we may be unable to replace or repair it in a timely manner or at a reasonable cost, which would impact our ability to produce and ship soda ash, which would have a material adverse effect on our results of operations, financial condition and our ability to distribute cash to our unitholders.

We may record impairment charges on our assets, including our reserves, that would adversely impact our results of operations and financial condition.

We are required to perform impairment tests on our assets, including our trona reserves, whenever events or changes in circumstances modify the estimated useful life of or estimated future cash flows from an asset that would indicate that the carrying

amount of such asset may not be recoverable or whenever management's plans change with respect to such asset. An impairment in one period may not be reversed in a later period even if prices increase. If we are required to recognize impairment charges in the future, our results of operations and financial condition may be materially and adversely affected.

A shortage of skilled workers could reduce our labor productivity and increase our costs, which could negatively affect our business.

Our mining and processing operations require personnel with specialized skills and experience. Our ability to be productive and profitable will depend upon our ability to employ and retain skilled workers. If we experience shortages of skilled workers in the future, our labor costs and overall productivity could be materially and adversely affected. If our labor costs increase or if we experience materially increased health and benefits costs, our results of operations could be materially and adversely affected.

We also depend on good relationships with our workforce generally. Any disruption in our relationships with our personnel, including as a result of potential union organizing activities, work actions or other labor issues, could substantially affect our operations and results.

Severe weather conditions could have a material adverse impact on our business.

Our business could be materially adversely affected by severe weather conditions. Severe weather conditions may affect our mining and processing operations by resulting in weather-related damage to our facility and equipment or impact our ability to transport soda ash from our facility. In addition, severe weather conditions could hinder our operations by causing us to halt or delay our operations, which could have a material adverse effect on our results of operations and financial condition.

Our business is subject to inherent risk, including risk relating to natural disasters, and our insurance coverage for such risks may not be adequate or available to us. If an accident or event occurs that is not fully insured, it could materially affect our business.

We are covered by insurance policies maintained by our affiliates on our behalf. These insurance policies provide limited coverage for some, but not all, of the potential risks and liabilities associated with our business. For some risks, we do not maintain insurance policies if we believe the cost of available insurance is excessive relative to the risks presented. As a result of market conditions, premiums and deductibles for certain insurance policies can increase substantially, and certain types of insurance may become unavailable or available only for reduced amounts of coverage. As a result, we may not be able to renew applicable existing insurance policies or procure other desirable insurance on commercially reasonable terms, if at all. In addition, we cannot insure against certain environmental, safety and pollution risks. Even where insurance coverage applies, insurers may contest their obligations to make payments. Our insurance coverage may not be adequate to cover us against losses we incur, and coverage under these policies may be depleted or may not be available to us to the extent that we otherwise exhaust its coverage limits. Our results of operations, and therefore our ability to distribute cash to unitholders, could be materially and adversely affected by losses and liabilities from uninsured or under-insured events, as well as by delays in the payment of insurance proceeds or the failure by insurers to make payments.

We also may incur costs and liabilities resulting from claims for damages to property or injury to persons arising from our operations. We must compensate employees for work-related injuries. If we do not make adequate provision for our workers' compensation liabilities, such claims could harm our future operating results. If we are required to pay for these fines, costs and liabilities, our financial condition, results of operations, and therefore our ability to distribute cash to unitholders, could be adversely affected.

We may be subject to litigation, the disposition of which could have a material adverse effect on our results of operations.

The nature of our operations exposes us to possible litigation claims, including disputes with customers and providers of shipping services. Some of the lawsuits may seek fines or penalties and damages in large amounts or seek to restrict our business activities. Because of the uncertain nature of litigation and coverage decisions, we cannot predict the outcome of these matters or whether insurance claims may mitigate any damages to us. Litigation is very costly, and the costs associated with prosecuting and defending litigation matters could have a material adverse effect on our results of operations.

Expansion or improvement of our existing facilities may not result in revenue increases and will be subject to regulatory, environmental, political, legal and economic risks, which could adversely affect our results of operations and financial condition.

One of the ways we may grow our business is through the expansion or improvement of our existing facility. The construction of additions or modifications to our existing facility involve numerous regulatory, environmental, political, legal and economic uncertainties that are beyond our control. Such expansion or improvement projects may also require the expenditure of significant amounts of capital, and financing may not be available on economically acceptable terms or at all. If we undertake

expansion or improvement projects, including if we determine to proceed with the Green River Expansion Project, or undertake other or additional expansion or improvement projects, any such projects may not be completed on schedule, at the budgeted cost, or at all. Moreover, our revenue may not increase immediately upon the expenditure of funds on a particular project. As a result, we may not be able to realize our expected investment return, which could adversely affect our results of operations and financial condition.

We conduct our operations through a joint venture, which subjects us to additional risks that could have a material adverse effect on our financial condition and results of operations.

The Partnership is a holding company that conducts its primary operations through Sisecam Wyoming, a joint venture with an affiliate of NRP. The amount of cash Sisecam Wyoming can distribute to the Partnership depends primarily on cash flows generated from Sisecam Wyoming's operations, which may fluctuate depending on, among other things, revenues it receives and costs it incurs, including for capital expenditure projects undertaken by Sisecam Wyoming.

We may also enter into other joint venture arrangements with third parties in the future. NRP has, and these third parties may have, obligations that are important to the success of the joint venture, such as the obligation to pay their share of capital and other costs of the joint venture. The performance of these third-party obligations, including the ability of our joint venture partner in Sisecam Wyoming, to satisfy their respective obligations, is outside our control. If these parties do not satisfy their obligations under the arrangement, our business may be adversely affected.

Our joint venture arrangement may involve risks not otherwise present without such partner, including, for example:

- our joint venture partner shares certain blocking rights over transactions between Sisecam Wyoming and its affiliates, including us and potential arrangements between us and Sisecam Chemicals, Ciner Enterprises and/or Sisecam USA and their respective affiliates, including Sisecam Chemicals' ability to market our soda ash directly into international markets;
- our joint venture partner may propose changes to our capital expenditure programs;
- our joint venture partner may take actions contrary to our instructions or requests or contrary to our policies or objectives;
- although we control Sisecam Wyoming, we owe contractual duties to Sisecam Wyoming and its other owners, which may conflict with our interests and the interests of our unitholders; and
- disputes between us and our joint venture partner may result in delays, litigation or operational impasses.

The risks described above or any failure to continue our joint venture or to resolve disagreements with our joint venture partner could adversely affect our ability to transact the business that is the subject of such joint venture, which would, in turn, negatively affect our financial condition, results of operations and ability to distribute cash to our unitholders.

We are subject to stringent environmental laws and regulations that may expose us to significant costs and liabilities.

Our operations are subject to stringent and complex federal, state and local environmental laws and regulations that govern the discharge of materials into the environment or otherwise relate to environmental protection. Examples of these laws include:

- the federal Clean Air Act and analogous state laws that impose obligations related to air emissions;
- the CERCLA or the Superfund law, and analogous state laws that regulate the cleanup of hazardous substances that may be or have been released at properties currently or previously owned or operated by us or at locations to which our wastes are or have been transported for disposal;
- the federal Water Pollution Control Act, or the Clean Water Act, and analogous state laws that regulate discharges from our facilities into state and federal waters, including wetlands and the Green River;
- the RCRA, and analogous state laws that impose requirements for the storage, treatment and disposal of solid and hazardous waste from our facilities;
- the Endangered Species Act, or ESA; and
- the Toxic Substances Control Act, or TSCA, and analogous state laws that impose requirements on the use, storage and disposal of various chemicals and chemical substances at our facility.

These laws and regulations may impose numerous obligations that are applicable to our operations, including the acquisition of permits to conduct regulated activities, the incurrence of capital or operating expenditures to limit or prevent releases of materials from our facility, and the imposition of substantial liabilities and remedial obligations for pollution resulting from our

operations. Numerous governmental authorities, such as the U.S. Environmental Protection Agency, or the EPA, and analogous state agencies, have the power to enforce compliance with these laws and regulations and the permits issued under them, oftentimes requiring difficult and costly corrective actions. Failure to comply with these laws, regulations and permits may result in the assessment of administrative, civil and criminal penalties, the imposition of remedial obligations and the issuance of injunctions limiting or preventing some or all of our operations. In addition, we may experience a delay in obtaining or be unable to obtain required permits or regulatory authorizations, which may cause us to lose potential and current customers, interrupt our operations and limit our growth and revenue. In addition, future changes in environmental or other laws may result in additional compliance expenditures that have not been pre-funded and which could adversely affect our business and results of operations and our ability to make cash distributions to our unitholders.

There is a risk that we may incur costs and liabilities in connection with our operations due to historical industry operations and waste disposal practices, our handling of wastes and potential emissions and discharges related to our operations. Private parties, including the owners of the properties on which we operate, may have the right to pursue legal actions to require remediation of contamination or enforce compliance with environmental requirements as well as to seek damages for personal injury or property damage. For example, an accidental release from our facility could subject us to substantial liabilities arising from environmental cleanup and restoration costs, claims made by neighboring landowners and other third parties for personal injury and property damage and fines or penalties for related violations of environmental laws or regulations. In addition, changes in environmental laws occur frequently, and any such changes that result in more stringent and costly waste handling, storage, transport, disposal or remediation requirements could have a material adverse effect on our operations or financial position. We may not be able to recover all or any of these costs from insurance. Please read Item 1, "Business—Environmental Matters" for more information.

The adoption of climate change legislation or enhanced scrutiny on environmental matters at the global, federal, state or local level could result in increased operating costs and reduced demand for the soda ash we produce.

Many nations have agreed to limit emissions of "greenhouse gases," or GHGs, pursuant to the United Nations Framework Convention on Climate Change, also known as the "Kyoto Protocol." Methane, a primary component of natural gas, and carbon dioxide, a by-product of the burning of coal, oil, natural gas and refined petroleum products, are GHGs regulated by the Kyoto Protocol. The United States signed, but did not ratify, the Kyoto Protocol. In August 2015, the Obama administration announced the Clean Power Plan (the "CPP"), which sets limits on GHG emissions from power plants. Further, in December 2015, the United States was one of 195 countries to sign the so-called Paris Agreement, committing to work towards addressing climate change and agreeing to a monitoring and review process for greenhouse gas emissions. The Paris Agreement came into effect in November 2016. Although the United States withdrew from the Paris Agreement in November 2020, the United States officially rejoined the Paris Agreement in February 2021 following the change in Presidential administrations and may in the future choose to join other international agreements targeting greenhouse gas emissions. In addition, in January 2021, President Biden issued an executive order directing all federal agencies to review and take action to address any federal regulations, orders, guidance documents, policies, and any similar agency actions promulgated during the prior administration that may be inconsistent with the current administration's policies and to confront the climate crisis. President Biden also issued an executive order solely targeting climate change.

The U.S. Congress has from time to time considered adopting legislation to reduce emissions of GHGs, and almost one-half of the states have already taken legal measures to reduce emissions of GHGs, primarily through the planned development of GHG emission inventories and/or regional GHG "cap and trade" programs. Although the U.S. Congress has not adopted such legislation at this time, many states continue to pursue regulations to reduce GHG emissions. Most of these cap and trade programs work by requiring major sources of emissions, such as electric power plants, or major producers of fuels, such as refineries and natural gas processing plants, to acquire and surrender emission allowances corresponding with their annual emissions of GHGs. These programs work by reducing the number of allowances available for purchase each year until the overall GHG emission reduction goal is achieved. As the number of GHG emission allowances declines each year, the cost or value of allowances is expected to escalate significantly. Restrictions on GHG emissions that may be imposed in various states could adversely affect the soda ash industry.

In addition, there has been public discussion that climate change may be associated with extreme weather conditions, such as more intense hurricanes, thunderstorms, tornados and snow or ice storms, as well as rising sea levels. Another possible consequence of climate change is increased volatility in seasonal temperatures. Some studies indicate that climate change could cause some areas to experience temperatures substantially colder than their historical averages. Extreme weather conditions can interfere with our production and increase our costs, and damage resulting from extreme weather may not be fully insured. However, at this time, we are unable to determine the extent to which climate change may lead to increased storm or weather hazards affecting our operations.

Enhanced scrutiny on environmental matters and increasing public expectations on companies to address climate change may result in increased costs, changed demand for our soda ash, increased regulations and litigation and adverse impacts on our unit price and access to capital.

We are subject to strict laws and regulations regarding employee and process safety, and failure to comply with these laws and regulations could have a material adverse effect on our results of operations, financial condition and ability to distribute cash to unitholders.

We are subject to a number of federal and state laws and regulations related to safety, including the Occupational Safety and Health Administration, or OSHA, the Mine Safety and Health Administration, or MSHA, and comparable state statutes, the purposes of which are to protect the health and safety of workers. In addition, OSHA requires that we maintain information about hazardous materials used or produced in our operations and that we provide this information to employees, state and local governmental authorities, and local residents. Failure to comply with OSHA and MSHA requirements and related state regulations, including general industry standards and record keeping requirements, and to monitor and control occupational exposure to regulated substances, could have a material adverse effect on our results of operations, financial condition and ability to make cash distributions if we are subjected to significant penalties, fines or compliance costs, including any shutdown of one or more of our miners or the shutdown of our mine.

Failure to maintain effective quality control systems at our mining, processing and production facilities could have a material adverse effect on our business and operations.

The performance and quality of our products are critical to the success of our business. These factors depend significantly on the effectiveness of our quality control systems, which, in turn, depends on a number of factors, including the design of our quality control systems, our quality-training program and our ability to ensure that employees who operate our assets adhere to our quality control policies and guidelines. Any significant failure or deterioration of our quality control systems could have a material adverse effect on our business, financial condition and results of operations.

Our inability to acquire, maintain or renew financial assurances related to the reclamation and restoration of mining property could have a material adverse effect on our business, financial condition and results of operations.

Mining operations are generally obligated under federal, state and local laws to restore property in accordance with regulatory standards and an approved reclamation plan after it has been mined, and generally must also maintain financial assurances, such as surety bonds, to secure such obligations. To fulfill the financial assurances requirement, the WDEQ historically allowed us to "self-bond," which commits us to pay directly for reclamation costs rather than obtaining a traditional surety bond. In May 2019, the State of Wyoming enacted legislation that limits our and other mine operators' ability to self-bond and required us to seek other acceptable financial instruments to provide alternate assurances for our reclamation obligations by November 2020.

We provided such alternate assurances by timely securing a third-party surety bond effective October 15, 2020 (the "Surety Bond") for the then-applicable full self-bond amount. After we secured the Surety Bond, the self-bond agreement was terminated. As of December 31, 2020, the amount of our Surety Bond was $36.2 million (for the 2018 operating year), which increased to $41.8 million (for the 2019 operating year) effective March 1, 2021 and the required Surety Bond amount was $41.8 million (for the 2020 operating year) effective January 7, 2022. As of the date of this Report, the impact on our net income and liquidity due to securing the Surety Bond is immaterial and we anticipate that to continue to be the case. The amount of such assurances that we are required to provide is subject to change upon periodic re-evaluation by the WDEQ's Land Quality Division.

Our inability to secure financial assurances satisfactory to WDEQ could subject us to fines and penalties as well as the revocation of our operating permits. Such inability could result from a variety of factors, including:

- the State of Wyoming's future decision to require mining operations to maintain surety bonds or other types of financial assurances;
- continued increases in the amount of required financial assurance;
- the lack of availability, high expense, or unreasonable terms of financial assurances;
- the ability of future financial assurance counterparties to require collateral; and
- the exercise by financial assurance counterparties of any rights to refuse to renew the financial assurance instruments.

Our inability to acquire, maintain, or renew necessary financial assurances related to the reclamation and restoration of mining property could have a material adverse effect on our business, financial condition, and results of operations.

Federal or state regulatory agencies have the authority to order certain of our mines to be temporarily or permanently closed under certain circumstances, which could materially and adversely affect our ability to meet our customers' demands.

Federal or state regulatory agencies have the authority under certain circumstances following significant health and safety incidents, to order a mine to be temporarily or permanently closed. If this occurred, we may also be required to incur significant operating or capital expenditures to re-open the mine. In the event that these agencies order the closing of our Green River Basin facility, our soda ash sales contracts generally permit us to issue force majeure notices which suspend our obligations to deliver soda ash under these contracts. However, our customers may challenge our issuances of force majeure notices. If these challenges are successful, we may have to purchase soda ash from third-party sources, if it is available, to fulfill these obligations, incur capital expenditures to re-open the mine and/or negotiate settlements with the customers, which may include price reductions, the reduction of commitments, the extension of time for delivery or the termination of customers' contracts. Any of these actions could have a material adverse effect on our business and results of operations.

Risks Related to Our Indebtedness and Liquidity

We may not have sufficient cash from operations following the establishment of cash reserves and payment of fees and expenses, including cost reimbursements to our general partner and its affiliates, to enable us to pay any quarterly distribution on our units.

We may not have sufficient available cash each quarter to pay the quarterly distribution at the current distribution level of $0.65 per unit, or $2.60 per unit on an annualized basis or at all. For example, in an effort to achieve greater financial and liquidity flexibility during the COVID-19 pandemic, our board of directors approved a suspension of quarterly distributions to our unitholders for each of the quarters ended June 30, 2020, September 30, 2020, December 31, 2020, March 31, 2021, and June 30, 2021. In order to pay the quarterly distribution at the current distribution level, we will require available cash of approximately $13 million per quarter, or $52 million per year, based on the number of common and general partner units currently outstanding.

The amount of cash we can distribute on our units principally depends upon the amount of cash we generate from our operations, which will fluctuate from quarter to quarter based on several factors, some of which are beyond our control, including, among other things:

- the market prices for soda ash in the markets in which we sell;
- the volume of natural and synthetic soda ash produced worldwide;
- domestic and international demand for soda ash in the flat glass, container glass, detergent, chemical and paper industries in which our customers operate or serve;
- the freight costs we pay to transport our soda ash to customers or various delivery points;
- the cost of electricity and natural gas used to power our operations;
- the amount of royalty payments we are required to pay to our lessors and licensor and the duration of our leases and license;
- political disruptions in the markets we or our customers serve, including any changes in trade barriers;
- our relationships with our customers and our sales agent's ability to renew contracts on favorable terms to us;
- the creditworthiness of our customers;
- a cybersecurity event;
- the short and long-term impact of the COVID-19 pandemic (including existing or future variants), including the impact of government orders on our employees, suppliers, customers and operations;
- the impact of the CoC Transaction and our transition to the utilization of our own global distribution network;
- regulatory action affecting the supply of, or demand for, soda ash, our ability to mine trona ore, our transportation logistics, our operating costs and our operating flexibility;
- new or modified statutes, regulations, governmental policies and taxes or their interpretations; and
- prevailing U.S. and international economic conditions and foreign exchange rates.

In addition, the actual amount of cash we will have available for distribution will depend on other factors, some of which are beyond our control, including, among other things:

- the level and timing of capital expenditures we make;
- the level of our operating, maintenance and general and administrative expenses, including reimbursements to our general partner for services provided to us;
- the cost of acquisitions, if any;
- our debt service requirements and other liabilities;
- fluctuations in our working capital needs;
- our ability to borrow funds and access capital markets;
- restrictions on distributions contained in debt agreements to which Sisecam Wyoming is a party;
- the amount of cash reserves established by our general partner; and
- other business risks affecting our cash levels.

Restrictions in the agreements governing Sisecam Wyoming's indebtedness, including the Sisecam Wyoming Credit Facility and the Sisecam Wyoming Equipment Financing Arrangement, could limit its operations, and therefore ours, and adversely affect our business, financial condition, results of operations and ability to make quarterly cash distributions to our unitholders.

Sisecam Wyoming is party to a $225.0 million senior secured revolving credit facility (as amended, the "Sisecam Wyoming Credit Facility"), with each of the lenders listed on the respective signature pages thereof and Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer, and an equipment financing arrangement (the "Ciner Wyoming Equipment Financing Arrangement") with Banc of America Leasing & Capital, LLC, as lender (the "Equipment Financing Lender") including a Master Loan and Security Agreement, dated as of March 25, 2020 (as amended to date, the "Master Agreement") and an Equipment Security Note Number 001, dated as of March 25, 2020 (the "Initial Secured Note"), and an Equipment Security Note Number 002, dated as of December 17, 2021 (the "Second Secured Note"), which provides the terms and conditions for the debt financing of certain equipment related to Sisecam Wyoming's new natural gas-fired turbine co-generation facility that became operational in March 2020 and certain other equipment related to Ciner Wyoming's operations.

The Sisecam Wyoming Credit Facility provides, among other things:

- a sublimit up to $40.0 million for the issuance of standby letters of credit and a sublimit up to $20.0 million for swingline loans;
- an accordion feature that enables Sisecam Wyoming to increase the revolving borrowings under the Sisecam Wyoming Credit Facility by up to an additional $250.0 million (subject to certain conditions);
- in addition to the aforementioned revolving borrowings, an ability to incur up to $225 million of additional term loan facility indebtedness to finance Sisecam Wyoming's capacity expansion capital expenditures; (subject to certain conditions);
- a pledge by Sisecam Wyoming of substantially all of Sisecam Wyoming's assets (subject to certain exceptions), including: (i) all present and future shares of any subsidiaries of Sisecam Wyoming (whether now existing or hereafter created) and (ii) all personal property of Sisecam Wyoming (subject to certain conditions);
- contains various covenants and restrictive provisions that limit (subject to certain exceptions) Sisecam Wyoming's ability to: (i) incur certain liens or permit them to exist; (ii) incur or guarantee additional indebtedness; (iii) make certain investments and acquisitions related to Sisecam Wyoming's operations in Wyoming; (iv) merge or consolidate with another company; (v) transfer, sell or otherwise dispose of assets, (vi) make distributions; (vii) change the nature of Sisecam Wyoming's business; and (viii) enter into certain transactions with affiliates;
- a requirement to maintain a quarterly consolidated leverage ratio of not more than 3.25:1:00; provided, however, subject to certain conditions, Sisecam Wyoming shall have the ability to increase the maximum consolidated leverage ratio to 3.75:1.00 for a year while Sisecam Wyoming is undertaking capacity expansion capital expenditures;
- a requirement to maintain a quarterly consolidated interest coverage ratio of not less than 3.00:1.00; and

- customary events of default including (i) failure to make payments required under the Sisecam Wyoming Credit Facility, (ii) events of default resulting from failure to comply with covenants and financial ratios, (iii) the occurrence of a voluntary change of control, as a result of which Sisecam Wyoming is directly or indirectly controlled by persons or entities not currently directly or indirectly controlling Sisecam Wyoming, (iv) the institution of insolvency or similar proceedings against Sisecam Wyoming, and (v) the occurrence of a cross default under any other material indebtedness Sisecam Wyoming may have. Upon the occurrence of an event of default, in their discretion, the Sisecam Wyoming Credit Facility lenders may exercise certain remedies, including, among others, accelerating the maturity of any outstanding loans, accrued and unpaid interest and all other amounts owing and payable such that all amounts thereunder will become immediately due and payable, and if not timely paid upon such acceleration, to charge Sisecam Wyoming a default rate of interest on all amounts outstanding under the Sisecam Wyoming Credit Facility.

For more information please read Part II, Item 8, “Financial Statements and Supplementary Data—Note 9—Debt—Sisecam Wyoming Credit Facility.”

With respect to the Sisecam Wyoming Equipment Financing Arrangement, in order to secure the payment and performance of Sisecam Wyoming’s obligations thereunder and other debt obligations owed by Sisecam Wyoming to the Equipment Financing Lender, Sisecam Wyoming granted to the Equipment Financing Lender a continuing security interest in all of Sisecam Wyoming’s right, title and interest in and to the Equipment (as defined in the Master Agreement) and certain related collateral. The Sisecam Wyoming Equipment Financing Arrangement (1) incorporates all covenants in the Sisecam Wyoming Credit Facility, now or hereinafter existing, or in any applicable replacement credit facility accepted in writing by the Equipment Financing Lender, that are based upon a specified level or ratio relating to assets, liabilities, indebtedness, rentals, net worth, cash flow, earnings, profitability, or any other accounting-based measurement or test, and (2) includes customary events of default subject to applicable grace periods, including, among others, (i) payment defaults, (ii) certain mergers or changes in control of Sisecam Wyoming, (iii) cross defaults with certain other indebtedness (a) to which the Equipment Financing Lender is a party or (b) to third parties in excess of $10 million, and (iv) the commencement of certain insolvency proceedings or related events identified in the Master Agreement. Upon the occurrence of an event of default, in its discretion, the Equipment Financing Lender may exercise certain remedies, including, among others, the ability to accelerate the maturity of any equipment note such that all amounts thereunder will become immediately due and payable, to take possession of the Equipment identified in any equipment note, and to charge Sisecam Wyoming a default rate of interest on all then outstanding or thereafter incurred obligations under the Sisecam Wyoming Equipment Financing Arrangement.

The provisions of the Sisecam Wyoming Credit Facility and the Sisecam Wyoming Equipment Financing Arrangement may affect Sisecam Wyoming’s ability to obtain future financing and pursue attractive business opportunities and flexibility in planning for, and reacting to, changes in business conditions. In addition, Sisecam Wyoming’s failure to comply with the provisions of the Sisecam Wyoming Credit Facility could result in an event of default, which could enable its lenders, subject to the terms and conditions thereof, to terminate all outstanding commitments and declare any outstanding principal of that debt, together with accrued and unpaid interest, to be immediately due and payable. If the payment of the Sisecam Wyoming Credit Facility’s debt is accelerated, the assets of Sisecam Wyoming may be insufficient to repay such debt in full. As a result, our results of operations and, therefore, our ability to distribute cash to unitholders, could be materially and adversely affected, and our unitholders could experience a partial or total loss of their investment. Please read Part II, Item 8, “Financial Statements and Supplementary Data—Note 9—Debt—Sisecam Wyoming Credit Facility” for more information.

Our level of indebtedness may increase, reducing our financial flexibility.

In the future, we may incur significant indebtedness in order to make future acquisitions or to develop or expand our facilities and mining capabilities. Our level of indebtedness could affect our operations in several ways, including:

- a significant portion of our cash flows could be used to service our indebtedness;
- a high level of debt would increase our vulnerability to general adverse economic and industry conditions;
- the covenants contained in the agreements governing our outstanding indebtedness will limit our ability to borrow additional funds, dispose of assets, pay distributions and make certain investments;
- a high level of debt may place us at a competitive disadvantage compared to our competitors that are less leveraged, and therefore may be able to take advantage of opportunities that our indebtedness would prevent us from pursuing;
- our debt covenants may also affect our flexibility in planning for, and reacting to, changes in the economy and our industry; and

- a high level of debt may impair our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions, distributions or for general corporate or other purposes.

A high level of indebtedness increases the risk that we may default on our debt obligations. Our ability to meet our debt obligations and to reduce our level of indebtedness depends on our future performance. General economic conditions and financial, business and other factors affect our operations and our future performance. Many of these factors are beyond our control. We may not be able to generate sufficient cash flows to pay the interest on our debt, and future working capital, borrowings or equity financing may not be available to pay or refinance such debt. Factors that will affect our ability to raise cash through an offering of our units or a refinancing of our debt include financial market conditions, the value of our assets and our performance at the time we need capital.

The amount of cash we have available for distribution to holders of our units depends primarily on our cash flow and not solely on profitability, which may prevent us from making cash distributions during periods when we record net income.

The amount of cash we have available for distribution depends primarily upon our cash flow, including cash flow from reserves and working capital or other borrowings, and not solely on profitability, which will be affected by non-cash items. As a result, we may pay cash distributions during periods when we record net losses for financial accounting purposes and may not pay cash distributions during periods when we record net income.

Risks Inherent in an Investment in Us

The CoC Transaction could significantly and adversely affect our results of operations because of difficulties related to integration, the achievement of synergies and other challenges.

- On December 21, 2021, Sisecam Chemicals USA Inc. (“Sisecam USA”) acquired from Ciner Enterprises Inc. (“Ciner Enterprises”) a 60% interest in Sisecam Chemicals Resources LLC (formerly known as Ciner Resources Corporation) (“Sisecam Chemicals”), an entity indirectly owning approximately 72% limited partner interest in the Partnership, as well as its 2% general partner interest and related incentive distribution rights, with Ciner Enterprises Inc. retaining a 40% interest in Sisecam Chemicals (the “CoC Transaction”). Prior to the completion of the CoC Transaction, Sisecam Chemicals was solely controlled and operated by Ciner Group, and there can be no assurances that Sisecam Chemicals, and its owners Sisecam USA and Ciner Enterprises (or their respective successors), will operate in a manner that allows for the achievement of substantial benefits to us. Further, it is possible that there could be a loss of our key customers, disruption of our ongoing businesses or unexpected issues, higher than expected costs and an integration process that takes longer than originally anticipated. Potential difficulties that may be encountered in the integration process include, among others:
- not retaining existing customer or logistics relationships or commercial arrangements, including in the Ciner Group’s global logistics network;
- difficulty obtaining new customer or logistics relationships and the terms of new commercial arrangements related thereto;
- not realizing anticipated operating synergies;
- integrating personnel from the two companies and the loss of key employees;
- potential unknown liabilities and unforeseen expenses or delays associated with and following the completion of the CoC Transaction;
- integrating relationships with customers, vendors and business partners; and
- the disruption of, or the loss of momentum in our ongoing business or inconsistencies in standards, controls, procedures and policies.
- In addition, at times the attention of certain members of our management and resources may be focused on integration of Sisecam Chemicals and diverted from our day-to-day business operations, which may disrupt our ongoing business.

Sisecam Chemicals, which is owned by Sisecam USA and Ciner Enterprises, indirectly owns and controls our general partner, which has sole responsibility for conducting our business and managing our operations. Our general partner and its affiliates and related parties, including Sisecam Chemicals, Sisecam USA and Ciner Enterprises, have conflicts of interest with us and

our unitholders and limited duties to us and our unitholders, and they may favor their own interests to the detriment of us and our unitholders.

Sisecam Chemicals, which is owned 60% by Sisecam USA and 40% by Ciner Enterprises, indirectly owns and controls our general partner and the owners of Sisecam Chemicals have agreed that (i) Sisecam USA and Ciner Enterprises have a right to designate six directors and four directors, respectively, to the board of directors of Sisecam Chemicals, (ii) the board of directors of our general partner shall consist of six designees from Sisecam USA, two designees from Ciner Enterprises and three independent directors for as long as our general partner is legally required to appoint such independent directors and (iii) our right to appoint four managers to the board of managers of Ciner Wyoming shall be comprised of three designees from Sisecam USA and one designee from Ciner Enterprises. In turn, the directors of our general partner appoint all of our general partner's officers. Although our general partner has a duty to manage us in a manner that is beneficial to us and our unitholders, the directors of our general partner who are appointed to represent Sisecam USA or Ciner Enterprises have a fiduciary duty to perform their duties in a manner beneficial to Sisecam USA or Ciner Enterprises, respectively. Therefore, conflicts of interest could arise between Sisecam Chemicals, Sisecam USA, Ciner Enterprises or any of their respective affiliates, including our general partner, on the one hand, and us or any of our unitholders, on the other hand. In resolving these conflicts of interest, our general partner may favor its own interests and the interests of Sisecam Chemicals, Sisecam USA and Ciner Enterprises over the interests of our common unitholders. These conflicts include, among others, the following situations:

- neither our partnership agreement nor any other agreement requires Sisecam Chemicals, Sisecam USA or Ciner Enterprises to pursue a business strategy that favors us, and the directors and officers of Sisecam USA and Ciner Enterprises have a fiduciary duty to make these decisions in the best interests of the stockholders of their respective companies, which may be contrary to our interests. Sisecam USA or Ciner Enterprises may choose to shift the focus of their respective investment and growth to areas not served by our assets;

- our general partner is allowed to take into account the interests of parties other than us, such as Sisecam Chemicals, Sisecam USA and Ciner Enterprises, in exercising certain rights under our partnership agreement, which may effectively limit its duty to our unitholders;

- all of the officers and eight of the directors of our general partner are also officers and/or directors of either Sisecam Chemicals, Sisecam USA and/or Ciner Enterprises or their respective affiliates and will owe fiduciary duties to their respective companies. These individuals may also devote some or a significant amount of their time to the businesses of Sisecam USA, Ciner Enterprises or their affiliates and will be compensated by such other parties accordingly;

- our partnership agreement replaces the fiduciary duties that would otherwise be owed by our general partner with contractual standards governing its duties, limits our general partner's liabilities and restricts the remedies available to our unitholders for actions that, without such limitations, might constitute breaches of fiduciary duty;

- except in limited circumstances, our general partner has the power and authority to conduct our business without unitholder approval;

- dispute may arise under any commercial agreements between us and Şişecam LLC, Sisecam USA and/or Ciner Enterprises and their respective affiliates;

- Sisecam Chemicals, Sisecam USA and Ciner Enterprises and their respective other affiliates are not limited in their ability to compete with us and may directly or indirectly compete with us for acquisition opportunities and customers. For example, we face competition from Sisecam USA and its affiliates and Ciner Group's trona-based soda ash production in Turkey and prospective soda ash production in the U.S. through a joint venture among affiliates of both Sisecam USA and Ciner Enterprises ;

- our general partner determines the amount and timing of asset purchases and sales, borrowings, issuances of additional partnership securities and the level of reserves, each of which can affect the amount of cash that we distribute to our unitholders;

- our general partner determines the amount and timing of any capital expenditure and whether a capital expenditure is classified as a maintenance capital expenditure, which reduces operating surplus, or an expansion or investment capital expenditure, which does not reduce operating surplus. Our partnership agreement does not set a limit on the amount of

maintenance capital expenditures that our general partner may determine to be necessary or appropriate. Please read Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Capital Expenditures" for a discussion regarding when a capital expenditure constitutes a maintenance capital expenditure or an expansion capital expenditure. This determination can affect the amount of cash that is distributed to our unitholders;

- our general partner may cause us to borrow funds to pay cash distributions, even if the purpose or effect of the borrowing is to make incentive distributions;
- our partnership agreement permits us to classify up to $20.0 million as operating surplus, even if it is generated from asset sales, non-working capital borrowings or other sources that would otherwise constitute capital surplus. This cash may be used to fund distributions or to our general partner in respect of the incentive distribution rights;
- our general partner generally determines which costs incurred by it and its affiliates are reimbursable by us;
- our partnership agreement does not restrict our general partner from causing us to pay our general partner or its affiliates for any services rendered to us or from entering into additional contractual arrangements with its affiliates on our behalf;
- our general partner intends to limit its liability regarding our contractual and other obligations;
- our general partner may exercise its right to call and purchase our common units if it and its affiliates own more than 80% of the common units;
- our general partner controls the enforcement of obligations that it and its affiliates owe to us, including Sisecam Chemicals' obligations under the Services Agreement and its commercial agreement with us;
- our general partner decides whether to retain separate counsel, accountants or others to perform services for us;
- our general partner may transfer its incentive distribution rights without unitholder approval; and
- our general partner may elect to cause us to issue common units to it in connection with a resetting of the target distribution levels related to our general partner's incentive distribution rights without the approval of the conflicts committee of the board of directors of our general partner or the unitholders. Any such election may result in lower distributions to the common unitholders in certain situations.

We currently do not have a majority of independent directors on the board of directors of our general partner, which could create conflicts of interests and pose a risk from a corporate governance perspective.

Pursuant to the Sisecam Chemicals Operating Agreement, the board of directors of our general partner shall consist of six designees from Sisecam USA, two designees from Ciner Enterprises and three independent directors for as long as our general partner is legally required to appoint such independent directors. As a publicly traded limited partnership, the NYSE rules do not require, and the board of directors of our general partner does not currently have, a majority of independent directors or a compensation committee or a nominating and corporate governance committee comprised of independent directors. In addition, while our partnership agreement permits our general partner to seek review by the conflicts committee comprised of independent directors of matters involving conflicts of interest between our general partner or any of its affiliates, on the one hand, and us, our partners and any of our subsidiaries, on the other hand, our general partner is not required or obligated to seek conflicts committee approval for any such matter. As a result, the lack of control of the independent directors on the board of directors of our general partner may create the potential for conflicts of interest and deprive us of the benefits of having entirely independent director approval of various decisions. Accordingly, unitholders do not have the same protections afforded to equity holders of entities that have a board of directors comprised of a majority of independent directors or are otherwise subject to all of the NYSE corporate governance requirements.

Operating performance and current and anticipated capital needs, including investments in expansion capital expenditures and acquisitions, may affect the amount distributed to unitholders.

We intend to pay a quarterly distribution to our unitholders to the extent we have sufficient cash from our operations after establishment of cash reserves, which may include current and anticipated expansion capital expenditures and acquisitions. In connection with the CoC Transaction, our management is evaluating whether and when to develop the potential Green River Expansion Project that we believe could increase production levels up to approximately 3.5 million tons of soda ash per year. We

have conducted the initial basic design, secured certain related permits and are currently evaluating the detailed cost analysis pursuant to the basic design. If we decide to proceed with this project, it will require capital expenditures materially higher than have been recently incurred by Sisecam Wyoming. To maintain a disciplined financial policy and what we believe is a conservative capital structure, we may pay for the investment should we decide to proceed with it in part through cash generated by the business and in part through debt.

Our general partner has considerable discretion in determining the amount of available cash, the amount of distributions and the decision to make any distribution. Although our partnership agreement requires that we distribute all of our available cash quarterly, there is no guarantee that we will make quarterly cash distributions to our unitholders or at any other rate, and we have no legal obligation to do so.

For example, in an effort to achieve greater financial and liquidity flexibility during the COVID-19 pandemic, our board of directors approved a suspension of quarterly distributions to our unitholders for the quarter ended June 30, 2020, that continued for each of the quarters ended September 30, 2020, December 31, 2020, March 31, 2021, and June 30, 2021.

To the extent we issue additional units in connection with any acquisitions or expansion capital expenditures, the payment of distributions on those additional units may increase the risk that we will be unable to maintain or increase our per unit distribution level. There are no limitations in our partnership agreement on our ability to issue additional units, including units ranking senior to the common units. The incurrence of additional commercial borrowings or other debt to finance our growth strategy will increase our interest expense, which, in turn, may impact the cash that we have available to distribute to our unitholders.

Our partnership agreement does not contain a requirement for us to pay distributions to our unitholders, and we do not guarantee that we will pay the minimum quarterly distribution (as defined in our partnership agreement) or any distribution on the units in any quarter.

Our partnership agreement does not contain a requirement for us to pay distributions to our unitholders, and we do not guarantee that we will pay any distribution on the units in any quarter. For example, in an effort to achieve greater financial and liquidity flexibility during the COVID-19 pandemic, our board of directors approved a suspension of quarterly distributions to our unitholders for the quarter ended June 30, 2020, that continued for each of the quarters ended September 30, 2020, December 31, 2020, March 31, 2021, and June 30, 2021.

Our partnership agreement replaces our general partner's fiduciary duties to holders of our common units with contractual standards governing its duties.

Our partnership agreement contains provisions that eliminate and replace the fiduciary standards to which our general partner would otherwise be held by Delaware law regarding fiduciary duty and replaces those duties with several different contractual standards. For example, our partnership agreement permits our general partner to make a number of decisions in its individual capacity, as opposed to in its capacity as our general partner, free of any duties to us and our unitholders other than the implied contractual covenant of good faith and fair dealing, which means that a court will enforce the reasonable expectations of the partners where the language in the partnership agreement does not provide for a clear course of action. This provision entitles our general partner to consider only the interests and factors that it desires and relieves it of any duty or obligation to give any consideration to any interest of, or factors affecting, us, our affiliates or our limited partners. Examples of decisions that our general partner may make in its individual capacity include:

- how to allocate business opportunities among us and its affiliates;
- whether to exercise its limited call right or assign it to one of its affiliates;
- whether to seek approval of the resolution of a conflict of interest by the conflicts committee of the board of directors of our general partner;
- how to exercise its voting rights with respect to the units it owns;
- whether to exercise its registration rights;
- whether to elect to reset target distribution levels;
- whether to transfer the incentive distribution rights or any units it owns to a third party; and
- whether or not to consent to any merger, consolidation or conversion of the partnership or amendment to the partnership agreement.

By purchasing a common unit, a unitholder is treated as having consented to the provisions in the partnership agreement, including the provisions discussed above.

Our partnership agreement restricts the remedies available to holders of our units for actions taken by our general partner that might otherwise constitute breaches of fiduciary duty.

Our partnership agreement contains provisions that restrict the remedies available to unitholders for actions taken by our general partner that might otherwise constitute breaches of fiduciary duty under Delaware law regarding fiduciary duty. For example, our partnership agreement provides that:

- whenever our general partner, the board of directors of our general partner or any committee thereof (including the conflicts committee) makes a determination or takes, or declines to take, any other action in their respective capacities, our general partner, the board of directors of our general partner and any committee thereof (including the conflicts committee), as applicable, is required to make such determination, or take or decline to take such other action, in good faith, meaning that it subjectively believed that the decision was in the best interests of our partnership, and, except as specifically provided by our partnership agreement, will not be subject to any other or different standard imposed by our partnership agreement, Delaware law, or any other law, rule or regulation, or at equity;
- our general partner will not have any liability to us or our unitholders for a decision made in its capacity as a general partner so long as such decisions are made in good faith;
- our general partner and its officers and directors will not be liable for monetary damages to us or our limited partners resulting from any act or omission unless there has been a final and non-appealable judgment entered by a court of competent jurisdiction determining that our general partner or its officers and directors, as the case may be, acted in bad faith or engaged in fraud or willful misconduct or, in the case of a criminal matter, acted with knowledge that the conduct was criminal; and
- our general partner will not be in breach of its obligations under the partnership agreement or its duties to us or our limited partners if a transaction with an affiliate or the resolution of a conflict of interest is:
    - approved by the conflicts committee of the board of directors of our general partner, although our general partner is not obligated to seek such approval;
    - approved by the vote of a majority of the outstanding common units, excluding any common units owned by our general partner and its affiliates;
    - determined by the board of directors of our general partner to be on terms no less favorable to us than those generally being provided to or available from unrelated third parties.
    - determined by the board of directors of our general partner to be fair and reasonable to us, taking into account the totality of the relationships among the parties involved, including other transactions that may be particularly favorable or advantageous to us.

In connection with a situation involving a transaction with an affiliate or a conflict of interest, any determination by our general partner or the conflicts committee must be made in good faith. If an affiliate transaction or the resolution of a conflict of interest is not approved by our common unitholders or the conflicts committee and the board of directors of our general partner determines that the resolution or course of action taken with respect to such affiliate transaction or conflict of interest satisfies either of the standards set forth in the third and fourth bullets above, then it will be presumed that, in making its decision, the board of directors acted in good faith, and in any proceeding brought by or on behalf of any limited partner or the partnership challenging such determination, the person bringing or prosecuting such proceeding will have the burden of overcoming such presumption.

Our general partner and its indirect equityholders, including Sisecam USA and Ciner Enterprises, are not restricted in their ability to compete with us.

Our partnership agreement provides that our general partner will be restricted from engaging in any business activities other than acting as our general partner and those activities incidental to its ownership of interests in us. Affiliates of our general partner, and its other indirect equity owners, including Sisecam USA and Ciner Enterprises and their respective other subsidiaries and affiliates, are not prohibited from owning assets or engaging in businesses that compete directly or indirectly with us. Sisecam USA and Ciner Enterprises and their respective other subsidiaries and affiliates may make investments in and purchases of entities that acquire, own and operate other soda ash producing assets and that may compete with us.

As a result, under the circumstances described above, each of Sisecam Chemicals, Sisecam USA and/or Ciner Enterprises and their respective related parties have the ability to construct or acquire assets that directly compete with our assets. Pursuant to the terms of our partnership agreement, the doctrine of corporate opportunity, or any analogous doctrine, does not apply to our

general partner or any of its affiliates, including its executive officers and directors and Sisecam USA and/or Ciner Enterprises. Any such person or entity that becomes aware of a potential transaction, agreement, arrangement or other matter that may be an opportunity for us will not have any duty to communicate or offer such opportunity to us. Any such person or entity will not be liable to us or to any limited partner for breach of any fiduciary duty or other duty by reason of the fact that such person or entity pursues or acquires such opportunity for itself, directs such opportunity to another person or entity or does not communicate such opportunity or information to us. This may create actual and potential conflicts of interest between us and affiliates of our general partner and result in less than favorable treatment of us and our common unitholders.

Our general partner, or any transferee holding a majority of the incentive distribution rights, may elect to cause us to issue common units to it in connection with a resetting of the minimum quarterly distribution (as defined in our partnership agreement) and target distribution levels related to its incentive distribution rights, without the approval of the conflicts committee of our general partner or the holders of our common units. This election could result in lower distributions to holders of our common units in certain situations.

The holder or holders of a majority of the incentive distribution rights, which is initially our general partner, have the right, at any time when there are no subordinated units outstanding and it has received incentive distributions at the highest level to which it is entitled (48.0%) for each of the prior four consecutive fiscal quarters (and the amount of each such distribution did not exceed adjusted operating surplus for each such quarter), to reset the minimum quarterly distribution and the initial target distribution levels at higher levels based on our cash distribution at the time of the exercise of the reset election. Following such a reset election, the minimum quarterly distribution will be reset to an amount equal to the average cash distribution per unit for the two fiscal quarters immediately preceding the reset election (such amount is referred to as the “reset minimum quarterly distribution”), and the target distribution levels will be reset to correspondingly higher levels based on percentage increases above the reset minimum quarterly distribution. Our general partner has the right to transfer the incentive distribution rights at any time, in whole or in part, and any transferee holding a majority of the incentive distribution rights will have the same rights as our general partner with respect to resetting target distributions.

In the event of a reset of our minimum quarterly distribution and target distribution levels, our general partner will be entitled to receive, in the aggregate, a number of common units equal to that number of common units that would have entitled the holder of such units to an aggregate quarterly cash distribution in the two-quarter period prior to the reset election equal to the distribution to our general partner on the incentive distribution rights in the quarter prior to the reset election prior two quarters. Our general partner will also be issued the number of general partner units necessary to maintain its general partner interest in us that existed immediately prior to the reset election (approximately 2.0%). We anticipate that our general partner would exercise this reset right to facilitate acquisitions or internal growth projects that would not be sufficiently accretive to cash distributions per common unit without such conversion. However, our general partner or a transferee could also exercise this reset election at a time when it is experiencing, or expects to experience, declines in the cash distributions it receives related to its incentive distribution rights and may, therefore, desire to be issued common units rather than retain the right to receive incentive distributions based on target distribution levels that are less certain in the then-current business environment. This risk could increase if our incentive distribution rights have been transferred to a third-party. As a result, a reset election may cause our common unitholders to experience dilution in the amount of cash distributions that they otherwise would have received had we not issued new common units to our general partner in connection with resetting the target distribution levels.

Holders of our common units have limited voting rights and are not entitled to appoint our general partner or its directors, which could reduce the price at which our common units will trade.

Unlike the holders of common stock in a corporation, unitholders have only limited voting rights on matters affecting our business and, therefore, limited ability to influence management’s decisions regarding our business. Unitholders will have no right on an annual or ongoing basis to appoint our general partner or its board of directors. Pursuant to the Sisecam Chemicals Operating Agreement, the board of directors of our general partner shall consist of six designees from Sisecam USA, two designees from Ciner Enterprises and three independent directors for as long as our general partner is legally required to appoint such independent directors, and not by our unitholders. As a result of these limitations, the secondary market price at which the common units will trade could decline because of the absence or reduction of a takeover premium in the trading price. Unlike publicly traded corporations, we will not conduct annual meetings of our unitholders to appoint directors or to conduct other matters routinely conducted at annual meetings of stockholders of corporations. Our partnership agreement also contains provisions limiting the ability of unitholders to call meetings or to acquire information about our operations, as well as other provisions limiting the unitholders’ ability to influence the manner or direction of management.

Even if holders of our common units are dissatisfied, they cannot initially remove our general partner without its consent.

If our unitholders are dissatisfied with the performance of our general partner, they will have limited ability to remove our general partner. The vote of the holders of at least 66-2/3% of all outstanding common units voting together as a single class is required to remove our general partner. As of March 10, 2022, SCW LLC owned 14,551,000 common units, which constitutes an aggregate of 73.5% of the common units in us.

Our general partner interest or the control of our general partner may be transferred to a third party without unitholder consent.

Our general partner may transfer its general partner interest to a third party in a merger or in a sale of all or substantially all of its assets or otherwise without the consent of our unitholders. Furthermore, our partnership agreement does not restrict the ability of Sisecam Chemicals, Sisecam USA, Ciner Enterprises or, another entity that controls any such entity, to transfer or otherwise dispose of the corresponding indirect ownership interest in our general partner to a third party. In such a situation, the new owner of our general partner could be in a position to replace the board of directors and executive officers of our general partner with its own designees and thereby exert significant control over the decisions taken by the board of directors and executive officers of our general partner. This effectively permits a "change of control" without the vote or consent of our unitholders. For example, in connection with the CoC Transaction, Ciner Enterprises transferred a 60% interest in our U.S. sponsor to Sisecam USA, and Ciner Enterprises and Sisecam agreed that Sisecam shall have the right to designate six directors to our board of directors.

The incentive distribution rights held by our general partner, or indirectly held by Sisecam Chemicals, may be transferred to a third party without unitholder consent.

Our general partner or its equityholders may transfer the incentive distribution rights to a third party at any time without the consent of our unitholders. If Sisecam Chemicals transfers the incentive distribution rights to a third party but retains its ownership interest in our general partner, our general partner may not have the same incentive to grow our partnership and increase quarterly distributions to unitholders over time as it would if Sisecam Chemicals had retained ownership of the incentive distribution rights. For example, a transfer of incentive distribution rights by Sisecam Chemicals could reduce the likelihood of Sisecam Chemicals accepting offers made by us to purchase assets owned by it, as it would have less of an economic incentive to grow our business, which in turn would impact our ability to grow our asset base.

Our general partner has a limited call right that may require unitholders to sell their common units at an undesirable time or price.

If at any time our general partner and its affiliates own more than 80% of the common units, our general partner will have the right, which it may assign to any of its affiliates or to us, but not the obligation, to acquire all, but not less than all, of the common units held by unaffiliated persons at a price equal to the greater of (1) the average of the daily closing price of the common units over the 20 trading days preceding the date three days before notice of exercise of the call right is first mailed and (2) the highest per-unit price paid by our general partner or any of its affiliates for common units during the 90-day period preceding the date such notice is first mailed. We refer to this right in this Report as the limited call right. As a result, unitholders may be required to sell their common units at an undesirable time or price and may receive no return or a negative return on their investment. Unitholders may also incur a tax liability upon a sale of their units. Our general partner is not obligated to obtain a fairness opinion regarding the value of the common units to be repurchased by it upon exercise of the limited call right. There is no restriction in our partnership agreement that prevents our general partner from issuing additional common units and exercising its limited call right. If our general partner exercised its limited call right, the effect would be to take us private and, if the units were subsequently deregistered, we would no longer be subject to the reporting requirements of the Exchange Act. As of March 10, 2022, SCW LLC owned an aggregate of 73.5% of our common units.

We may issue additional units, including units ranking senior to common units, without unitholder approval, which would dilute existing unitholder ownership interests.

Our partnership agreement does not limit the number of additional limited partner interests we may issue at any time without the approval of our unitholders. Any additional partnership interests that we issue may be senior to the common units in right of distribution, liquidation and voting. The issuance of additional common units or other equity interests of equal or senior rank will have the following effects:

- our existing unitholders' proportionate ownership interest in us will decrease;
- the amount of cash available for distribution on each unit may decrease;
- because the amount payable to holders of incentive distribution rights is based on a percentage of the total cash available for distribution, the distributions to holders of incentive distribution rights will increase even if the per unit distribution on common units remains the same;
- the ratio of taxable income to distributions may increase;
- the relative voting strength of each previously outstanding unit may be diminished;
- the market price of the common units may decline;

- the amounts available for distributions to our common unitholders may be reduced or eliminated; and
- the claims of the common unitholders to our assets in the event of our liquidations may be subordinated.

Our general partner intends to limit its liability regarding our obligations.

Our general partner intends to limit its liability under contractual arrangements so that the counterparties to such arrangements have recourse only against our assets, and not against our general partner or its assets. Our general partner may therefore cause us to incur indebtedness or other obligations that are nonrecourse to our general partner. Our partnership agreement permits our general partner to limit its liability, even if we could have obtained more favorable terms without the limitation on liability. In addition, we are obligated to reimburse or indemnify our general partner to the extent that it incurs obligations on our behalf. Any such reimbursement or indemnification payments would reduce the amount of cash otherwise available for distribution to our unitholders.

Our partnership agreement restricts the voting rights of unitholders owning 20% or more of our common units.

Our partnership agreement restricts unitholders' voting rights by providing that any units held by a person or group that owns 20% or more of any class of units then outstanding, other than our general partner and its affiliates, their transferees and persons who acquired such units with the prior approval of the board of directors of our general partner, cannot vote on any matter.

Cost reimbursements due to our general partner and its affiliates for services provided to us or on our behalf will reduce our earnings and therefore our ability to distribute cash to our unitholders. The amount and timing of such reimbursements will be determined by our general partner.

Prior to making any distribution on the common units, we will reimburse our general partner and its affiliates for all expenses they incur and payments they make on our behalf. Our partnership agreement does not set a limit on the amount of expenses for which our general partner and its affiliates may be reimbursed. These expenses include salary, bonus, incentive compensation and other amounts paid to persons who perform services for us or on our behalf pursuant to the Services Agreement and expenses allocated to us by our general partner or its affiliates. Our partnership agreement provides that our general partner will determine in good faith the expenses that are allocable to us, including those allocated to us pursuant to the Services Agreement. The reimbursement of expenses and payment of fees, if any, to our general partner and its affiliates will reduce our earnings and therefore our ability to distribute cash to our unitholders.

Your liability may not be limited if a court finds that unitholder action constitutes control of our business.

A general partner of a partnership generally has unlimited liability for the obligations of the partnership, except for those contractual obligations of the partnership that are expressly made without recourse to the general partner. Our partnership is organized under Delaware law, and we conduct business primarily in Wyoming and Georgia. The limitations on the liability of holders of limited partner interests for the obligations of a limited partnership have not been clearly established in some jurisdictions. You could be liable for any and all of our obligations as if you were a general partner if a court or government agency were to determine that:

- we were conducting business in a state but had not complied with that particular state's partnership statute; or
- your right to act with other unitholders to remove or replace the general partner, to approve some amendments to our partnership agreement or to take other actions under our partnership agreement constitute "control" of our business.

Unitholders may have liability to repay distributions and in certain circumstances may be personally liable for the obligations of the partnership.

Under certain circumstances, unitholders may have to repay amounts wrongfully returned or distributed to them. Under Section 17-607 of the Delaware Revised Uniform Limited Partnership Act, we may not make a distribution to our unitholders if the distribution would cause our liabilities to exceed the fair value of our assets. Delaware law provides that, for a period of three years from the date of the impermissible distribution, limited partners who received a distribution and who knew at the time of such distribution that it violated Delaware law will be liable to the limited partnership for the distribution amount. Transferees of common units are liable both for the obligations of the transferor to make contributions to the partnership that were known to the transferee at the time of transfer and for those obligations that were unknown if the liabilities could have been determined from the partnership agreement. Liabilities to partners on account of their partnership interests and liabilities that are non-recourse to the partnership are not counted for purposes of determining whether a distribution is permitted.

The New York Stock Exchange does not require a publicly-traded partnership like us to comply with certain of its corporate governance requirements.

Our common units are listed on the NYSE under the symbol "SIRE." Because we are a publicly-traded partnership, the NYSE does not require us to have a majority of independent directors on our general partner's board of directors or to establish a compensation committee or a nominating and corporate governance committee. Accordingly, unitholders do not have the same protections afforded to certain corporations that are subject to all of the NYSE corporate governance requirements.

The market price of our common units could be adversely affected by sales of substantial amounts of our common units in the public markets, including sales by our existing unitholders.

Under our partnership agreement, we have agreed to register for resale under the Securities Act and applicable state securities laws any common units or other limited partner interests proposed to be sold by our general partner or any of its affiliates or their assignees if an exemption from the registration requirements of the Securities Act is not otherwise available. These registration rights continue for two years following any withdrawal or removal of our general partner. The sale or disposition of a substantial number of our common units in the public markets could have a material adverse effect on the price of our common units or could impair our ability to obtain capital through an offering of equity securities. We do not know whether any such sales would be made in the public market or in private placements, nor do we know what impact such potential or actual sales would have on our unit price in the future.

Our unitholders who fail to furnish certain information requested by our general partner or who our general partner, upon receipt of such information, determines are not eligible citizens are not entitled to receive distributions or allocations of income or loss on their common units and their common units will be subject to redemption.

Our general partner may require each limited partner to furnish information about his nationality, citizenship or related status. If a limited partner fails to furnish information about his nationality, citizenship or other related status within 30 days after a request for the information or our general partner determines after receipt of the information that the limited partner is not an eligible citizen, the limited partner may be treated as a non-citizen assignee. A non-citizen assignee does not have the right to direct the voting of his units and may not receive distributions in kind upon our liquidation. Furthermore, we have the right to redeem all of the common units of any holder that is not an eligible citizen or fails to furnish the requested information. The redemption price will be paid in cash or by delivery of a promissory note, as determined by our general partner.

Changes in accounting standards issued by the Financial Accounting Standards Board ("FASB") could have a material effect on our balance sheet, revenue and results of operations, and could require a significant expenditure of time, attention and resources, especially by senior management.

Our accounting and financial reporting policies conform to Generally Accepted Accounting Principles in the U.S., which are periodically revised and/or expanded. The application of accounting principles is also subject to varying interpretations over time. Accordingly, we are required to adopt new or revised accounting standards or comply with revised interpretations that are issued from time to time by various parties, including accounting standard setters and those who interpret the standards, such as the Financial Accounting Standards Board and the Securities and Exchange Commission and our independent registered public accounting firm. Such new financial accounting standards may result in significant changes that could adversely affect our financial condition and results of operations.

Refer to Note 2 "Summary of Significant Accounting Policies - Recently Issued Accounting Pronouncements" of the Notes to the Consolidated Financial Statements for further discussion of these new accounting standards, including the implementation status and potential impact to our consolidated financial statements.

Tax Risks to Common Unitholders

Our tax treatment depends on our status as a partnership for U.S. federal income tax purposes, as well as our not being subject to a material amount of entity-level taxation by individual states. If the Internal Revenue Service ("IRS") were to treat us as a corporation for U.S. federal income tax purposes or we were otherwise subject to a material amount of entity-level taxation, then our ability to distribute cash to our unitholders could be substantially reduced.

The anticipated after-tax economic benefit of an investment in our common units depends largely on our being treated as a partnership for U.S. federal income tax purposes. Despite the fact that we are organized as a limited partnership under Delaware law, we will be treated as a corporation for U.S. federal income tax purposes unless we satisfy a "qualifying income" requirement. Based upon our current operations, we believe we satisfy the qualifying income requirement. Failing to meet the qualifying income requirement or a change in current law could cause us to be treated as a corporation for U.S. federal income tax purposes or otherwise subject us to taxation as an entity.

If we were treated as a corporation for U.S. federal income tax purposes, we would pay U.S. federal income tax on our taxable income at the corporate tax rate and we would also likely pay additional state and local income taxes at varying rates. Distributions to our unitholders would generally be taxed again as corporate distributions, which would be taxable as dividends for

U.S. federal income tax purposes to the extent paid out of our current or accumulated earnings and profits as determined for U.S. federal income tax purposes, and no income, gains, losses, deductions or credits recognized by us would flow through to our unitholders. Because tax would be imposed upon us as a corporation, our cash available for distribution to our unitholders would be substantially reduced.

At the state level, several states have been evaluating ways to subject partnerships to entity-level taxation through the imposition of state income, franchise or other forms of taxation. Imposition of a material amount of any of these taxes in the jurisdictions in which we own assets or conduct business could substantially reduce the cash available for distribution to our unitholders.

If we were treated as a corporation for U.S. federal income tax purposes or otherwise subjected to a material amount of entity-level taxation, there would be a material reduction in the anticipated cash flow and after-tax return to our unitholders, likely causing a substantial reduction in the value of our common units.

Our partnership agreement provides that if a law is enacted or existing law is modified or interpreted in a manner that subjects us to taxation as a corporation or otherwise subjects us to entity-level taxation for U.S. federal, state or local income tax purposes, the target distribution amounts may be adjusted to reflect the impact of that law on us.

The tax treatment of publicly traded partnerships or an investment in our common units could be subject to potential legislative, judicial or administrative changes and differing interpretations, possibly on a retroactive basis.

The present U.S. federal income tax treatment of publicly traded partnerships, including us, or an investment in our common units may be modified by administrative, legislative or judicial changes or differing interpretations at any time. For example, from time to time, members of Congress have proposed and considered substantive changes to the existing U.S. federal income tax laws that would affect publicly traded partnerships, including elimination of partnership tax treatment for publicly traded partnerships.

The Treasury Department has issued, and in the future may issue, regulations interpreting those laws that affect publicly traded partnerships. We believe the income that we treat as qualifying satisfies the requirements under current regulations. However, there can be no assurance that there will not be further changes to U.S. federal income tax laws or the Treasury Department’s interpretation of the qualifying income rules in a manner that could impact our ability to qualify as a partnership for U.S. federal income tax purposes in the future.

We are unable to predict whether additional legislation or any other tax-related proposals will ultimately be enacted. Any modification to the U.S. federal income tax laws may be applied retroactively and could make it more difficult or impossible to meet the exception for certain publicly traded partnerships to be treated as partnerships for U.S. federal income tax purposes. Any such change could negatively impact the value of an investment in our common units.

Unitholders are required to pay taxes on their respective shares of our income even if they do not receive any cash distributions from us.

Each unitholder is treated as a partner to whom we will allocate taxable income even if the unitholder does not receive any cash distributions from us. Unitholders are required to pay U.S. federal income taxes and, in some cases, state and local income taxes, on their respective shares of our taxable income, whether or not they receive cash distributions from us. Our unitholders may not receive cash distributions from us equal to their respective shares of our taxable income or even equal to the actual tax due from them with respect to that income.

Tax gain or loss on the disposition of our common units could be more or less than expected.

If our unitholders sell their common units, they will recognize a gain or loss equal to the difference between the amount realized and their tax basis in those common units. Because distributions in excess of their allocable share of our net taxable income result in a decrease in their tax basis in their common units, the amount, if any, of such prior excess distributions with respect to the units they sell will, in effect, become taxable income to them if they sell such units at a price greater than their tax basis in those units, even if the price they receive is less than their original cost. Furthermore, a substantial portion of the amount realized, whether or not representing gain, may be taxed as ordinary income due to potential recapture of depreciation, depletion or certain other expense deductions and certain other items. In addition, because the amount realized includes a unitholder’s share of our liabilities, if they sell their units, they may incur a tax liability in excess of the amount of cash they receive from the sale.

Unitholders may be subject to limitations on their ability to deduct interest expense we incur.

Our ability to deduct business interest expense is limited for federal income tax purposes to an amount equal to the sum of our business interest income and a specified percentage of our “adjusted taxable income” during the taxable year computed without regard to any business interest income or expense, and in the case of taxable years beginning before 2022, any deduction allowable

for depreciation, amortization, or depletion. Business interest expense that we are not entitled to fully deduct will be allocated to each unitholder as excess business interest and can be carried forward by the unitholder to successive taxable years and used to offset any excess taxable income allocated by us to the unitholder. Any excess business interest expense allocated to a unitholder will reduce the unitholder's tax basis in its partnership interest in the year of the allocation even if the expense does not give rise to a deduction to the unitholder in that year.

Tax-exempt entities face unique tax issues from owning common units that may result in adverse tax consequences to them.

Investment in common units by tax-exempt entities, such as employee benefit plans and individual retirement accounts, or "IRAs," raises issues unique to them. For example, virtually all of our income allocated to organizations that are exempt from U.S. federal income tax, including IRAs and other retirement plans, will be unrelated business taxable income and will be taxable to them. Tax-exempt entities with multiple unrelated trades or businesses cannot aggregate losses from one unrelated trade or business to offset income from another to reduce total unrelated business taxable income. As a result, it may not be possible for tax-exempt entities to utilize losses from an investment in us to offset unrelated business taxable income from another unrelated trade or business and vice versa. Tax-exempt entities should consult a tax advisor before investing in our common units.

Non-U.S. unitholders will be subject to U.S. federal income taxes and withholding with respect to income and gain from owning our common units.

Non-U.S. persons are generally taxed and subject to U.S. federal income tax filing requirements on income effectively connected with a U.S. trade or business. Income allocated to our unitholders and any gain from the sale of our units will generally be considered to be "effectively connected" with a U.S. trade or business. As a result, distributions to a non-U.S. unitholder will be subject to withholding at the highest applicable effective tax rate and a non-U.S. unitholder who sells or otherwise disposes of a common unit will also be subject to federal income tax on the gain realized from the sale or disposition of that unit.

Moreover, the transferee of an interest in a partnership that is engaged in a United States trade or business is generally required to withhold 10% of the "amount realized" by the transferor unless the transferor certifies that it is not a non-U.S. person. While the determination of a partner's "amount realized" generally includes any decrease of a partner's share of the partnership's liabilities, Treasury Regulations provide that the "amount realized" on a transfer of an interest in a publicly traded partnership, such as our common units, will generally be the amount of gross proceeds paid to the broker effecting the applicable transfer on behalf of the transferor, and thus will be determined without regard to any decrease in that partner's share of a publicly traded partnership's liabilities. The Treasury Regulations and recent guidance from the IRS further provide that withholding on a transfer of an interest in a publicly traded partnership will not be imposed on a transfer that occurs prior to January 1, 2023, and after that date, if effected through a broker, the obligation to withhold is imposed on the transferor's broker. Non-U.S. persons should consult a tax advisor before investing in our common units.

If the IRS contests the U.S. federal income tax positions we take, the market for our common units may be adversely impacted and our cash flow available for distribution to our unitholders might be substantially reduced.

The IRS may adopt positions that differ from the conclusions of our counsel or from the positions we take, and the IRS's position may ultimately be sustained. It may be necessary to resort to administrative or court proceedings to sustain some or all of our counsel's conclusions or the positions we take and such positions may not ultimately be sustained. A court may not agree with some or all of our counsel's conclusions or the positions we take. Any contest by the IRS may materially and adversely impact the market for our common units and the price at which they trade. In addition, our costs of any contest with the IRS will be borne indirectly by our unitholders and our general partner because the costs will reduce our distributable cash flow.

Pursuant to legislation applicable for partnership tax years beginning after 2017, if the IRS makes audit adjustments to our partnership tax returns, it may assess and collect any taxes (including any applicable penalties and interest) resulting from such audit adjustments directly from us. To the extent possible under these rules our general partner may elect to either pay the taxes (including any applicable penalties and interest) directly to the IRS in the year in which the audit is completed or, if we are eligible, issue a revised information statement to each current and former unitholder with respect to an audited and adjusted partnership tax return. Although our general partner may elect to have our current and former unitholders take such audit adjustment into account and pay any resulting taxes (including applicable penalties or interest) in accordance with their interests in us during the tax year under audit, there can be no assurance that such election will be practical, permissible or effective in all circumstances. If we make payments of taxes and any penalties and interest directly to the IRS in the year in which the audit is completed, our cash available for distribution to our unitholders might be substantially reduced, in which case our current unitholders may bear some or all of the tax liability resulting from such audit adjustment, even if the unitholders did not own units in us during the tax year under audit.

We treat each purchaser of our common units as having the same tax benefits without regard to the actual common units purchased. The IRS may challenge this treatment, which could adversely affect the value of the common units.

Because we cannot match transferors and transferees of common units, our depreciation, depletion and amortization positions may not conform to all aspects of existing Treasury Regulations. A successful IRS challenge to those positions could

adversely affect the amount of tax benefits available to our unitholders. It also could affect the timing of these tax benefits or the amount of gain from the sale of common units and could have a negative impact on the value of our common units or result in audit adjustments to a unitholder's tax returns.

We prorate our items of income, gain, loss and deduction between transferors and transferees of our units based upon the ownership of our units on the first day of each month, instead of on the basis of the date a particular unit is transferred. The IRS may challenge this treatment, which could change the allocation of items of income, gain, loss and deduction among our unitholders.

We generally prorate our items of income, gain, loss and deduction between transferors and transferees of our common units based upon the ownership of our common units on the first day of each month, instead of on the basis of the date a particular common unit is transferred. Although Treasury Regulations allow publicly traded partnerships to use a similar monthly simplifying convention to allocate tax items among transferor and transferee unitholders, such tax items must be prorated on a daily basis and these regulations do not specifically authorize all aspects of our proration method. If the IRS were to successfully challenge our proration method, we may be required to change the allocation of items of income, gain, loss, and deduction among our unitholders.

A unitholder whose common units are the subject of a securities loan (e.g., a loan to a "short seller" to cover a short sale of common units) may be considered as having disposed of those common units. If so, the unitholder would no longer be treated for tax purposes as a partner with respect to those common units during the period of the loan and may recognize gain or loss from the disposition.

Because there is no tax concept of loaning a partnership interest, a unitholder whose common units are the subject of a securities loan may be considered as having disposed of the loaned units. In that case, the unitholder may no longer be treated for tax purposes as a partner with respect to those common units during the period of the loan to the short seller and the unitholder may recognize gain or loss from such disposition. Moreover, during the period of the loan, any of our income, gain, loss or deduction with respect to those common units may not be reportable by the unitholder and any cash distributions received by the unitholder as to those common units could be fully taxable as ordinary income. Our unitholders desiring to assure their status as partners and avoid the risk of gain recognition from a loan to a short seller are urged to consult a tax advisor to discuss whether it is advisable to modify any applicable brokerage account agreements to prohibit their brokers from loaning their common units.

We have adopted certain valuation methodologies in determining a unitholder's allocations of income, gain, loss and deduction. The IRS may challenge these methodologies or the resulting allocations, and such a challenge could adversely affect the value of our common units.

In determining the items of income, gain, loss and deduction allocable to our unitholders, we must routinely determine the fair market value of our assets. Although we may from time to time consult with professional appraisers regarding valuation matters, we make many fair market value estimates ourselves using a methodology based on the market value of our common units as a means to determine the fair market value of our assets. The IRS may challenge these valuation methods and the resulting allocations of income, gain, loss and deduction.

A successful IRS challenge to these methods or allocations could adversely affect the timing, character or amount of taxable income or loss being allocated to our unitholders. It also could affect the amount of gain from our unitholders' sale of common units and could have a negative impact on the value of the common units or result in audit adjustments to our unitholders' tax returns without the benefit of additional deductions.

As a result of investing in our common units, our unitholders may become subject to state and local taxes and return filing requirements in jurisdictions where we operate or own or acquire properties.

In addition to U.S. federal income taxes, our unitholders may be subject to other taxes, including state and local income taxes, unincorporated business taxes and estate, inheritance or intangible taxes that are imposed by the various jurisdictions in which we conduct business or control property now or in the future, even if they do not live in any of those jurisdictions. Further, unitholders may be subject to penalties for failure to comply with those requirements. As we make acquisitions or expand our business, we may own assets or conduct business in additional states or foreign jurisdictions that impose a personal income tax. It is a unitholder's responsibility to file all applicable U.S. federal, foreign, state and local tax returns.

ITEM 1B. ***Unresolved Staff Comments***

None**.**

ITEM 2. ***Properties***

In addition to the information provided below, information regarding our properties is included in Item 1. "Business — Our Operations," "Leases and License" and "Summary of Trona Resources and Trona Reserves," and "Internal Controls Disclosure over Trona Resources and Trona Reserves" and is incorporated by reference in this Item.

Our Green River Basin facility is situated on approximately 880 owned acres in the Green River Basin of Wyoming. We own the surface land and its improvements in fee, which we acquired pursuant to a quitclaim deed in 1991. See Item 1A, "Risk Factors**—**Risks Inherent in our Business and Industry**—***Defects in title or loss of any leasehold interests in our properties could limit our ability to conduct mining operations on these properties or result in significant unanticipated costs*" for more information. We have operated our facility since 1996, prior to which Rhône-Poulenc was the operator. In addition, we have approximately 23,500 acres of subsurface leased/licensed mining areas. Four ponds on the property of our Green River Basin facility enable us to store the by-products from our refining process. We draw the water necessary for our refining processes from the nearby Green River. Our mining assets consist of two mining beds with five active mining faces at any one given time. The mine is served by four separate mine shafts.

Sisecam Chemicals leases 12,234 square feet of office space for its headquarters in Atlanta, Georgia which it utilizes to provide management and other shared services to the Partnership, pursuant to the various shared services agreements.

We believe that the size of our facilities is adequate for our current and anticipated needs.

Item 3. ***Legal Proceedings***

From time to time we are party to various claims and legal proceedings related to our business. Although the outcome of these proceedings cannot be predicted with certainty, management does not currently expect any legal proceedings to have a material effect on our business, financial condition and results of operations. We cannot predict the nature of any future claims or proceedings, nor the ultimate size or outcome thereof and whether any damages resulting from them will be covered by insurance.

Item 4. ***Mine Safety Disclosures***

Information regarding mine safety violations and other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95.1 to this Report.

PART II

Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Our common units are listed on the NYSE under the symbol "SIRE." As of March 10, 2022, SCW LLC owned 14,551,000 common units. The closing sales price of our common units on NYSE on March 10, 2022 was $19.95. SCW LLC has approximately 74% ownership interest in the common units and the public owned 5,236,748 common units which constitutes an approximately 26% ownership interest in us. There were 8 record holders of our outstanding common units as of March 10, 2022.

Distributions of Available Cash from Operating Surplus and Capital Surplus

General

Our partnership agreement requires that, within 60 days after the end of each quarter, we distribute our available cash to unitholders of record on the applicable record date.

Definition of Available Cash

Available cash generally means, for any quarter, all cash and cash equivalents on hand at the end of that quarter:

less, the amount of cash reserves established by our general partner to:

- provide for the proper conduct of our business (including reserves for our future capital expenditures and for anticipated future credit needs subsequent to that quarter);
- comply with applicable law, any of our debt instruments or other agreements; or
- provide funds for distributions to our unitholders and to our general partner for any one or more of the next four quarters (provided that our general partner may not establish cash reserves for distributions if the effect of the establishment of such reserves will prevent us from distributing the minimum quarterly distribution on all common units);

plus, if our general partner so determines, all or any portion of the cash on hand on the date of determination of available cash for the quarter, resulting from working capital borrowings made subsequent to the end of such quarter.

The purpose and effect of the above is to allow our general partner, if it so decides, to use cash received by us after the end of the quarter but on or before the date of determination of available cash for the quarter, including cash on hand from working capital borrowings made after the end of the quarter but on or before the date of determination of available cash for that quarter, to pay distributions to unitholders. Under our partnership agreement, working capital borrowings are generally borrowings that are made under a credit facility, commercial paper facility or similar financing arrangement, and in all cases are used solely for working capital purposes or to pay distributions to partners, and with the intent of the borrower to repay such borrowings within 12 months with funds other than from additional working capital borrowings.

Any distributions we make will be characterized as made from "operating surplus" or "capital surplus." Distributions of available cash from operating surplus are made differently than distributions of available cash that we would make from capital surplus. Operating surplus distributions will be made first to our unitholders. If our quarterly distributions exceed the first target distribution level described below, then operating surplus distributions will also be made to the holder of our incentive distribution rights. We do not anticipate that we will make any distributions from capital surplus. If we do make any capital surplus distribution, however, we will distribute such amount pro rata to all unitholders. The holder of the IDRs would generally not participate in any capital surplus distributions with respect to those rights.

In determining operating surplus and capital surplus, we will only take into account our proportionate share of our interest in our consolidated subsidiaries, so long as they are not wholly owned, as well as our proportionate share of entities accounted for under the equity method.

Operating Surplus

We define operating surplus as:

- $20.0 million; plus
- all of our cash receipts, including amounts received by us from OCI Enterprises under the Omnibus Agreement for periods prior to the consummation of Ciner Enterprises' indirect acquisition of approximately 72% limited partner interests in us, as well as, our approximate 2.0% general partner interest and all of our incentive distribution rights (the "OCI Transaction"), and, by us from Sisecam Chemicals under the Services Agreement for periods subsequent to the consummation of the OCI Transaction, in each case, to the extent such amounts offset operating expenditures or lost revenue, and excluding cash from interim capital transactions (as defined below) and, under certain circumstances, the termination of hedge contracts; plus

- working capital borrowings, if any, made after the end of a period but on or before the date of determination of operating surplus for the period; plus
- cash distributions paid in respect of equity issued (including incremental distributions on IDRs), to finance all or a portion of replacement, improvement or expansion capital expenditures in respect of the period from such financing until the earlier to occur of (1) the date the related capital improvement commences commercial service and (2) the date that it is abandoned or disposed of; plus
- cash distributions paid in respect of debt or equity issued (including incremental distributions on IDRs) to pay the construction period interest on debt incurred, or to pay construction period distributions on equity issued, to finance the expansion capital expenditures referred to above, in each case, in respect of the period from such financing until the earlier to occur of (1) the date the capital asset is placed in service and (2) the date that it is abandoned or disposed of; less
- all of our operating expenditures (as defined below); less
- the amount of cash reserves or our proportionate share of cash reserves in the case of subsidiaries that are not wholly-owned established by our general partner to provide funds for future operating expenditures; less
- all working capital borrowings not repaid within twelve months after having been incurred, or repaid within such twelve-month period with the proceeds of additional working capital borrowings; less
- any cash loss realized on disposition of an investment capital expenditure.

We will include in operating surplus, when collected, cash receipts equal to our proportionate share of accounts receivable that are retained by Sisecam Chemicals.

As described above, operating surplus does not reflect actual cash on hand that is available for distribution to our unitholders and is not limited to cash generated by our operations. For example, it includes a basket of $20.0 million that will enable us, if we choose, to distribute as operating surplus cash we receive in the future from non-operating sources such as asset sales, issuances of securities and long-term borrowings that would otherwise be distributed as capital surplus. In addition, by including, as described above, certain cash distributions on equity interests in operating surplus, we will increase operating surplus by the amount of any such cash distributions. As a result, we may also distribute as operating surplus up to the amount of any such cash that we receive from non-operating sources.

The proceeds of working capital borrowings increase operating surplus, and repayments of working capital borrowings are generally operating expenditures, as described below. Therefore, we will reduce operating surplus when we repay working capital borrowings. However, if we do not repay a working capital borrowing during the twelve-month period following such borrowing, it will be deemed to be repaid at the end of such period, thereby decreasing operating surplus at such time. When such working capital borrowing is, in fact, repaid, it will be excluded from operating expenditures because operating surplus will have been previously reduced by the deemed repayment.

We define operating expenditures in our partnership agreement, which generally means all of our cash expenditures, including:

- taxes,
- reimbursement of expenses to our general partner or its affiliates,
- payments made in the ordinary course of business under interest rate hedge agreements or commodity hedge agreements (provided that (1) with respect to amounts paid in connection with the initial purchase of an interest rate hedge contract or a commodity hedge contract, we will amortize such amounts over the life of the applicable interest rate hedge contract or commodity hedge contract, and (2) we will include in operating expenditures payments made in connection with the termination of any interest rate hedge contract or commodity hedge contract prior to the expiration of its stipulated settlement or termination date of such contracts in equal quarterly installments over the remaining scheduled life of such contract),
- compensation of officers and directors of our general partner,
- repayment of working capital borrowings,
- debt service payments, and
- payments made in the ordinary course of business under any hedge contracts.

However, operating expenditures will not include:

- repayment of working capital borrowings deducted from operating surplus pursuant to the penultimate bullet point of the definition of operating surplus above when such repayment actually occurs;

- payments (including prepayments and prepayment penalties) of principal of and premium on indebtedness, other than working capital borrowings;
- expansion capital expenditures;
- investment capital expenditures;
- payment of transaction expenses relating to interim capital transactions;
- distributions to our partners (including distributions in respect of our IDRs); or
- repurchases of equity interests except to fund obligations under employee benefit plans.

Capital Surplus

Capital surplus is defined in our partnership agreement as any available cash distributed in excess of our operating surplus. Accordingly, we will generate capital surplus generally only by the following (which we refer to as "interim capital transactions"):

- borrowings, refinancings or refundings of indebtedness other than working capital borrowings and other than for items purchased on open account or for a deferred purchase price in the ordinary course of business;
- sales of our equity and debt securities;
- sales or other dispositions of assets, other than inventory, accounts receivable and other assets sold in the ordinary course of business or as part of normal retirement or replacement of assets; and
- capital contributions received.

Quarterly Distributions

Our general partner has considerable discretion in determining the amount of available cash, the amount of distributions and the decision to make any distribution. Although our partnership agreement requires that we distribute all of our available cash quarterly, there is no guarantee that we will make quarterly cash distributions to our unitholders or at any other rate, and we have no legal obligation to do so.

In an effort to achieve greater financial and liquidity flexibility during the COVID-19 pandemic, on August 3, 2020, each of the members of the board of managers of Sisecam Wyoming approved a suspension of quarterly distributions to its members. In addition, effective August 3, 2020, in connection with the quarterly distribution for the quarter ended June 30, 2020, each of the members of the board of directors of our general partner approved a suspension of quarterly distributions to our unitholders that continued for each of the quarters ended September 30, 2020, December 31, 2020, March 31, 2021, and June 30, 2021.

In March 2021, the board of managers of Sisecam Wyoming approved a special $8.0 million distribution to, amongst other things, provide the Partnership with funds to retire the Ciner Resources Credit Facility.

In October 2021, the board of managers of Sisecam Wyoming approved a $15.0 million distribution to the members of Sisecam Wyoming.

On October 29, 2021, the Partnership declared its third quarter 2021 quarterly cash distribution of $0.340 per unit to both the limited partners and general partners. The quarterly cash distribution was paid on November 19, 2021 to unitholders of record on November 9, 2021.

On January 27, 2022, the Partnership declared its fourth quarter 2021 quarterly distribution. On February 18, 2022, we paid a quarterly cash distribution of $0.650 per limited partner unit to unitholders of record on February 7, 2022. The total distribution paid was $13.4 million with $12.9 million paid to our limited partners and $0.3 million and $0.3 million paid to our general partner for its general partner interests and incentive distribution rights, respectively.

Percentage Allocations of Distributions from Operating Surplus

The following table illustrates the percentage allocations of distributions from operating surplus between the unitholders and our general partner based on the specified target distribution levels. The amounts set forth under the column heading "Marginal Percentage Interest in Distributions" are the approximate percentage interests of our general partner and the unitholders in any distributions from operating surplus we distribute up to and including the corresponding amount in the column "Total Quarterly Distribution per Unit Target Amount." The percentage interests shown for our unitholders and our general partner for the minimum quarterly distribution also apply to quarterly distribution amounts that are less than the minimum quarterly distribution. Under our partnership agreement, our general partner has considerable discretion to determine the amount of available cash (as defined therein) for distribution each quarter to the Partnership's unitholders, including the discretion to establish cash reserves that would limit the amount of available cash eligible for distribution to the Partnership's unitholders for any quarter. The Partnership does not guarantee

that it will pay the target amount of the minimum quarterly distribution listed below (or any distributions) on its units in any quarter. The percentage interests set forth below for our general partner (1) include its 2.0% general partner interest, (2) assume that our general partner has contributed any additional capital necessary to maintain its 2.0% general partner interest, (3) assume that our general partner has not transferred its IDRs and (4) assume that we do not issue additional classes of equity securities.

		Marginal Percentage Interest in Distributions	
	Total Quarterly Distribution per Unit Target Amount	**Unitholders**	**General Partner**
Minimum Quarterly Distribution	$0.5000	98.0 %	2.0 %
First Target Distribution	above $0.5000 up to $0.5750	98.0 %	2.0 %
Second Target Distribution	above $0.5750 up to $0.6250	85.0 %	15.0 %
Third Target Distribution	above $0.6250 up to $0.7500	75.0 %	25.0 %
Thereafter	above $0.7500	50.0 %	50.0 %

Securities Authorized for Issuance under Equity Compensation Plan

See Item 12, “Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters” for information relating to compensation plans under which the Partnership’s securities are authorized for issuance.

During the year ended December 31, 2021, the Partnership did not repurchase any of its equity securities.

Item 6. [RESERVED]

Item 7. *Management’s Discussion and Analysis of Financial Condition and Results of Operations*

References

References in this Annual Report on Form 10-K (“Report”) to the “Partnership,” “SIRE,” “we,” “our,” “us,” or like terms refer to Sisecam Resources LP (formerly known as Ciner Resources LP) and its subsidiary, Sisecam Wyoming LLC (formerly known as Ciner Wyoming LLC), which is the consolidated subsidiary of the Partnership and referred to herein as “Sisecam Wyoming.” Sisecam Chemicals Resources LLC ("Sisecam Chemicals" formerly known as Ciner Resources Corporation) is 60% owned by Sisecam Chemicals USA Inc. ("Sisecam USA") and 40% owned by Ciner Enterprises Inc. References to “our general partner” or “Sisecam GP” refer to Sisecam Resource Partners LLC (formerly known as Ciner Resource Partners LLC), the general partner of Sisecam Resources LP and a direct wholly-owned subsidiary of Sisecam Chemicals Wyoming LLC ("SCW LLC" formerly known as Ciner Wyoming Holding Co.), which is a direct wholly-owned subsidiary of Sisecam Chemicals. Sisecam Chemicals is a 60%-owned subsidiary of Sisecam USA, which is a direct wholly-owned subsidiary of Türkiye Şişe ve Cam Fabrikalari A.Ş, a Turkish corporation ("Şişecam Parent") which is an approximately 51%-owned subsidiary of Turkiye Is Bankasi Turkiye Is Bankasi ("Isbank"). Şişecam Parent is a global company operating in soda ash, chromium chemicals, flat glass, auto glass, glassware glass packaging and glass fiber sectors. Şişecam Parent was founded 86 years ago, is based in Turkey and is one of the largest industrial publicly-listed companies on the Istanbul exchange. With production facilities in four continents and in 14 countries, Sisecam is one of the largest glass and chemicals producers in the world. Ciner Enterprises Inc. is a direct wholly-owned subsidiary of WE Soda Ltd., a U.K. Corporation (“WE Soda”). WE Soda is a direct wholly-owned subsidiary of KEW Soda Ltd., a U.K. corporation (“KEW Soda”), which is a direct wholly-owned subsidiary of Akkan Enerji ve Madencilik Anonim Şirketi (“Akkan”). Akkan is directly and wholly owned by Turgay Ciner, the Chairman of the Ciner Group (“Ciner Group”), a Turkish conglomerate of companies engaged in energy and mining (including soda ash mining), media and shipping markets. All of our soda ash processed is sold to various domestic and international customers.

Effective as of the end of day on December 31, 2020, Sisecam Chemicals exited ANSAC. As of January 1, 2021, Sisecam Chemicals began managing the Partnership’s sales and marketing efforts for exports with the ANSAC exit being complete. Sisecam Chemicals was able to establish business relationships with distributors by leveraging the Ciner Group’s distributor network and offering its customers an improved level of service and greater certainty of supply to the Partnership’s end customers. In connection with the settlement agreement with ANSAC, the Partnership met its 2021 sales commitments to ANSAC which were at substantially lower volumes than prior years. These 2021 sales to ANSAC were for export sales purposes, and required a fixed rate per ton selling, general and administrative expense. There remains a commitment to sell additional tons to ANSAC in 2022, which are at substantially lower volumes than 2021. Additionally, in connection with the settlement agreement, the Partnership met its obligation to purchase a limited amount of export logistics services in 2021. There is not an obligation to purchase logistic services from ANSAC beyond 2021. Through in part the Partnership’s affiliates, the Partnership has amongst other things: (i) obtained its own international customer sales arrangements, (ii) obtained third-party export port services, and (iii) chartered and executed its own international product delivery.

You should read the following management's discussion and analysis of financial condition and results of operations ("MD&A") in conjunction with the historical consolidated financial statements, and notes thereto, included elsewhere in this Report. The Partnership has omitted from this MD&A a detailed discussion of the year-over-year changes from the Partnership's fiscal year 2019 to the fiscal year 2020, which can be found in the MD&A section in the Partnership's annual report on Form 10-K for the year ended December 31, 2020, filed with the U.S. Securities and Exchange Commission on March 16, 2021.

Overview

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and notes to consolidated financial statements included elsewhere in this Report. The following discussion and analysis contains forward-looking statements that reflect our future plans, estimates, beliefs and expected performance. Our actual results and financial condition may differ materially from those implied or expressed by these forward-looking statements. Please read "Cautionary Statement Concerning Forward-Looking Statements" and the risk factors discussed in Item 1A " Risk Factors" of this Report.

We are a Delaware limited partnership that owns a 51% membership interest in, and operates the trona ore mining and soda ash production business of, Sisecam Wyoming. Sisecam Wyoming is currently one of the world's largest producers of soda ash, serving a global market from its facility in the Green River Basin of Wyoming. Our facility has been in operation for more than 50 years.

NRP Trona LLC, a wholly owned subsidiary of Natural Resource Partners L.P. ("NRP"), currently owns a 49% membership interest in Sisecam Wyoming.

Recent Developments

Change in Control of Sisecam Chemicals

On December 21, 2021, Ciner Enterprises (which was the indirect owner of approximately 74% of the common units in the Partnership, completed the following transactions pursuant to the definitive agreement which Ciner Enterprises entered into with Sisecam USA, a direct subsidiary of Şişecam Parent on November 20, 2021:

- Ciner Enterprises converted Ciner Resources Corporation into Sisecam Chemicals Resources LLC, a Delaware limited liability company ("Sisecam Chemicals"), and Ciner Wyoming Holding Co., a direct wholly-owned subsidiary of Sisecam Chemicals, into Sisecam Chemicals Wyoming LLC ("SCW LLC"), with SCW LLC in turn then directly owning approximately 74% of the common units in the Partnership and 100% of the general partner, and Sisecam USA purchased, 60% of the outstanding units of Sisecam Chemicals owned by Ciner Enterprises for a purchase price of $300 million (the "Sisecam Chemicals Sale"); and

- at the closing of the Sisecam Chemicals Sale, Sisecam Chemicals, Ciner Enterprises, and Sisecam USA entered into a unitholders and operating agreement (the "Sisecam Chemicals Operating Agreement") (collectively such transactions, the "CoC Transaction").

Pursuant to the terms of the Sisecam Chemicals Operating Agreement, Sisecam USA and Ciner Enterprises have a right to designate six directors and four directors, respectively, to the board of directors of Sisecam Chemicals. In addition, the Sisecam Chemicals Operating Agreement provides that (i) the board of directors of the general partner (the "MLP Board") shall consist of six designees from Sisecam USA, two designees from Ciner Enterprises and three independent directors for as long as the general partner is legally required to appoint such independent directors and (ii) the Partnership's right to appoint four managers to the board of managers of Sisecam Wyoming (the "Wyoming Board") shall be comprised of three designees from Sisecam USA and one designee from Ciner Enterprises. Each of Sisecam USA and Ciner Enterprises shall vote all units over which such unitholder has voting control in Sisecam Chemicals to elect to the board of directors any individual designated by Sisecam USA and Ciner Enterprises. The Sisecam Chemicals Operating Agreement also requires the board of directors of Sisecam Chemicals to unanimously approve certain actions and commitments, including without limitation taking any action that would have an adverse effect on the master limited partnership status of the Partnership or any of its subsidiaries. As a result of Sisecam USA's and Ciner Enterprise's respective interests in Sisecam Chemicals and their respective rights under the Sisecam Chemicals Operating Agreement, each of Ciner Enterprises and Sisecam USA and their respective beneficial owners may be deemed to share beneficial ownership of the approximate 2% general partner interest in the Partnership and approximately 74% of the common units in the Partnership owned directly by SCW LLC and indirectly by Sisecam Chemicals as parent entity of SCW LLC.

Expected Change in Management

On February 11, 2022, the Partnership disclosed that Turkiye Sise ve Cam Fabrikalari A.S. of Istanbul, Turkey ("Sisecam"), announced its intention (i) to appoint Mr. Ertugrul Kaloglu as President and Chief Executive Officer of Sisecam Chemicals and its subsidiaries, including our general partner, effective upon the receipt of all requisite U.S. immigration and corporate approvals (the

"Kaloglu Effective Date"), and (ii) to appoint Mr. Mehmet Nedim Kulaksizoglu as Chief Financial Officer of Sisecam Chemicals and its subsidiaries, including our general partner, effective upon the receipt of all requisite U.S. immigration and corporate approvals (the "Kulaksizoglu Effective Date"). Mr. Oguz Erkan has agreed to resign as the President and Chief Executive Officer of the general partner as of the Kaloglu Effective Date in order to pursue other opportunities with the Ciner Group. After the effectiveness of the foregoing resignation Mr. Erkan is expected to remain a member of the board of directors of our general partner and continue to serve as President and Chief Executive Officer of Ciner Enterprises. Mr. Ahmet Tohma has agreed to resign as the Chief Financial Officer of the general partner as of the Kulaksizoglu Effective Date in order to pursue other opportunities with the Ciner Group and is expected to continue to serve as the WE Soda Group's Chief Financial Officer. As of the date of this filing, neither the Kaloglu Effective Date nor the Kulaksizoglu Effective Date has occurred.

COVID-19

COVID-19, including the Omicron variant, continues to cause certain disruptions to the economy throughout the world, including the United States and markets to which our products have historically been exported. There have been extraordinary actions taken by international, federal, state, and local public health and governmental authorities to contain and combat the outbreak and spread of COVID-19 in regions throughout the world, including travel bans, many vaccine mandate policies, quarantines, "stay-at-home" orders, and similar mandates for many individuals to restrict daily activities and for many businesses to curtail or cease normal operations. Vaccines for COVID-19 become widely available globally and individuals over five years old are eligible for the vaccine in the U.S.

Our Response to COVID-19

We continue to closely monitor the impact of the COVID-19 pandemic and all governmental actions in response thereto on all aspects of our business, including how it impacts our customers, employees, supply chain, distribution network, and cash flows. As COVID-19 vaccines become broadly available, we have encouraged employees to get vaccinated. We continue to use guidance from local health organizations, including the Centers for Disease Control and Prevention, to make decisions about our return to the workplace policies. Our focus has been the safety of our teams and this will continue to be our priority as we use data to address the COVID-19 pandemic. We continue to actively monitor and adhere to applicable local, state, federal, and international governmental guideline actions to better ensure the safety of our employees.

The impact of COVID-19

As the impact of COVID-19 evolved, we saw continued recovery in both domestic and international business in 2021. The soda ash volume sold in the first, second, third, and fourth quarters for 2021 increased 21.7%, decreased 9.7%, increased 7.8%, and increased 6.0%, respectively, compared to the immediately preceding quarter. The decline in the soda ash volume sold in the second quarter of 2021 compared to the first quarter of 2021 is primarily due to the first quarter of 2021 including significant international sales volumes associated with the initial impact of selling directly to international customers as part of our December 31, 2020 ANSAC exit. The production volumes in 2021 are at pre-COVID-19 pandemic levels, which we consider to be production levels prior to the second quarter 2020. The sales volumes in the second half of 2021 are at pre-COVID-19 pandemic levels. Sales volumes for the twelve months ended December 31, 2021 and 2020 were 2.8 million short tons and 2.2 million short tons, respectively.

For the year ended December 31, 2021 and 2020, we have incurred $1.8 million and $2.4 million, respectively, in costs directly related to COVID-19 primarily in the form of costs related to employee safety and retention and additional inventory storage and logistics costs.

Quarterly Distribution

Our general partner has considerable discretion in determining the amount of available cash, the amount of distributions and the decision to make any distribution. Although our partnership agreement requires that we distribute all of our available cash quarterly, there is no guarantee that we will make quarterly cash distributions to our unitholders, and we have no legal obligation to do so.

In an effort to achieve greater financial and liquidity flexibility during the COVID-19 pandemic, on August 3, 2020, each of the members of the board of managers of Sisecam Wyoming approved a suspension of quarterly distributions to its members. In addition, effective August 3, 2020, in connection with the quarterly distribution for the quarter ended June 30, 2020, each of the members of the board of directors of our general partner approved a suspension of quarterly distributions to our unitholders that continued for each of the quarters ended September 30, 2020, December 31, 2020, March 31, 2021, and June 30, 2021.

In March 2021, the board of managers of Sisecam Wyoming approved a special $8.0 million distribution to, amongst other things, provide the Partnership with funds to retire the Ciner Resources Credit Facility.

In October 2021, the board of managers of Sisecam Wyoming approved a $15.0 million distribution to the members of Sisecam Wyoming.

On October 29, 2021, the Partnership declared its third quarter 2021 quarterly cash distribution of $0.340 per unit to both the limited partners and general partners. The quarterly cash distribution was paid on November 19, 2021 to unitholders of record on November 9, 2021.

On January 27, 2022, the Partnership declared its fourth quarter 2021 quarterly distribution. On February 18, 2022, we paid a quarterly cash distribution of $0.650 per limited partner unit to unitholders of record on February 7, 2022. The total distribution paid was $13.4 million with $12.9 million paid to our limited partners and $0.3 million and $0.3 million paid to our general partner for its general partner interests and incentive distribution rights, respectively.

Green River Expansion Project

In connection with the CoC Transaction, we believe we have further opportunities to debottleneck our facility and are incorporating several of these in our holistic approach as we further explore whether to proceed with the Green River Expansion Project that, should we decide to proceed, we believe could increase production levels up to approximately 3.5 million short tons of soda ash per year or up to approximately 134% of the last five-year average of soda ash produced per year. We have conducted the initial basic design and secured certain related permits and are currently evaluating the detailed cost and market analysis pursuant to the basic design. If we proceed with this project, it will require capital expenditures materially higher than have been recently incurred by Sisecam Wyoming. The timing of the new Green River Expansion Project as well as any other expansion capital expenditures may also be impacted by the Partnership's financial results including further negative volatility caused by the ongoing COVID-19 pandemic, including resurgences or subsequent variants of the virus.

Financial Assurance Regulatory Updates by the Wyoming Department of Environmental Quality ("WDEQ")

Our operations are subject to oversight by the Land Quality Division of Wyoming Department of Environmental Quality ("WDEQ"). Our principal mine permit issued by the Land Quality Division, requires the Partnership to provide financial assurances for our reclamation obligations for the estimated future cost to reclaim the area of our processing facility, surface pond complex and on-site sanitary landfill. The Partnership provides such assurances through a third-party surety bond (the "Surety Bond"). According to the annual recalculation and submittal, the Surety Bond amount was $41.8 million and $36.2 million at December 31, 2021 and 2020, respectively. The amount of such assurances that we are required to provide is subject to change upon annual recalculation according to Department of Environmental Quality's Guideline 12, annual site inspection and subsequent evaluation/approval by the WDEQ's Land Quality Division.

For a discussion of risks in connection with future legislation relating to such financial assurances that could affect our business, financial condition and liquidity, see Part I, Item 1A, "*Risk Factors - Risks Inherent in our Business and Industry - Our inability to acquire, maintain or renew financial assurances related to the reclamation and restoration of mining property could have a material adverse effect on our business, financial condition and results of operations.*" for additional information.

Factors Affecting Our Results of Operations

Soda Ash Supply and Demand

Our net sales, earnings and cash flow from operations are primarily affected by the global supply of, and demand for, soda ash, which, in turn, directly impacts the prices that we and other producers charge for our products.

Historically, long-term demand for soda ash in the United States has been driven in large part by general economic growth and activity levels in the end-markets that the glass-making industry serves, such as the automotive and construction industries. Long-term soda ash demand in international markets has grown in conjunction with Gross Domestic Product. We expect that over the long-term, future global economic growth will positively influence global demand, which will likely result in increased exports, primarily from the United States, Turkey and to a limited extent, from China, the largest suppliers of soda ash to international markets. Currently, and in the near and mid-term we expect customers across all segments to continue managing and mitigating the impact of COVID-19 to their operations. Soda ash demand in the U.S. as well as the global market have recovered to pre-pandemic levels in 2021. There are select markets which continue to bear the impacts, however in most cases we see recovery taking place even where the demand was impacted to a great extent for a prolonged period.

Sales Mix

We will adjust our sales mix based upon what is the best margin opportunity for the business between domestic and international. Our operations have been and continue to be sensitive to fluctuations in freight and shipping costs and changes in international prices, which have historically been more volatile than domestic prices. Our gross profit will be impacted by the mix of domestic and international sales as a result of changes in logistics costs and our average selling prices.

International Commercial Restructuring and Expansion

As previously disclosed, Sisecam Chemicals, an affiliate of the Partnership, terminated its membership in ANSAC effective December 31, 2020. As of January 1, 2021, Sisecam Chemicals began managing the Partnership's sales and marketing efforts for exports with the ANSAC exit being complete. In connection with the settlement agreement with ANSAC, Sisecam Chemicals continued to sell, at substantially lower volumes, product to ANSAC for export sales purposes, with a fixed rate per ton selling, general and administrative expense, and also fulfilled its obligation to purchase a limited amount of export logistics services in 2021. In connection with the settlement agreement with ANSAC, there remains sales commitments to ANSAC in 2022 where Sisecam Chemicals will continue to sell, at substantially lower volumes than 2021, product to ANSAC for export sales purposes, with a fixed rate per ton selling, general and administrative expense. Further, in 2022 there are no required export logistics services with ANSAC. The ANSAC exit allowed Sisecam Chemicals to improve access to customers and gain control over placement of its sales in the international marketplace in 2021. This enhanced view of the global market allows Sisecam Chemicals to better understand supply/demand fundamentals thus allowing better decision making for its business. Sisecam Chemicals continues to optimize its distribution network leveraging strengths of existing distribution partners while expanding as our business requires in certain target areas.

Although ANSAC has historically been our largest customer, the impact of Sisecam Chemicals' exit from ANSAC on our net sales, net income and liquidity was limited. With a low-cost position and improved access to international customers and control over placement of its sales in the international marketplace and logistics, we have adequately replaced these net sales made under the former agreement with ANSAC. Sisecam Chemicals leveraged the distributor network established by the Ciner Group in 2021 and continues to evaluate the distribution network and independent third-party distribution partners to optimize our reach into each market.

Energy Costs

One of the primary impacts to our profitability is our energy costs. Because we depend upon natural gas and electricity to power our trona ore mining and soda ash processing operations, our net sales, earnings and cash flow from operations are sensitive to changes in the prices we pay for these energy sources. Due to the historic volatility of natural gas prices, we expect to continue to hedge a portion of our forecasted natural gas purchases to mitigate volatility. During the first quarter of 2020, we completed construction of a natural gas-fired turbine co-generation facility that is capable of providing roughly one-third of our electricity and steam demands at our mine in the Green River Basin. This co-generation facility began operating in March 2020 and provided 172.6 million kWh of electricity which saved the Partnership $4.4 million in 2021 based on average purchased electricity costs and gas costs. In a normal production environment the facility is expected to provide us over 180.0 million kWh of electricity annually.

How We Evaluate Our Business

Productivity of Operations

Our soda ash production volume is primarily dependent on the following three factors: (1) operating rate, (2) quality of our mined trona ore and (3) recovery rates. Operating rate is a measure of utilization of the effective production capacity of our facility and is determined in large part by productivity rates and mechanical on-stream times, which is the percentage of actual run times over the total time scheduled. We implement two planned outages of our mining and surface operations each year, typically in the second and third quarters. During these outages, which are scheduled to last approximately one week each, we repair and replace equipment and parts. Periodically, we may experience minor unplanned outages or unplanned extensions to planned outages caused by various factors, including equipment failures, power outages or service interruptions. The quality of our mine ore, which we refer to as our "ore grade," is determined by measuring the trona ore recovered as a percentage of the deposit, which includes both trona ore and insolubles. Our ore grade for the years ended December 31, 2021 and 2020 was 86.3% and 85.7%, respectively. Plant recovery rates are generally determined by calculating the soda ash produced divided by the sum of the soda ash produced plus soda ash that is not recovered from the process. All of these factors determine the amount of trona ore we require to produce one short ton of soda ash and liquor, which we refer to as our "ore to ash ratio." Our ore to ash ratio for the years ended December 31, 2021 and 2020 was 1.56: 1.0 and 1.60: 1.0, respectively.

Freight and Logistics

The soda ash industry is logistics intensive and involves careful management of freight and logistics costs. This freight costs make up a large portion of the total delivered cost to the customer. Delivery costs to most domestic customers and ANSAC primarily relate to rail freight services. Some domestic customers may elect to arrange their own freight and logistic services. Delivered costs to non-ANSAC international customers primarily consists of both rail freight services to the port of embarkation and the additional ocean freight to the port of disembarkation.

Sisecam Chemicals enters into contracts with one railroad company for the majority of the domestic rail freight services that the Partnership receives and the related freight and logistics costs are allocated to the Partnership. For the year ended December 31, 2021 and 2020, the Partnership shipped over 90% of our soda ash to our customers initially via a single rail line owned and controlled by the railroad company. The Partnership's plant receives rail service exclusively from the railroad company and shipments by rail accounted for over 60% and over 80% of our total freight costs for the year ended December 31, 2021 and 2020, respectively. The decrease in the percentage of freight that is related to the railroad company is due primarily to the increased ocean freight in the year ended December 31, 2021 of direct international sales and their respective delivery locations.

If Sisecam Chemicals does not ship at least a significant portion of our soda ash production on the railroad company's rail line during a twelve-month period, it must pay the railroad company a shortfall payment under the terms of our transportation agreement. The Partnership assists the majority of its domestic customers in arranging their freight services. During the year ended December 31, 2021 and 2020, Sisecam Chemicals had no shortfall payments and does not expect to make any such payments in the future. Sisecam Chemicals renewed its agreement with the railroad company in October 2021, which now expires on December 31, 2025.

Net Sales

Net sales include the amounts we earn on sales of soda ash. We recognize revenue from our sales when we satisfy the performance obligation defined in the contract with the customer. The performance obligation is typically met when goods are delivered to the carrier for shipment, which is the point at which the customer has the ability to direct the use of and obtain substantially all remaining benefits from the asset. The time at which delivery and transfer of title occurs is the point when the product leaves our facilities for domestic customers , the point when the product reaches the port of loading for ANSAC sales, and the point when the product is placed on a vessel for other international customers, thereby rendering our performance obligation fulfilled. Until the ANSAC exit on December 31, 2020, the time at which delivery and transfer of title occurred for ANSAC sales had been the same as domestic customers. Substantially all of our sales are derived from sales of soda ash, which we sell through our exclusive sales agent, Sisecam Chemicals. A small amount of our sales is derived from sales of production purge, which is a by-product liquor solution containing soda ash that is produced during the processing of trona ore. For the purposes of our discussion below, we include these transactions in domestic sales of soda ash and in the volume of domestic soda ash sold.

Until the end of 2020, sales prices for sales through ANSAC include the cost of freight to the ports of embarkation for overseas export or to Laredo, Texas for sales to Mexico. Sales prices for other international sales may include the cost of rail freight to the port of embarkation and the cost of ocean freight to the port of disembarkation for import by the customer.

Cost of products sold

Expenses relating to employee compensation, energy, including natural gas and electricity, royalties and maintenance materials constitute the greatest components of cost of products sold. These costs generally increase in line with increases in sales volume.

Energy. A major item in our cost of products sold is energy, comprised primarily of natural gas and electricity. We primarily use natural gas to fuel our above-ground processing operations, including the heating of calciners, and we use electricity to power our underground mining operations, including our continuous mining machines, or continuous miners, and shuttle cars. The monthly Northwest Pipeline Rocky Mountain Index natural gas settlement prices, over the past five years, have ranged between $1.29 and $6.34. The average monthly Northwest Pipeline Rocky Mountain Index natural gas settlement prices for the years ended December 31, 2021 and 2020, were $3.90 and $2.07 per MMBtu, respectively. In early 2020, we constructed a new natural gas-fired turbine co-generation facility that is expected to provide roughly one-third of our electricity and steam demands at our mine in the Green River Basin. This co-generation facility began operating in March 2020 and provided 172.6 million kWh of electricity which saved the Partnership $4.4 million in 2021 based on average purchased electricity costs and gas costs. In a normal production environment the facility is expected to provide us over 180.0 million kWh of electricity annually. In order to mitigate the risk of gas price fluctuations, the Partnership expects to continue to hedge a portion of its forecasted natural gas purchases by entering into physical or financial gas hedges generally ranging between 20% and 80% of our expected monthly gas requirements, on a sliding scale, for approximately the next three years. See Item 7A, "Quantitative and Qualitative Disclosures about Market Risk - Commodity Price Risks," for additional information.

Employee Compensation. See Item 8, Financial Statements and Supplementary Data—Note 11, "Employee Compensation," for information on the various benefit plans offered and administered by Sisecam Chemicals.

Royalties. During the year ended December 31, 2021, we paid royalties to the State of Wyoming, the U.S. Bureau of Land Management and Sweetwater Royalties LLC. The royalties are calculated based upon a percentage of the value of soda ash and related products sold at a certain stage in the mining process. These royalty payments may be subject to a minimum domestic production volume from our Green River Basin facility. We are also obligated to pay annual rentals to our lessors and licensor regardless of actual sales. In addition, we pay a production tax to Sweetwater County, and trona severance tax to the State of Wyoming that is calculated based on a formula that utilizes the volume of trona ore mined and the value of the soda ash produced.

The royalty rates we pay to our lessors and licensor may change upon our renewal or renegotiation of such leases and license. On June 28, 2018, Sisecam Wyoming amended its License Agreement, dated July 18, 1961 (the "License Agreement"), with a predecessor in interest to Sweetwater Royalties LLC, to, among other things, (i) extend the term of the License Agreement to July 18, 2061 and for so long thereafter as Sisecam Wyoming continuously conducts operations to mine and remove sodium minerals from the licensed premises in commercial quantities; and (ii) set the production royalty rate for each sale of sodium mineral products produced from ore extracted from the licensed premises at eight percent (8%) of the net sales of such sodium mineral products. Any increase in the royalty rates we are required to pay to our lessors and licensor, or any failure by us to renew any of our leases and license, could have a material adverse impact on our results of operations, financial condition or liquidity, and, therefore, may affect our ability to distribute cash to unitholders. On December 11, 2020, the Secretary of the Interior authorized an industry-wide royalty reduction from currently set rates by establishing a 2% federal royalty rate for a period of ten years for all existing and future federal soda ash or sodium bicarbonate leases. This change by the Secretary of the Interior reduced the rates on our mineral leases with the U.S. Government from 6% to 2% as of January 1, 2021 and for the following ten years. This 4% rate reduction saved over $6.5 million in royalty fees based on our mining operations in 2021.

Selling, general and administrative expenses

Selling, general and administrative expenses incurred by our affiliates on our behalf are allocated to us based on the time the employees of those companies spend on our business and the actual direct costs they incur on our behalf. The Partnership has a Services Agreement (the "Services Agreement"), with our general partner and Sisecam Chemicals. Pursuant to the Services Agreement, Sisecam Chemicals has agreed to provide the Partnership with certain corporate, selling, marketing, and general and administrative services, in return for which the Partnership has agreed to pay Sisecam Chemicals an annual management fee, subject to quarterly adjustments, and reimburse Sisecam Chemicals for certain third-party costs incurred in connection with providing such services. In addition, under the agreement governing Sisecam Wyoming, Sisecam Wyoming reimburses us for employees who operate our assets and for support provided to Sisecam Wyoming.

Effective as of the end of day on December 31, 2020, Sisecam Chemicals exited ANSAC. As of January 1, 2021, Sisecam Chemicals began managing the Partnership's sales and marketing efforts for exports with the ANSAC exit being complete. Sisecam Chemicals was able to establish business relationships with distributors by leveraging the Ciner Group's distributor network and offering its customers an improved level of service and greater certainty of supply to the Partnership's end customers. In connection with the settlement agreement with ANSAC, the Partnership met its 2021 sales commitments to ANSAC which were at substantially lower volumes than prior years. These 2021 sales to ANSAC were for export sales purposes, and required a fixed rate per ton selling, general and administrative expense. There remains a commitment to sell additional tons to ANSAC in 2022, which are at substantially lower volumes than 2021. Additionally, in connection with the settlement agreement, the Partnership met its obligation to purchase a limited amount of export logistics services in 2021. There is not an obligation to purchase logistic services from ANSAC beyond 2021. Through in part the Partnership's affiliates, the Partnership has amongst other things: (i) obtained its own international customer sales arrangements, (ii) obtained third-party export port services, and (iii) chartered and executed its own international product delivery.

Results of Operations

A discussion and analysis of the factors contributing to our results of operations is presented below for the periods and as of the dates indicated. The financial statements, together with the following information, are intended to provide investors with a reasonable basis for assessing our historical operations, but should not serve as the only criteria for predicting our future performance.

The following tables set forth our results of operations for the years ended December 31, 2021 and 2020.

	Years Ended December 31,	
($ in millions; except for operating and other data section)	**2021**	**2020**
Net sales	$ 540.1	$ 392.2
Cost of products sold:		
Cost of products sold (excludes depreciation, depletion and amortization expense set forth separately below)	215.5	185.6
Depreciation, depletion and amortization expense	31.6	28.8
Freight costs	213.0	123.7
Total cost of products sold	460.1	338.1
Gross profit	80.0	54.1
Operating expenses:		
Selling, general and administrative expenses	23.5	21.7
Total operating expenses	23.5	21.7
Operating income	56.5	32.4
Other income/(expenses):		
Interest income	—	0.1
Interest expense	(5.0)	(5.3)
Other - net	(0.1)	(0.3)
Total other expense, net	(5.1)	(5.5)
Net income	51.4	26.9
Net income attributable to noncontrolling interest	27.0	15.2
Net income attributable to Sisecam Resources LP	$ 24.4	$ 11.7
Operating and Other Data:		
Trona ore consumed (thousands of short tons)	4,251.2	3,653.8
Ore to ash ratio[(1)]	1.56: 1.0	1.60: 1.0
Ore grade[(2)]	86.3 %	86.6 %
Soda ash volume produced (thousands of short tons)	2,720.5	2,279.3
Soda ash volume sold (thousands of short tons)	2,813.5	2,221.9
Adjusted EBITDA[(3)]	$ 88.5	$ 61.6

(1) Ore to ash ratio expresses the number of short tons of trona ore needed to produce one short ton of soda ash and liquor and includes our deca rehydration recovery process. In general, a lower ore to ash ratio results in lower costs and improved efficiency.
(2) Ore grade is the percentage of raw trona ore that is recoverable as soda ash free of impurities. A higher ore grade will produce more soda ash than a lower ore grade.
(3) For a discussion of the non-GAAP financial measure Adjusted EBITDA, please read "Non-GAAP Financial Measures" of this Management's Discussion and Analysis.

Analysis of Results of Operations

The following table sets forth a summary of net sales, sales volumes and average sales price, and the percentage change between the periods:

($ in millions, except per ton data)	Years Ended December 31, 2021	Years Ended December 31, 2020	Percent Increase/(Decrease) 2021 vs 2020
Net sales:			
Domestic	$ 276.8	$ 208.8	32.6%
International	263.3	183.4	43.6%
Total net sales	$ 540.1	$ 392.2	37.7%
Sales volumes (thousands of short tons):			
Domestic (thousands of short tons)	1,300.6	940.9	38.2%
International (thousands of short tons)	1,512.9	1,281.0	18.1%
Total soda ash volume sold (thousands of short tons)	2,813.5	2,221.9	26.6%
Average sales price (per short ton):			
Domestic	$ 212.82	$ 221.92	(4.1)%
International	$ 174.04	$ 143.17	21.6%
Average	$ 191.97	$ 176.52	8.8%
Percent of net sales:			
Domestic sales	51.2 %	53.2 %	(3.8)%
International sales	48.8 %	46.8 %	4.3%
Total percent of net sales	100.0 %	100.0 %	
Percent of sales volumes:			
Domestic volume	46.2 %	42.3 %	9.2%
International volume	53.8 %	57.7 %	(6.8)%
Total percent of volume sold	100.0 %	100.0 %	

Consolidated Results

Net sales. Net sales increased by 37.7% to $540.1 million for the year ended December 31, 2021 from $392.2 million for the year ended December 31, 2020, primarily driven by an increase in soda ash volumes sold of 26.6% and an increase in average sales price per short ton of 8.8% primarily due to continuing recovery of domestic and international demand from the significant negative impact from the COVID-19 pandemic. We operated at normal production capacity in the year ended December 31, 2021. Domestic average price was lower than the prior year same period due to customer mix, factoring in the overall volume growth as well as lower annual market prices which were set during the slow economy in late 2020 affected by the COVID-19 pandemic. Sales prices, particularly when considering the impact of rising logistics costs, in the year ended December 31, 2021 had not fully recovered to pre-COVID-19 pandemic levels. Increase in net sales and cost of product sold from 2020 to 2021 is also impacted by an increase in non-ANSAC international sales which include ocean freight in both net sales and cost of product sold.

Cost of products sold. Cost of products sold, including depreciation, depletion and amortization expense and freight costs, increased by 36.1% to $460.1 million for the year ended December 31, 2021 from $338.1 million for the year ended December 31, 2020, primarily due to significant increases in overall soda ash sales volumes. The increase in cost of products sold is also due to supplier cost inflation as well as significant increases in ocean freight rates primarily from the high demand in the global supply chain as well as price increases in natural gas. In addition, the increases from 2020 to 2021 are also attributable to an increase in non-ANSAC international sales which include ocean freight in both net sales and cost of product sold.

Selling, general and administrative expenses. Our selling, general and administrative expenses increased 8.3% to $23.5 million for the year ended December 31, 2021, compared to $21.7 million for the year ended December 31, 2020. The increase was primarily due to developing our internal international sales, marketing, and logistics infrastructure while additionally incurring an incremental fixed rate cost per ton on sales to ANSAC in 2021.

Operating income. Operating income increased by 74.4% to $56.5 million for the year ended December 31, 2021, compared to $32.4 million for the year ended December 31, 2020. The increase is primarily due to the sales volume improvement to the pre-COVID pandemic level, the international sales price improvement to the pre-COVID pandemic level, and the domestic sales price slow recovery toward the pre-COVID pandemic level. Despite the sales recovery from the negative impact of the COVID-19

pandemic, the operating income has not yet recovered to the pre-pandemic level as supply chain costs have increased at a much faster pace than sales.

Net income. As a result of the foregoing, net income increased by 91.1% to $51.4 million for the year ended December 31, 2021, compared to $26.9 million for the year ended December 31, 2020

Liquidity and Capital Resources

Sources of liquidity include cash generated from operations and borrowings under credit facilities and capital calls from partners. We use cash and require liquidity primarily to finance and maintain our operations, fund capital expenditures for our property, plant and equipment, make cash distributions to holders of our partnership interests, pay the expenses of our general partner and satisfy obligations arising from our indebtedness. Our ability to meet these liquidity requirements will depend on our ability to generate cash flow from operations.

Our sources of liquidity include:

- cash generated from our operations;
- Approximately $155.0 million ($225.0 million, less $70.0 million outstanding) was available for borrowing and undrawn under the Sisecam Wyoming Credit Facility as of December 31, 2021, subject to availability; during the year ended December 31, 2021, we had borrowings of $83.5 million under the Sisecam Wyoming Credit Facility, offset by repayments of $116.0 million; The Prior Sisecam Wyoming Credit Facility was terminated and replaced by the Sisecam Wyoming Credit Facility on October 28, 2021, with approximately $105.0 million drawn on the Sisecam Wyoming Credit Facility that was used to terminate the Prior Sisecam Wyoming Credit Facility. Please read Part II, Item 8, Financial Statements - Note 9, “Debt,” for details.

We continue to analyze all aspects of our spending in order to maintain liquidity at levels we believe are necessary in order to satisfy cash requirements over the next twelve months and beyond. We are closely reviewing maintenance capital expenditures at our Wyoming facility to adequately maintain the physical assets. In addition, we are subject to business and operational risks that could adversely affect our cash flow, access to borrowings under the Sisecam Wyoming Credit Facility, and ability to make monthly installment payments under the Sisecam Wyoming Equipment Financing Arrangement. Our ability to satisfy debt service obligations, to fund planned capital expenditures, to make acquisitions and to make distributions will depend upon our future operating performance, which, in turn, will be affected by prevailing economic conditions, our business and other factors, some of which are beyond our control.

We expect our ongoing working capital and capital expenditures to be funded by cash generated from operations and borrowings under the Sisecam Wyoming Credit Facility. The amount, timing and classification of any such capital expenditures could affect the amount of cash that is available to be distributed to our unitholders.

In addition, we are subject to business and operational risks that could adversely affect our cash flow and access to borrowings under the Sisecam Wyoming Credit Facility and the Sisecam Wyoming Equipment Financing Arrangement.

We intend to pay a quarterly distribution to unitholders of record, to the extent we have sufficient cash from our operations after establishment of cash reserves, funding of any acquisitions and expansion capital expenditures, paying debt obligations and payment of fees and expenses, including payments to our general partner and its affiliates.

Working Capital Requirements

Working capital is the amount by which current assets exceed current liabilities. Our working capital requirements have been, and will continue to be, primarily driven by changes in accounts receivable and accounts payable, which generally fluctuate with changes in volumes, contract terms and market prices of soda ash in the normal course of our business. Other factors impacting changes in accounts receivable and accounts payable could include the timing of collections from customers and payments to suppliers, and supplier cost inflation, as well as the level of spending for maintenance and growth capital expenditures. A material adverse change in operations or available financing under the Sisecam Wyoming Credit Facility could impact our ability to fund our requirements for liquidity and capital resources. Historically, we have not made working capital borrowings to finance our operations. As of December 31, 2021, we had a working capital balance of $134.2 million as compared to a working capital balance of $109.3 million as of December 31, 2020. The primary driver for the increase in our working capital balance was an increase in accounts receivable related to increases in sales in the fourth quarter ended December 31, 2021 in comparison to sales in the fourth quarter ended December 31, 2020.

Capital Expenditures

Our operations require investments to expand, upgrade or enhance existing operations and to meet evolving environmental and safety regulations. We distinguish between maintenance and expansion capital expenditures. Maintenance capital expenditures

(including expenditures for the replacement, improvement or expansion of existing capital assets) are made to maintain, over the long-term, our operating income or operating capacity. Examples of maintenance capital expenditures are expenditures to upgrade and replace mining equipment and to address equipment integrity, safety and environmental laws and regulations. Our maintenance capital expenditures do not include actual or estimated capital expenditures for replacement of our trona reserves. Expansion capital expenditures are incurred for acquisitions or capital improvements made to increase, over the long-term, our operating income or operating capacity. Examples of expansion capital expenditures include the acquisition and/or construction of complementary assets to grow our business and to expand existing facilities, such as projects that increase production from existing facilities or reduce costs, to the extent such capital expenditures are expected to increase our long-term operating capacity or operating income.

The following table summarizes our capital expenditures, on an accrual basis:

	Years Ended December 31,			
($ in millions)		**2021**		**2020**
Maintenance		27.0	$	22.9
Expansion		0.8		14.5
Total	$	27.8	$	37.4

During the year ended December 31, 2021, capital spending decreased $9.6 million as compared to the year ended December 31, 2020. The decrease was primarily due to the COVID-19 pandemic during which we tried to maintain sound financial liquidity by postponing capital expenditures for expansion. The decrease was also attributable to the completion of our new co-generation facility, which became operational in March 2020.

Cash Flows Discussion

The following is a summary of cash provided by or used in each of the indicated types of activities:

	Years Ended December 31,				Percent Increase/(Decrease)	
($ in millions)		**2021**		**2020**	**2021 vs 2020**	
Cash provided by (used in):						
Operating activities	$	54.2	$	54.7	(0.9)	%
Investing activities	$	(24.9)	$	(42.2)	(41.0)	%
Financing activities	$	(27.1)	$	(26.9)	0.7	%

Operating Activities

Cash provided by operating activities decreased to $54.2 million during the year ended December 31, 2021 compared to $54.7 million of cash provided during the year ended December 31, 2020, primarily as a result of the following:

- an increase of 91.1% of net income of $51.4 million during the year ended December 31, 2021, compared to $26.9 million during the year ended December 31, 2020, and
- an increase of $28.0 million in working capital used by operating activities from $2.4 million during the year ended December 31, 2020 to $30.4 million year ended December 31, 2021. The increase was primarily due to higher accounts receivable balance at December 31, 2021 as a result of higher net sales for the three months ended December 31, 2021 compared to the same period ended December 31, 2020. It is partly offset by the higher balances of accounts payable and accrued expenses as of December 31, 2021.

Investing Activities

We used cash flows of $24.9 million in investing activities during the year ended December 31, 2021, compared to $42.2 million used the year ended December 31, 2020, primarily related to capital projects as described in “Capital Expenditures” above.

Financing Activities

Cash used in financing activities was $27.1 million during the year ended December 31, 2021, compared to $26.9 million used for the year ended December 31, 2020. Higher repayments than borrowings on debt offset by lower distributions for the year ended December 31, 2021 compared to 2020 resulted in slightly more cash used in financing activities during the year ended December 31, 2021

Borrowings under the Prior Sisecam Wyoming Credit Facility were at variable interest rates.

($ in millions)	As of and for the quarter ended	As of and for the year ended	
	December 31, 2021	December 31, 2021	December 31, 2020
Short-term borrowings from banks:			
Outstanding amount at period ending	$ 70.0	$ 70.0	$
Weighted average interest rate at period ending[1]	2.69 %	2.69 %	
Average daily amount outstanding for the period	$ 107.9	$ 114.3	$
Weighted average daily interest rate for the period[1]	2.62 %	2.94 %	
Maximum month-end amount outstanding during the period	$ 115.0	$ 122.5	$

(1) Weighted average interest rates set forth in the table above include the impacts of our interest rate swap contracts designated as cash flow hedges. As of December 31, 2021, the interest rate swap contracts had an aggregate notional value of $37.5 million.

Debt

See Part II, Item 8, Financial Statements and Supplementary Data - Note 9, “Debt,” for details of our outstanding debt.

Material Cash Requirements

The following table sets forth a summary of our material cash requirements related to our significant contractual obligations as of December 31, 2021:

	Payments Due by Period						
	2022	2023	2024	2025	2026	Thereafter	Total
($ in millions)							
Long-term debt	$ 8.6	$ 8.9	$ 9.1	$ 9.2	$ 79.5	$ 8.4	$ 123.7
Purchase obligations [1]	57.1	4.8	6.2	0.5	0.5	—	69.1
Interest payments [2]	2.5	2.3	2.1	1.8	1.5	0.2	10.4
Lease obligations [3]	0.1	0.1	0.1	0.1	0.1	1.1	1.6
Asset retirement obligation [4]	—	—	—	—	—	170.7	170.7
Total	$ 68.3	$ 16.1	$ 17.5	$ 11.6	$ 81.6	$ 180.4	$ 375.5

(1) Purchase obligations primarily include agreement to purchase goods or services that are enforceable and legally binding and that specify all significant terms. We have certain long-term utility contracts with various terms extending through 2024 with year-to-year renewal options thereafter. These commitments are designed to mitigate price volatility and assure source of supply for our normal requirements. The amounts include financial natural gas hedge commitments, as well as, purchase obligations under a contract for the transportation of gas and the contract for the transportation of gas may be cancelled by either party upon twelve months’ advance written notice to the other party. Purchase obligations also include ocean freight contracts primarily for vessels with terms through December 31, 2022.

(2) Long-term debt interest payments set forth in the table above are based on our contractual rates, or in the case of variable interest rate obligations, the weighted average interest rates as of December 31, 2021.

(3) Minimum contractual rental commitments of various operating leases, including renewal periods. Not included in the table above are the operating lease contracts that Sisecam Chemicals typically enters into with various lessors for railcars to transport product to customer locations and warehouses. Rail car leases under these contractual commitments range for periods from one to ten years. Sisecam Chemicals’ obligation related to these rail car leases are $8.4 million in 2022, $5.0 million in 2023, $3.4 million in 2024, $2.2 million in 2025, $1.6 million in 2026 and $0.5 million thereafter.

(4) Asset retirement obligations are the liability for the present value of cost we estimate we will incur to retire certain assets. The amount reported in the Contractual Obligations table above, represents the undiscounted estimated cost to retire such assets. The estimated average timing of these obligations is in excess of thirty years. Based on the information about the reclamation liability recently obtained from WDEQ, the current estimated reclamation cost of $41.8 million is used to calculate the asset retirement obligation estimate. See Part II, Item 8, Financial Statements and Supplementary Data - Note 14, Commitments and Contingencies - “Mine Permit Bonding Commitment,” for more information regarding our off-balance-sheet arrangements.

Impact of Inflation

The impact of inflation has become significant in recent months and in the U.S. economy and may increase our cost to acquire or replace properties, plant and equipment. Inflation may also increase our costs of labor and supplies. To the extent permitted by competition, regulation and existing agreements, we pass along increased costs to our customers in the form of higher selling prices, and we expect to continue this practice.

Non-GAAP Financial Measures

We report our financial results in accordance with generally accepted accounting principles in the United States (“GAAP”). We also present the non-GAAP financial measures of:

- Adjusted EBITDA;
- Distributable cash flow; and
- Distribution coverage ratio.

We define Adjusted EBITDA as net income (loss) plus net interest expense, income tax, depreciation, depletion and amortization, equity-based compensation expense and certain other expenses that are non-cash charges or that we consider not to be indicative of ongoing operations. Distributable cash flow is defined as Adjusted EBITDA less net cash paid for interest, maintenance capital expenditures and income taxes, each as attributable to Sisecam Resources LP. The Partnership may fund expansion-related capital expenditures with borrowings under existing credit facilities such that expansion-related capital expenditures will have no impact on cash on hand or the calculation of cash available for distribution. In certain instances, the timing of the Partnership’s borrowings and/or its cash management practices will result in a mismatch between the period of the borrowing and the period of the capital expenditure. In those instances, the Partnership adjusts designated reserves (as provided in the partnership agreement) to take account of the timing difference. Accordingly, expansion-related capital expenditures have been excluded from the presentation of cash available for distribution. Distributable cash flow will not reflect changes in working capital balances. We define distribution coverage ratio as the ratio of distributable cash flow as of the end of the period to cash distributions payable with respect to such period.

Adjusted EBITDA is a non-GAAP supplemental financial measure that management and external users of our consolidated financial statements, such as industry analysts, investors, lenders and rating agencies, may use to assess the Partnership’s operating performance and liquidity. Adjusted EBITDA may provide an operating performance comparison to other publicly traded partnerships in our industry, without regard to historical cost basis or financing methods. Adjusted EBITDA may also be used to assess the Partnership’s liquidity including such things as the ability of our assets to generate sufficient cash flows to make distributions to our unitholders and our ability to incur and service debt and fund capital expenditures.

Distributable cash flow and distribution coverage ratio are non-GAAP supplemental financial measures that management and external users of our consolidated financial statements, such as industry analysts, investors, lenders and rating agencies, may use to assess the Partnership’s liquidity, including:

- the ability of our assets to generate sufficient cash flow to make distributions to our unitholders and
- our ability to incur and service debt and fund capital expenditures.

We believe that the presentation of Adjusted EBITDA provides useful information to our investors in assessing our financial conditions, results of operations and liquidity. Distributable cash flow and distribution coverage ratio provide useful information to investors in assessing our liquidity. The GAAP measures most directly comparable to Adjusted EBITDA is net income and net cash provided by operating activities. The GAAP measure most directly comparable to distributable cash flow and distribution coverage ratio is net cash provided by operating activities. Our non-GAAP financial measures of Adjusted EBITDA, distributable cash flow and distribution coverage ratio should not be considered as alternatives to GAAP net income, operating income, net cash provided by operating activities, or any other measure of financial performance or liquidity presented in accordance with GAAP. Adjusted EBITDA and distributable cash flow have important limitations as analytical tools because they exclude some, but not all items that affect net income and net cash provided by operating activities. Investors should not consider Adjusted EBITDA, distributable cash flow and distribution coverage ratio in isolation or as a substitute for analysis of our results as reported under GAAP. Because Adjusted EBITDA, distributable cash flow and distribution coverage ratio may be defined differently by other companies, including those in our industry, our definition of Adjusted EBITDA, distributable cash flow and distribution coverage ratio may not be comparable to similarly titled measures of other companies, thereby diminishing its utility.

The table below presents a reconciliation of the non-GAAP financial measures of Adjusted EBITDA and distributable cash flow to the GAAP financial measures of net income and net cash provided by operating activities:

($ in millions, except per unit data)	Year Ended December 31, 2021	Year Ended December 31, 2020
Reconciliation of Net income to Adjusted EBITDA:		
Net income	$ 51.4	$ 26.9
Add backs:		
Depreciation, depletion and amortization expense	31.6	28.8
Interest expense, net	5.0	5.2
Equity-based compensation expense	0.5	0.7
Adjusted EBITDA	88.5	61.6
Less: Adjusted EBITDA attributable to noncontrolling interest	44.6	31.5
Adjusted EBITDA attributable to Sisecam Resources LP	$ 43.9	$ 30.1
Reconciliation of distributable cash flow to Adjusted EBITDA attributable to Sisecam Resources LP:		
Adjusted EBITDA attributable to Sisecam Resources LP	$ 43.9	$ 30.1
Less: Cash interest expense, net attributable to Sisecam Resources LP	2.3	1.4
Less: Maintenance capital expenditures attributable to Sisecam Resources LP	12.6	11.7
Distributable cash flow attributable to Sisecam Resources LP	$ 29.0	$ 17.0
Cash distribution declared per unit	$ 0.990	$ 0.340
Total distributions to limited partner unitholders and general partner	$ 20.3	$ 6.8
Distribution coverage ratio [(a)]	1.43	2.50
Reconciliation of Net cash from operating activities to Adjusted EBITDA:		
Net cash provided by operating activities	$ 54.2	$ 54.7
Add/(less):		
Amortization of long-term loan financing	(0.6)	(0.4)
Net change in working capital	30.4	2.4
Interest expense, net	5.0	5.2
Other non-cash items	(0.5)	(0.3)
Adjusted EBITDA	88.5	61.6
Less: Adjusted EBITDA attributable to noncontrolling interest	44.6	31.5
Adjusted EBITDA attributable to Sisecam Resources LP	43.9	30.1
Less: Cash interest expense, net attributable to Sisecam Resources LP	2.3	1.4
Less: Maintenance capital expenditures attributable to Sisecam Resources LP	12.6	11.7
Distributable cash flow attributable to Sisecam Resources LP	$ 29.0	$ 17.0

(a) Distribution coverage ratio is calculated as distributable cash flow attributable to Sisecam Resources LP divided by total distributions to limited partners unitholders and general partners.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make certain estimates and assumptions regarding matters that are inherently uncertain and that ultimately affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosure of contingent assets and liabilities. The estimates and assumptions are based on management's experience and understanding of current facts and circumstances. These estimates may differ from actual results.

We believe our judgments and related estimates associated with transactions with our affiliates and revenue recognition are critical in the preparation of our consolidated financial statements. Management has discussed the development and selection of these critical accounting judgments and estimates with the Audit Committee of our Board of Directors, and the Audit Committee has reviewed our disclosures relating to them, which are presented below.

Transactions with Affiliates

Agreements and transactions with affiliates have a significant impact on the Partnership's financial statements because the Partnership is a subsidiary and investee within two different global group structures. Agreements directly between the Partnership and other affiliates, or indirectly between affiliates that the Partnership does not control, can have a significant impact on recorded amounts or disclosures in the Partnership's financial statements, including any commitments and contingencies between the Partnership and affiliates, or potentially, third parties.

For instance Sisecam Chemicals, an upstream affiliate of the Partnership, acts as a shared service center for a variety of functions, including logistics and retirement benefits for Ciner Enterprises and its investee affiliates. Sisecam Chemicals is the exclusive sales agent for the Partnership and allocates costs to the Partnership for ocean freight cost, selling, general and administrative expenses, retirement and postretirement benefits, and railcar leases. For more information related to these expenses see Item 8, "Financial Statements and Supplementary Data" Note 15, "Agreements and Transactions with Affiliates."

There may be certain items that affiliates are in the process of evaluating how the Partnership may benefit or participate in the development, including participating in the related expenditures. In addition, the general partner may contract and/or develop certain transactions or assets on its own or through affiliates. Further upstream affiliates of the Partnership, including affiliates of Şişecam Parent may enter into agreements that limit or otherwise adversely impact the Partnership.

There is judgment in the Partnership's identification, evaluation, and disclosure of affiliate relationships, transactions, and commitments and contingencies.

Revenue Recognition

The majority of the Partnership's revenues generated are recognized upon delivery and transfer of title to the product to our customers. Generally the time at which delivery and transfer of title occurs, for the majority of our contracts with customers, is the point when the Partnership ships product to customers, thereby rendering our performance obligation fulfilled. Additionally, the Partnership has made an accounting policy election to account for shipping and handling activities as fulfillment costs. For more information related to revenue see Item 8, "Financial Statements and Supplementary Data" - Note 2 - "Summary of Significant Accounting Policies."

Recently Issued Accounting Standards

Accounting standards recently issued are discussed in Part II, Item 8. "Financial Statements and Supplementary Data" - Note 2 - Summary of Significant Accounting Policies, in the notes to the consolidated financial statements.

ITEM 7A. ***Quantitative and Qualitative Disclosures about Market Risk***

Our exposure to the financial markets consists of changes in interest rates relative to the balance of our outstanding debt obligations and derivatives that we have employed from time to time to manage our exposure to changes in market interest rates, foreign currency rate and commodity prices. We do not use financial instruments or derivatives for trading or other speculative purposes.

Interest Rate Risks

The aggregate principal amount of variable rate debt we had outstanding under our debt instruments as of December 31, 2021 was $70.0 million (as of December 31, 2020: $103.5 million). We have interest rate swap contracts, designated as cash flow hedges, to mitigate our exposure to possible increases in interest rates. The swap contracts consist of three individual $12.5 million swaps with an aggregate notional value of $37.5 million at December 31, 2021 and three individual $12.5 million swaps with an aggregate notional value of $37.5 million at December 31, 2020. The swaps have various maturities through 2024. The fair value liability of these interest rate swaps was $0.4 million as of December 31, 2021. The Partnership's variable rate debt had a weighted average interest rate, inclusive of designated interest rate swap contracts, of 2.69% as of December 31, 2021 (as of December 31, 2020: 2.88%). Based on the variable rate debt in our debt instruments as of December 31, 2021 including the impact of the interest rate swap contract discussed below, a change in interest rates of 1% would result in an increase or a decrease of our annual interest expense of approximately $0.3 million.

Foreign Exchange Rate Risks

Our sales to customers are denominated in U.S. Dollars but our sales to international customers may be denominated in a foreign currency, which exposes us to foreign currency fluctuations. As of December 31, 2021, the Partnership had no outstanding balances denominated in a foreign currency.

Commodity Price Risks

Energy costs represent a large part of our cost of products sold. Natural gas is a large component of that expense. We purchase natural gas primarily from two suppliers: BP Energy and Castleton. The purchase price we pay does not include the cost of transportation so we must arrange and pay for the cost of transporting the natural gas from the gas compressor facility approximately 20 miles from the plant to our facility. We have a separate contract for the transportation of gas. We pay a fixed amount to reserve capacity on a daily basis. In order to mitigate the risk of gas price fluctuations, we hedge a portion of our forecasted natural gas purchases by entering into physical or financial gas hedges generally ranging between 20% and 80% of our expected monthly gas requirements, on a sliding scale, for approximately the next three years. We can give no assurance that we will continue this practice. Historically, we have taken physical delivery under our physical gas contract and we intend to take physical delivery in the future. In addition, to manage our exposure to fluctuating natural gas prices, we enter into financial gas forward purchase contracts. We generally designate our financial gas forward contracts with financial counter-parties as cash flow hedges. Any outstanding contracts are valued at market with the offset going to other comprehensive income (loss), and any material hedge ineffectiveness is recognized in cost of goods sold. Any gain or loss is recognized in cost of goods sold in the same period or periods during which the hedged transaction affects earnings. The aggregate notional value of our financial gas forward purchase contracts as of December 31, 2021 was $24.1 million and net fair value asset was $6.4 million. As of December 31, 2020, the aggregate notional value and fair value liability were $25.9 million and $1.4 million, respectively.

ITEM 8. ***Financial Statements and Supplementary Data***

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Partners of
Sisecam Resources LP
Atlanta, Georgia

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Sisecam Resources LP (a majority-owned subsidiary of Sisecam Chemicals Wyoming LLC) and its subsidiary (the "Partnership") as of December 31, 2021 and 2020, the related consolidated statements of operations and comprehensive income, cash flows, and equity for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Partnership as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Partnership's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 14, 2022, expressed an unqualified opinion on the Partnership's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Partnership's management. Our responsibility is to express an opinion on the Partnership's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Partnership in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Agreements and Transactions with Affiliates – Refer to Notes 1, 9, 14, and 15 to the financial statements

Critical Audit Matter Description

The Partnership is both a subsidiary and investee within two different global group structures and agreements directly between the Partnership and affiliates, or indirectly between affiliates that the Partnership does not control, can have a significant impact on recorded amounts or disclosures in the Partnership's financial statements, including any commitments and contingencies between the Partnership and affiliates or, potentially, third parties. Performing audit procedures to evaluate the Partnership’s identification of upstream affiliate relationships, transactions, and commitments and contingencies originating outside of the Ciner Enterprises, Inc. group and the impact of such matters on the financial statements represents a critical audit matter because of the increased auditor judgment necessary to perform audit procedures related to these matters and evaluate the results of those procedures.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the Partnership’s identification of upstream affiliate relationships, transactions, and commitments and contingencies originating outside of the Ciner Enterprises, Inc. group and the impact of such matters on the financial statements included the following, among others:

a. We tested the effectiveness of controls over the Partnership’s affiliate process, including controls over the identification of the Partnership’s affiliate relationships, transactions, and commitments and contingencies originating outside of the Ciner Enterprises, Inc. group.

b. We read publicly available financial filings and news sources related to the Partnership and its affiliates outside of the Ciner Enterprises, Inc. group and listened to the Partnership’s quarterly investor relations calls for information related to potential new affiliates and transactions between the Partnership and affiliates.

c. We inspected director and executive officer questionnaires from the Partnership’s directors and officers to identify any affiliate matters.

d. We searched the general ledger for potential transactions with affiliates.

e. We read significant new or amended agreements and contracts of the Partnership to identify new affiliate relationships, transactions, or commitments and contingencies, and evaluated management’s analyses regarding the accounting and disclosure of such arrangements.

f. We inquired of executive officers, key members of management, and the Audit Committee of the Board of Directors regarding affiliate relationships, transactions and commitments and contingencies.

g. We confirmed with the Partnership’s ultimate parent companies that the affiliate relationships, transactions, and commitments and contingencies identified and disclosed by the Partnership were complete.

/s/ Deloitte & Touche LLP

Atlanta, Georgia

March 14, 2022

We have served as the Partnership's auditor since 2008.

SISECAM RESOURCES LP
CONSOLIDATED BALANCE SHEETS

(In millions)		December 31, 2021		December 31, 2020
ASSETS				
Current assets:				
Cash and cash equivalents	$	2.7	$	0.5
Accounts receivable-affiliates		49.3		86.5
Accounts receivable, net		116.9		40.6
Inventory		30.1		33.5
Other current assets		9.0		4.1
Total current assets		208.0		165.2
Property, plant and equipment, net		304.2		307.4
Other non-current assets		31.1		25.4
Total assets	$	543.3	$	498.0
LIABILITIES AND EQUITY				
Current liabilities:				
Current portion of long-term debt	$	8.6	$	3.0
Accounts payable		21.9		16.4
Due to affiliates		2.3		2.9
Accrued expenses		41.0		33.6
Total current liabilities		73.8		55.9
Long-term debt		115.0		128.1
Other non-current liabilities		9.8		8.7
Total liabilities		198.6		192.7
Commitments and Contingencies (See Note 14)				
Equity:				
Common unitholders - Public and SCW LLC (19.8 and 19.8 units issued and outstanding at December 31, 2021 and 2020)		187.4		170.0
General partner unitholders - Sisecam Resource Partners LLC (0.4 units issued and outstanding at December 31, 2021 and 2020)		4.6		4.2
Accumulated other comprehensive loss		3.0		—
Partners' capital attributable to Sisecam Resources LP		195.0		174.2
Noncontrolling interest		149.7		131.1
Total equity		344.7		305.3
Total liabilities and partners' equity	$	543.3	$	498.0

See accompanying notes.

SISECAM RESOURCES LP
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

(In millions, except per unit data)	Years Ended December 31, 2021	2020	2019
Net sales:			
Sales - affiliates	$ —	$ 177.9	$ 315.8
Sales - others	540.1	214.3	207.0
Total net sales	540.1	392.2	522.8
Cost of products sold:			
Cost of products sold (excludes depreciation, depletion and amortization expense set forth separately below)	215.5	185.6	221.4
Depreciation, depletion and amortization expense	31.6	28.8	26.9
Freight costs	213.0	123.7	143.6
Total cost of products sold	460.1	338.1	391.9
Gross profit	80.0	54.1	130.9
Operating expenses:			
Selling, general and administrative expenses—affiliates	17.2	17.5	18.4
Selling, general and administrative expenses—others	6.3	4.2	5.4
Total operating expenses	23.5	21.7	23.8
Operating income	56.5	32.4	107.1
Other income/(expenses):			
Interest income	—	0.1	0.4
Interest expense	(5.0)	(5.3)	(5.9)
Other - net	(0.1)	(0.3)	—
Total other expense, net	(5.1)	(5.5)	(5.5)
Net income	$ 51.4	$ 26.9	$ 101.6
Net income attributable to noncontrolling interest	27.0	15.2	52.0
Net income attributable to Sisecam Resources LP	$ 24.4	$ 11.7	$ 49.6
Other comprehensive income:			
Income on derivative financial instruments	5.9	5.9	1.6
Comprehensive income	57.3	32.8	103.2
Comprehensive income attributable to noncontrolling interest	29.9	18.1	52.7
Comprehensive income attributable to Sisecam Resources LP	$ 27.4	$ 14.7	$ 50.5
Net income per limited partner unit:			
Net income per limited partner unit (basic)	$ 1.19	$ 0.58	$ 2.46
Net income per limited partner unit (diluted)	$ 1.19	$ 0.58	$ 2.46
Limited partner units outstanding:			
Weighted average limited partner units outstanding (basic)	19.8	19.7	19.7
Weighted average limited partner units outstanding (diluted)	19.8	19.8	19.7

See accompanying notes.

SISECAM RESOURCES LP
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)	**Years Ended December 31, 2021**	**2020**	**2019**
Cash flows from operating activities:			
Net income	$ 51.4	$ 26.9	$ 101.6
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, depletion and amortization expense	32.2	29.2	27.1
Impairment and loss on disposal of assets, net	—	—	0.6
Equity-based compensation expense	0.5	0.7	0.8
Other non-cash items	0.5	0.3	0.3
Changes in operating assets and liabilities:			
(Increase)/decrease in:			
Accounts receivable, net	(34.3)	(4.6)	0.9
Accounts receivable - affiliates	(4.7)	8.5	(24.9)
Inventory	0.3	(9.8)	(0.4)
Other current and other non-current assets	(1.8)	(0.5)	0.1
Increase/(decrease) in:			
Accounts payable	5.0	2.2	(3.1)
Due to affiliates	(0.5)	(0.1)	0.4
Accrued expenses and other liabilities	5.6	1.9	0.4
Net cash provided by operating activities	54.2	54.7	103.8
Cash flows from investing activities:			
Capital expenditures	(25.7)	(42.2)	(65.4)
Insurance proceeds	0.8	—	—
Net cash used in investing activities	(24.9)	(42.2)	(65.4)
Cash flows from financing activities:			
Borrowings on Revolving Credit Facilities	84.5	212.5	102.0
Borrowings on Equipment Financing Arrangements	29.0	30.0	—
Repayments on Revolving Credit Facilities	(118.0)	(238.5)	(71.5)
Repayments on Equipment Financing Arrangements	(3.0)	(2.2)	—
Debt issuance costs	(1.4)	(0.6)	—
Common units surrendered for taxes	(0.1)	(0.2)	(0.5)
Distributions to common unitholders	(6.7)	(13.4)	(31.2)
Distributions to general partner	(0.1)	(0.3)	(0.6)
Distributions to noncontrolling interest	(11.3)	(14.2)	(31.9)
Net cash used in financing activities	(27.1)	(26.9)	(33.7)
Net increase/(decrease) in cash and cash equivalents	2.2	(14.4)	4.7
Cash and cash equivalents at beginning of year	0.5	14.9	10.2
Cash and cash equivalents at end of year	$ 2.7	$ 0.5	$ 14.9
Supplemental disclosure of cash flow information:			
Interest paid during the year	$ 4.6	$ 5.1	$ 5.5
Supplemental disclosure of non-cash investing activities:			
Capital expenditures on account	$ 4.1	$ 2.0	$ 6.8

See accompanying notes.

SISECAM RESOURCES LP
CONSOLIDATED STATEMENTS OF EQUITY

(In millions)	Common Units	General Partner	Accumulated Other Comprehensive Loss/Income	Partners' Capital Attributable to Sisecam Resources LP Equity	Noncontrolling Interest	Total Equity
Balance at January 1, 2019	$ 153.8	$ 3.9	$ (3.8)	$ 153.9	$ 106.2	$ 260.1
Net income	48.6	1.0	—	49.6	52.0	101.6
Other comprehensive income	—	—	0.8	0.8	0.8	1.6
Equity-based compensation plan activity	0.3	—	—	0.3	—	0.3
Distributions	(31.3)	(0.6)	—	(31.9)	(31.8)	(63.7)
Balance at December 31, 2019	$ 171.4	$ 4.3	$ (3.0)	$ 172.7	$ 127.2	$ 299.9
Net income	11.5	0.2	—	11.7	15.2	26.9
Other comprehensive income	—	—	3.0	3.0	2.9	5.9
Equity-based compensation plan activity	0.5	—	—	0.5	—	0.5
Distributions	(13.4)	(0.3)	—	(13.7)	(14.2)	(27.9)
Balance at December 31, 2020	$ 170.0	$ 4.2	$ —	$ 174.2	$ 131.1	$ 305.3
Partnership net income	23.9	0.5	—	24.4	27.0	51.4
Other comprehensive income	—	—	3.0	3.0	2.9	5.9
Equity-based compensation plan activity	0.2	—	—	0.2	—	0.2
Distributions	(6.7)	(0.1)	—	(6.8)	(11.3)	(18.1)
Balance at December 31, 2021	$ 187.4	$ 4.6	$ 3.0	$ 195.0	$ 149.7	$ 344.7

See accompanying notes.

SISECAM RESOURCES LP
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. GENERAL

Nature of Operations

As used in this Report, the terms “Sisecam Resources LP,” “the Partnership,” “SIRE,” “we,” “us,” or “our” may refer to Sisecam Resources LP, a publicly traded Delaware limited partnership formed in April 2013 by both Sisecam Chemicals Wyoming LLC (“SCW LLC”), a wholly-owned subsidiary of Sisecam Chemicals Resources LLC (“Sisecam Chemicals”) and Sisecam Resource Partners LLC (our “general partner” or “Sisecam GP”), a wholly-owned subsidiary of SCW LLC. Sisecam Chemicals is 60% owned by Sisecam Chemicals USA Inc. (“Sisecam USA”) and 40% owned by Ciner Enterprises Inc. (“Ciner Enterprises”). Sisecam USA is a direct subsidiary of Türkiye Sise ve Cam Fabrikalari A.S (“Şişecam Parent”) which is an approximately 51%-owned subsidiary of Turkiye Is Bankasi Turkiye Is Bankasi ("Isbank").

Şişecam Parent is a global company operating in soda ash, chromium chemicals, flat glass, auto glass, glassware glass packaging and glass fiber sectors and is based in Turkey and is listed on the Istanbul exchange. Ciner Enterprises Inc. is a direct wholly-owned subsidiary of WE Soda Ltd., a U.K. Corporation (“WE Soda”). WE Soda is a direct wholly-owned subsidiary of KEW Soda Ltd., a U.K. corporation (“KEW Soda”), which is a direct wholly-owned subsidiary of Akkan Enerji ve Madencilik Anonim Şirketi (“Akkan”). Akkan is directly and wholly owned by Turgay Ciner, the Chairman of the Ciner Group (“Ciner Group”), a Turkish conglomerate of companies engaged in energy and mining (including soda ash mining), media and shipping markets.

Sisecam Wyoming LLC (“Sisecam Wyoming”) is in the business of mining trona ore to produce soda ash, and is a 51.0% majority-owned subsidiary of the Partnership. The Partnership’s operations consist solely of its investment in Sisecam Wyoming. NRP Trona LLC, a wholly owned subsidiary of Natural Resource Partners L.P. (“NRP”), currently owns a 49.0% membership interest in Sisecam Wyoming. NRP’s membership interest in Sisecam Wyoming is reflected as the noncontrolling interest in the Partnership’s financial results.

All of our soda ash processed is currently sold to various domestic and international customers. Sisecam Chemicals is the exclusive sales agent for the Partnership. Sisecam Chemicals has leveraged the distributor network established by Ciner Group while independently reviewing current and potential distribution partners to optimize the Partnership’s reach into each market.

Completed Change in Control Transaction

On December 21, 2021, Ciner Enterprises (which was the indirect owner of approximately 74% of the common units in the Partnership, completed the following transactions pursuant to the definitive agreement which Ciner Enterprises entered into with Sisecam USA, a direct subsidiary of Şişecam Parent on November 20, 2021:

- Ciner Enterprises converted Ciner Resources Corporation into Sisecam Chemicals Resources LLC, a Delaware limited liability company ("Sisecam Chemicals"), and Ciner Wyoming Holding Co., a direct wholly-owned subsidiary of Sisecam Chemicals, into Sisecam Chemicals Wyoming LLC (“SCW LLC”), with SCW LLC in turn then directly owning approximately 74% of the common units in the Partnership and 100% of the general partner, and Sisecam USA purchased, 60% of the outstanding units of Sisecam Chemicals owned by Ciner Enterprises for a purchase price of $300 million (the “Sisecam Chemicals Sale”); and
- at the closing of the Sisecam Chemicals Sale, Sisecam Chemicals, Ciner Enterprises, and Sisecam USA entered into a unitholders and operating agreement (the “Sisecam Chemicals Operating Agreement”) (collectively such transactions, the “CoC Transaction”).

Pursuant to the terms of the Sisecam Chemicals Operating Agreement, Sisecam USA and Ciner Enterprises have a right to designate six directors and four directors, respectively, to the board of directors of Sisecam Chemicals. In addition, the Sisecam Chemicals Operating Agreement provides that (i) the board of directors of the general partner (the “MLP Board”) shall consist of six designees from Sisecam USA, two designees from Ciner Enterprises and three independent directors for as long as the general partner is legally required to appoint such independent directors and (ii) the Partnership’s right to appoint four managers to the board of managers of Sisecam Wyoming (the “Wyoming Board”) shall be comprised of three designees from Sisecam USA and one designee from Ciner Enterprises. Each of Sisecam USA and Ciner Enterprises shall vote all units over which such unitholder has voting control in Sisecam Chemicals to elect to the board of directors any individual designated by Sisecam USA and Ciner Enterprises. The Sisecam Chemicals Operating Agreement also requires the board of directors of Sisecam Chemicals to unanimously approve certain actions and commitments, including without limitation taking any action that would have an adverse effect on the master limited

partnership status of the Partnership or any of its subsidiaries. As a result of Sisecam USA's and Ciner Enterprise's respective interests in Sisecam Chemicals and their respective rights under the Sisecam Chemicals Operating Agreement, each of Ciner Enterprises and Sisecam USA and their respective beneficial owners may be deemed to share beneficial ownership of the approximate 2% general partner interest in the Partnership and approximately 74% of the common units in the Partnership owned directly by SCW LLC and indirectly by Sisecam Chemicals as parent entity of SCW LLC.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Significant Accounting Policies

The accompanying consolidated financial statements of the Partnership and its subsidiary have been prepared in conformity with U.S. generally accepted accounting principles and reflect all adjustments, consisting of normal recurring accruals, which are necessary for fair presentation of the results of operations, financial position and cash flows for the periods presented. All significant intercompany transactions, balances, revenue and expenses have been eliminated in consolidation and unless otherwise noted, the financial information for the Partnership is presented before noncontrolling interest.

Use of Estimates

The preparation of consolidated financial statements, in accordance with accounting principles generally accepted in the United States of America, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the dates of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Furthermore, we considered the impact of the COVID-19 pandemic on the use of estimates and assumptions used for financial reporting. While our year-to-date production has recovered from the negative impact of the COVID-19 pandemic, given we cannot predict the duration or the scope of the COVID-19 pandemic and its impact on our operations, the potential negative financial impact to our results cannot be reasonably estimated but could be material. As a result of these uncertainties, actual results could differ from those estimates and assumptions. If the economy or markets in which we operate become weaker than pre-COVID-19 levels, our business, financial condition and results of operations might be materially and adversely impacted.

Revenue Recognition

The majority of the Partnership's revenues are recognized upon satisfaction of our performance obligations, that is, delivery and transfer of title to the product to our customers as discussed below. Additionally, the Partnership has made an accounting policy election to account for shipping and handling activities as fulfillment costs. We have one reportable segment and our revenue is derived from the sale of soda ash which is our sole and primary good and service.

Performance Obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. At contract inception, we assess the goods and services promised in contracts with customers and identify performance obligations for each promise to transfer to the customer, a good or service that is distinct. To identify the performance obligations, the Partnership considers all goods and services promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices. From its analysis, the Partnership determined that the sale of soda ash is currently its only performance obligation. Many of our customer volume commitments are short-term and our performance obligations for the sale of soda ash are generally limited to single purchase orders.

- ***When performance obligations are satisfied.*** Substantially all of our revenue is recognized at a point-in-time when control of goods transfers to the customer.
- ***Transfer of Goods.*** The Partnership uses standard shipping terms across each customer contract with very few exceptions. Control transfer occurs at the point at which the customer has the ability to direct the use of and obtain substantially all remaining benefits from the asset. The time at which delivery and transfer of title, and therefore control, occurs is the point when the product leaves our facilities for domestic customers, the point when the product reaches the port of loading for ANSAC sales, and the point when the product is placed on a vessel for other international customers, thereby rendering our performance obligation fulfilled. Until the ANSAC exit on December 31, 2020, the time at which delivery and transfer of title occurred for ANSAC sales had been the same as domestic customers.
- ***Payment Terms.*** Our payment terms vary by the type and location of our customers. The term between invoicing and when payment is due is not significant and consistent with typical terms in the industry.
- ***Variable Consideration.*** We recognize revenue as the amount of consideration that we expect to receive in exchange for transferring promised goods or services to customers. We do not adjust the transaction price for the effects of a significant financing component, as the time period between control transfer of goods and services and expected payment is one year or less. At the time of sale, we estimate provisions for different forms of variable consideration (discounts, rebates, and pricing adjustments) based on historical experience, current conditions and contractual obligations, as applicable. The estimated

transaction price is typically not subject to significant reversals. We adjust these estimates when the most likely amount of consideration we expect to receive changes, although these changes are typically immaterial.

- ***Returns, Refunds and Warranties.*** In the normal course of business, the Partnership does not accept returns, nor does it typically provide customers with the right to a refund.
- ***Freight.*** In accordance with FASB Accounting Standard Codification, Revenue from Contracts with Customers (Topic 606) ("ASC 606"), the Partnership made a policy election to treat freight and related costs that occur after control of the related good transfers to the customer as fulfillment activities instead of separate performance obligations. Therefore, freight is recognized at the point in which control of soda ash has transferred to the customer.

Revenue Disaggregation. In accordance with ASC 606-10-50, the Partnership disaggregates revenue from contracts with customers into geographical regions. The Partnership determined that disaggregating revenue into these categories achieved the disclosure objectives to depict how the nature, timing, amount and uncertainty of revenue and cash flows are affected by economic factors. Refer to Note 16, "Major Customers and Segment Reporting," for revenue disaggregated into geographical regions.

Revenue Contract Balances. The timing of revenue recognition, billings and cash collections results in billed receivables, unbilled receivables (contract assets), and customer advances and deposits (contract liabilities).

- ***Contract Assets.*** At the point of shipping, the Partnership has an unconditional right to payment generally that is only dependent on the passage of time. In general, customers are billed and a receivable is recorded as goods are shipped. These billed receivables are reported as "Accounts Receivable, net" on the Consolidated Balance Sheets as of December 31, 2021 and December 31, 2020. There were no contract assets as of December 31, 2021 and December 31, 2020.
- ***Contract Liabilities.*** There may be situations where customers are required to prepay for freight and insurance prior to shipment. The Partnership accounts for freight costs as fulfillment activities and therefore, such prepayments are considered a part of the single obligation to provide soda ash. In such instances, a contract liability for prepaid freight will be recorded.

Freight Costs

The Partnership includes freight costs billed to customers for shipments administered by the Partnership in gross sales. The related freight costs incurred by the Partnership along with cost of products sold are deducted from gross sales to determine gross profit.

Cash and Cash Equivalents

The Partnership considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. Cash equivalents consist primarily of money market deposit accounts.

Accounts Receivable

We determine expected credit losses for recorded receivables based on information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount.

Inventory

Inventory is carried at the lower of cost and net realizable value. Cost is determined using the first-in, first-out method for raw material and finished goods inventory and the weighted average cost method for stores inventory. Costs include raw materials, direct labor and manufacturing overhead. Net realizable value is defined as the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation.

- *Raw material inventory* includes material, chemicals and natural resources being used in the mining and refining process.
- *Finished goods inventory* is the finished product soda ash.
- *Stores inventory* includes parts, materials and operating supplies which are typically consumed in the production of soda ash and currently available for future use. If the inventory has been used within the preceding twelve months, it is classified as current assets and remainder is classified as non-current assets.

Property, Plant, and Equipment

Property, plant, and equipment are stated at cost less accumulated depreciation. Depreciation is computed over the estimated useful lives of depreciable assets, using the straight-line method. The estimated useful lives applied to depreciable assets are as follows:

	Useful Lives
Land improvements	10 years
Depletable land	15-60 years
Buildings and building improvements	10-30 years
Computer hardware	3-5 years
Machinery and equipment	5-20 years
Furniture and fixtures	5-10 years

Mineral reserves are amortized over an estimated time period that is derived from total estimated proven and probable mineral reserves divided by our average annual tons mined which was over 50 years as of December 31, 2021.

The Partnership's policy is to evaluate property, plant, and equipment for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. An indicator of potential impairment would include situations when the estimated future undiscounted cash flows are less than the carrying value. The amount of any impairment then recognized would be calculated as the difference between estimated fair value and the carrying value of the asset.

Derivative Instruments and Hedging Activities

The Partnership may enter into derivative contracts from time to time to manage exposure to the risk of exchange rate changes on its foreign currency transactions, the risk of changes in natural gas prices, and the risk of the variability in interest rates on borrowings. Gains and losses on derivative contracts qualifying for hedge accounting are reported as a component of the underlying transactions. The Partnership follows hedge accounting for its hedging activities. All derivative instruments are recorded on the balance sheet at their fair values. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation. The Partnership designates its derivatives based upon criteria established for hedge accounting under generally accepted accounting principles. For a derivative designated as a fair value hedge, the gain or loss is recognized in earnings in the period of change together with the offsetting gain or loss on the hedged item attributed to the risk being hedged. For a derivative designated as a cash flow hedge, the effective portion of the derivative's gain or loss is initially reported as a component of accumulated other comprehensive income (loss) and subsequently reclassified into earnings when the hedged exposure affects earnings. Any significant ineffective portion of the gain or loss is reported in earnings immediately. For derivatives not designated as hedges, the gain or loss is reported in earnings in the period of change. When the Partnership has natural gas physical forward contracts, they are accounted for under the normal purchases and normal sales scope exception.

Income Tax

We are organized as a pass-through entity for federal income tax purposes and therefore are not subject to federal or certain state income taxes. As a result, our partners are responsible for income taxes based on their respective share of taxable income. Net income for financial statement purposes may differ significantly from taxable income reportable to unitholders as a result of differences between the tax basis and financial reporting basis of assets and liabilities and the taxable income allocation requirements under the partnership agreement.

Reclamation Costs

The Partnership is obligated to return the land beneath its refinery and tailings ponds to its natural condition upon completion of operations and is required to return the land beneath its rail yard to its natural condition upon termination of the various lease agreements.

The Partnership accounts for its land reclamation liability as an asset retirement obligation, which requires that obligations associated with the retirement of a tangible long-lived asset be recorded as a liability when those obligations are incurred, with the amount of the liability initially measured at fair value. Upon initially recognizing a liability for an asset retirement obligation, an entity must capitalize the cost by recognizing an increase in the carrying amount of the related long-lived asset. Over time, the liability is accreted to its present value each period, and the capitalized cost is depreciated over the estimated useful life of the related asset. Upon settlement of the liability, an entity either settles the obligation for its recorded amount or incurs a gain or loss upon settlement.

The estimated original liability calculated in 1996 for the refinery and tailing ponds was calculated based on the estimated useful life of the mine, which was 80 years, and on external and internal estimates as to the cost to restore the land in the future and

state regulatory requirements. The liability was discounted using a weighted average credit-adjusted risk-free rate of approximately 6% and is being accreted throughout the estimated life of the related assets to equal the total estimated costs with a corresponding charge being recorded to cost of products sold.

The Partnership has constructed a rail yard to facilitate loading and switching of rail cars. The Partnership is required to restore the land on which the rail yard is constructed to its natural conditions. The original estimated liability for restoring the rail yard to its natural condition was calculated based on the land lease life of 30 years and on external and internal estimates as to the cost to restore the land in the future. The liability is discounted using a credit-adjusted risk-free rate of 4.2% and is being accreted throughout the estimated life of the related assets to equal the total estimated costs with a corresponding charge being recorded to cost of products sold.

Fair Value of Financial Instruments

Fair value is determined using a valuation hierarchy, generally by reference to an active trading market, quoted market prices or model-derived valuations for the same or similar financial instruments. See Note 17, “Fair Value Measurements,” for more information.

Equity-Based Compensation

We recognize compensation expense related to equity-based awards, with service conditions, granted to employees based on the estimated fair value of the awards on the date of grant, net of estimated forfeitures. The grant date fair value of the equity-based awards is generally recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the respective awards. Equity-based awards with market conditions are fair valued using a Monte Carlo Simulation model. See Note 12, “Equity-Based Compensation,” for additional information.

Fair value measurements

The Partnership measures certain financial and non-financial assets and liabilities at fair value on a recurring basis. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants on the measurement date. Fair value disclosures are reflected in a three-level hierarchy, maximizing the use of observable inputs and minimizing the use of unobservable inputs.

A three-level valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability on the measurement date. The three levels are defined as follows:

Level 1-inputs to the valuation methodology are quoted prices (unadjusted) for an identical asset or liability in an active market.

Level 2-inputs to the valuation methodology include quoted prices for a similar asset or liability in an active market or model-derived valuations in which all significant inputs are observable for substantially the full term of the asset or liability.

Level 3-inputs to the valuation methodology are unobservable and significant to the fair value measurement of the asset or liability.

Financial instruments consist primarily of cash and cash equivalents, accounts receivable, accounts payable, accrued expenses, derivative financial instruments and long-term debt. The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable and accrued expenses approximate their fair value because of the nature of such instruments. Our long-term debt and derivative financial instruments are measured at their fair values with Level 2 inputs based on quoted market values for similar but not identical financial instruments.

Subsequent Events

We have evaluated subsequent events through the filing of this Annual Report on Form 10-K. See Note 18, “Subsequent Events” for additional information.

Recent Accounting Guidance

Recently Adopted Accounting Guidance

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting (“ASU 2020-04”) providing temporary guidance to ease the potential burden in accounting for reference rate reform primarily resulting from the discontinuation of the London Inter-bank Offered Rate (“LIBOR”), which occurred on December 31, 2021 except U.S. Dollar LIBOR, which is expected to occur on June 30, 2023. The amendments in ASU 2020-04 are elective and apply to all entities that have contracts, hedging relationships, and other transactions that reference LIBOR or another

reference rate expected to be discontinued. The new guidance provides the following optional expedients: (i) simplifies accounting analyses under current GAAP for contract modifications; (ii) simplifies the assessment of hedge effectiveness and allows hedging relationships affected by reference rate reform to continue; and (iii) allows a one-time election to sell or transfer debt securities classified as held to maturity that reference a rate affected by reference rate reform. An entity may elect to apply the amendments prospectively from March 12, 2020 through December 31, 2022 by accounting topic. The Partnership evaluated ASU 2020-04 and concluded that there was no impact to the Partnership's consolidated financial statements.

In January 2021, the FASB issued ASU 2021-01, Reference Rate Reform (Topic 848): Scope ("ASU 2021-01") to clarify that all derivative instruments affected by changes to the interest rates used for discounting, margining or contract price alignment (commonly referred to as the discounting transition) are in the scope of ASC 848. The amendments also clarify other aspects of the guidance in ASC 848 and addresses the effects of the cash compensation adjustment provided in the discounting transition on certain aspects of hedge accounting. The guidance in ASC 848 also allows entities to make a one-time election to sell and/or transfer to available for sale or trading any held-to-maturity debt securities that refer to an interest rate affected by reference rate reform and were classified as held to maturity before January 1, 2020. The original guidance and the recently issued ASU are effective as of their issuance dates. The relief provided is temporary and generally cannot be applied to contract modifications that occur after December 31, 2022 or hedging relationships entered into or evaluated after that date. However, the FASB has indicated that it will revisit the sunset date in ASC 848 after the LIBOR administrator makes a final decision on a phaseout date. The LIBOR administrator recently extended the publication of the overnight and the one-, three-, six- and 12-month U.S. Dollar LIBOR settings through June 30, 2023, when many existing contracts that reference LIBOR will have expired. The Partnership evaluated ASU 2021-01 and concluded that there was no impact to the Partnership's consolidated financial statements.

3. NET INCOME PER UNIT AND CASH DISTRIBUTION

Allocation of Net Income

Our net income is allocated to the general partner and limited partners in accordance with their respective partnership percentages, after giving effect to priority income allocations for incentive distributions, if any, to our general partner, pursuant to our partnership agreement. Net income per unit applicable to limited partners is computed by dividing limited partners' interest in net income attributable to Sisecam Chemicals, after deducting the general partner's interest and any incentive distributions, by the weighted average number of outstanding common units. Earnings in excess of distributions are allocated to the general partner and limited partners based on their respective ownership interests. Payments made to our unitholders are determined in relation to actual distributions declared and are not based on the net income allocations used in the calculation of net income per unit.

In addition to the common units, we have also identified the general partner interest and incentive distribution rights ("IDRs") as participating securities and use the two-class method when calculating the net income per unit applicable to limited partners, which is based on the weighted-average number of common units outstanding during the period. Anti-dilutive units outstanding were immaterial for all periods presented.

The net income attributable to common unitholders and the weighted average units for calculating basic and diluted net income per common units were as follows:

	Year Ended December 31,		
(In millions)	2021	2020	2019
Net income attributable to Sisecam Resources LP	$ 24.4	$ 11.7	$ 49.6
Less: General partner's distribution declared	0.7	0.1	0.6
Less: Limited partners' distribution declared	19.6	6.7	26.8
Income in excess of distribution	$ 4.1	$ 4.9	$ 22.2

	Year Ended December 31, 2021		
(In millions, except per unit data)	General Partner	Limited Partners' common units	Total
Distribution declared	$ 0.7	$ 19.6	$ 20.3
Income in excess of distribution	0.1	4.0	4.1
Net income attributable to partners	$ 0.8	$ 23.6	$ 24.4
Weighted average limited partner units outstanding:			
Basic		19.8	
Diluted		19.8	
Net income per limited partner unit:			
Basic		$ 1.19	
Diluted		$ 1.19	

	Year Ended December 31, 2020		
(In millions, except per unit data)	General Partner	Limited Partners' common units	Total
Distribution declared	$ 0.1	$ 6.7	$ 6.8
Income in excess of distribution	0.1	4.8	4.9
Net income attributable to partners	$ 0.2	$ 11.5	$ 11.7
Weighted average limited partner units outstanding:			
Basic		19.7	
Diluted		19.8	
Net income per limited partner unit:			
Basic		$ 0.58	
Diluted		$ 0.58	

(In millions, except per unit data)	Year Ended December 31, 2019 General Partner	Limited Partners' common units	Total
Distribution declared	$ 0.6	$ 26.8	$ 27.4
Income in excess of distribution	0.4	21.8	22.2
Net income attributable to partners	$ 1.0	$ 48.6	$ 49.6
Weighted average limited partner units outstanding:			
Basic		19.7	
Diluted		19.7	
Net income per limited partner unit:			
Basic		$ 2.46	
Diluted		$ 2.46	

Quarterly Distribution

On January 27, 2022, the Partnership declared its fourth quarter 2021 quarterly distribution. On February 18, 2022, we paid a quarterly cash distribution of $0.650 per limited partner unit to unitholders of record on February 7, 2022. The total distribution paid was $13.4 million with $12.9 million paid to our limited partners and $0.3 million and $0.3 million paid to our general partner for its general partner interests and incentive distribution rights, respectively.

Our general partner has considerable discretion in determining the amount of available cash, the amount of distributions and the decision to make any distribution. Although our partnership agreement requires that we distribute all of our available cash quarterly, there is no guarantee that we will make quarterly cash distributions to our unitholders at our current quarterly distribution level, at the minimum quarterly distribution level or at any other rate, and we have no legal obligation to do so.

The following table illustrates the total amount of available cash from operating surplus for the quarter ended December 31, 2021 that was distributed to the unitholders of limited partners and the general partner, including in respect of incentive distribution rights.

(In thousands)	Cash Distributions to Limited Partner Units	Cash Distributions to General Partner: General Partner Units	Incentive Distribution Rights	Total	Total Distributions
$0.5000	$ 9,893	$ 200	$ —	$ 200	$ 10,093
above $0.5000 up to $0.5750	1,484	30	—	30	1,514
above $0.5750 up to $0.6250	989	23	151	174	1,164
above $0.6250 up to $0.7500	495	13	152	165	659
above $0.7500	—	—	—	—	—
	$ 12,861	$ 265	$ 303	$ 568	$ 13,430

General Partner Interest and Incentive Distribution Rights

Our partnership agreement provides that our general partner initially will be entitled to approximately 2.0% of all distributions that we make prior to our liquidation. Our general partner has the right, but not the obligation, to contribute up to a proportionate amount of capital to us in order to maintain its approximately 2.0% general partner interest if we issue additional units. Our general partner's approximate 2.0% interest, and the percentage of our cash distributions to which our general partner is entitled from such approximate 2.0% interest, will be proportionately reduced if we issue additional units in the future (other than the issuance of common units upon a reset of the IDRs), and our general partner does not contribute a proportionate amount of capital to us in order to maintain its approximate 2.0% general partner interest. Our partnership agreement does not require that our general partner fund its capital contribution with cash. It may, instead, fund its capital contribution by contributing to us common units or other property.

IDRs represent the right to receive increasing percentages (13.0%, 23.0% and 48.0%) of quarterly distributions from operating surplus after we have achieved the minimum quarterly distribution and the target distribution levels. Our general partner currently holds the IDRs, but may transfer these rights separately from its general partner interest, subject to certain restrictions in our partnership agreement.

Percentage Allocations of Distributions from Operating Surplus

The following table illustrates the percentage allocations of distributions from operating surplus between the unitholders and our general partner based on the specified target distribution levels. The amounts set forth under the column heading "Marginal Percentage Interest in Distributions" are the percentage interests of our general partner and the unitholders in any distributions from operating surplus we distribute up to and including the corresponding amount in the column "Total Quarterly Distribution per Unit Target Amount." The percentage interests shown for our unitholders and our general partner for the minimum quarterly distribution apply to quarterly distribution amounts for the fourth quarter of 2021. Under the Partnership agreement, our general partner has considerable discretion to determine the amount of available cash (as defined therein) for distribution each quarter to the Partnership's unitholders, including discretion to establish cash reserves that would limit the amount of available cash eligible for distribution to the Partnership's unitholders for any quarter. The Partnership does not guarantee that it will pay the target amount of the minimum quarterly distribution listed below (or any distributions) on its units in any quarter. The percentage interests set forth below for our general partner (1) include a 2.0% general partner interest, (2) assume that our general partner has contributed any additional capital necessary to maintain its 2.0% general partner interest, (3) assume that our general partner has not transferred its incentive distribution rights and (4) assume that we do not issue additional classes of equity securities.

		Marginal Percentage Interest in Distributions		
	Total Quarterly Distribution per Unit Target Amount	**Unitholders**	**General Partner**	**Incentive Distributions Rights**
Minimum Quarterly Distribution	$0.5000	98.0 %	2.0 %	— %
First Target Distribution	above $0.5000 up to $0.5750	98.0 %	2.0 %	— %
Second Target Distribution	above $0.5750 up to $0.6250	85.0 %	15.0 %	13.0 %
Third Target Distribution	above $0.6250 up to $0.7500	75.0 %	25.0 %	23.0 %
Thereafter	above $0.7500	50.0 %	50.0 %	48.0 %

4. ACCOUNTS RECEIVABLE, NET

Accounts receivable, net consisted of the following as of December 31:

(In millions)	**2021**	**2020**
Trade receivables, net	$ 109.8	$ 32.6
Other receivables	7.1	8.0
Total	$ 116.9	$ 40.6

The increase in trade receivables, net of allowances, at December 31, 2021 compared to December 31, 2020, is primarily due to the receivables from ANSAC being included in the balance at December 31, 2021, while classified as accounts receivable (affiliates) at December 31, 2020, as well as more sales in the three months ended December 31, 2021 compared to the same period ended December 31, 2020.

5. INVENTORY

Inventory consisted of the following as of December 31:

(In millions)	**2021**	**2020**
Raw materials	$ 10.5	$ 9.9
Finished goods	9.3	13.4
Stores inventory, current	10.3	10.2
Total	$ 30.1	$ 33.5

The decrease in finished goods inventory at December 31, 2021 compared to December 31, 2020 is primarily due to the buildup of inventory to facilitate Sisecam Chemicals' exit from ANSAC on December 31, 2020.

6. PROPERTY, PLANT, AND EQUIPMENT, NET

Property, plant, and equipment, net consisted of the following as of December 31:

(In millions)	2021	2020
Land and land improvements	$ 0.3	$ 0.3
Depletable land	3.0	3.0
Buildings and building improvements	164.3	163.4
Computer hardware	5.6	5.3
Machinery and equipment	714.8	709.8
Mining reserves	65.3	65.3
Total	953.3	947.1
Less accumulated depreciation, depletion and amortization	(708.7)	(679.9)
Total net book value	244.6	267.2
Construction in progress	59.6	40.2
Total property, plant, and equipment, net	$ 304.2	$ 307.4

Depreciation, depletion and amortization expense on property, plant, and equipment was $30.7 million, $28.1 million, and $26.9 million for the years ended December 31, 2021, 2020, and 2019, respectively.

The increase in construction in progress from December 31, 2020 to December 31, 2021 is due to the construction of mine ventilation and housing for the switchgear.

7. OTHER NON-CURRENT ASSETS

Other non-current assets consisted of the following as of December 31:

(In millions)	2021	2020
Stores inventory, non-current	$ 20.5	$ 18.6
Internal-use software, net of accumulated amortization	5.7	5.7
Other	4.9	1.1
Total	$ 31.1	$ 25.4

During the years ended December 31, 2021, 2020, and 2019, in accordance with ASC 350-40, Internal-Use Software, we capitalized $0.9 million, $0.5 million and $0.6 million, respectively, of certain internal use software development costs. Software development activities generally consist of three stages (i) the research and planning stage, (ii) the application and infrastructure development stage, and (iii) the post-implementation stage. Costs incurred in the planning and post-implementation stages of software development, or other maintenance and development expenses that do not meet the qualification for capitalization are expensed as incurred. Costs incurred in the application and infrastructure development stage, including significant enhancements and upgrades, are capitalized. The Partnership amortizes software development costs on a straight-line basis over the estimated useful life of five to ten years under depreciation and amortization expense which is included in the cost of products sold financial statement line item of the consolidated statements of operations. During the years ended December 31, 2021, 2020, and 2019, we amortized internal use software development costs of $0.9 million, $0.7 million and $0.7 million, respectively. Amortization for these internal use software development costs are expected to be $0.8 million per year.

8. ACCRUED EXPENSES

Accrued expenses consisted of the following as of December 31:

(In millions)	2021	2020
Accrued capital expenditures	$ 2.9	$ 1.3
Accrued energy costs	7.0	5.1
Accrued royalty costs	7.6	8.1
Accrued employee compensation & benefits	9.1	7.6
Accrued other taxes	4.2	5.0
Accrued derivatives	0.8	0.9
Other accruals	9.4	5.6
Total	$ 41.0	$ 33.6

9. DEBT

Long-term debt consisted of the following as of December 31:

(In millions)	2021	2020
Sisecam Wyoming Equipment Financing Arrangement Security Note Number 001 with maturity date of March 26, 2028, fixed interest rate of 2.479%	$ 24.6	$ 27.6
Sisecam Wyoming Equipment Financing Arrangement Security Note Number 002 with maturity date of December 17, 2026, fixed interest rate of 2.4207%	29.0	N/A
Prior Sisecam Wyoming Credit Facility, secured principal expiring on August 1, 2022, variable interest rate as a weighted average rate of 2.25% at December 31, 2020	—	102.5
Sisecam Wyoming Credit Facility, secured principal expiring on October 28, 2026, variable interest rate as a weighted average rate of 1.82% at December 31, 2021	70.0	N/A
Sisecam Resources LP Credit Facility, secured principal expiring on August 1, 2022, variable interest rate as a weighted average rate of 2.25% at December 31, 2020	—	1.0
Total debt	123.6	131.1
Current portion of long-term debt	8.6	3.0
Total long-term debt	$ 115.0	$ 128.1

Aggregate maturities required on long-term debt at December 31, 2021 are due in future years as follows:

(In millions)	Amount
2022	$ 8.6
2023	8.9
2024	9.1
2025	9.2
2026	79.5
Thereafter	8.4
Total	$ 123.7

Sisecam Wyoming Equipment Financing Arrangement

Master Loan and Security Agreement:

On March 26, 2020, Sisecam Wyoming and Banc of America Leasing & Capital, LLC, as lender (the "Equipment Financing Lender"), entered into an equipment financing arrangement ("Sisecam Wyoming Equipment Financing Arrangement"), including a Master Loan and Security Agreement, dated as of March 25, 2020 (as amended, the "Master Agreement") and an Equipment Security Note Number 001, dated as of March 25, 2020 (the "Sisecam Wyoming Equipment Financing Arrangement Security Note Number 001," or the "Initial Secured Note"), which provides the terms and conditions for the debt financing of certain equipment related to Sisecam Wyoming's natural gas-fired turbine co-generation facility that became operational in March 2020. Each equipment financing entered into under the Sisecam Wyoming Equipment Financing Arrangement will be evidenced by the execution of one or more equipment notes (including the Initial Secured Note) that incorporate the terms and conditions of the Master Agreement (each, an "Equipment Note"). In order to secure the payment and performance of Sisecam Wyoming's obligations under the Sisecam Wyoming Equipment Financing Arrangement, Sisecam Wyoming granted to the Equipment Financing Lender a continuing security interest in all of Sisecam Wyoming's right, title and interest in and to the Equipment (as defined in the Master Agreement) and certain related collateral.

On October 28, 2021, in connection with the entry into the Sisecam Wyoming Credit Facility (which replaced the Prior Sisecam Wyoming Credit Facility), Sisecam Wyoming and the Equipment Financing Lender entered into an amendment to the Master Agreement, in order to amend and restate all covenants that are based upon a specified level or ratio relating to assets, liabilities, indebtedness, rentals, net worth, cash flow, earnings, profitability, or any other accounting-based measurement or test to conform with the Sisecam Wyoming Credit Facility.

On December 17, 2021, Sisecam Wyoming and the Equipment Financing Lender entered into Amendment Number 001 to the Initial Secured Note ("First Amendment to the Initial Secured Note"). The First Amendment to the Initial Secured Note, provides among other things: (i) upon the occurrence of an early full payoff of the Second Secured Note (as defined below), Sisecam Wyoming shall simultaneously pay, in full, the outstanding amount of the Initial Secured Note and (ii) Sisecam Wyoming grants to Equipment Financing Lender a security interest in all collateral securing the Second Secured Note to secure Sisecam Wyoming's obligations under the Initial Secured Note.

At December 31, 2021, Sisecam Wyoming was in compliance with all financial covenants of the Sisecam Wyoming Equipment Financing Arrangement.

The Sisecam Wyoming Equipment Financing Arrangement:

(1) incorporates all covenants in the Sisecam Wyoming Credit Facility (as defined below), now or hereinafter existing, or in any applicable replacement credit facility accepted in writing by the Equipment Financing Lender, that are based upon a specified level or ratio relating to assets, liabilities, indebtedness, rentals, net worth, cash flow, earnings, profitability, or any other accounting-based measurement or test, and (2) includes customary events of default subject to applicable grace periods, including, among others, (i) payment defaults, (ii) certain mergers or changes in control of Sisecam Wyoming, (iii) cross defaults with certain other indebtedness (a) to which the Equipment Financing Lender is a party or (b) to third parties in excess of $10 million, and (iv) the commencement of certain insolvency proceedings or related events identified in the Master Agreement. Upon the occurrence of an event of default, in its discretion, the Equipment Financing Lender may exercise certain remedies, including, among others, the ability to accelerate the maturity of any Equipment Note such that all amounts thereunder will become immediately due and payable, to take possession of the Equipment identified in any Equipment Note, and to charge Sisecam Wyoming a default rate of interest on all then outstanding or thereafter incurred obligations under the Sisecam Wyoming Equipment Financing Arrangement:

Among other things, Security Note Number 001:

- was executed on March 25, 2020;
- has a principal amount of $30,000,000;
- has a maturity date of March 26, 2028;
- shall be payable by Sisecam Wyoming to the Equipment Financing Lender in 96 consecutive monthly installments of principal and interest commencing on April 26, 2020 and continuing thereafter until the maturity date of the Initial Secured Note, which shall be in the amount of approximately $307,000 for the first 95 monthly installments and approximately $4,307,000 for the final monthly installment; and
- entitles Sisecam Wyoming to prepay all (but not less than all) of the outstanding principal balance of the Initial Secured Note (together with all accrued interest and other charges and amounts owed thereunder) at any time after one (1) year from the date of the Initial Secured Note, subject to Sisecam Wyoming paying to the Equipment Financing Lender an additional prepayment amount determined by the amount of principal balance prepaid and the date such prepayment is made.

In connection with the Second Sisecam Wyoming Amendment (as defined below), the Master Agreement was amended to incorporate, among other things, the modified covenants set forth in the Second Sisecam Wyoming Amendment related to consolidated leverage ratios of Sisecam Wyoming.

In December 2021 a waiver was obtained to accommodate the CoC Transaction.

First Amendment to Security Note Number 001:

On December 17, 2021, Sisecam Wyoming and the Equipment Financing Lender entered into Amendment Number 001 to the Initial Secured Note (“First Amendment to the Initial Secured Note”). The First Amendment to the Initial Secured Note, provides among other things: (i) upon the occurrence of an early full payoff of the Second Secured Note, Sisecam Wyoming shall simultaneously pay, in full the outstanding amount of the Initial Secured Note and (ii) Sisecam Wyoming grants to Equipment Financing Lender a security interest in all collateral securing the Second Secured Note to secure Sisecam Wyoming’s obligations under the Initial Secured Note.

Sisecam Wyoming’s balance under the Sisecam Wyoming Equipment Financing Arrangement at December 31, 2021 was $24.7 million ($24.6 million net of financing costs).

Among other things, Security Note Number 002:

- was executed on December 17, 2021
- has a principal amount of $29,000,000;
- has a maturity date of December 17, 2026;
- shall be payable by Sisecam Wyoming to the Equipment Financing Lender in 60 consecutive monthly installments of principal and interest commencing on January 17, 2022 and continuing thereafter until the maturity date of the Second Secured Note, which shall be in the amount of approximately $513,660 for each monthly installment;

- entitles Sisecam Wyoming to prepay all (but not less than all) of the outstanding principal balance of the Second Secured Note (together with all accrued interest and other charges and amounts owed thereunder) at any time after one (1) year from the date of the Second Secured Note, subject to Sisecam Wyoming paying to the Equipment Financing Lender an additional prepayment amount determined by the amount of principal balance prepaid and the date such prepayment is made and subject to Sisecam Wyoming simultaneously paying, in full, the outstanding amount of the Initial Secured Note as discussed above; and
- upon the occurrence of full payoff of Initial Secured Note dated as of March 25, 2020 under the Master Agreement, Sisecam Wyoming shall simultaneously pay, in full, the outstanding amount of this Second Secured Note.

Sisecam Wyoming Credit Facility

On October 28, 2021, Sisecam Wyoming entered into a new $225.0 million senior secured revolving credit facility (the "Sisecam Wyoming Credit Facility") with each of the lenders listed on the respective signature pages thereof and Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer. The Sisecam Wyoming Credit Facility matures on October 28, 2026. On closing, the amount drawn under this new Sisecam Wyoming Credit Facility approximated the amount outstanding under the Prior Sisecam Wyoming Credit Facility at September 30, 2021.

The Sisecam Wyoming Credit Facility provides, among other things:

- a sublimit up to $40.0 million for the issuance of standby letters of credit and a sublimit up to $20.0 million for swingline loans;
- an accordion feature that enables Sisecam Wyoming to increase the revolving borrowings under the Sisecam Wyoming Credit Facility by up to an additional $250.0 million (subject to certain conditions);
- in addition to the aforementioned revolving borrowings, an ability to incur up to $225 million of additional term loan facility indebtedness to finance Sisecam Wyoming's capacity expansion capital expenditures; (subject to certain conditions);
- a pledge by Sisecam Wyoming of substantially all of Sisecam Wyoming's assets (subject to certain exceptions), including: (i) all present and future shares of any subsidiaries of Sisecam Wyoming (whether now existing or hereafter created) and (ii) all personal property of Sisecam Wyoming (subject to certain conditions);
- contains various covenants and restrictive provisions that limit (subject to certain exceptions) Sisecam Wyoming's ability to: (i) incur certain liens or permit them to exist; (ii) incur or guarantee additional indebtedness; (iii) make certain investments and acquisitions related to Sisecam Wyoming's operations in Wyoming); (iv) merge or consolidate with another company; (v) transfer, sell or otherwise dispose of assets, (vi) make distributions; (vii) change the nature of Sisecam Wyoming's business; and (viii) enter into certain transactions with affiliates;
- a requirement to maintain a quarterly consolidated leverage ratio of not more than 3.25:1:00; provided, however, subject to certain conditions, Sisecam Wyoming shall have the ability to increase the maximum consolidated leverage ratio to 3.75:1.00 for a year while Sisecam Wyoming is undertaking capacity expansion capital expenditures;
- a requirement to maintain a quarterly consolidated interest coverage ratio of not less than 3.00:1.00; and
- customary events of default including (i) failure to make payments required under the Sisecam Wyoming Credit Facility, (ii) events of default resulting from failure to comply with covenants and financial ratios, (iii) the occurrence of a voluntary change of control, as a result of which Sisecam Wyoming is directly or indirectly controlled by persons or entities not currently directly or indirectly controlling Sisecam Wyoming, (iv) the institution of insolvency or similar proceedings against Sisecam Wyoming, and (v) the occurrence of a cross default under any other material indebtedness Sisecam Wyoming may have. Upon the occurrence of an event of default, in their discretion, the Sisecam Wyoming Credit Facility lenders may exercise certain remedies, including, among others, accelerating the maturity of any outstanding loans, accrued and unpaid interest and all other amounts owing and payable such that all amounts thereunder will become immediately due and payable, and if not timely paid upon such acceleration, to charge Sisecam Wyoming a default rate of interest on all amounts outstanding under the Sisecam Wyoming Credit Facility. However, upon the occurrence of an involuntary change of control of Sisecam Wyoming, and after the passage of time as specified in the Sisecam Wyoming Credit Facility, Sisecam Wyoming's debt thereunder would be accelerated.

In addition, loans under the Sisecam Wyoming Credit Facility (other than any swingline loans) will bear interest at Sisecam Wyoming's option at either:

- a base rate, which equals the highest of (i) Bank of America's prime rate, (ii) the federal funds rate then in effect on such day, plus 0.50%; (iii) one-month Bloomberg Short-Term Bank Yield Index ("BSBY") adjusted daily rate, plus 1.0%; and (iv) 1.0%, plus, in each case, an applicable margin range from 0.50% to 1.75% based on the consolidated leverage ratio of Sisecam Wyoming; or

- a BSBY rate for interest periods of one, three or six months, plus, in each case, an applicable margin range from 1.50% to 2.75% based on the consolidated leverage ratio of Sisecam Wyoming.

In addition, if a BSBY rate ceases to exist for any period, loans under the Sisecam Wyoming Credit Facility will bear interest based on alternative indexes (including the secured overnight financing rate), plus an applicable margin.

The unused portion of the Sisecam Wyoming Credit Facility is subject to a per annum commitment fee and the applicable margin of the interest rate under the Sisecam Wyoming Credit Facility will be determined as follows:

Pricing Tier	Leverage Ratio	BSBY Rate Loans	Base Rate Loans	Commitment Fee
1	< 1.25:1.0	1.500%	0.500%	0.225%
2	≥ 1.25:1.0 but < 1.75:1.0	1.750%	0.750%	0.250%
3	≥ 1.75:1.0 but < 2.25:1.0	2.000%	1.000%	0.275%
4	≥ 2.25:1.0 but < 3.00:1.0	2.250%	1.250%	0.300%
5	≥ 3.00:1.0 but < 3.50:1.0	2.500%	1.500%	0.325%
6	≥ 3.50:1.0	2.750%	1.750%	0.350%

The Sisecam Wyoming Credit Facility permits the consolidated leverage ratio as of the end of each fiscal quarter of Sisecam Wyoming, commencing with the fiscal quarter ending December 31, 2021, to be greater than 3.25: 1.0; provided, however, during the Specified Capital Expansion Holiday, the lenders shall not permit the consolidated leverage ratio as of the end of each fiscal quarter of Sisecam Wyoming to be greater than 3.75:1.00. "Specified Capital Expansion Holiday" means the period consisting of four (4) full fiscal quarters after the Sisecam Wyoming has (i) made capital expenditures related to the Specified Capital Expansion (or other capital expansion project approved by the board of directors, board of managers or equivalent governing body of Sisecam Wyoming) of at least $200.0 million and (ii) provided written notice to the administrative agent that Sisecam Wyoming is electing to initiate such Specified Capital Expansion Holiday. "Specified Capital Expansion" means expansion activities related to the lenders' soda ash operations in Wyoming which have been approved in writing by the Sisecam Wyoming's board of directors, board of managers or equivalent governing body. The Sisecam Wyoming Credit Facility permits the consolidated interest coverage ratio as of the end of any fiscal quarter of Sisecam Wyoming, commencing with the fiscal quarter ending December 31, 2021, to be less than 3.00:1.00.

In connection with the CoC Transaction (as defined in Note 1 above), on December 17, 2021, Sisecam Wyoming entered into the First Amendment ("First Amendment") to its $225.0 million senior secured revolving credit facility, dated as of October 28, 2021 (as amended, the "Sisecam Wyoming Credit Facility"), with each of the lenders listed on the respective signature pages thereof and Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer. Pursuant to the First Amendment, the definition of "Change of Control" under the Credit Facility was revised to reflect that the updated indirect ownership of Sisecam Resources LP and Sisecam GP as contemplated by the CoC Transaction will not cause a Change of Control under the Sisecam Wyoming Credit Facility so long as the CoC Transaction occurs prior to March 31, 2022. The CoC Transaction did not cause a change in control event under the Credit Facility.

Management is not aware of any current circumstances that would result in an event of default under the Sisecam Wyoming Credit Facility at December 31, 2021 or in the next twelve months.

Prior Sisecam Wyoming Credit Facility

On August 1, 2017, Sisecam Wyoming entered into a credit agreement (as amended, the "Prior Sisecam Wyoming Credit Facility" and together with the Sisecam Wyoming Equipment Financing Arrangement, the "Prior Sisecam Wyoming Debt Agreements") with each of the lenders listed on the respective signature pages thereof and PNC Bank, National Association ("PNC Bank"), as administrative agent, swing line lender and a Letter of Credit ("L/C") issuer. The Prior Sisecam Wyoming Credit Facility was a $225.0 million senior revolving credit facility with a syndicate of lenders, which matured on the fifth anniversary of the closing date of such credit facility. The Prior Sisecam Wyoming Credit Facility provided for revolving loans to fund working capital requirements, and capital expenditures, to consummate permitted acquisitions and for all other lawful partnership purposes. The Prior Sisecam Wyoming Credit Facility had an accordion feature that allowed Sisecam Wyoming to increase the available revolving borrowings under the facility by up to an additional $75.0 million, subject to Sisecam Wyoming receiving increased commitments

from existing lenders or new commitments from new lenders and the satisfaction of certain other conditions. In addition, the Prior Sisecam Wyoming Credit Facility includes a sublimit up to $20.0 million for same-day swing line advances and a sublimit up to $40.0 million for letters of credit.

On July 27, 2020, the Prior Sisecam Wyoming Credit Facility was further amended (the “July 2020 Sisecam Wyoming Amendment”) to increase Sisecam Wyoming’s financial and liquidity flexibility due to COVID-19. The July 2020 Sisecam Wyoming Amendment, among other things, (i) increased, for a limited period, certain restrictive debt covenants that require Sisecam Wyoming and its subsidiaries to maintain certain leverage ratios and interest coverage ratios at the end of each period, (ii) provided a tiered interest rate structure based on applicable covenant ratios and established a 0.5% interest floor, (iii) effectuated changes to collateral restricted disbursements and covenanted to give security if covenant ratios are equal to or above certain levels. The July 2020 Sisecam Wyoming Amendment also provided for covenants to restrict certain payments and to give security in certain personal property of Ciner Wyoming following a fiscal quarter in which the leverage ratio is equal to or higher than 3.50:1.0, so long as the applicable leverage ratio limit is otherwise adhered to. Any such security would be released upon achievement of a leverage ratio less than 2.00:1.0 at the end of any quarter.

In addition, the Prior Sisecam Wyoming Credit Facility contained various covenants and restrictive provisions that limit (subject to certain exceptions) Sisecam Wyoming’s ability to:

- make distributions on or redeem or repurchase units;
- incur or guarantee additional debt;
- make certain investments and acquisitions;
- incur certain liens or permit them to exist;
- enter into certain types of transactions with affiliates of Sisecam Wyoming;
- merge or consolidate with another company; and
- transfer, sell or otherwise dispose of assets.

The July 2020 Sisecam Wyoming Amendment also required quarterly maintenance of a certain leverage ratio and an interest coverage ratio of not less than 3.00:1.0. On October 28, 2021, Sisecam Wyoming terminated the Prior Sisecam Wyoming Credit Facility and entered into the Sisecam Wyoming Credit Facility as described above.

Ciner Resources Credit Facility

On August 1, 2017, the Partnership entered into a Credit Agreement (as amended, the “Ciner Resources Credit Facility”) with each of the lenders listed on the respective signature pages thereof and PNC Bank, as administrative agent, swing line lender and an L/C issuer. The Ciner Resources Credit Facility was a $10.0 million senior secured revolving credit facility with a syndicate of lenders, that would have matured on the fifth anniversary of the closing date of such credit facility. The Ciner Resources Credit Facility provided for revolving loans to be available to fund distributions on the Partnership’s units and working capital requirements and capital expenditures, to consummate permitted acquisitions and for all other lawful partnership purposes. The Ciner Resources Credit Facility included a sublimit up to $5.0 million for same-day swing line advances and a sublimit up to $5.0 million for letters of credit. The Partnership’s obligations under the Ciner Resources Credit Facility were guaranteed by each of the Partnership’s material domestic subsidiaries other than Sisecam Wyoming. In addition, the Partnership’s obligations under the Ciner Resources Credit Facility were secured by a pledge of substantially all of the Partnership’s assets (subject to certain exceptions), including the membership interests held in Sisecam Wyoming by the Partnership.

On March 8, 2021, the Partnership terminated the Ciner Resources Credit Facility; the Partnership repaid in full its obligations thereunder.

WE Soda and Ciner Enterprises Facilities Agreement

On August 1, 2018, Ciner Enterprises, the entity that, prior to the CoC Transaction, indirectly owned and controlled the Partnership, refinanced its existing credit agreement and entered into a new facilities agreement, to which WE Soda and Ciner Enterprises (as borrowers), and KEW Soda, WE Soda, WE Soda Kimya Yatırımları Anonim Şirketi, Ciner Kimya Yatırımları Sanayi ve Ticaret Anonim Şirketi, Ciner Enterprises, SCW LLC, and Sisecam Chemicals (as original guarantors and together with the borrowers, the “Ciner Obligors”), were parties (as amended and restated or otherwise modified, the “Facilities Agreement”), and certain related finance documents.

On February 20, 2022, the Facilities Agreement was refinanced and Ciner Enterprises, SCW LLC, and Sisecam Chemicals were released from being Obligors of the Facilities Agreement and are not a party to the WE Soda refinanced agreement.

10. OTHER NON-CURRENT LIABILITIES

Other non-current liabilities consisted of the following as of December 31:

(In millions)	2021	2020
Reclamation reserve	$ 8.0	$ 7.3
Derivative instruments and hedges, fair value liabilities, and other	1.8	1.4
Total	$ 9.8	$ 8.7

A reconciliation of the Partnership's reclamation reserve liability is as follows:

(In millions)	2021	2020
Reclamation reserve balance at beginning of year	$ 7.3	$ 5.7
Accretion expense	0.4	0.3
Reclamation adjustments [(1)]	0.3	1.3
Reclamation reserve balance at end of year	$ 8.0	$ 7.3

(1) The reclamation costs are periodically evaluated for adjustments by the Wyoming Department of Environmental Quality. See Note 14 "Commitments and Contingencies," "*Mine Permit Bonding Commitment"* for additional information on our reclamation reserve at December 31, 2021 and 2020.

11. EMPLOYEE COMPENSATION

The Partnership participates in various benefit plans offered and administered by Sisecam Chemicals and is allocated its portions of the annual costs related thereto. The specific plans are as follows:

Retirement Plans - Benefits provided under the retirement plans for salaried employees and hourly employees (the "Retirement Plans") are based upon years of service and average compensation for the highest 60 consecutive months of the employee's last 120 months of service, as defined. The Retirement Plans cover substantially all full-time employees hired before May 1, 2001. Sisecam Chemicals' Retirement Plans had a net liability balance of $32.8 million and $55.1 million at December 31, 2021 and December 31, 2020, respectively. Sisecam Chemicals' current funding policy is to contribute an amount within the range of the minimum required and the maximum tax-deductible contribution. The Partnership's allocated portion of the Retirement Plans' net periodic pension (benefit) cost for the years ended December 31, 2021, 2020 and 2019 was $(2.7) million, $(1.3) million and $1.0 million, respectively. The variation in annual pension (benefit) cost was driven by a better-than-expected return on assets and lower interest expense assumptions.

Savings Plan - The 401(k) Retirement Plan (the "401(k) Plan") covers all eligible hourly and salaried employees. Eligibility is limited to all domestic residents and any foreign expatriates who are in the United States indefinitely. The 401(k) Plan permits employees to contribute specified percentages of their compensation, while the Partnership makes contributions based upon specified percentages of employee contributions. Participants hired on or subsequent to May 1, 2001, will receive an additional contribution from the Partnership based on a percentage of the participant's base pay. Contributions made to the 401(k) Plan for the years ended December 31, 2021, 2020 and 2019 were $3.4 million, $3.4 million and $3.0 million, respectively.

Postretirement Benefits - Most of the Partnership's employees hired before January 2, 2017 are eligible for postretirement benefits other than pensions if they reach age 58 while still employed with at least 10 years of service.

The postretirement benefits are accounted for by Sisecam Chemicals on an accrual basis over an employee's period of service. The postretirement plan, excluding pensions, is not funded, and Sisecam Chemicals has the right to modify or terminate the plan. The post-retirement plan had a net unfunded liability of $10.7 million and $13.1 million on December 31, 2021 and December 31, 2020, respectively.

The Partnership's allocated portion of postretirement cost (benefit) for the years ended December 31, 2021, 2020 and 2019, was $0.9 million, $1.2 million and $(2.2) million, respectively. The postretirement benefit for the Partnership in 2019 is due to Sisecam Chemicals amending its postretirement benefit plan in prior years.

12. EQUITY - BASED COMPENSATION

In July 2013, our general partner established the Sisecam Resource Partners LLC 2013 Long-Term Incentive Plan (as amended to date, the "Plan" or "LTIP"). Under the LTIP as it existed at December 31, 2021, the Partnership is authorized to grant various unit based awards of our common units to employees, officers, consultants and non-employee directors. The Plan provides for

awards in the form of common units, phantom units, distribution equivalent rights (“DERs”), cash awards and other unit-based awards.

All employees, officers, consultants and non-employee directors of us and our parents and subsidiaries are eligible to be selected to participate in the Plan. As of December 31, 2021, subject to further adjustment as provided in the Plan, a total of 0.6 million common units were available for awards under the Plan. Any common units tendered by a participant in payment of the tax liability with respect to an award, including common units withheld from any such award, will not be available for future awards under the Plan. Common units awarded under the Plan may be reserved or made available from our authorized and unissued common units or from common units reacquired (through open market transactions or otherwise). Any common units issued under the Plan through the assumption or substitution of outstanding grants from an acquired company will not reduce the number of common units available for awards under the Plan. If any common units subject to an award under the Plan are forfeited, any common units counted against the number of common units available for issuance pursuant to the Plan with respect to such award will again be available for awards under the Plan. The Partnership has made a policy election to recognize forfeitures as they occur in lieu of estimating future forfeiture activity under the Plan.

Non-employee Director Awards

During the year ended December 31, 2021, a total of 17,511 common units were granted and fully vested to non-employee directors, and 21,720 were granted during the year ended December 31, 2020. The grant date average fair value per unit of these awards was $13.20 and $9.88 for the years ended December 31, 2021 and 2020, respectively. The total fair value of these awards was approximately $0.2 million during the years ended December 31, 2021 and 2020, respectively.

Time Restricted Unit Awards

We grant restricted unit awards in the form of common units to certain employees which vest over a specified period of time, usually between one to three years, with vesting based on continued employment as of each applicable vesting date. Award recipients are entitled to distributions subject to the same restrictions as the underlying common unit. The awards are classified as equity awards, and are accounted for at fair value at grant date.

The CoC Transaction as discussed in Note 1, General, “Completed Change in Control Transaction,” triggered the change in control provisions associated with the time restricted unit awards, resulting in the remaining unvested time restricted unit awards becoming immediately vested as of the CoC Transaction date. As of December 31, 2021, there are no unvested time restricted unit awards and no unrecognized related compensation expense.

The following table presents a summary of activity on the Time Restricted Unit Awards for the years ended December 31, 2021 and 2020:

	2021		2020	
(Units in whole numbers)	**Number of Units**	**Grant-Date Average Fair Value per Unit (1)**	**Number of Units**	**Grant-Date Average Fair Value per Unit (1)**
Unvested at the beginning of year	21,937	$ 17.57	55,454	$ 20.33
Vested	(20,605)	17.64	(27,802)	22.99
Forfeited	(1,332)	16.45	(5,715)	18.38
Unvested at the end of the year	—	$ —	21,937	$ 17.57

Total Return Performance Unit Awards

Historically, we have granted TR Performance Unit Awards to certain employees. The TR Performance Unit Awards represent the right to receive a number of common units at a future date based on the achievement of market-based performance requirements in accordance with the TR Unit Performance Award agreement, and also include Distribution Equivalent Rights (“DERs”). DERs are the right to receive an amount equal to the accumulated cash distributions made during the period with respect to each common unit issued upon vesting. The TR Performance Unit Awards vest at the end of the performance period, usually between two to three years from the date of the grant. Performance is measured on the achievement of a specified level of total return, or TR, relative to the TR of a peer group comprised of other limited partnerships. The potential payout ranges from 0-200% of the grant target quantity and is adjusted based on our total return performance relative to the peer group. For purposes of the table below the number of units are included at target quantity.

We utilized a Monte Carlo simulation model to estimate the grant date fair value of TR Performance Unit Awards granted to employees. These type of awards, with market conditions, require the input of highly subjective assumptions, including expected volatility and expected distribution yield. Historical and implied volatilities were used in estimating the fair value of these awards.

The following table presents a summary of activity on the TR Performance Unit Awards for the years ended December 31:

	2021		2020	
(Units in whole numbers)	**Number of Units**	**Grant-Date Average Fair Value per Unit (1)**	**Number of Units**	**Grant-Date Average Fair Value per Unit (1)**
Unvested at the beginning of year	7,678	$ 41.53	20,173	$ 41.79
Vested	(7,678)	41.53	(7,654)	42.21
Forfeited	—	—	(4,841)	41.53
Unvested at the end of the year	—	$ —	7,678	$ 41.53

(1) Determined by dividing the aggregate grant date fair value of awards by the number of awards issued.

2019 Performance Unit Awards

On September 23, 2019, the board of directors of our general partner approved a new form of performance unit award to be granted based upon the achievement of certain financial, operating and safety-related performance metrics (“2019 Performance Unit Awards”) pursuant to our LTIP, and the vesting of the 2019 Performance Unit Awards is linked to a weighted average consisting of internal performance metrics defined in the 2019 Performance Unit Award agreement (the “Performance Metrics”) during a three-year performance period (the “Measurement Period”). The vesting of the 2019 Performance Unit Awards, and number of common units of the Partnership distributable pursuant to such vesting, is dependent on our performance relative to a pre-established budget over the Measurement Period; provided, that the awardee remains continuously employed with our general partner or its affiliates or satisfies other service-related criteria through the end of the Measurement Period, except in certain cases of Changes in Control (as defined in our LTIP) or the awardee’s death or disability.

Vested 2019 Performance Unit Awards will be settled in our common units, with the number of such common units payable under the award to be calculated by multiplying the target number provided in the corresponding 2019 Performance Unit Award agreement by a payout multiplier, which may range from 0%-200% in each case, as determined by aggregating the corresponding weighted average assigned to the Performance Metrics. The 2019 Performance Unit Awards also contain DERs and grant the recipient the right to receive an amount equal to the accumulated cash distributions made during the period with respect to each common unit issued. Upon vesting of the 2019 Performance Unit Awards, the award recipient is entitled to receive a cash payment equal to the sum of the distribution equivalents accumulated with respect to vested 2019 Performance Unit Awards during the period beginning on January 1, 2019 and ending on the applicable vesting date. The 2019 Performance Unit Awards granted to award recipients during 2019 have a performance cycle that began on January 1, 2019 and will end on December 31, 2021. At December 31, 2021 and 2020, respectively, the Partnership's (i) unrecognized compensation expense for unvested performance based units was de minimis and; (ii) the weighted-average period over which compensation is expected to be recognized is de minimis and approximately one year.

The following table presents a summary of activity on the 2019 Performance Unit Awards for the years ended December 31, 2021 and 2020:

	Year Ended December 31, 2021		Year Ended December 31, 2020	
(Units in whole numbers)	**Number of Common Units**	**Grant-Date Average Fair Value per Unit(1)**	**Number of Common Units**	**Grant-Date Average Fair Value per Unit (1)**
Unvested at the beginning of period	29,057	$ 16.45	35,908	$ 16.45
Forfeited	(3,995)	16.45	(6,851)	16.45
Unvested at the end of the period	25,062	$ 16.45	29,057	$ 16.45

(1) Determined by dividing the weighted average price per common unit on the date of grant.

13. ACCUMULATED OTHER COMPREHENSIVE (LOSS)/INCOME

Accumulated Other Comprehensive (loss)/income

Accumulated other comprehensive (loss)/income, attributable to Sisecam Resources LP, includes unrealized gains and losses on derivative financial instruments. Amounts recorded in accumulated other comprehensive (loss)/income as of December 31, 2021, 2020 and 2019, and changes within the period, consisted of the following:

(In millions)	Gains and Losses on Cash Flow Hedges
Balance at January 1, 2019	**$ (3.8)**
Other comprehensive income before reclassification	0.3
Amounts reclassified from accumulated other comprehensive loss	0.5
Net current-period other comprehensive income	0.8
Balance at December 31, 2019	**$ (3.0)**
Other comprehensive income before reclassification	1.3
Amounts reclassified from accumulated other comprehensive loss	1.7
Net current-period other comprehensive income	3.0
Balance at December 31, 2020	**$ —**
Other comprehensive income before reclassification	3.0
Amounts reclassified from accumulated other comprehensive income	—
Net current period other comprehensive income	3.0
Balance at December 31, 2021	**$ 3.0**

Other Comprehensive Income/(Loss)

Other comprehensive income/(loss), including the portion attributable to noncontrolling interest, is derived from adjustments to reflect the unrealized gains/(loss) on derivative financial instruments.

The components of other comprehensive income/(loss) consisted of the following for the years ended December 31:

(In millions)	2021	2020	2019
Unrealized gain/(loss) on derivatives:			
Mark to market adjustment on interest rate swap contracts	$ 0.9	$ (0.4)	$ (0.5)
Mark to market adjustment on natural gas forward contracts	5.0	6.3	2.1
Income/(loss) on derivative financial instruments	$ 5.9	$ 5.9	$ 1.6

Reclassifications for the period

The components of other comprehensive income/(loss), attributable to Sisecam Resources LP, that have been reclassified consisted of the following for the years ended December 31:

(In millions)	2021	2020	2019	Affected Line Items on the Consolidated Statements of Operations and Comprehensive Income
Details about other comprehensive income/(loss) components:				
Gains and losses on cash flow hedges:				
Interest rate swap contracts	$ 0.4	$ 0.4	$ —	Interest expense
Natural gas forward contracts	(0.4)	1.3	0.5	Cost of products sold
Total reclassifications for the period	$ —	$ 1.7	$ 0.5	

14. COMMITMENTS AND CONTINGENCIES

Lease and License Commitments

The Partnership leases and licenses mineral rights from the U.S. Bureau of Land Management, the state of Wyoming, Rock Springs Royalty Company, LLC (“RSRC”) an affiliate of Occidental Petroleum Corporation (formerly an affiliate of Anadarko Petroleum Corporation), and other private parties which provide for royalties based upon production volume. The Partnership has a perpetual right of first refusal with respect to these leases and license and intends to continue renewing the leases and license as has been its practice.

The Partnership entered into a 10-year rail yard switching and maintenance agreement on December 1, 2011. Under the agreement, the rail-switching services are provided at the Partnership’s rail yard. The Partnership’s rail yard is constructed on land leased by the third party from Rock Springs Grazing Association and on land that the third party holds an easement from Sweetwater Surface LLC. The land lease is renewable every five years for a total period of thirty years, while the Sweetwater Surface LLC easement is perpetual. The Partnership has agreed with the third party for the assignment of the lease and easement to the Partnership at any time during the land lease term. An immaterial annual rental is paid under the easement and lease. On December 1, 2021, the Partnership entered into a new 10-year agreement for rail yard switching and maintenance services.

As of December 31, 2021, the total minimum contractual rental commitments under the Partnership’s various operating leases, including renewal periods is approximately $1.6 million with the amount due in any of the next five years being immaterial.

Sisecam Chemicals typically enters into operating lease contracts with various lessors for rail cars to transport product to customer locations and warehouses. Rail car leases under these contractual commitments range for periods from one to ten years. Sisecam Chemicals’ obligation related to these rail car leases are $8.4 million in 2022, $5.0 million in 2023, $3.4 million in 2024, $2.2 million in 2025, $1.6 million in 2026 and $0.5 million thereafter. Total lease expense allocated to the Partnership from Sisecam Chemicals was approximately $10.6 million, $11.3 million and $11.8 million for the years ended December 31, 2021, 2020 and 2019, respectively, and is recorded in freight costs.

Purchase Commitments

We have financial natural gas supply contracts to mitigate volatility in the price of natural gas. As of December 31, 2021, these contracts totaled approximately $24.1 million for the purchase of a portion of our natural gas requirements over approximately the next three years. The supply purchase agreements have specific commitments of $14.1 million in 2022, $4.3 million in 2023, and $5.7 million in 2024. The Partnership has a separate contract that expired in 2021 and renews annually thereafter, for the transportation of natural gas with an average minimum annual cost of approximately $4.0 million per year.

Legal and Environmental Matters

From time to time we are party to various claims and legal proceedings related to our business. Although the outcome of these proceedings cannot be predicted with certainty, management does not currently expect any such legal proceedings we may be involved in from time to time to have a material effect on our business, financial condition and results of operations. We cannot predict the nature of any future claims or proceedings, nor the ultimate size or outcome of any such claims and legal proceedings and whether any damages resulting from them will be covered by insurance.

Mine Permit Bonding Commitment

Our operations are subject to oversight by the Land Quality Division of Wyoming Department of Environmental Quality (“WDEQ”). Our principal mine permit issued by the Land Quality Division, requires the Partnership to provide financial assurances for our reclamation obligations for the estimated future cost to reclaim the area of our processing facility, surface pond complex and on-site sanitary landfill. The Partnership provides such assurances through a third-party surety bond (the “Surety Bond”). According to the annual recalculation and submittal, the Surety Bond amount was $41.8 million and $36.2 million at December 31, 2021 and 2020, respectively. The amount of such assurances that we are required to provide is subject to change upon annual recalculation according to Department of Environmental Quality’s Guideline 12, annual site inspection and subsequent evaluation/approval by the WDEQ’s Land Quality Division.

15. AGREEMENTS AND TRANSACTIONS WITH AFFILIATES

Agreements and transactions with affiliates have a significant impact on the Partnership’s financial statements because the Partnership is a subsidiary and investee within two different global group structures. Agreements directly between the Partnership and other affiliates, or indirectly between affiliates that the Partnership does not control, can have a significant impact on recorded amounts or disclosures in the Partnership's financial statements, including any commitments and contingencies between the Partnership and affiliates, or potentially, third parties.

Sisecam Chemicals was the exclusive sales agent for the Partnership and through its membership in ANSAC, through December 31, 2020, Sisecam Chemicals had responsibility for promoting and increasing the use and sale of soda ash and other refined or processed sodium products produced. Through December 31, 2020, ANSAC served as the primary international distribution channel for the Partnership and two other U.S. manufacturers of trona-based soda ash. ANSAC operated on a cooperative service-at-cost basis to its members such that typically any annual profit or loss is passed through to the members. As previously disclosed as part of its strategic initiative to gain better direct access and control of international customers and logistics and the ability to leverage the expertise of Ciner Group, the world’s largest natural soda ash producer, effective as of the end of day on December 31, 2020, Sisecam Chemicals exited ANSAC (the “ANSAC termination date”) and ANSAC has no longer been an affiliate since January 1, 2021. Through in part the Partnership’s affiliates, the Partnership has amongst other things: (i) obtained its own international customer sales arrangements for 2021, (ii) obtained third-party export port services, and (iii) chartered and executed its own international product delivery. For the year ended December 31, 2021, the total logistic services, which are included in cost of products sold, from affiliates were approximately $3.5 million.

Although ANSAC has historically been our largest customer, the impact of Sisecam Chemicals' exit from ANSAC on our net sales, net income and liquidity was limited. With a low-cost position and improved access to international customers and control over placement of its sales in the international marketplace and logistics, we have adequately replaced these net sales made under the former agreement with ANSAC. Since January 1, 2021, Sisecam Chemicals has managed the Partnership’s sales and marketing activities for exports with the ANSAC exit being complete. Sisecam Chemicals leveraged the distributor network established by the Ciner Group in 2021 and continues to evaluate the distribution network and independent third-party distribution partners to optimize our reach into each market.

Selling, general and administrative expenses also include amounts charged to the Partnership by its affiliates principally consisting of salaries, benefits, office supplies, professional fees, travel, rent and other costs of certain assets used by the Partnership. On October 23, 2015, the Partnership entered into a Services Agreement (the “Services Agreement”) with our general partner and Sisecam Chemicals. Pursuant to the Services Agreement, Sisecam Chemicals has agreed to provide the Partnership with certain corporate, selling, marketing, and general and administrative services, in return for which the Partnership has agreed to pay Sisecam Chemicals an annual management fee and reimburse Sisecam Chemicals for certain third-party costs incurred in connection with providing such services. In addition, under the limited liability company agreement governing Sisecam Wyoming, Sisecam Wyoming reimburses us for employees who operate our assets and for support provided to Sisecam Wyoming. These transactions do not necessarily represent arm's length transactions and may not represent all costs if Sisecam Wyoming operated on a standalone basis.

The total selling, general and administrative costs charged to the Partnership by affiliates were as follows:

	Years Ended December 31,		
(In millions)	**2021**	**2020**	**2019**
Sisecam Chemicals	$ 17.2	$ 16.1	$ 14.9
ANSAC [1]	N/A	1.4	3.5
Total selling, general and administrative expenses - affiliates	$ 17.2	$ 17.5	$ 18.4

[1] ANSAC allocated its expenses to its members using a pro-rata calculation based on sales.

Net sales to affiliates were as follows:

	Years Ended December 31,		
(In millions)	**2021**	**2020**	**2019**
ANSAC	N/A	$ 177.9	$ 315.8
Total	$ —	$ 177.9	$ 315.8

The Partnership had accounts receivable from affiliates and due to affiliates as follows:

(In millions)	As of December 31, 2021	2020	2021	2020
	Accounts receivable from affiliates		Due to affiliates	
ANSAC	N/A	$ 41.9	N/A	$ 0.2
Sisecam Chemicals	49.3	44.6	2.2	2.6
Other	—	—	0.1	0.1
Total	$ 49.3	$ 86.5	$ 2.3	$ 2.9

The increase in due from Sisecam Chemicals from December 31, 2020 to December 31, 2021 is due to timing of funding of pension and postretirement plans offered and administered by Sisecam Chemicals.

16. MAJOR CUSTOMERS AND SEGMENT REPORTING

Our operations are similar in geography, nature of products we provide, and type of customers we serve. As the Partnership earns substantially all of its revenues through the sale of soda ash mined at a single location, we have concluded that we have one operating segment for reporting purposes.

The net sales by geographic area consisted of the following:

	Years Ended December 31,		
(In millions)	**2021**	**2020**	**2019**
Domestic	$ 276.8	$ 208.8	$ 207.0
International	263.3	183.4	315.8
Total net sales	$ 540.1	$ 392.2	$ 522.8

17. FAIR VALUE MEASUREMENTS

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

Derivative Financial Instruments

We have interest rate swap contracts, designated as cash flow hedges, to mitigate our exposure to possible increases in interest rates. The swap contracts consist of three individual $12.5 million swaps with an aggregate notional value of $37.5 million at both December 31, 2021 and December 31, 2020. The swaps outstanding at December 31, 2021 have various maturities through 2024.

We enter into natural gas financial forward contracts, designated as cash flow hedges, to mitigate volatility in the price of natural gas related to a portion of the natural gas we consume. These contracts generally have various maturities through 2024. These contracts had an aggregate notional value of $24.1 million and $25.9 million at December 31, 2021 and December 31, 2020, respectively.

The following table presents the fair value of derivative assets and liability derivatives and the respective locations on our consolidated balance sheets as of December 31, 2021 and December 31, 2020:

	Assets				Liabilities			
	2021		2020		2021		2020	
(In millions)	**Balance Sheet Location**	**Fair Value**	**Balance Sheet Location**	**Fair Value**	**Balance Sheet Location**	**Fair Value**	**Balance Sheet Location**	**Fair Value**
Derivatives designated as hedges:								
Interest rate swap contracts - current		$ —		$ —	Accrued Expenses	$ 0.2	Accrued Expenses	$ 0.2
Natural gas forward contracts - current	Other Current Assets	5.9	Other Current Assets	1.4	Accrued Expenses	0.6	Accrued Expenses	0.7
Interest rate swap contracts - non-current	Other non-current assets	0.1		—	Other non-current liabilities	0.2	Other non-current liabilities	1.1
Natural gas forward contracts - non-current	Other non-current assets	2.5	Other non-current assets	0.9	Other non-current liabilities	1.4	Other non-current liabilities	0.2
Total fair value of derivatives designated as hedging instruments		$ 8.5		$ 2.3		$ 2.4		$ 2.2

Financial Assets and Liabilities not Measured at Fair Value

The carrying value of the Sisecam Wyoming Credit Facility materially reflects the fair value as the rate is variable and its key terms are similar to indebtedness with similar amounts, durations and credit risks. The carrying value of the borrowings under the Sisecam Wyoming Equipment Financing Arrangements materially reflects the fair value as its key terms are similar to indebtedness with similar amounts, durations and credit risks that are currently available to the Partnership. See Note 9, “Debt,” for additional information on our debt arrangements.

18. SUBSEQUENT EVENTS

Distribution Declaration

On January 27, 2022, the Partnership declared its fourth quarter 2021 quarterly distribution. On February 18, 2022, we paid a quarterly cash distribution of $0.650 per limited partner unit to unitholders of record on February 7, 2022. The total distribution paid was $13.4 million with $12.9 million paid to our limited partners and $0.3 million and $0.3 million paid to our general partner for its general partner interests and incentive distribution rights, respectively.

On February 17, 2022, the members of the board of managers of Sisecam Wyoming, approved a cash distribution to the members of Sisecam Wyoming in the aggregate amount of $27.0 million. This distribution was paid on February 17, 2022.

Corporate Name Changes

As a result of the CoC Transaction, the Partnership changed its name to Sisecam Resources LP to be effective on February 18, 2022. The Partnership's common units have traded on the New York Stock Exchange under the new ticker symbol "SIRE" since March 1, 2022. In connection with these changes, the general partner of the Partnership also changed its name to Sisecam Resource Partners LLC and Ciner Wyoming LLC changed its name to Sisecam Wyoming LLC, effective on February 18, 2022.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

Item 9A. ***Controls and Procedures***

Management's Annual Report on Internal Control over Financial Reporting

The Partnership's management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. Our internal control system is designed under the supervision of the Partnership's principal executive officer and principal financial officer to provide reasonable assurance to the Partnership's management and our general partner's Board of Directors regarding the preparation and fair presentation of published financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Our management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2021. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 Internal Control—Integrated Framework. Based on this assessment, our management has concluded that as of December 31, 2021 our internal control over financial reporting is effective.

Evaluation of Disclosure Controls and Procedures

Based on an evaluation under the supervision and with the participation of the Partnership's management, the Partnership's principal executive officer and principal financial officer have concluded that the Partnership's disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act were effective as of December 31, 2021 to ensure that information required to be disclosed by the Partnership in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms and (ii) accumulated and communicated to the Partnership's management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There have not been changes in the Partnership's internal control over financial reporting during the fourth quarter of fiscal year December 31, 2021, which were identified in connection with management's evaluation required by paragraph (d) of Rules 13a-15 and 15d-15 under the Exchange Act, that have materially affected, or are reasonably likely to materially affect, the Partnership's internal control over financial reporting.

Attestation Report of Registered Public Accounting Firm

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Partners of

Sisecam Resources LP

Atlanta, Georgia

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Sisecam Resources LP (a majority-owned subsidiary of Sisecam Chemicals Wyoming LLC) and its subsidiary (the "Partnership") as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Partnership maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework (2013*) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2021, of the Partnership and our report dated March 14, 2022, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Partnership's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Partnership's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Partnership in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Atlanta, Georgia

March 14, 2022

Item 9B. ***Other Information***

Not applicable

Item 9C. ***Disclosure Regarding Foreign Jurisdictions that Prevent Inspections***

Not applicable

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance***

Our general partner manages our operations and activities on our behalf through its directors and officers. SCW LLC, which is indirectly 60% owned by Sisecam USA and 40% owned by Ciner Enterprises, owns all of the membership interests in our general partner and has the right to appoint the entire board of directors of our general partner, including our independent directors, subject to the terms of the Sisecam Chemicals Operating Agreement, which requires the directors of our general partner shall consist of six designees from Sisecam USA, two designees from Ciner Enterprises and three independent directors for so long as our general partner is legally required to appoint independent directors. Our unitholders are not entitled to elect the directors of our general partner's board of directors or to directly or indirectly participate in our management or operations. In addition, our general partner owes certain duties to our unitholders as well as a fiduciary duty to its owners. References to "our directors" or "our executive officers" refer to the directors or executive officers of our general partner.

The Board of Directors of Our General Partner

The board of directors of our general partner (the "Board") oversees our operations. The Board's directors hold office until their successors have been elected or qualified or until the earlier of their death, resignation, removal or disqualification. Executive officers serve at the discretion of the Board. There are no family relationships among any of our directors or executive officers. The Board held seven meetings during the fiscal year ended December 31, 2021.

Our common units are traded on the NYSE. The NYSE does not require publicly traded partnerships listed on its exchange, such as ours, to have, and we do not intend to have, a majority of independent directors on the Board or to establish a compensation committee or a nominating and corporate governance committee.

At the date of this Report, the Board consists of the following members: Oðuz Erkan, Huseyin Kuscu, Mustafa Gorkem Elverici, Tahsin Burhan Ergene, Abdullah Kilinc, Michael E. Ducey, Thomas W. Jasper, Alec G. Dreyer, Gokhan Guralp, Hande Eroz, and Selma Oner. The Board has determined that each of Michael E. Ducey, Thomas W. Jasper and Alec G. Dreyer qualifies as an independent director under applicable SEC rules and regulations and the rules of the NYSE. Under the NYSE's listing standards, a director will not be deemed independent unless the Board affirmatively determines that the director has no material relationship with us. Based upon information requested from and provided by each director concerning his or her background, diversity, personal characteristics, business experience and affiliations, including commercial, industrial, banking, consulting, legal, accounting, charitable and familial relationships, the Board has determined that each of its independent directors has no material relationship with Sisecam Chemicals, Ciner Enterprises, Sisecam USA or us, either directly or as a partner, stockholder or officer of an organization that has a relationship with us, and is therefore independent under the NYSE's listing standards and applicable SEC rules and regulations.

Director Experience and Qualifications

In identifying and evaluating candidates as possible director-nominees of our general partner, Sisecam Chemicals and its members will assess the experience and personal characteristics of the possible nominee against the following individual qualifications, which such parties may modify from time to time:

- possesses integrity, competence, insight, creativity and dedication together with the ability to work with colleagues while challenging one another to achieve superior performance;
- has attained prominence in his or her field of endeavor;
- possesses broad business experience;
- has ability to exercise sound business judgment;
- is able to draw on his or her past experience relative to significant issues facing us;
- has experience in our industry or in another industry or endeavor with practical application to our needs;
- has sufficient time and dedication for preparation as well as participation in board and committee deliberations;
- has no conflict of interest;
- meets such standards of independence and financial knowledge as may be required or desirable; and
- possesses attributes deemed appropriate given the then current needs of the board.

Executive Officers of Our General Partner

The Board appoints all of our executive officers, all of whom are employed by Sisecam Chemicals and devote such portion of their productive time to our business and affairs as is required to manage and conduct our operations. Our executive officers manage the day-to-day affairs of our business and conduct our operations. We will also utilize a significant number of employees of Sisecam Chemicals to operate our business and provide us with general and administrative services.

Directors, Executive Officers and Other Significant Employees of Our General Partner

The following table shows information for the current directors and executive officers of our general partner as of the date of this report:

Name	Age	Position
Oğuz Erkan	44	President and Chief Executive Officer of our General Partner
Ahmet Tohma	41	Principal Financial Officer and Chief Financial Officer of our General Partner
Christopher L. DeBerry	54	Chief Accounting Officer and Principal Accounting Officer of our General Partner
Marla E. Nicholson	40	Vice President, General Counsel and Secretary of our General Partner
Raymond Katekovich	48	Vice President, Commercial and Corporate Strategy of our General Partner
Huseyin Kuscu(1)	38	Director of our General Partner
Mustafa Görkem Elverici(2)	45	Director of our General Partner and Chairman of the Board
Tahsin Burhan Ergene(2)	56	Director of our General Partner
Abdullah Kılınç(2)	54	Director of our General Partner
Gökhan Güralp(2)	46	Director of our General Partner
Hande Eröz(2)	44	Director of our General Partner
Selma Öner(2)	48	Director of our General Partner
Michael E. Ducey	73	Director of our General Partner
Thomas W. Jasper	73	Director of our General Partner
Alec G. Dreyer	63	Director of our General Partner

(1) Huseyin Kuscu was appointed to the board of directors of the General Partner as a Ciner designee effective December 21, 2021
(2) Mustafa Görkem Elverici, Tahsin Burhan Ergene, Abdullah Kılınç, Gökhan Güralp, Hande Eröz and Selma Öner were each appointed to the board of directors of the General Partner as Sisecam USA's designees effective December 21, 2021.

Oğuz Erkan was appointed Chairman of the Board, President and Chief Executive Officer of our General Partner in June 2019. Mr. Erkan stepped down as Chairman of the Board effective February 11, 2022. Mr. Erkan also has served as a director of the General Partner since July 2016. Mr. Erkan served as Director of International Operations & Coordination at Ciner Enterprises Inc., from January 2015 to November 2015. Mr. Erkan served as Director for Ciner Group in London, UK. from June 2012 until January 2015. Mr. Erkan served as General Manager of Kasimpasa AS, a subsidiary of Ciner Group, and from 2009 to 2012 he served as a Project Director for Middle East and North Africa. Mr. Erkan holds a Bachelor's Degree in Marketing and International Business from Northwest Missouri State University. We believe that Mr. Erkan's familiarity with Ciner Group's businesses and his business acumen provide him with the necessary skills to be a member of the board of directors of our general partner.

Ahmet Tohma was appointed Principal Financial Officer and Chief Financial Officer of our general partner in April 2020. Mr. Tohma had served as a director of the General Partner from October 2019 to December 2021. Since August 2019, Mr. Tohma has been a Finance Director at Ciner Group. From 2003 until August 2019, Mr. Tohma worked in various management roles at Turkiye Garanti Bankasi ("Garanti") in Turkey, a Turkish financial services company, and most recently as the Executive Vice President responsible for the Corporate Finance Department at Garanti Securities beginning in 2018. Mr. Tohma's experience at Garanti included his roles as an internal auditor until February 2009 and as a member of the Project and Acquisition Finance Department until 2018, where he frequently engaged in project finance transactions in the energy and industrial sectors. Mr. Tohma is a citizen of the Republic of Turkey and earned a Bachelor of Science degree in Industrial Engineering from the Middle East Technical University in Turkey in 2003. He has also participated in executive programs at Bocconi University and Columbia Business School, where he focused on Business Administration and Strategy. We believe that Mr. Tohma's familiarity with the soda ash and mining industries and his business acumen provide him with the necessary skills to be a member of the Chief Financial Officer of our general partner.

Christopher L. DeBerry was appointed Chief Accounting Officer of our General Partner in July 2017 and principal financial officer of our general partner effective January 1, 2019. Mr. DeBerry served as Controller of the Partnership from October 2014 to July 2017. Prior to joining the Partnership, Mr. DeBerry served as the Assistant Corporate Controller with Axiall Corporation from September 2006 to August 2014. Mr. DeBerry earned his Masters of Accounting and Bachelors of

Science in Accounting degrees from Florida State University and is a certified public accountant in the state of Georgia. We believe that Mr. DeBerry's financial acumen and knowledge of business matters provide him with the necessary skills to be Chief Accounting Officer of our general partner.

Marla E. Nicholson was appointed Vice President and General Counsel of our General Partner in October 2019 and Secretary of our General Partner effective September 6, 2019. Ms. Nicholson was most recently Deputy General Counsel, and before that she served as Senior Counsel and Assistant Corporate Secretary of the General Partner from November 2017 until September 2019. Prior to joining Ciner, Ms. Nicholson served as Director & Senior Corporate Counsel at LexisNexis Risk Solutions where she worked from April 2013 until November 2017. From May 2010 through April 2013 she was counsel for CDC Corporation. She began her practice in the Mergers & Acquisitions group at Jones Day where she worked from September 2007 through April 2010. Ms. Nicholson earned a Juris Doctor from Cornell Law School and a Bachelor of Science in accounting from the Pennsylvania State University.

Raymond Katekovich was appointed as Vice President, Commercial and Commercial Strategy of our general partner effective as of February 28, 2020. Prior to that, he served as Vice President, Commercial at Sisecam Chemicals, where he managed certain sales and marketing activities, from February 2019 until February 2020. From June 2017 to February 2019, Mr. Katekovich served as Director, Commercial at Sisecam Chemicals. Prior to joining Sisecam Chemicals, from January 2011 to May 2017, Mr. Katekovich served as the Business Director for Caustic Soda and PVC at PPG Industries, Inc, Axiall Corporation and Westlake Chemical Corporation, where he was responsible for financial management and had direct responsibilities associated with the commercial aspects of the respective businesses. Before his role as Business Director, Mr. Katekovich spent over 15 years in various operations, sales and management positions in these same commodity chemical businesses. Mr. Katekovich holds a Bachelor’s Degree in Chemical Engineering from West Virginia University and a Masters in Business Administration from the Joseph M. Katz Graduate School of Business at the University of Pittsburgh.

Huseyin Kuscu was appointed as a director of our general partner in December 2021. Since October 2021, Mr. Kuscu has also served as Senior Finance Manager of our general partner. Between December 2020 and September 2021, he served as a Finance Director of the Ciner Group. Prior to these positions, Mr. Kuscu worked at Garanti BBVA, a Turkish financial services company. He held various management roles from 2006 to November 2020, earning a solid track record of successful financial management and fiscal responsibility. Mr. Kuscu earned a Bachelor of Science degree in Industrial Engineering from the Bilkent University in Turkey in 2006. We believe that Mr. Kuscu’s previous leadership positions and knowledge of business matters provide him with the necessary skills to be a member of the board of directors of our general partner.

*Mustafa Görkem Elveric*i was appointed as a director of our general partner in December 2021 and Chairman of the Board in February 2022. Mr. Elverici has served as Chief Financial Officer of Şişecam Parent since May 2014. Mr. Elverici joined Şişecam Parent as Chief Financial Officer of its Flat Glass Group in March 2013. Throughout his career, he has worked in various middle and senior management positions at İşbank, HSBC, Deloitte Consulting and Accenture Consulting from 1998. Mr. Elverici graduated from Middle East Technical University, Faculty of Engineering, Department of Civil Engineering in 1996 and obtained his MBA from Bilkent University in 1998. In 2015, Mr. Elverici completed the Advanced Management Program at Harvard Business School and is currently working on his Ph.D. dissertation on Banking & Finance at Kadir Has University. We believe that Mr. Elverici’s previous leadership positions and knowledge of business matters provide him with the necessary skills to be a member of the board of directors of our general partner.

Tahsin Burhan Ergene was appointed as a director of our general partner in December 2021. Mr. Ergene has served as President, Chemicals Group of Sisecam since January 2014. Mr. Ergene joined Şişecam Parent in 1990 where he has held various managerial positions in the sales and marketing departments and was appointed as Marketing and Sales Vice President of the Sisecam Chemicals. Mr. Ergene graduated with a Bachelor’s degree in Mechanical Engineering from Istanbul Technical University in 1989. He completed the International Management Certificate Program at Istanbul University in 1990 and the Advanced Management Program at Harvard Business School in 2012. We believe that Mr. Ergene’s previous leadership positions and knowledge of business matters provide him with the necessary skills to be a member of the board of directors of our general partner.

Abdullah Kılınç was appointed as a director of our general partner in December 2021. Mr. Kılınç has served as President of Glass Packaging Group Turkey since 2014 and as Glass Packaging Group of Şişecam Parent (“Sisecam Glass Packaging”) since January 2020 following the merger of operations in Turkey and Russia. Mr. Kılınç joined Anadolu Cam Sanayii A.Ş. As Production Engineer at Mersin Plant in 1992, where he later worked as Chief of Production in 1995. Mr. Kılınç was appointed Assistant General Manager at Mina Ksani Glass Packaging Company in Georgia in 1999. Mr. Kılınç joined Anadolu Cam Sanayii A.Ş. in 2003 as Management and Sales HQ Business Development Manager. Subsequently, Kılınç served within the Glass Packaging Group as General Manager of the Ruscam Ufa Plant, Operations Director of Russia Operations, and Operations Director of the Group. Mr. Kılınç graduated with a Bachelor’s degree in Mechanical Engineering from Middle East Technical University in 1990 and completed the Advanced Management Program at Harvard Business

School in 2013. We believe that Mr. Kılınç's previous leadership positions and knowledge of business matters provide him with the necessary skills to be a member of the board of directors of our general partner.

Gökhan Güralp was appointed as a director of our general partner in December 2021. Mr. Güralp has served as Chief Financial Officer of Şişecam Parent since July 1, 2021. Mr. Güralp joined Şişecam Parent and served as Financial Control and Reporting Group Manager from November 2015 to January 2016 and as Financial Analysis and Financial Control Director from January 2016 to June 2021. Before joining Şişecam Parent, Mr. Güralp worked as Assistant Auditor at Ernst & Young from 1999 to 2002 and as Auditor from 2002 to 2003, Financial Affairs Manager at Bechtel Enka from 2003 to 2004, Audit Manager at Ernst & Young from 2004 to 2007, and as Audit Manager at Ernst & Young Moscow from 2007 to 2008. After serving as a Senior Manager at Ernst & Young Istanbul from 2008 to 2011, Güralp worked as Budget, Strategic Planning and Reporting Manager at Eti Gıda Sanayi Ticaret A.Ş. from 2011 to 2014. He simultaneously served as Finance Director and Member of the Board of Directors at Eti Romania SRL from 2013 to 2014. Güralp worked as Internal Audit Manager at Zorlu Holding A.Ş. from 2014 to 2015. Mr. Güralp completed his undergraduate education in the Department of Business Administration (English) at Marmara University in 1999. We believe that Mr. Güralp's previous leadership positions and knowledge of business matters provide him with the necessary skills to be a member of the board of directors of our general partner.

Hande Eröz was appointed as a director of our general partner in December 2021. Ms. Eröz has served as Legal Services Chief since July 2021. Ms. Eröz joined Şişecam Parent and served as Legal Affairs Manager from January 2019 to July 2021. Before joining Şişecam Parent, Ms. Eröz worked as lawyer at Bilgen Law Office, Inal Law Office, and Senguler Law Office from June 2001 to March 2008, and served as Legal Counsel at Arçelik A.Ş from April 2008 to December 2018. Ms. Eröz earned a Bachelor of Law from the Istanbul University in 2000. We believe that Ms. Eröz's previous positions and knowledge of commercial matters provide her with the necessary skills to be a member of the board of directors of our general partner.

Selma Öner was appointed as a director of our general partner in December 2021. Dr. Öner has served as Chief Procurement Officer of Şişecam Parent since January 2018. Dr. Öner started her professional career as a Research Assistant at Boğazici University and then joined Şişecam in 1997. She worked as Logistics Engineer at Paşabahce Cam San. ve Tic. A.Ş. And later served in various managerial positions there before becoming Supply Chain Director at Trakya Cam San. A.Ş. In 2017, Dr. Oner was appointed Group Procurement Coordinator at Turkiye Şişe ve Cam Fabrikaları A.Ş. Dr. Öner graduated from Istanbul Technical University, Department of Industrial Engineering in 1995 and received her Master's degree and Ph.D. from Boğazici University, Department of Industrial Engineering. She completed the General Management program at Harvard Business School in 2014. We believe that Dr. Oner's previous leadership positions and knowledge of business matters provide her with the necessary skills to be a member of the board of directors of our general partner.

Michael E. Ducey was appointed as a director of our general partner in September 2014 and as lead independent director in February 2017. Mr. Ducey is the retired President, CEO and Director of Compass Minerals International, Inc., the second largest salt producer in North America and the largest in the U.K. Prior to joining Compass Minerals, he was a 30-year veteran of Borden Chemical, Inc., where he worked in various management, sales, marketing, planning and commercial development roles culminating in President, CEO and Director. He previously served on the boards of HaloSource, Inc., and Fenner PLC and currently sits on the board of Apollo Global Management LLC. Mr. Ducey is a graduate of Otterbein College, where he earned a Bachelor of Arts; he earned a Master of Business Administration from the University of Dayton. We believe that Mr. Ducey's comprehensive corporate background and experience in the mining industry, and his experience serving on various boards and committees, add significant value to the board of directors of our general partner.

Thomas W. Jasper was appointed as a director of our general partner in January 2016, as chair of the conflicts committee in February 2017 and as the Chairperson of the Audit Committee in March 2018. Mr. Jasper has served as Managing Partner of Manursing Partners, LLC, since 2011, and also previously served as Chief Executive Officer of Primus Guaranty, Ltd. from 2001 to 2010. Prior to joining Primus, Mr. Jasper served for 17 years as a key executive of Salomon Brothers, Inc. and its successor companies. Mr. Jasper's accomplishments at Salomon included: establishing its interest rate swap business, running its Debt Capital Markets platform, serving as Chief Operating Officer of the Asia Pacific Region based in Hong Kong and as Global Treasurer. In 1984 while at Salomon, Mr. Jasper co-founded the International Swaps and Derivatives Association and served as its first Co-Chairman. Mr. Jasper currently serves on the Board of Directors and as Chair of the Audit Committee of the Blackstone funds Blackstone Senior Loan Fund, Blackstone Long-Short Credit Income Fund, Blackstone Strategic Credit Fund, Blackstone Floating Rate Enhanced Income Fund and Blackstone Real Estate Investment Fund. He received his BBA from Southern Methodist University and his MBA from the University of Texas. We believe that Mr. Jasper's financial acumen and knowledge of business matters provide him with the necessary skills to be a member of the board of directors of our general partner.

Alec G. Dreyer was appointed director to our General Partner in July 2018. Mr. Dreyer served from 2012 until June of 2020 as a Senior Advisor to IFM Investors, a leading investment management company with over $75 billion under

management. He also served as Chairman of the Board of Managers and Audit Committee Chair for Essential Power Investments LLC, an IFM Investors holding prior to its sale in 2016. Mr. Dreyer served as Chairman of the Board, Lead Director and Audit Committee Chair for Comverge, Inc., a clean energy company when it was listed on NASDAQ. Mr. Dreyer also served on the Board of Directors for EcoSecurities Group plc when it was listed on the London Stock Exchange. Prior to his Board tenure, Mr. Dreyer has served as Chief Executive Officer of the Port of Houston Authority, one of the nation's leading ports. He also was Chief Executive Officer for Horizon Wind Energy LLC, when it was a wholly-owned subsidiary of Goldman Sachs & Co. He also has held senior leadership positions at Dynegy Inc., Illinova Corporation, and Illinois Power Company. Mr. Dreyer started his career with Price Waterhouse in St. Louis. Mr. Dreyer is a Certified Public Accountant, is a Phi Beta Kappa graduate in Political Science and Pre-Law from the University of Illinois, and holds a Masters of Business Administration Degree with distinction from Washington University in St. Louis. We believe that Mr. Dreyer's previous leadership positions and knowledge of business matters provide him with the necessary skills to be a member of the board of directors of our general partner.

Committees of the Board of Directors

The Board has established an audit committee and a conflicts committee. Michael E. Ducey, Thomas W. Jasper and Alec G. Dreyer are the members of the audit committee, and Thomas W. Jasper serves as chairperson. Michael E. Ducey, Thomas W. Jasper and Alec G. Dreyer are the members of our conflicts committee; and Thomas W. Jasper serves as the chairman. The Board will determine whether to refer a matter to the conflicts committee on a case-by-case basis in accordance with our partnership agreement. We do not have a compensation committee, but rather the Board approves equity grants to and compensation of our directors, and Sisecam Chemicals approves compensation of our officers subject to our review and approval under the Services Agreement.

Audit Committee

We are required to have an audit committee of at least three members who meet the independence and experience standards established by the NYSE and the Exchange Act. In accordance with the rules of the NYSE, we have appointed three independent directors of the audit committee. The Board has determined that each director appointed to the audit committee is "financially literate," and Michael E. Ducey and Alec G. Dreyer, who are members of the audit committee, and Thomas W. Jasper, who serves as chairperson of the audit committee, each has "accounting or related financial management expertise" and constitutes an "audit committee financial expert" in accordance with SEC and NYSE rules and regulations. The audit committee operates pursuant to a written charter, an electronic copy of which is available on our website at www.ciner.us.com under the Investor Overview - Governance Documents tab.

The audit committee assists the Board in its oversight of the integrity of our financial statements and our compliance with legal and regulatory requirements and partnership policies and controls. The audit committee operates under a written charter and has been given the sole authority to (1) retain and terminate our independent registered public accounting firm, (2) approve all auditing services and related fees and the terms thereof performed by our independent registered public accounting firm, (3) establish policies and procedures for pre-approval of all audit, non-audit and internal control related services to be rendered by our independent registered public accounting firm and (4) review and evaluate all related party transactions or dealings with parties related to us and disclosures of such transactions or dealings in our annual report on Form 10-K. The audit committee is also responsible for confirming the independence and objectivity of our independent registered public accounting firm. Our independent registered public accounting firm has been given unrestricted access to the audit committee and our management, as necessary. The audit committee met eight times during the fiscal year ended December 31, 2021.

Conflicts Committee

The conflicts committee reviews specific matters that may involve conflicts of interest between our general partner or any of its affiliates, on the one hand, and us, our partners and any of our subsidiaries, on the other hand, in accordance with the terms of our partnership agreement. The conflicts committee operates pursuant to a written charter, an electronic copy of which is available on our website at www.ciner.us.com under the Investor Overview - Governance Documents tab. The members of the conflicts committee may not be officers or employees of our general partner or directors, officers or employees of its affiliates, including SCW LLC; may not hold an ownership interest in our general partner or its affiliates other than common units or awards under any long-term incentive plan, equity compensation plan or similar plan implemented by our general partner or the partnership; and must meet the independence standards established by the NYSE and the Exchange Act to serve on an audit committee of a board of directors. Any matters approved by the conflicts committee will be conclusively deemed to be in our best interest, approved by all of our partners and not a breach by our general partner of any duties it may owe us or our unitholders. Any unitholder challenging any matter approved by the conflicts committee will have the burden of proving that the members of the conflicts committee did not believe that the matter was in the best interests of our partnership. Moreover, any acts taken or omitted to be taken in reliance upon the advice or opinions of experts such as legal counsel, accountants, appraisers, management consultants and investment bankers, where our general partner (or any members of the Board including

any member of the conflicts committee) reasonably believes the advice or opinion to be within such person's professional or expert competence, shall be conclusively presumed to have been done or omitted in good faith. The conflicts committee did not meet in 2021.

Board Leadership Structure and Role in Risk Oversight

The Board does not mandate the separation of the offices of chairperson of the Board and chief executive officer. Instead, that relationship is defined and governed by the first amended and restated limited liability company agreement, as amended, of our general partner, which permits the same person to hold both offices. The Board believes that whether the offices of Chairperson of the Board and Chief Executive Officer are combined or separated should be decided by the Board, from time to time, in its business judgment after considering relevant circumstances. On February 11, 2022, Mr. Erkan resigned as Chairperson of the Board and effective as of the same date, Mr. Mustafa Görkem Elverici was appointed as the new Chairperson of the Board to serve until the earlier of his removal, his death or resignation. Directors of the Board are designated or elected in accordance with the terms of the limited liability company agreement of our general partner and the Sisecam Chemicals Operating Agreement. Pursuant to such arrangements, the Board shall consist of six designees from Sisecam USA, two designees from Ciner Enterprises and three independent directors for as long as our general partner is legally required to appoint such independent directors. Accordingly, unlike holders of common stock in a corporation, our unitholders have only limited voting rights on matters affecting our business or governance, subject in all cases to any specific unitholder rights contained in our partnership agreement.

Our corporate governance guidelines provide that the Board is responsible for reviewing the process for assessing the major risks facing us and the options for their mitigation. This responsibility is largely satisfied by our audit committee, which is responsible for reviewing and discussing with management and our independent registered public accounting firm our major risk exposures and the policies management has implemented to monitor such exposures, including our financial risk exposures and risk management policies.

Executive Sessions of Independent Directors and Lead Independent Director

Effective on February 10, 2017, the Board appointed Michael E. Ducey as the Board’s Lead Independent Director. Under our Corporate Governance Guidelines, the Lead Independent Director is responsible for:

- presiding at executive sessions of the independent directors of the Board;
- working with the committee chairs to set agendas and lead the discussion of regular meetings of the directors outside the presence of management;
- providing feedback regarding these meetings to the Chairperson of the Board; and
- otherwise serves as a liaison between the independent directors and the Chairperson of the Board.

The Board holds regular executive sessions in which the independent directors of the Board meet without any members of management present. The purpose of these executive sessions is to promote open and candid discussion among the independent directors. Pursuant to our Corporate Governance Guidelines, we have our Lead Independent Director preside over these executive sessions.

Communication with the Board of Directors

A holder of our units or other interested party who wishes to communicate with the non-management directors or independent directors of our general partner may do so by contacting our corporate secretary at the address or phone number appearing on the front page of this Report. Communications will be relayed to the intended recipient of the Board except in instances where it is deemed unnecessary or inappropriate to do so. Any communications withheld will nonetheless be recorded and available for any director who wishes to review them.

Delinquent Section 16(a) Reports

To our knowledge, based solely on a review of our the reports filed with the SEC and the written representations of our directors and executive officers, we believe that all reporting requirements for fiscal year 2021 were complied with by each person who at any time during the 2021 fiscal year was a director or an executive officer or held more than 10% of our common stock, except for the following: Mr. Kuscu filed a Form 3 on January 13, 2022; Mr. Elverici filed a Form 3 on January 14, 2022; Mr. Ergene filed a Form 3 on January 14, 2022; Mr. Kilinc filed a Form 3 on January 14, 2022; Mr. Guralp filed a Form 3 on January 14, 2022; Ms. Eroz filed a Form 3 on January 14, 2022; and Ms. Oner filed a Form 3 on January 14, 2022.

Code of Conduct

We have adopted a code of conduct that applies to our principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions, as well as other employees. We intend to disclose any amendments to or waivers of the code of conduct on behalf of our Chief Executive Officer, principal financial officer, Chief Accounting Officer and persons performing similar functions on our website at www.ciner.us.com under the Investor Overview - Governance Documents tab. Additionally, the Board has adopted corporate governance guidelines for the directors and the Board. The code of conduct and the corporate governance guidelines may be found on our website at www.ciner.us.com under the Investor Overview - Governance Documents tab.

ITEM 11. *Executive Compensation*

Background

This "Compensation Discussion and Analysis" or "CD&A" sets forth an overview of the philosophy, objectives and elements of the executive compensation program for executives who perform services on our behalf and the key executive compensation decisions that were made by us or Sisecam Chemicals Resources LLC (formerly known as Ciner Resources Corporation and OCI Chemical Corporation) for 2021. This CD&A provides context and background for the compensation earned by and awarded to our general partners' named executive officers ("NEOs"), as reflected in the compensation tables contained in the CD&A.

For 2021, our general partners' NEOs were as follows:

Individuals Serving as Named Executive Officers as of December 31, 2021:

- Oğuz Erkan, President and Chief Executive Officer
- Ahmet Tohma, Chief Financial Officer
- Christopher L. DeBerry, Chief Accounting Officer and Corporate Controller
- Raymond Katekovich, Vice President, Commercial and Corporate Strategy
- Marla Nicholson, Vice President, General Counsel and Secretary

On February 11, 2022, the Partnership disclosed that Turkiye Sise ve Cam Fabrikalari A.S. of Istanbul, Turkey ("Sisecam"), announced its intention (i) to appoint Mr. Ertugrul Kaloglu as President and Chief Executive Officer of Sisecam Chemicals and its subsidiaries, including our general partner, effective upon the receipt of all requisite U.S. immigration and corporate approvals (the "Kaloglu Effective Date"), and (ii) to appoint Mr. Mehmet Nedim Kulaksizoglu as Chief Financial Officer of Sisecam Chemicals and its subsidiaries, including our general partner, effective upon the receipt of all requisite U.S. immigration and corporate approvals (the "Kulaksizoglu Effective Date"). Mr. Oguz Erkan has agreed to resign as the President and Chief Executive Officer of the general partner as of the Kaloglu Effective Date in order to pursue other opportunities with the Ciner Group. After the effectiveness of the foregoing resignation Mr. Erkan is expected to remain as a member of the board of directors of the general partner and continue to serve as President and Chief Executive Officer of Ciner Enterprises. Mr. Ahmet Tohma has agreed to resign as the Chief Financial Officer of the general partner as of the Kulaksizoglu Effective Date in order to pursue other opportunities with the Ciner Group and is expected to continue to serve as the WE Soda Group's Chief Financial Officer. As of the date of this filing, neither the Kaloglu Effective Date nor the Kulaksizoglu Effective Date has occurred.

Other individuals that Served as Executive Officers during the year ended December 31, 2021 but Resigned Prior to December 31, 2021:

Mr. Freydel resigned as Vice President, Supply Chain and Finance of our general partner and as director and various officer roles within members of the Ciner Group, each effective as of July 27, 2021.

Executive Summary

We are managed by our general partner and neither we nor our general partner directly employs any of the persons responsible for managing our business. Instead, the executive officers of our general partner are employees of Sisecam Chemicals. Other than awards that may be granted by our Board under our general partner's 2013 Long-Term Incentive Plan (as amended to date, the "Plan"), it is Sisecam Chemicals that has ultimate-decision making authority to determine and approve the compensation program and individual compensation of the employees who perform services on our behalf, including the NEOs. Sisecam Chemicals indirectly owns and controls our general partner and indirectly owns approximately 72% of the outstanding limited partner interests in us and all of our incentive distribution rights. We reimburse Sisecam Chemicals for such services and compensation, and our reimbursement is governed by the Services Agreement, dated as of October 23, 2015 (the "Services Agreement"), by and among us, our general partner and Sisecam Chemicals, under which we have agreed to pay

Sisecam Chemicals an annual management fee, subject to quarterly adjustments, with estimates of such proposed annual fees and costs subject to initial review and approval by our Board. The annual management fee proposed by Sisecam Chemicals is determined based on the estimated time the employees are expected to spend on our business, and the costs for such employees, including the NEOs, are determined based on Sisecam Chemicals' compensation policies and practices. Each of the NEOs devoted a majority of their time to our business for the year ended December 31, 2021.

Neither we nor our general partner maintains any employee benefit plans or arrangements, or any defined benefit pension plans, nonqualified deferred compensation plans or retirement plans. Rather, the NEOs are eligible to participate under the same plans that Sisecam Chemicals offers to similarly situated employees and we reimburse Sisecam Chemicals for amounts allocated to the NEOs under such plans to the extent such expenses are allocated to the Partnership under the Services Agreement.

Determination of Compensation Decisions

Other than awards that may be granted under the Plan, Sisecam Chemicals determines and sets the compensation of the employees that perform services on our behalf, including the NEOs, and, as a result, retains ultimate decision-making authority as to the compensation philosophy for its employees, including the NEOs. We reimburse Sisecam Chemicals for such services and compensation, and our reimbursement is governed by the Services Agreement, under which we have agreed to pay Sisecam Chemicals an annual management fee, subject to quarterly adjustments, with estimates of such proposed annual fees and costs subject to initial review and approval by our Board. The annual management fee proposed by Sisecam Chemicals is determined based on the estimated time the employees, including the NEOs, are expected to spend on our business, and the costs for such employees, including the NEOs, are determined based on Sisecam Chemicals' compensation policies and practices. We have no control over and do not direct or establish Sisecam Chemicals' executive compensation policies and practices, but instead our Board annually reviews the estimated annual management fee proposed by Sisecam Chemicals and reviews any quarterly adjustments made by Sisecam Chemicals to such fee.

Because neither we nor our general partner directly employ any of the NEOs and because Sisecam Chemicals has ultimate decision-making authority as to the compensation for the NEOs to manage our business and affairs, we did not provide traditional fixed or discretionary compensation (e.g., salary or bonus) to the NEOs in 2021. Rather, we reimburse Sisecam Chemicals for those amounts and other benefits provided by Sisecam Chemicals or its affiliates or related parties to the NEOs that are allocated to us and subject to reimbursement under our Services Agreement. At the same time, we believe that the NEOs should have an ongoing stake in our success, that their interests should be aligned with those of our unitholders and that the best interests of our unitholders may be further advanced by enabling the NEOs who are responsible for our management, growth and success, to receive compensation in the form of long-term incentive awards. Accordingly, our Board periodically grants long-term incentives in the form of awards under the Plan, which was adopted in connection with our initial public offering and is administered by our Board. The Plan provides for awards in the form of common units, phantom units, distribution equivalent rights, cash awards and other unit-based awards. All awards granted under the Plan are approved by our Board. All employees, officers, consultants and non-employee directors of us and our parents and subsidiaries are eligible to be selected to participate in the Plan.

Our Board's decisions with respect to the amount of awards made under the Plan to the NEOs are governed by the following objectives:

- to motivate and retain our general partner's key executives;
- to align the long-term economic interests of our general partner's executives with those of our unitholders; and
- to reward excellence and performance by our general partner's executives that increase the value of our units.

Our Board believes that mix of base salary, incentive cash awards and other employment benefit plan or arrangements determined by Sisecam Chemicals and allocated to us under the Services Agreement and equity-based awards granted by our Board under the Plan fit the Partnership's overall compensation objectives. Our Board believes this mix of compensation provides competitive compensation opportunities to align and drive employee performance in support of the Partnership's business strategies, as well as Sisecam Chemicals', and to attract, motivate and retain high-quality talent with the skills and competencies required by the Partnership and Sisecam Chemicals.

Elements of Compensation

Overview

Sisecam Chemicals provides compensation to its executives in the form of (i) base salaries, (ii) annual performance-based cash incentive awards under an incentive compensation plan of Sisecam Chemicals (the "Short-Term Bonus") that provides cash incentive compensation to its executive employees and salaried employees tied to our annual EBITDA and

controllable costs, and (iii) participation in various other employment plans and arrangements, including (1) medical, dental, vision, disability and life insurance plans for its employees, (2) a 401(k) retirement plan (the “401(k) Plan”), which permits employees to contribute specified percentages of their compensation, (3) a post-retirement benefit plan (“Post-Retirement Plan”), which enables its employees to obtain postretirement benefits, other than pensions, accounted for on an accrual basis over an employee’s period of service, if such employees reach retirement age while still employed, and (4) deferred-compensation plans (“Deferred Compensation Plans”), which allow a select group of management employees to defer compensation to a future date. Other than our Board’s review of the management fee under the Services Agreement, all determinations with respect to such benefits are made by Sisecam Chemicals, or the plans, as the case may be, without input from us, our general partner or our Board, and we only bear the cost of such program or benefits that are charged back to us pursuant to the Services Agreement.

In addition to such aforementioned compensation, our Board has historically granted long-term equity awards under the Plan to the NEOs from time to time, which to date have consisted of restricted unit awards and performance-based awards that are described further below. Our Board has not adopted any formal or informal policies or guidelines for allocating compensation between long-term and current compensation, between cash and non-cash compensation or among different forms of compensation other than its belief that in addition to reimbursement of the annual management fee under the Services Agreement, equity-based compensation should be made to the NEOs for the reasons set forth above. The decision to grant awards under the Plan by our Board is strictly made on a subjective and individual basis after consideration of the relevant factors discussed herein.

The NEOs are not subject to any agreements or arrangements with us or our general partner pursuant to which they would receive any payments or benefits in connection with a termination of their employment or a change in control of us or our general partner, other than with respect to our current restricted unit awards and performance-based unit awards granted to the NEOs under the Plan which contain provisions that could accelerate vesting of the award in certain situations. In addition, we could be required to reimburse Sisecam Chemicals for amounts awarded to the NEOs and allocated to us under the Short-Term Bonus in connection with an NEO’s termination of employment or a change in control of us or our general partner.

Base Salary.

As discussed above, we reimburse Sisecam Chemicals for an annual management fee under our Services Agreement. Base salaries allocated to the NEOs under the Services Agreement are generally designed by Sisecam Chemicals to provide competitive fixed rates of pay recognizing employees’ different levels of responsibility and performance. In setting base salaries for its officers, Sisecam Chemicals considers factors including, but not limited to, the scope of the officer’s responsibilities, individual contribution, experience and sustained performance, general economic conditions, industry specific business conditions, base salaries for comparable positions in similar industries, the tenure of the officers and base salaries of the officers relative to one another. Adjustments are made generally by Sisecam Chemicals in accordance with the considerations described above and to maintain base salaries at competitive levels. The annual management fee proposed by Sisecam Chemicals is determined based on the estimated time such employees are expected to spend on our business and the compensation principles set forth above.

The allocable portion of the base salaries paid to the NEOs during the fiscal year ended December 31, 2021 are set forth in the table below and in the “Salary” column of the “Summary Compensation Table”:

Named Executive Officer	2021 Total Base Salary Allocable to Us (%)
Oğuz Erkan	88%
Ahmet Tohma	88%
Christopher L. DeBerry	82%
Raymond Katekovich	99%
Marla Nicholson	95%
Eduard Freydel [(1)]	85%

(1) Mr. Freydel resigned as Vice President Supply Chain and Finance of our general partner effective July 27, 2021.

Cash Incentive Awards.

In addition to reimbursing Sisecam Chemicals under the Services Agreement for allocable portions of the base salaries of the NEOs, we also reimburse Sisecam Chemicals for the amounts of annual cash incentive awards provided to the NEOs under the Short-Term Bonus that are allocated to the Partnership. The percentage of each NEO’s annual cash incentive award that is allocated to the Partnership is equal to the portion of the NEO’s base salary that is allocated to the Partnership as set forth

above. Annual cash incentive awards are used by Sisecam Chemicals to motivate and reward its executives and employees for the achievement of objectives aligned with value creation and/or to recognize individual contributions to our performance. The amount of any annual cash incentive payment to the NEOs are generally set by Sisecam Chemicals using a target bonus amount equal to a percentage of each NEO's annual base salary. Sisecam Chemicals then determines the actual amount of such annual cash incentive payment to the NEOs based upon the Partnership's actual performance and such NEO's individual performance. Other than our periodic review of the amount reimbursable under our Services Agreement, such annual incentive bonuses are determined on a discretionary basis solely by Sisecam Chemicals without input from us, our general partner or our Board. Unless otherwise determined, payments under the Short-Term Bonus have historically been subject to an individual's continued employment through the end of the applicable calendar year.

For 2021, annual cash incentive bonuses were targeted at the percentage of each NEO's annual base salary as shown below:

Named Executive Officer	2021 Target Bonus as a Percent of Base Salary
Oğuz Erkan	55%
Ahmet Tohma	—%
Christopher L. DeBerry	30%
Raymond Katekovich	30%
Marla Nicholson	50%
Eduard Freydel [(1)]	30%

(1) Mr. Freydel resigned as Vice President Supply Chain and Finance of our general partner effective July 27, 2021.

For 2021, each NEO was eligible to receive an annual cash incentive bonus based on achievement of pre-established targets for EBITDA, tons produced, and controllable costs for the Partnership of approximately $85.9 million and 2.8 tons, and $110.4 million, respectively. For the purpose of calculation under the Short-Term Bonus, EBITDA was defined as earnings before interest, taxes, depreciation and amortization. Under the Short-Term Bonus, bonus payments are based 60% on meeting or exceeding target EBITDA, 20% on meeting or exceeding tons produced target, and 20% on meeting or exceeding controllable costs target as well as individual performance in connection with achievement of such targets. An individual performance multiplier ranging from 0x to 1.25x is applied based on the NEOs 2021 performance rating. There are generally no payouts for results below 75% of the EBITDA target. The maximum payout multiplier is capped at 2.0x.

EBITDA, tons produced and controllable costs used by Sisecam Chemicals for each NEOs' bonus calculation for the year ended December 31, 2021 was: $88.7 ("2021 EBITDA"), 2.7 million ("2021 tons produced") and $104.7 ("2021 Controllable Costs"), respectively. In accordance with the Change in Control language, no individual performance multipliers were applied for 2021. Based on 2021 EBITDA, 2021 tons produced, and 2021 controllable costs achieved by the Partnership, Messrs. Erkan, DeBerry, Katekovich and Ms. Nicholson earned annual incentive bonuses allocable to us equal to $341,190, $114,905, $132,990 and $222,588, respectively, representing 64%, 35%, 35% and 59% of their annual 2021 base salary.

*Long-Term Equity Incentive Awards***.**

In addition to the salaries and cash incentive awards paid by Sisecam Chemicals to the NEOs and reimbursable by us under the Services Agreement, our Board administers the Plan and approves awards granted under the Plan to the NEOs. The Plan is intended to provide incentives that will attract, motivate and retain valued employees, offering them a greater stake in our success and a closer identity with us in order to better align them with the long-term interests of our unitholders, and to reward excellence and performance that increases the value of our units. The Plan provides for awards in the form of common units, phantom units, distribution equivalent rights, cash awards and other unit-based awards.

As of December 31, 2021, and subject to adjustments as provided in the Plan, there were a total of 643,117 common units available for issuance under the Plan. Any common units tendered by a participant in payment of the tax liability with respect to an award, including common units withheld from any such award, will not be available for future awards under the Plan. Common units awarded under the Plan may be reserved or made available from our authorized and unissued common units or from common units reacquired (through open market transactions or otherwise). Any common units issued under the Plan through the assumption or substitution of outstanding grants from an acquired company will not reduce the number of common units available for awards under the Plan. If any common units subject to an award under the Plan are forfeited, any common units counted against the number of common units available for issuance pursuant to the Plan with respect to such award will again be available for awards under the Plan. To date, awards under the Plan that have been granted to the NEOs include (i) time-based vesting conditions ("restricted unit awards"), (ii) performance-based vesting conditions linked to the relative performance of the Partnership's common units during a pre-determined performance period ("TR performance-based

unit awards") and (iii) performance-based vesting conditions linked to the achievement of certain financial, operating and safety-related performance metrics ("2019 performance-based unit awards").

The restricted unit awards provide the NEOs with the rights of a unitholder in the Partnership with respect to a restricted unit, except cash distributions paid by the Partnership with respect to such a restricted unit will be credited to a separate account for such restricted unit and, subject to any tax withholding considerations, will be paid to the recipient at the time such restricted unit vests. The outstanding restricted unit awards granted to the NEOs have vested in substantially equal one-third increments so that any restricted unit award (and any related restricted cash distribution) will be 100% vested three years from the grant date, so long as the award recipient remains continuously employed by the Partnership Entities (as defined in the corresponding restricted unit award agreement) from the date of grant through each applicable vesting date, unless otherwise vesting earlier pursuant to the terms of the restricted unit award with regard to "Change in Control" (as defined in the Plan), death or disability. If an award recipient's service with the Partnership Entities or membership on the Board, as applicable, is terminated prior to full vesting of the restricted units, then the award recipient will forfeit all unvested restricted units and related restricted cash distributions, except that upon a "Change in Control" or termination of the participant due to death or disability all unvested restricted units and related restricted cash distributions will become immediately vested in full.

The vesting of the outstanding TR performance-based unit awards, and number of common units of the Partnership distributable pursuant to such vesting, is dependent on the relative performance of the Partnership's common units compared to an initial peer group consisting of other publicly traded partnerships (provided that the participant remains continuously employed with our general partner or its affiliates or satisfies other service-related criteria through the end of the performance period and certification of the results, except in certain cases of "Change in Control" or the participant's death or disability). Vested TR performance-based unit awards are to be settled in the Partnership's common units, with the number of such units payable under the award to be calculated by multiplying the target number provided in the TR performance-based unit award agreement by a performance percentage, which may range from 0% to 200%, depending on the relative performance of the Partnership's common units over the performance period compared to common units of each member of the peer group. In addition, upon vesting of the TR performance-based unit award, the award recipient is entitled to receive a cash payment equal to the distribution equivalents accumulated with respect to the target number provided in the TR performance-based unit award agreement, multiplied by the performance percentage described in the immediately preceding sentence. The typical performance cycle has been a three-year period.

Effective July 27, 2021, Mr. Freydel resigned as Vice President Supply Chain and Finance of our general partner, and all of his restricted unit awards and TR performance-based unit awards and related cash distributions paid thereon that had not vested prior to July 27, 2021 were forfeited.

In 2021, (i) Mr. DeBerry, Mr. Freydel, and Mr. Katekovichhad had 423 restricted units, 403 restricted units, and 888 restricted units, respectively, vest on March 15, 2021, which in each case were originally granted on April 26, 2018, (ii) Mr. DeBerry, Mr. Erkan, Mr. Freydel, Mr. Katekovich and Ms. Nicholson had 1,281 restricted units, 3,284 restricted units, 1,332 restricted units, 1,815 restricted units and 463 restricted units respectively, vest on March 15, 2021, which in each case were originally granted on September 23, 2019, (iii) Mr. DeBerry, Mr. Erkan, Mr. Katekovich and Ms. Nicholson had 1,281 restricted units, 3,284 restricted units, 1,815 restricted units and 463 restricted units respectively, vest on December 21, 2021, which in each case were originally granted on September 23, 2019, and (iv) Mr. DeBerry, Mr. Freydel and Mr. Katekovich had 1,192 TR performance units, 1,135 TR performance, and 2,505 TR performance units, respectively, vest on January 21, 2021, which were originally granted on April 26, 2018.

Severance and Change in Control Arrangements

The NEOs are not parties to any agreements or arrangements with us or our general partner pursuant to which they would receive any payments or benefits in connection with a termination of their employment or a change in control of us or our general partner, except that our current restricted unit awards, TR performance-based unit awards and 2019 performance-based unit awards under the Plan contain provisions that could accelerate vesting of the award in certain situations. In the event that one of the NEOs is terminated by us or one of our affiliates prior to the vesting date of the restricted unit awards, TR performance-based unit awards or 2019 performance-based unit awards, all such restricted units, TR performance-based unit awards and 2019 performance-based unit awards will immediately be forfeited without consideration unless such termination is due to the NEO's death or disability.

For the restricted unit awards and related cash distributions accumulated thereunder, in the event of the NEO's death or disability, or if a "Change in Control" occurs, all restricted unit awards will become 100% vested. For the TR performance-based unit awards and the 2019 performance-based unit awards and the related cash distributions accumulated thereunder, respectively, the awards granted to the NEOs are earned and vested and/or forfeited, as the case may be, in the amounts described in further detail in the section titled "Potential Payments upon Termination or Change-in-Control" as described below.

The Plan generally defines a "Change in Control" as occurring on one or more of the following events:

(a) the acquisition in one or more transactions by any "person" (as such term is used for purposes of Section 13(d) or Section 14(d) of the Exchange Act) but excluding, for this purpose, (i) the Partnership or any of our parents or their subsidiaries or (ii) any employee benefit plan of any entity described in clause (i) above (the entities described in clauses (i) and (ii) hereof, "Excluded Persons"), of more than fifty percent (50%) of the combined voting power of the Partnership's or our general partner's then outstanding voting securities;

(b) the consummation of a merger or consolidation involving the Partnership or our general partner if the owners of the Partnership or our general partner (as applicable), immediately before such merger or consolidation, do not own, directly or indirectly, immediately following such merger or consolidation, at least fifty percent (50%) of the combined voting power of the outstanding voting securities of the entity resulting from such merger or consolidation; or

(c) the acquisition by any "person" (as such term is used for purposes of Section 13(d) or Section 14(d) of the Exchange Act), other than an Excluded Person, in a single transaction or in a series of related transactions occurring during any period of 12 consecutive months, of assets from the Partnership or our general partner that have a total gross fair market value equal to or more than 51% of the total gross fair market value of all of the assets of the Partnership or our general partner (as applicable) and its subsidiaries (determined on a consolidated basis) immediately prior to such acquisition or acquisitions.

The Short-Term Bonus provided by Sisecam Chemicals also contains provisions that could accelerate vesting of the payment in certain situations. For the Short-Term Bonus, if a "change in control" occurs, those individuals associated with the business that is sold will be paid their pro-rata portion of the applicable incentive award. To be eligible, a participant must be an active employee as of the date of the change in control. The pro-rata calculation will use the participant's annual base salary in effect as of the date of the change in control and actual business results through the change in control. The financial goals and the individual participation percentage will be pro-rated through the date of the change in control and no individual performance multiplier will apply.

The Short-Term Bonus generally describes a "change in control" as occurring in the event that Sisecam Chemicals completes a direct or indirect sale to an unrelated third party of all or substantially all of the equity interests or assets in one of the businesses covered by the Short-Term Bonus.

Other Elements of Compensation and Perquisites

Neither we nor our general partner sponsor any employee benefit plans or arrangements, any defined benefit pension plan or nonqualified deferred compensation plans or any retirement plans for the NEOs, and neither we nor our general partner provide the NEOs with any perquisites. Instead, these types of benefits are provided in certain situations to the NEOs in connection with their employment by Sisecam Chemicals and are governed in all cases by the terms of the applicable plan documents. The NEOs have been eligible to participate under the same plans that Sisecam Chemicals offers to its other employees with respect to medical, dental, vision, disability and life insurance plans, and the NEOs have participated in the Short-Term Bonus, the 401(k) Plan and the Post-Retirement Plan. The NEOs participate in these plans on the same basic terms as all other similarly situated employees. The NEOs also participate in Deferred Compensation Plans and receive certain perquisites provided by Sisecam Chemicals. For the year ended December 31, 2021, perquisites included a company car for Mr. Erkan and Mr. Tohma and a country club membership for Mr. Katekovich. All determinations with respect to such benefits are made by Sisecam Chemicals, or the plans, as the case may be, without input from us or our general partner or our Board, and we only bear the cost of such program or benefits that are charged back to us under the provisions of the Services Agreement.

Compensation Committee Interlocks and Insider Participation

As a limited partnership, we are not required by the New York Stock Exchange ("NYSE") to establish a compensation committee. As discussed above, we do not directly employ any of the NEOs and, outside of the Plan, all compensation granted to the NEOs is under Sisecam Chemicals' ultimate direction and control. Mr. Erkan, our general partner's Chief Executive Officer, has participated in his capacity as a director of our general partner in the deliberations of our Board concerning previous grants under the Plan and made recommendations to our Board regarding NEO compensation provided under the Plan in 2021. Our Board does not currently intend to establish a compensation committee.

Compensation Consultants

Our Board did not retain a compensation consultant in 2021.

Unit Ownership Requirements

Neither we nor our general partner has established unit ownership requirements for the NEOs, provided that, in order to more closely align the interests of non-management directors of our general partner and unitholders in us, we and our general partner have equity ownership guidelines that require non-management directors of our general partner to hold common units in the Partnership within five years from their initial election date to our board that have an aggregate value equivalent to three times the annual cash retainer provided by our board to such director.

Guidelines for Trading by Insiders

We and our general partner maintain policies that govern trading in our common units by the officers and directors of our general partner who are required to report under Section 16 of the Exchange Act, as well as certain other employees who may have regular access to material non-public information about us. These policies include pre-approval requirements for all trades in our common units and periodic trading "black-out" periods designed with reference to our quarterly financial reporting schedule. These policies also prohibit such persons from short selling, purchasing our common units on margin or pledging our common units.

Compensation Risk Assessment

Based on an internal review by our Board of the Plan, the Services Agreement and its understanding of the material compensation programs of Sisecam Chemicals, our general partner has concluded that there are no plans that provide meaningful incentives for employees, including the NEOs, to take risks that would be reasonably likely to have a material adverse effect on the Partnership.

CEO Pay Ratio

Neither we nor our general partner have any employees. As a result, we have no basis for disclosing the annual compensation and corresponding ratio as required under Item 402(u) of Regulation S-K.

Compensation Committee Report

Our Board has reviewed and discussed with management the compensation discussion and analysis contained in this Report as required by Item 402(b) of Regulation S-K. Based on such review and discussion, our Board has recommended that this Compensation Discussion and Analysis be included in the annual report on Form 10-K for the year ended December 31, 2021.

Members of the board of directors of Sisecam Chemicals

Alec G. Dreyer

Michael E. Ducey

Mustafa Gorkem Elverici

Tahsin Burhan Ergene

Oğuz Erkan

Hande Eroz

Gokhan Gurlap

Thomas W. Jasper

Abdullah Kilinc

Huseyin Kuscu

Selma Oner

Compensation Risk Assessment

Based on an internal review by our Board of the Plan, the Services Agreement and its understanding of the material compensation programs of Sisecam Chemicals, our general partner has concluded that there are no plans that provide meaningful incentives for employees, including the NEOs, to take risks that would be reasonably likely to have a material adverse effect on the Partnership.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table summarizes the compensation paid to the NEOs and allocated to the Partnership for the fiscal years ended December 31, 2021, 2020 and 2019, as applicable. Other than for awards granted under the Plan, it is Sisecam Chemicals that has ultimate-decision making authority to determinate and approve the compensation program and individual compensation of the employees that perform services on our behalf, including the NEOs, and we reimburse Sisecam Chemicals for such services and compensation under the Services Agreement. Other than for awards granted under the Plan, the amounts reflected in the columns of the summary compensation table reflect the amounts we incurred for such services from the NEOs, in accordance with our Services Agreement with Sisecam Chemicals. We believe these expenses accurately reflect amounts paid to the NEOs as compensation for the services provided to us.

Name and Principal Position	Year	Salary ($)	Bonus ($)(1)	Unit Awards ($)(2)	Non-Equity Incentive Plan Compensation ($)(3)	All Other Compensation ($)(4)	Total ($)
Oðuz Erkan, *President and Chief Executive Officer*	2021	$529,716	$—	$—	$341,190	$29,331	$900,237
	2020	$545,995	$150,149	$—	$—	$29,324	$725,468
	2019	$277,161	$—	$324,098	$92,520	$19,398	$713,177
Ahmet Tohma *Chief Financial Officer (5)*	2021	$457,148	$—	$—	$—	$26,658	$483,806
	2020	$387,047	$39,420	$—	$—	$48,954	$475,421
Christopher L. DeBerry, *Chief Accounting Officer*	2021	$323,484	$—	$—	$114,905	$26,884	$465,273
	2020	$288,896	$43,956	$—	$—	$24,822	$357,674
	2019	$184,751	$—	$126,402	$79,547	$9,485	$400,185
Raymond Katekovich *Vice President, Commercial and Corporate Strategy(6)*	2021	$375,810	$—	$—	$132,990	$43,362	$552,162
	2020	$360,810	$104,065	$—	$—	$36,764	$501,639
Marla Nicholson, *Vice President, General Counsel and Secretary*	2021	$343,067	$—	$—	$222,588	$30,263	$595,918
	2020	$316,587	$80,283	$—	$—	$27,199	$424,069
	2019	$188,031	$—	$45,665	$79,542	$16,437	$329,675
Eduard Freydel *Vice President, Supply Chain and Finance (7)*	2021	$165,737	$—	$—	$—	$430,168	$595,905
	2020	$285,919	$43,503	$—	$—	$21,427	$350,849
	2019	$234,268	$—	$131,436	$81,942	$22,624	$470,270

(1) The 2020 amounts in the "Bonus" column for Messrs. Erkan, DeBerry, Katekovich, Ms. Nicholson, and Mr. Freydel reflect the allocated portions of discretionary bonus payments Sisecam Chemicals made in recognition of the hard work and dedication exemplified during the unprecedented challenges faced by the organization during 2020, and for Mr. Tohma reflect a new hire bonus.

(2) The amounts shown in the "Unit Awards" column reflect the full aggregate grant date fair value of the performance-based unit awards and the restricted unit awards granted to the NEOs during the applicable period, as determined in accordance with ASC Topic 718, and as determined without regard to potential forfeitures (the amounts shown do not reflect the actual value that may be recognized by each NEO). For the restricted unit awards, the fair value per unit is equal to the closing sale price of our common units on the NYSE on the dates of the applicable grants ($16.45 on September 23, 2019). The grant date fair value for the 2019 performance-based unit awards was based on a per unit price of $16.45 on September 23, 2019. At maximum, the values of the 2019 performance-based unit awards for Mr. Erkan would be: $324,098; for Mr. DeBerry: $126,402; for Mr. Katekovich: $179,141; for Ms. Nicholson: $45,665; and for Mr. Freydel: $131,436 . For a discussion of the valuation assumptions applicable to the Unit Awards, please see Note 12 to our financial statements included in this Annual Report on Form 10-K for the year ended December 31, 2021.

(3) For the years ended December 31, 2021 and 2019, the amounts shown in this column reflect awards under Sisecam Chemicals Resources LLC's Short-Term Bonus that were allocated to and reimbursed by us under the Services Agreement. The 2021 amounts represent payments that were earned in 2021 and paid by us in early 2022, and the 2019 amounts represent payments that were earned in 2019 and paid by us in early 2020.

(4) Amounts shown in this column for each of 2021 include the following: taxable gifts, taxable compensation for wellness programs, employer contributions to non-qualified deferred compensation plans, taxable value of company-provided vehicles, taxable value of fitness center reimbursements, company contributions to Health Savings Accounts, value of country club membership, company contributions to the 401(k) plan. The amount shown in this column for Mr. Tohma for 2020 also includes $23,932 for relocation expenses reimbursed directly to third party service providers in connection with his appointment of Chief Financial Officer and Principal Financial Officer of the Partnership in April 2020, which includes "gross-ups" for the related payment of taxes. For Mr. Freydel, the amount shown in the "All Other Compensation" column for 2021 includes $421,672 of severance paid in connection with his termination.
(5) Mr. Tohma became one of the NEOs upon appointment to Chief Financial Officer of our general partner in 2020. Consequently, compensation information was not reported for the prior years.
(6) Mr. Katekovich became one of the NEOs upon appointment to Vice President, Commercial and Corporate Strategy in 2020. Consequently, compensation information was not reported for prior years.
(7) Mr. Freydel resigned as Vice President Supply Chain and Finance of our general partner effective July 27, 2021 and as a result, outstanding unvested restricted unit awards and performance-based unit awards granted to him were forfeited.

Grants of Plan-Based Awards

The following table provides information regarding the amounts that could have been earned under Sisecam Chemicals' Short-Term Bonus and the Plan and allocated to us under the Services Agreement with respect to 2021.

		Estimated Possible Payouts under Non-Equity Incentive Plan Awards (1)			Estimated Possible Payouts under Equity Incentive Plan Awards (2)				
Name	Grant date	Threshold ($)	Target ($)	Maximum ($)	Threshold (#)	Target (#)	Maximum (#)	All Other Unit Awards: Number of Units (#)(3)	Grant Date Fair Value of Unit Awards ($)
Oğuz Erkan									
Short-Term Bonus	—	$ 72,836	$ 291,344	$ 582,687	—	—	—	—	—
Restricted Units	—	—	—	—	—	—	—	—	—
Performance Units	—	—	—	—	—	—	—	—	—
Ahmet Tohma									
Short-Term Bonus	—	—	—	—	—	—	—	—	—
Restricted Units	—	—	—	—	—	—	—	—	—
Performance Units	—	—	—	—	—	—	—	—	—
Christopher L. DeBerry									
Short-Term Bonus	—	$ 24,531	$ 98,125	$ 196,251	—	—	—	—	—
Restricted Units	—	—	—	—	—	—	—	—	—
Performance Units	—	—	—	—	—	—	—	—	—
Raymond Katekovich									
Short-Term Bonus	—	$ 28,392	$ 113,570	$ 227,140	—	—	—	—	—
Restricted Units	—	—	—	—	—	—	—	—	—
Performance Units	—	—	—	—	—	—	—	—	—
Marla Nicholson									
Short-Term Bonus	—	$ 47,521	$ 190,083	$ 380,167	—	—	—	—	—
Restricted Units	—	—	—	—	—	—	—	—	—
Performance Units	—	—	—	—	—	—	—	—	—
Eduard Freydel									
Short-Term Bonus	—	$ 21,995	$ 87,978	$ 175,957	—	—	—	—	—
Restricted Units	—	—	—	—	—	—	—	—	—
Performance Units	—	—	—	—	—	—	—	—	—

(1) Reflects the estimated 2021 cash payouts allocable to the Partnership under the Short-Term Bonus in respect of 2021 performance at the threshold, target and maximum levels with respect to each performance measure. All such amounts are primarily set without input from us, our general partner or our Board, and reflect amounts that can be allocated to the Partnership under the Services Agreement. If threshold levels of performance are not met, then the payout can be zero. The maximum value reflects the maximum amount allocable to the Partnership under the Services Agreement. The amounts allocated to the Partnership for the actual bonus payouts for each NEO under the Short-Term Bonus for 2021 are reflected in the Non-Equity Incentive Plan Compensation column of the Summary Compensation Table set forth above.
(2) No performance-based units were awarded in 2021.
(3) No restricted unit awards were made in 2021.

Outstanding Equity Awards at Fiscal Year-End 2021

The following table summarizes the outstanding equity awards held by the NEOs for the fiscal year ended December 31, 2021. Other than awards granted under the Plan, the NEOs do not receive any grants of equity or equity-based awards in us or Sisecam Chemicals.

Name	Grant Date	Number of Units That Have Not Vested (#)	Market Value of Units That Have Not Vested ($)(1)	Equity Incentive Plan Awards: Number of Unearned Units That Have Not Vested (#)	Equity Incentive Plan Awards: Market Value of Unearned Units that Have Not Vested ($)(2)
Oğuz Erkan	9/23/2019	—	—	9,851 (2)	$188,223
Ahmet Tohma		—	—	—	—
Christopher L. DeBerry	9/23/2019	—	—	3,842 (2)	$73,409
Raymond Katekovich	9/23/2019	—	—	5,445 (2)	$104,038
Marla Nicholson	9/23/2019	—	—	1,388 (2)	$26,521
Eduard Freydel (3)	9/23/2019	—	—	—	—

(1) Calculated by multiplying the number of 2019 performance-based units awards, as applicable, reported in the preceding column by the closing price of our common units on the NYSE on December 31, 2021, which was $16.50, plus (i) for purposes of footnote (2) below included $2.607 in accrued distributions per common unit.

(2) These 2019 performance-based unit awards were awarded under the Plan on September 23, 2019, and vest, if at all, based on the Partnership's performance relative to a pre-established budget over the applicable three-year performance period; provided, that the awardee remains continuously employed with our general partner or its affiliates or satisfies other service-related criteria through the end of the applicable three-year performance period and continued employment of the NEO with our general partner or its affiliates (or other service-related criteria) through the end of the applicable three-year performance period and certification of the results. Vesting fully accelerates upon a change in control of the Partnership or our general partner "(in the case of the Partnership's 2019 performance award, vesting is also conditional upon the Partnership's board approval), or the death or disability of the NEO. Vested 2019 performance-based unit awards are settled in our common units, with the number of units payable determined by multiplying the target number provided in the 2019 performance-based unit award agreement by a payout multiplier, which may range from 0% to 200%, in each case, determined by aggregating the corresponding weighted average assigned to the 2019 Award Performance Metrics. Upon any vesting of the 2019 performance-based unit awards, the NEO will also receive a cash payment equal to distribution equivalents that were accumulated with respect to vested 2019 performance-based unit awards during the period beginning on January 1, 2019 and ending on the applicable vesting date. The number of performance-based units that may be earned under this award.

(3) Mr. Freydel resigned as Vice President Supply Chain and Finance effective July 27, 2021 and, as a result, outstanding unvested restricted unit awards and 2019 performance-based unit awards granted to him were forfeited.

Units Vested Table

The following table provides information related to the vesting of restricted units and performance-based units during fiscal year ended 2021.

	Sisecam Resources LP Unit Awards	
Name	Number of Units Acquired on Vesting	Value Realized on Vesting(1)
Mr. Erkan	6,568	$108,208
Mr. Tohma (2)	—	$—
Mr. DeBerry	4,177	$71,852
Mr. Katekovich	7,023	$122,083
Mr. Nicholson	926	$15,256
Mr. Freydel	2,870	$48,077

(1) This column reflects restricted unit awards and TR performance unit awards that vested in 2021 and the fair market value of the common units on the date of vesting, which includes accrued distributions for such common units since the grant date.

(2) Mr. Tohma did not have any equity awards in the Partnership vest during fiscal year ended 2021.

Nonqualified Deferred Compensation and Other Nonqualified Deferred Compensation Plans

Although neither we nor our general partner sponsors a nonqualified deferred compensation or other nonqualified deferred compensation plan, Sisecam Chemicals maintains a nonqualified deferred compensation plan for certain of its employees, including the NEOs, which we reimburse Sisecam Chemicals for a portion thereof allocated to us under the Services Agreement. The nonqualified deferred compensation plan allows individuals to defer up to 80% of their base pay and up to up to 100% of their Short-Term Bonus. In addition, Sisecam Chemicals contributes a matching contribution on compensation in excess of the dollar amount under Section 401(a)(17) of the IRS code ($290,000 for 2021). That matching contribution is equal to 100% of the first 4% that the NEO contributes to the plan and 50% of the next 2% that an individual contributes to the plan. Sisecam Chemicals. has historically also made an additional discretionary contribution to the plan for individuals hired on or after May 1, 2001. That additional discretionary contribution is equal to 3% of the annual base pay in excess of the dollar amount under Section 401(a)(17) of the IRS code ($290,000 for 2021), provided the individual is employed on December 31 for such year. The allocated expense for each NEO is included in the "All Other Compensation" column of the Summary Compensation Table above. The following table provides information on nonqualified deferred compensation of the NEOs as of December 31, 2021, for whom we reimburse Sisecam Chemicals under the Services Agreement.

		For the Year Ended December 31, 2021				
Name	**Beginning Balance**	**Executive Contribution**	**Registrant Contribution**	**Aggregate Earnings**	**Aggregate Withdrawals/ Distributions ($)**	**Aggregate Balance as of December 31, 2020 ($)**
Oğuz Erkan	$12,232	—	$9,483	$6	—	$21,721
Ahmet Tohma	—	—	3,909	$1	—	$3,910
Christopher L. DeBerry	68,582	$7,886	$7,198	$12,089	—	$95,755
Raymond Katekovich	80,262	$76,113	$7,144	$25,242	—	$188,761
Marla Nicholson	22,159	$13,439	$4,713	$720	—	$41,031
Eduard Freydel [(1)]	—	$1,950	$1,499	$261	—	$3,710

(1) Mr. Freydel resigned as Vice President Supply Chain and Finance effective July 27, 2021 and, as a result, his entire balance in the nonqualified deferred compensation plan becomes payable in a lump sum on February 1, 2022.

Potential Payments upon Termination or Change-in-Control

In connection with the resignation by Mr. Freydel as the Vice President Supply Chain and Finance of our general partner, as a member of the Board and all committees thereof, and from other positions within the affiliates, Sisecam Chemicals entered into a Separation and Release Agreement (the "Separation Agreement") with Mr. Freydel dated July 26, 2021. The Separation Agreement provides among other things, that Mr. Freydel's employment with Ciner Group terminated on July 27, 2021. Subject to the terms and conditions set forth in the Separation Agreement, upon his termination, Sisecam Chemicals paid Mr. Freydel a one-time separation payment of $490,585 in the aggregate. In addition, Mr. Freydel was eligible to continue his health care coverage pursuant to the provisions of COBRA. The Separation Agreement also includes confidentiality and cooperation covenants, and a release of claims in favor of Ciner Group, the Partnership and our general partner, among other things. Other than the Separation Agreement, neither we, or general partner or Sisecam Group or Ciner Group have any employment agreements or severance agreements with the NEOs.

Our current restricted unit awards, TR performance-based unit awards and 2019 performance-based awards under the Plan and Short-Term Bonus and allocated to us contain provisions that could accelerate vesting of the award in certain situations, in the event of a (i) termination of an employee due to death or disability or (ii) a change in control (as described below). In the event of termination of employment for any other reason than described below, all restricted unit awards, TR performance-based unit awards and 2019 performance-based unit awards that are still unvested shall be forfeited.

Termination

Pursuant to the terms of the award agreements issued under the Plan, for the restricted unit awards, in the event of a termination of an employee due to death or disability, all restricted unit awards and related cash distribution accumulated thereunder shall become 100% vested. Pursuant to the terms of the award agreements issued under the Plan, for each of the TR

performance-based unit awards and 2019 performance-based unit awards, in the event of the NEO's death or disability during the three-year measurement period, then performance-based unit awards are resolved as follows:

(i) if such event occurs during the first year of the measurement period for the applicable TR performance-based unit awards or 2019 performance-based unit awards, as the case may be, all such applicable TR performance-based unit awards or 2019 performance-based unit awards and related accumulated distributions are forfeited for no consideration;

(ii) if such event occurs during second year of the measurement period for the applicable TR performance-based unit awards or 2019 performance-based unit awards, as the case may be, then such TR performance-based unit awards and 2019 performance-based unit awards and related accumulated distributions are earned and vested at 33% of the target units for such awards; and

(iii) if such event occurs, during the last year of the measurement period for the applicable TR performance-based unit awards or 2019 performance based unit awards, as the case may be, then such TR performance-based unit awards and 2019 performance-based unit awards and related accumulated distributions are earned and vested at 67% of the target units for such awards.

Pursuant to the terms of the award agreements issued under the Plan, for the TR performance-based unit awards and the 2019 performance-based unit awards, in the event of the NEO's death or disability after the measurement period, but prior to the determination date for such TR performance-based unit awards or 2019 performance-based unit awards, as applicable, the participant's outstanding TR performance-based unit awards or 2019 performance-based unit awards and the related distribution equivalents shall be earned and vest if at all, based on the attainment of such performance criteria, as determined by the administrator, with all remaining performance-based unit awards (and accumulated distributions associated with such performance-based unit awards) being immediately forfeited for no consideration.

The Short-Term Bonus does not provide for accelerated vesting in connection with a termination of employment for any reason.

Change in Control Benefits

Pursuant to the terms of the award agreements issued under the Plan, for the restricted unit awards and related cash distributions accumulated thereunder, in the event of a "Change in Control", all restricted unit awards and related cash distributions accumulated thereunder shall become 100% vested. Pursuant to the terms of the award agreements issued under the Plan, for each of the TR performance-based unit awards and 2019 performance-based unit awards, in the event of a "Change in Control" then such TR performance-based unit awards or 2019 performance-based unit awards and the related cash distributions accumulated thereunder shall vest and forfeit as follows:

(i) in the event a Change of Control occurs before three-year measurement period has been completed, then the measurement period shall be deemed to end on the date of such Change in Control, and the participant's outstanding TR performance-based unit awards or outstanding 2019 performance-based unit awards and the related distribution equivalents shall be earned and vest, if at all, based on the attainment of such performance criteria, as determined by the administrator, as if the measurement period ended on the date of the Change in Control and as if the ending unit prices were determined as of the date of the Change in Control, with all remaining TR performance-based unit awards or 2019 performance-based unit awards (and accumulated distributions associated with such TR performance-based unit awards or 2019 performance-based unit awards) being immediately forfeited for no consideration; and

(ii) in the event a Change in Control occurs after the three-year measurement period has been completed but prior to the determination date for such TR performance-based unit awards or 2019 performance-based unit awards, on the date of the Change in Control, the participant's outstanding TR performance-based unit awards or 2019 performance-based unit awards and accumulated distributions associated with such TR performance-based unit awards or 2019 performance-based unit awards shall be earned and vest, if at all, based on the attainment of such performance criteria as described in TR performance unit awards or 2019 performance-based unit awards, as determined by the administrator of the Plan, with all remaining TR performance-based unit awards or 2019 performance-based unit awards (and accumulated distributions associated with such TR performance-based unit awards or 2019 performance-based unit awards) being immediately forfeited for no consideration; and

The Plan generally defines a "Change in Control" as occurring on one or more of the following events:

(a) the acquisition in one or more transactions by any "person" (as such term is used for purposes of Section 13(d) or Section 14(d) of the Exchange Act) but excluding, for this purpose, (i) the Partnership or any of our parents or their subsidiaries or (ii) any employee benefit plan of any entity described in clause (i) above (the entities described in

clauses (i) and (ii) hereof, “Excluded Persons”), of more than fifty percent (50%) of the combined voting power of the Partnership’s or our general partner’s then outstanding voting securities;

(b) the consummation of a merger or consolidation involving the Partnership or our general partner if the owners of the Partnership or our general partner (as applicable), immediately before such merger or consolidation, do not own, directly or indirectly, immediately following such merger or consolidation, at least fifty percent (50%) of the combined voting power of the outstanding voting securities of the entity resulting from such merger or consolidation; or

(c) the acquisition by any “person” (as such term is used for purposes of Section 13(d) or Section 14(d) of the Exchange Act), other than an Excluded Person, in a single transaction or in a series of related transactions occurring during any period of 12 consecutive months, of assets from the Partnership or our general partner that have a total gross fair market value equal to or more than 51% of the total gross fair market value of all of the assets of the Partnership or our general partner (as applicable) and its subsidiaries (determined on a consolidated basis) immediately prior to such acquisition or acquisitions.

Pursuant to the Short-Term Bonus, in the event of a “change in control” prior to the determination date thereunder, the participant’s outstanding awards under the Short-Term Bonus shall be paid their pro-rata portion of the applicable incentive award. To be eligible, a participant must be an active employee as of the date of the change in control. The pro-rata calculation will use the participant’s annual base salary in effect as of the date of the change in control and actual business results through the date of the change in control. The financial goals and the individual participation percentage will be pro-rated through the date of the change in control and no individual performance multiplier will apply. The Short-Term Bonus generally describes a “change in control” as occurring in the event that Sisecam Chemicals completes a direct or indirect sale to an unrelated third party of all or substantially all of the equity interests or assets in one of the businesses covered by the Short-Term Bonus.

The following table shows the amount of incremental value that would have been received by each of the NEOs upon certain events of termination or a “Change in Control” resulting in the accelerated vesting of our restricted units and performance based units held by the NEOs on December 31, 2021 and the amount of expense that could be allocated to us by Sisecam Chemicals under the Services Agreement in connection with certain events of termination or a “change in control” under the Short-Term Bonus, as if such event occurred on December 31, 2021. Actual amounts will be determinable only upon termination or a change in control event.

Name	Benefit	Termination Due to Death or Disability ($)[1]	Termination for Any Other Reason ($)	Change of Control with or without Continued Employment ($)[1]
Oğuz Erkan	Plan Common Unit Vesting	$106,522	—	$158,970
	Short-Term Bonus	—	—	—
Ahmet Tohma	Plan Common Unit Vesting	—	—	—
	Short-Term Bonus	—	—	—
Christopher L. DeBerry	Plan Common Unit Vesting	$41,558	—	$62,002
	Short-Term Bonus	—	—	—
Raymond Katekovich	Plan Common Unit Vesting	$58,888	—	$87,873
	Short-Term Bonus	—	—	—
Marla Nicholson	Plan Common Unit Vesting	$15,018	—	$22,413
	Short-Term Bonus	—	—	—

(1) The amounts reflected above represent the product of the number of 2019 performance-based unit awards that were subject to vesting/restrictions on December 31, 2021, multiplied by the closing price of our common units of $16.50 on that date.

CEO Pay Ratio

Neither we nor our general partner have any employees. As a result, we have no basis for disclosing the annual compensation and corresponding ratio as required under Item 402(u) of Regulation S-K.

Director Compensation

Officers or employees of Sisecam Chemicals or its affiliates who also serve as directors of our general partner do not receive additional compensation for their service as a director of our general partner. Directors of our general partner who are not officers or employees of Sisecam Chemicals or its affiliates receive compensation as “non-employee directors.” For fiscal year ended December 31, 2021, our annual retainer for our non-employee directors consisted of approximately $165,000, of which $90,000 was paid in the form of an annual cash retainer and the remaining $75,000 was paid in a fully-vested grant of common units under the Plan. The lead director, audit committee chair and the conflicts committee chair were paid additional annual retainers of $10,000, $15,000 and $10,000, respectively. Each non-employee director that did not serve as a non-employee director for the entire fiscal year, received a prorated retainer reflecting their partial year of non-employee director service with us.

The following table summarizes the compensation paid to our non-employee directors for the fiscal year ended December 31, 2021.

Name	Fees Earned or Paid in Cash ($)(1)	Unit Awards ($)(2)	All Other Compensation ($)	Total ($)
Alec G. Dreyer	$90,000	$77,048	$—	$167,048
Michael E. Ducey	$100,000	$77,048	$—	$177,048
Thomas W. Jasper	$115,000	$77,048	$—	$192,048

(1) The amounts shown in this column reflect the director cash retainers and committee chair fees paid for non-employee director board service based on when the service was effective.
(2) The amounts shown in this column reflect the aggregate grant date fair value, as determined in accordance with the Financial Accounting Standards Board ASC Topic 718, for awards of common units as follows: Alec G. Dreyer (with 5,837 common units), Michael E. Ducey (with 5,837 common units) and Thomas W. Jasper (with 5,837 common units) granted on April 1, 2021.

Each non-employee director will be reimbursed for out-of-pocket expenses in connection with attending such meetings. Each director will be fully indemnified by us for actions associated with being a director to the fullest extent permitted under Delaware law.

ITEM 12. S*ecurity Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the beneficial ownership of our common units as of March 10, 2022 owned by:

- each person known by us to be a beneficial owner of more than 5% of our units;
- each of the directors of our general partner;
- each of the named executive officers of our general partner; and
- all directors and executive officers of our general partner as a group.

The amounts and percentage of units beneficially owned are reported on the basis of regulations of the SEC governing the determination of beneficial ownership of securities. Under the rules of the SEC, a person is deemed to be a "beneficial owner" of a security if that person has or shares "voting power," which includes the power to vote or to direct the voting of such security, or "investment power," which includes the power to dispose of or to direct the disposition of such security. Except as indicated by footnote, the persons named in the table below have sole voting and investment power with respect to all units shown as beneficially owned by them, subject to community property laws where applicable.

Percentage of total units beneficially owned is based on 19,788,208 common units and 399,000 general partner units outstanding. The list of beneficial owners is presented in the following table below:

Name of Beneficial Owner (1)	Common Units Beneficially Owned(2)	Percentage of Common Units Beneficially Owned	General Partner' Units Beneficially Owned	Percentage of General Partner Units Beneficially Owned
Sisecam Chemicals Wyoming LLC (2)	14,551,000	74 %	—	—
Sisecam Resource Partners LLC (2)	—	—	399,000	100.0 %
Oğuz Erkan	9,043	*	—	—
Christopher L. DeBerry	15,002	*	—	—
Marla Nicholson	1,918	*	—	—
Michael E. Ducey	32,513	*	—	—
Thomas W. Jasper	25,257	*	—	—
Alec G. Dreyer	17,448	*	—	—
Ahmet Tohma	—	*	—	—
Raymond Katekovich	9,022	*	—	—
Huseyin Kuscu	—	*	—	—
Mustafa Görkem Elverici	—	*	—	—
Tahsin Burhan Ergene	—	*	—	—
Abdullah Kılınç	—	*	—	—
Gökhan Güralp	—	*	—	—
Hande Eröz	—	*	—	—
Selma Öner	—	*	—	—
All directors and executive officers as a group (15 people)	110,203	*	—	—

* Beneficial ownership represents less than 1% of the Partnership's outstanding common units.

(1) Unless otherwise indicated, the address for all beneficial owners is Five Concourse Parkway, Suite 2500, Atlanta, Georgia 30328.

(2) SCW LLC, the sole member of our general partner, owns 14,551,000 common units representing limited partner interests and 100% of the membership interests of our general partner, and our general partner (Sisecam Resource Partners LLC) owns 399,000 general partner units representing general partner interests in us. Turkiye Is Bankasi ("Isbank"), owns 51% of the interests in Türkiye Şişe ve Cam Fabrikalari A.Ş, a Turkish corporation ("Şişecam Parent"), which owns all of the ownership interests in Sisecam USA, which owns 60% of the ownership interests of Sisecam Chemicals. Turgay Ciner owns all of the ownership interests of Akkan Enerji ve Madencilik Anonim Sirketi, which owns all of the ownership interests of KEW Soda, which owns all of the ownership interests of WE Soda, which owns all of the ownership interests of Ciner Enterprises, which owns the other 40% of the ownership interests of Sisecam Chemicals, which owns all of the ownership interests of SCW LLC, the sole member of our general partner. Each of Isbank, Şişecam Parent, Sisecam USA, Sisecam Chemicals, Turgay Ciner, Akkan Enerji ve Madencilik Anonim Sirketi, KEW Soda, WE Soda, and Ciner Enterprises may, therefore, be deemed to share beneficial ownership of the units held by SCW LLC and the general partner. The business address of Isbank, Şişecam Parent and Sisecam USA is Türkiye Şişe ve Cam Fabrikalari A.Ş. İçmeler Mah. D-100 Karayolu Cad. No:44A 34947 Tuzla/İstanbul – Turkey Attention: Hande Eroz, General Counsel. The

business address of the general partner, SCW LLC, Sisecam Chemicals and Ciner Enterprises is Five Concourse Parkway, Suite 2500, Atlanta, Georgia 30328. The business address of each of WE Soda and KEW Soda is 23 College Hill, London, United Kingdom, EC4R 2RP. The business address of Akkan is ehitmuhtar Cad., 38/1 Taksim, Beyoglu Istanbul, Turkey. The business address of Mr. Ciner is Paşalimanı Caddesi, No:73, 34670 Paşalimanı, Üsküdar, Istanbul, Turkey.

Equity Compensation Plan Information

The following table summarizes information about our equity compensation plans as of December 31, 2021:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available For Future Issuance Under Equity Compensation Plan
Equity compensation plans approved by security holders	—	—	—
Equity compensation plans not approved by security holders	—	—	643,117

For a description of our equity compensation plan, please see the discussion under “Item 11. Executive Compensation” above.

ITEM 13. C*ertain Relationships and Related Transactions, and Director Independence*

As of March 10, 2022, SCW LLC owned 14,551,000 common units representing an approximate 72% ownership interest in us, and owns and controls our general partner. In addition, our general partner owns general partner units representing an approximate 2% general partner interest in us and all of our incentive distribution rights.

The terms of the transactions and agreements disclosed in this section were determined by and among affiliated entities and, consequently, are not the result of arm’s length negotiations. These terms and agreements are not necessarily at least as favorable to us as the terms that could have been obtained from unaffiliated third parties.

Distributions and Payments to Our General Partner and Its Affiliates

The following table summarizes the distributions and payments to be made by us to our general partner and its affiliates in connection with the formation, ongoing operation and any liquidation of Sisecam Resources LP.

Operational Stage

Distributions to our general partner and its affiliates	We will generally make cash distributions 98.0% to our unitholders, pro rata, including our general partner and its affiliates as the holders of an aggregate of 14,551,000 common units, and approximately 2.0% to our general partner. In addition, if distributions exceed the minimum quarterly distribution and other higher target distribution levels, our general partner will be entitled to increasing percentages of the distributions, up to 48.0% of the distributions we make above the highest target distribution level.
Payments to our general partner and its affiliates	Sisecam Chemicals will receive a management fee in connection with our general partner’s management of us (as described in the section “Reimbursement of General and Administrative Expenses” below), and, prior to making any distribution on our common units, we will reimburse certain of its affiliates, including SCW LLC and Sisecam Chemicals, for all expenses they incur and payments they make on our behalf pursuant to the Services Agreement. Our partnership agreement does not set a limit on the amount of expenses for which our general partner and such affiliates may be reimbursed. These expenses may include salary, bonus, incentive compensation and other amounts paid to persons who perform services for us or on our behalf and expenses allocated to our general partner by such affiliates. Our partnership agreement provides that our general partner will determine in good faith the expenses that are allocable to us.
Withdrawal or removal of our general partner	If our general partner withdraws or is removed, its general partner interest and its incentive distribution rights will either be sold to the new general partner for cash or converted into common units, in each case for an amount equal to the fair market value of those interests.

Liquidation Stage

Liquidation	Upon our liquidation, the partners, including our general partner, will be entitled to receive liquidating distributions according to their particular capital account balances.

Indemnification Agreement

On October 23, 2015, in connection with the consummation of the Transaction, the Partnership amended and restated in its entirety, and renamed, that Omnibus Agreement (as amended and restated, the "Indemnification Agreement"), dated September 18, 2013, among the Partnership, our general partner and OCI Enterprises. Pursuant to the Indemnification Agreement, OCI Enterprises agreed to continue to indemnify the Partnership for issues arising out of, including but not limited to, certain tax liabilities relating to the period before the Partnership's initial public offering and assets retained by OCI Enterprises and its affiliates.

Services Agreement

On October 23, 2015, Ciner Enterprises indirectly acquired OCI Enterprises Inc.'s approximately 73% limited partner interest in the Partnership, as well as its 2% general partner interest and related incentive distribution rights (the "OCI Transaction"). Further, in connection with the closing of the OCI Transaction, the Partnership entered into the Services Agreement among the Partnership, our general partner and Sisecam Chemicals. Pursuant to the Services Agreement, Sisecam Chemicals agreed to provide the Partnership with certain corporate, selling, marketing, and general and administrative services, in return for which the Partnership has agreed to pay Sisecam Chemicals an annual management fee, subject to quarterly adjustments, and reimburse Sisecam Chemicals for certain third-party costs incurred in connection with providing such services.

Trademark License Agreement

In connection with the closing of the Transaction on October 23, 2015, the Partnership also entered into the Trademark License Agreement, among Park Holding, Akkan, Ciner Enterprises, Sisecam Chemicals, SCW LLC, the Partnership, our general partner and Sisecam Wyoming. The Trademark License Agreement governs the use of "Ciner" as part of the names used by the Partnership and the other related parties thereto following the Transaction, and as a trademark and service mark, for the Partnership's products and services.

Reimbursement of General and Administrative Expense

Under the Services Agreement, we pay Sisecam Chemicals for services provided to us, and we also reimburse Sisecam Chemicals for certain third-party costs incurred in connection with providing such services. We also reimburse Sisecam Chemicals for our allocable portion of the premiums on any insurance policies covering our assets and for any additional state income, franchise or similar tax paid by Ciner Enterprises resulting from the inclusion of us (and our subsidiaries) in a combined state income, franchise or similar tax report with Sisecam Chemicals as required by applicable law.

Transactions with Affiliates

Sisecam Chemicals and Sisecam Wyoming are party to a sales agency agreement dated June 17, 2015. Under the sales agency agreement, Sisecam Chemicals contracts with customers, including ANSAC and Ciner Group, for the sale of the soda ash that Sisecam Wyoming produces, and Sisecam Wyoming delivers soda ash directly to the customers. Though Sisecam Chemicals is the contractual party with customers, any risk of loss related to soda ash is passed directly to Sisecam Wyoming, except in circumstances where the buyer takes ownership of soda ash at the shipping point. Sisecam Wyoming invoices the customers, and risk of loss from collecting accounts receivable remains with Sisecam Wyoming. Sisecam Wyoming also bears any risk of loss from liability claims related to soda ash. Sisecam Chemicals receives sales proceeds directly from customers on behalf of Sisecam Wyoming, and Sisecam Chemicals then transfers the total proceeds of the sales directly to Sisecam Wyoming, less Sisecam Chemicals' actual costs of sales and marketing. Sisecam Chemicals' costs are allocated to Sisecam Wyoming by OCI Enterprises (prior to the OCI Transaction) and Sisecam Chemicals (subsequent to the OCI Transaction) based on the amount of time spent by Sisecam Chemicals providing such services. For the years ended December 31, 2021, 2020 and 2019, these charges amounted to approximately $17.2 million, $16.1 million and $14.9 million, respectively. Sisecam Chemicals also contracts with various land and sea carriers for freight transportation on behalf of Sisecam Wyoming. All such actual freight costs are charged directly to Sisecam Wyoming.

Substantially all of Sisecam Wyoming's selling and marketing expenses and general and administrative expenses are expenses charged to Sisecam Wyoming by Sisecam Chemicals for actual expenses incurred by it on behalf of Sisecam Wyoming and include expenses relating to salaries, benefits, office supplies, professional fees, travel, computers and rent.

Prior to 2021, Sisecam Chemicals was a member company of ANSAC and had an approximate 34.9% and 38.2% participation interest at December 31, 2020 and 2019, respectively. We made approximately 21.1%, 45.4% and 60.4% of our total net sales for the years ended December 31, 2021, 2020 and 2019, respectively, to ANSAC. In addition, prior to 2021, ANSAC provided logistics and support services for all of our export sales during the period the Partnership was a member of ANSAC. On July 27,

2020, ANSAC and the members thereof entered into an agreement, effective as of July 24, 2020, that, among other things, terminated Sisecam Chemicals' membership in ANSAC effective as of December 31, 2020. The conflicts committee met three times in 2020 to deliberate on and approve proposed affiliate transactions for post-ANSAC operations that went into effect starting January 2021. See Item 1, Business, "Shipping and Logistics," for more information.

The personnel who operate our assets are employees of Sisecam Chemicals and its affiliates. Sisecam Chemicals directly charges us for the payroll and benefit costs associated with employees and carried the obligations for other employee-related benefits in its financial statements. We are allocated a portion of Sisecam Chemicals' defined benefit pension plan liability and postretirement benefit liability for the employees providing services to us based on an actuarial assessment of that liability. See Item 8, Financial Statements and Supplementary Data, Note 11, "Employee Compensation," for more information. In addition, under the joint venture agreement governing Sisecam Wyoming, Sisecam Wyoming reimburses us for employees who operate our assets and for support provided to Sisecam Wyoming.

Procedures for Review, Approval and Ratification of Transactions with Related Persons

As disclosed under "Item 10. Directors, Executive Officers and Corporate Governance," our audit committee has been given the sole authority, under the audit committee charter, to review and evaluate any related party transactions or dealings with parties related to us and disclosures of such transactions or dealings in our annual report on Form 10-K, and our conflicts committee is responsible, under the conflicts committee charter, with reviewing specific matters that may involve conflicts of interest between our general partner or any of its affiliates, on the one hand, and us, our partners and any of our subsidiaries, on the other hand, in accordance with the terms of our partnership agreement. Any matters approved by our conflicts committee in good faith will be deemed to be approved by all of our partners and not a breach by our general partner of any duties it may owe us or our unitholders.

Director Independence

See "Item 10. Directors, Executive Officers and Corporate Governance" for information regarding the directors of our general partner and independence requirements applicable for the Board of Directors of our general partner and its committees.

ITEM 14. P*rincipal Accountant Fees and Services*

The Audit Committee has ratified Deloitte & Touche LLP, Independent Registered Public Accounting Firm, to audit the books, records and accounting of Sisecam Resources LP for the year ended December 31, 2021. The Audit Committee in its discretion may select a different registered public accounting firm at any time during the year if it determines that such a change will be in the best interests of us and our unitholders.

Audit Fees

The following table presents approximate fees billed by Deloitte & Touche LLP for the audit of our annual consolidated financial statements and other services rendered for the years ended December 31, 2021 and December 31, 2020.

	Year ended December 31, 2021	Year ended December 31, 2020
Audit fees [1]	$ 828,934	$ 994,237
Tax fees [2]	375,717	651,497
Total	$ 1,204,651	$ 1,645,734

(1) Audit fees represent fees for professional services rendered in connection with (i) the audit of our annual financial statements, (ii) the review of our quarterly financial statements and (iii) those services normally provided in connection with statutory and regulatory filings or engagements including consents and other services related to SEC matters.

(2) Tax fees represent fees for professional services rendered primarily in connection with tax compliance. For the year ended December 31, 2021 and 2020, $123,280 and $228,269 of the above tax fees were related to K-1 services.

Pre-Approval Policy

As outlined in its charter, the audit committee of the board of directors of our general partner is responsible for reviewing and approving, in advance, all audit services, internal control related services and permissible non-audit services to be provided to us by our independent registered public accounting firm. During the year ended December 31, 2021, all of the services performed for us by Deloitte & Touche LLP were pre-approved by the audit committee of the board of directors of our general partner.

PART IV

Item 15. E*xhibits, Financial Statement Schedules*

(a) the following documents are included with the filing of this report:

1. The financial statements filed as part of this Report are listed in Part II, Item 8, “Financial Statements and Supplementary Data.”
2. No financial statement schedules are required to be filed as part of this Report because all such schedules have been omitted. Such omission has been made on the basis that information is provided in the financial statements or related footnotes in Part II, Item 8, “Financial Statements and Supplementary Data,” or is not required to be filed as the information is not applicable.
3. The exhibits listed on the Exhibit Index are included with this Report and incorporated by reference into this Item.

Item 16. F*orm 10-K Summary*

None.

Exhibit Index

Exhibit Number	Description
3.1	Certificate of Limited Partnership of Sisecam Resources LP dated April 22, 2013 (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-189838) filed with the SEC on July 8, 2013)
3.2	Certificate of Amendment of the Certificate of Limited Partnership of Sisecam Resources LP effective November 5, 2015 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on November 5, 2015
3.3*	Certificate of Amendment of the Certificate of Limited Partnership of Sisecam Resources LP dated as of February 18, 2022
3.4	First Amended and Restated Agreement of Limited Partnership of Sisecam Resources LP dated as of September 18, 2013 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on September 18, 2013)
3.5	Amendment No. 1 to the First Amended and Restated Agreement of Limited Partnership of Sisecam Resources LP dated as of May 2, 2014 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on May 7, 2014)
3.6	Amendment No. 2 to the First Amended and Restated Agreement of Limited Partnership of Sisecam Resources LP dated as of November 5, 2015 (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on November 5, 2015)
3.7	Amendment No. 3 to the First Amended and Restated Agreement of Limited Partnership of Sisecam Resources LP, dated April 28, 2017 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on May 2, 2017)
3.8*	Amendment No. 4 to the First Amended and Restated Agreement of Limited Partnership of Sisecam Resources LP, dated as of February 18, 2022
3.9	Certificate of Formation of Sisecam Resource Partners LLC, dated April 22, 2013 (incorporated by reference to Exhibit 3.3 to the Registrant's Registration Statement on Form S-1 (File No. 333-189838) filed with the SEC on July 8, 2013).
3.10	Certificate of Amendment to the Certificate of Formation of Sisecam Resource Partners LLC effective November 5, 2015 (incorporated by reference to Exhibit 3.3 to the Registrant's Current Report on Form 8-K, filed with the SEC on November 5, 2015)
3.11	Amended and Restated Limited Liability Company Agreement of Sisecam Resource Partners LLC dated as of September 18, 2013 (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on September 18, 2013)
3.12*	Certificate of Amendment of the Certificate of Formation of Sisecam Resource Partners LLC dated as of February 18, 2022
3.13	Amended and Restated Limited Liability Company Agreement of Sisecam Resources Partners LLC (formerly known as Ciner Resource Partners LLC and OCI Resource Partners LLC) dated as of September 18, 2013 (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on September 18, 2013)
3.14	Amendment No. 1 to the Amended and Restated Limited Liability Company Agreement of Sisecam Resource Partners LLC dated November 5, 2015 (incorporated by reference to Exhibit 3.4 to the Registrant's Current Report on Form 8-K, filed with the SEC on November 5, 2015)
3.15	Amendment No. 2 to the Amended and Restated Limited Liability Company Agreement of Sisecam Resource Partners LLC, dated as of December 14, 2021 (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on December 14, 2021).
3.16*	Amendment No. 3 to the Amended and Restated Limited Liability Company Agreement of Sisecam Resource Partners LLC, dated as of February 18, 2022
4.1*	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934, as amended (incorporated by reference to Exhibit 4.1 to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 9, 2020)
In accordance with Item 601(b)(4)(iii)(A) of Regulation S-K, certain instruments respecting long-term debt of the Registrant have been omitted but will be furnished to the SEC upon request.	
10.1	Sodium Lease (WYW101824), dated June 1, 2018, between the United States Department of the Interior Bureau of Land Management and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.3 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 8, 2019)
10.2	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-42571, dated August 2, 2009, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form S-1 (File No. 333-189838) filed with the SEC on July 8, 2013)
10.3	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-42570, dated August 2, 2009, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.11 to the Registrant's Registration Statement on Form S-1 (File No. 333-189838) filed with the SEC on July 8, 2013)

10.4	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-26012, dated November 2, 2009, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.12 to the Registrant's Registration Statement on Form S-1 (File No. 333-189838) filed with the SEC on July 8, 2013)
10.5	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-25779, dated September 2, 2009, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.13 to the Registrant's Registration Statement on Form S-1 (File No. 333-189838) filed with the SEC on July 8, 2013)
10.6	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-25971, dated November 2, 2009, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.14 to the Registrant's Registration Statement on Form S-1 (File No. 333-189838) filed with the SEC on July 8, 2013)
10.7	Sodium Lease (WYW079420), dated December 1, 2017, between the United States Department of the Interior Bureau of Land Management and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.16 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 9, 2018)
10.8	Sodium Lease (WYW0111730), dated December 1, 2017, between the United States Department of the Interior Bureau of Land Management and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.17 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 9, 2018)
10.9	Sodium Lease (WYW0111731), dated December 1, 2017, between the United States Department of the Interior Bureau of Land Management and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 9, 2018)
10.10	License Agreement, dated July 18, 1961, between Union Pacific Railroad Company and Stauffer Chemical Company of Wyoming (as amended by Amendment of License Agreement, dated September 20, 2010, between Sisecam Wyoming LLC, as successor by assignment from Stauffer Chemical Company of Wyoming, and RSRC Royalty Company LLC, as successor in interest to Union Pacific Railroad Company) (incorporated by reference to Exhibit 10.15 to the Registrant's Registration Statement on Form S-1 (File No. 333-189838) filed with the SEC on July 8, 2013)
10.11	Amendment - 1961 License Agreement, dated as of June 28, 2018, between RSRC Royalty Company LLC and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on July 3, 2018)
10.12	Sodium Lease (WYW079420), dated January 1, 2015, between the United States Department of the Interior Bureau of Land Management and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on December 15, 2014)
10.13	Contribution, Assignment and Assumption Agreement dated as of September 18, 2013 by and among OCI Wyoming Co., Sisecam Resource Partners LLC, Ciner Resources LP (formerly known as OCI Resources LP), Ciner Wyoming Holding Co. (formerly known as OCI Wyoming Holding Co.) and Ciner Resources Corporation (formerly known as OCI Chemical Corporation) (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on September 18, 2013)
10.14++	Amendment No. 1 to Sisecam Resource Partners LLC 2013 Long-Term Incentive Plan (incorporated by reference to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 9, 2020)
10.15++	Sisecam Resource Partners LLC 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.18 to the Registrant's Registration Statement on Form S-1/A (File No. 333-189838) filed with the SEC on September 3, 2013)
10.16++	Form of Sisecam Resource Partners LLC 2013 Long-Term Incentive Plan Restricted Unit Award Agreement (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the SEC on July 2, 2014)
10.17++	Form of Sisecam Resource Partners LLC 2013 Long-Term Incentive Plan Director Unit Agreement (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed with the SEC on November 4, 2014)
10.18++	Form of Sisecam Resource Partners LLC 2013 Long-Term Incentive Plan TR Performance Unit Award (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on August 6, 2014)
10.19++	Form of Sisecam Resource Partners LLC 2019 Performance Unit Award (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on September 24, 2019)
10.20	Limited Liability Company Agreement of Sisecam Wyoming LLC dated as of June 30, 2014 (incorporated by reference to Exhibit 10.1 to the Registrants Current Report on Form 8-K, filed with the SEC on July 2, 2014)
10.21	Amendment No. 1 to Limited Liability Company Agreement of Sisecam Wyoming LLC dated as of November 5, 2015 (incorporated by reference to Exhibit 10.22 to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 11, 2016)
10.22*	Amendment No. 2 to Limited Liability Company Agreement of Sisecam Wyoming LLC dated as of February 10, 2022
10.23	Services Agreement, dated as of October 23, 2015, among Ciner Resources LP (formerly known as OCI Resources LP), Sisecam Wyoming LLC, and Ciner Resources Corporation (formerly known as OCI Chemical Corporation) (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on October 26, 2015)

10.24	OCI Indemnification Agreement, dated as of October 23, 2015, among Ciner Resources LP (formerly known as OCI Resources LP), Sisecam Wyoming LLC, and OCI Enterprises Inc. (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on October 26, 2015)
10.25	Trademark License Agreement, dated as of October 23, 2015, among Park Holding A.S., Ciner Enterprises Inc., Sisecam Chemicals Resources LLC (formerly known as Ciner Resources Corporation and OCI Chemical Corporation), Sisecam Wyoming Holding LLC (formerly known as Ciner Wyoming Holding Co. and OCI Wyoming Holding Co.), Sisecam Wyoming LLC (formerly known as Ciner Wyoming LLC and OCI Wyoming LLC), Sisecam Resources LP (formerly known as Ciner Resources LP), and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K, filed with the SEC on October 26, 2015)
10.26	Master Loan and Security Agreement, dated as of March 25, 2020, by and between Banc of America Leasing & Capital, LLC, as lender, and Sisecam Wyoming LLC, as borrower (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 27, 2020)
10.27	Equipment Security Note Number 001, dated as of March 25, 2020, by and between Banc of America Leasing & Capital, LLC, as lender, and Sisecam Wyoming LLC, as borrower (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 27, 2020)
10.28	Amendment Number 001 to Master Loan and Security Agreement, dated as of July 27, 2020, by and between Banc of America Leasing & Capital, LLC, as lender, and Sisecam Wyoming LLC, as borrower (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K, filed with the SEC on July 31, 2020)
10.29	Amendment Number 002 to Master Loan and Security Agreement, dated as of March 5, 2021 by and between Banc of America Leasing & Capital, LLC, as lender, and Sisecam Wyoming LLC, as borrower (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on March 11, 2021)
10.30	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-42571, dated August 2, 2019, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.30 to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 9, 2020)
10.31	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-42570, dated August 2, 2019, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.31 to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 9, 2020)
10.32	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-25779, dated September 2, 2019, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 9, 2020)
10.33	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-26012, dated November 2, 2019, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 9, 2020)
10.34	Sodium/Trona and Associated Mineral Salts Mining Lease No. 0-25971, dated November 2, 2019, between the State of Wyoming and Sisecam Wyoming LLC (incorporated by reference to Exhibit 10.34 to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 9, 2020)
10.35	Credit Agreement, dated as of October 28, 2021, by and among Sisecam Wyoming LLC, the lenders listed on the respective signature pages thereof and Bank of America, N.A., as administrative agent, swing line lender and a letter of credit issuer (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on November 3, 2021)
10.36	First Amendment to Credit Agreement, dated as of December 17, 2021, by and among Sisecam Wyoming LLC, the lenders listed on the respective signature pages thereof and Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on December 22, 2021).
10.37	Equipment Security Note Number 002, dated as of December 17, 2021, by and between Sisecam Wyoming LLC, as borrower, and Banc of America Leasing & Capital, LLC, as lender (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on December 22, 2021).
10.38	Amendment No. 001, dated as of December 17, 2021, to Equipment Security Note Number 001, dated as of March 25, 2020, by and between Sisecam Wyoming LLC, as borrower, and Banc of America Leasing & Capital, LLC, as lender (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K, filed with the SEC on December 22, 2021).
10.39	Amendment Number 003 to Master Loan and Security Agreement, dated as of October 28, 2021 by and between Banc of America Leasing & Capital, LLC, as lender, and Sisecam Wyoming LLC, as borrower (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on November 3, 2021)
10.40*++	Separation and Release Agreement, dated July 26, 2021, by and between Ed Freydel and Sisecam Resource Partners LLC
21.1*	List of Subsidiaries of Registrant
23.1*	Consent of Deloitte & Touche LLP, dated March 14, 2022
31.1*	Chief Executive Officer Certification Pursuant to Exchange Act Rule 13a-14(a) or Rule 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

31.2*	Principal Financial Officer Certification Pursuant to Exchange Act Rule 13a-14(a) or Rule 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Chief Executive Officer Certification Pursuant to Exchange Act Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code, as Adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2**	Principal Financial Officer Certification Pursuant to Exchange Act Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code, as Adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
95.1*	Mine Safety Disclosures
96.1*	S-K 1300 Technical Report Summary on the Big Island Mine, Sweetwater County, Wyoming, USA
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase
104*	The cover page from the Partnership’s Annual Report 10-K ended December 31, 2020, formatted in Inline XBRL (included in Exhibit 104)

* Filed herewith.
** Furnished herewith. Not considered to be “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, and are not deemed incorporated by reference into any filing under the Securities Act of 1933, as amended.
++Management contract or compensatory plan or arrangement required to be filed as an exhibit to this Form 10-K pursuant to Item 15.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Sisecam Resources LP (Registrant)

By: Sisecam Resource Partners LLC, its General Partner

By: /s/ Oğuz Erkan

Oğuz Erkan
President, Chief Executive Officer and Director of the Board of Directors of Sisecam Resource Partners LLC*, our General Partner*
(Principal Executive Officer)

Date: March 14, 2022

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacity and on the dates indicated.

Signature	Title	Date
/s/ Oğuz Erkan **Oğuz Erkan**	*President, Chief Executive Officer and Director of the Board of Directors of Sisecam Resource Partners LLC, our General Partner* *(Principal Executive Officer)*	March 14, 2022
/s/ Ahmet Tohma **Ahmet Tohma**	*Chief Financial Officer of Sisecam Resource Partners LLC, our General Partner* *(Principal Financial Officer)*	March 14, 2022
/s/ Christopher L. DeBerry **Christopher L. DeBerry**	*Chief Accounting Officer of Sisecam Resource Partners LLC, our General Partner* *(Principal Accounting Officer)*	March 14, 2022
/s/ Huseyin Kuscu **Huseyin Kuscu**	*(Director of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022
/s/ Mustafa Görkem Elverici **Mustafa Görkem Elverici**	*(Chairman of the Board of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022
/s/ Tahsin Burhan Ergene **Tahsin Burhan Ergene**	*(Director of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022
/s/ Abdullah Kılınç **Abdullah Kılınç**	*(Director of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022
/s/ Michael E. Ducey **Michael E. Ducey**	*(Director of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022
/s/ Thomas W. Jasper **Thomas W. Jasper**	*(Director of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022
/s/ Alec G. Dreyer **Alec G. Dreyer**	*(Director of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022
/s/ Gökhan Guralp **Gökhan Guralp**	*(Director of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022
/s/ Hande Eroz **Hande Eroz**	*(Director of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022
/s/ Selma Öner **Selma Öner**	*(Director of Sisecam Resource Partners LLC, our General Partner)*	March 14, 2022

GLOSSARY OF INDUSTRY TERMS

ANSAC: American Natural Soda Ash Corporation, a U.S. export cooperative organized under the provisions of the Webb-Pomerene Act of 1918.

Calciner: A large furnace used to heat and bring about thermal decomposition of trona.

Continuous Miner: A machine with a large rotating steel drum equipped with tungsten carbide teeth that scrapes trona from a mining bed seam.

Deca: Sodium carbonate decahydrate, a natural by-product of trona ore processing.

Effective Capacity: The volume of soda ash that can be generated using current operational resources, taking into account scheduled and unscheduled downtime and idled capacity.

IDRs: Incentive Distribution Rights represents the general partner’s right to receive increasing percentages of quarterly distributions from operating surplus after the Partnership has achieved the minimum quarterly distribution and the target distribution levels.

Liquor: A solution consisting of sodium carbonate dissolved in water.

Mining Bed: A layer or stratum of trona.

Mining Face: The exposed area of an underground mine from which trona is extracted.

MMBtu: Million British thermal units.

MSHA: Mine Safety and Health Administration.

Non-subsidence mining: Any one of several mining techniques designed to prevent or avoid the collapse of the surface above the mine. Room and pillar mining, which leaves “pillars” to support the roof of a mine, is a form of non-subsidence mining.

Operating Rate: The amount of soda ash produced in a given year as a percentage of effective capacity for that year.

Ore to Ash Ratio: The number of short tons of trona ore it takes to produce one short ton of soda ash.

Ore Grade: Ore grade is the percentage of raw trona ore that is recoverable as soda ash free of impurities. A higher ore grade will produce more soda ash than a lower ore grade.

Purged Liquor: Liquor expelled into collection ponds during trona ore processing.

Recovery Rate: An amount, expressed as a percentage, calculated by dividing the volume of dry soda ash produced by the sum of the volume of dry soda ash produced and the losses experienced in the refinery process.

Room and Pillar Mining: A mining method wherein underground mineral seams are mined in a network of “rooms.” As these rooms are cut and formed, continuous miners simultaneously load trona onto shuttle cars for hoisting to the surface. “Pillars” composed of trona are left behind in these rooms to support the roofs of the mines. Room and pillar mining is often used to mine smaller blocks or center seams.

Run-of-Mine: The amount of trona removed directly from the mine prior to processing.

Seam: Trona deposits occur in layers typically separated by layers of rock. Each layer of trona is called a “seam.”

Soda Ash: Sodium carbonate (Na_2CO_3) in a powder form.

Tailings Disposal: Disposal of materials left over after the process of separating the soluble portion of trona ore from the non-soluble portion of trona ore.

Trona: Sodium sesquicarbonate (Na_2CO_3-$NaHCO_3$-$2H_2O$), a naturally occurring soft mineral, consisting primarily of sodium carbonate, or soda ash, sodium bicarbonate and water.

Trona Ore: Trona that has been removed from the ground.

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "CINER RESOURCES LP", CHANGING ITS NAME FROM "CINER RESOURCES LP" TO "SISECAM RESOURCES LP", FILED IN THIS OFFICE ON THE EIGHTEENTH DAY OF FEBRUARY, A.D. 2022, AT 10:35 O`CLOCK A.M.

Jeffrey W. Bullock, Secretary of State

5317726 8100
SR# 20220586523

Authentication: 202707803
Date: 02-18-22

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 10:35 AM 02/18/2022
FILED 10:35 AM 02/18/2022
SR 20220586523 - File Number 5317726

STATE OF DELAWARE
AMENDMENT TO THE CERTIFICATE
OF
LIMITED PARTNERSHIP
OF
CINER RESOURCES LP

Pursuant to Section 17-202 of the

Revised Uniform Limited Partnership Act of the State of Delaware

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The undersigned, desiring to amend the Certificate of Limited Partnership of Ciner Resources LP (the "**Limited Partnership**"), does hereby certify as follows:

FIRST: The name of the Limited Partnership is Ciner Resources LP.

SECOND: The First Article of the Certificate of Limited Partnership of the Limited Partnership shall be amended as follows:

FIRST: The name of the limited partnership is Sisecam Resources LP (hereinafter referred to as the "limited partnership").

THIRD: The Third Article of the Certificate of Limited Partnership of the Limited Partnership shall be amended as follows:

THIRD: The name and mailing address of the general partner is as follows:

Name	Address
Sisecam Resource Partners LLC	Five Concourse Parkway Suite 2500 Atlanta, GA 30328

FOURTH: The foregoing amendment was duly adopted in accordance with the provisions of Section 17-405(d) of the Revised Uniform Limited Partnership Act of the State of Delaware.

IN WITNESS WHEREOF, the undersigned executed this Amendment to the Certificate of Limited Partnership on this 10th day of February, 2022.

[Signature Page Follows]

GENERAL PARTNER:
SISECAM RESOURCE PARTNERS LLC

By: ______________________________
Name: Oguz Erkan
Title: President and Chief Executive Officer

AMENDMENT NO. 2 TO
AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT
OF
CINER RESOURCE PARTNERS LLC

This Amendment No. 2 (this "Amendment") to the Amended and Restated Limited Liability Company Agreement of Ciner Resource Partners LLC (the "Company"), dated as of September 18, 2013, as amended by that certain Amendment No. 1, dated as of November 5, 2015 (the "LLC Agreement") is hereby adopted effective as of December 14, 2021 (the "Effective Date"), by Ciner Wyoming Holding Co., a Delaware corporation (the "Sole Member"), as the sole member of the Company. Capitalized terms used but not defined herein have the respective meanings given to such terms in the LLC Agreement. Each reference to "hereof," "hereto," "herein," "hereunder," "hereby" and "this Agreement" in the LLC Agreement shall, from and after the effective date of this Amendment, refer to the LLC Agreement as amended by this Amendment.

WHEREAS, Section 11.5 of the LLC Agreement provides that the LLC Agreement may be amended only by a written instrument executed by the Sole Member; and

WHEREAS, acting pursuant to the power and authority granted to it under Section 11.5 of the LLC Agreement, the Sole Member has determined to amend the LLC Agreement to increase the maximum number of directors constituting the board of the Company from nine (9) to eleven (11) directors.

NOW THEREFORE, the Sole Member does hereby amend the LLC Agreement as follows:

Section 1. Amendments.

(a) Exhibit A to the LLC Agreement is hereby deleted in its entirety and replaced with Exhibit A hereto.

(b) Section 5.2 of the LLC Agreement is hereby deleted in its entirety and replaced with the following:

"Section 5.2 *Number; Qualification; Tenure.*

(a) The number of Directors constituting the Board shall be at least three and no more than eleven, and may be fixed from time to time pursuant to a resolution adopted by the Sole Member. Each Director shall be elected or approved by the Sole Member and shall continue in office until the removal of such Director in accordance with the provisions of this Agreement or until the earlier death or resignation of such Director.

(b) The Directors of the Company in office as of the effective date of the second amendment to this Agreement are set forth on Exhibit A hereto."

2. Confirmation of LLC Agreement. Except as so modified pursuant to this Amendment, the LLC Agreement is ratified and confirmed in all respects and shall continue in full force and effect. The LLC Agreement, as amended by this Amendment, is deemed effective as of the Effective Date.

3. Governing Law. This Amendment shall be governed by, and construed under, the laws of the State of Delaware, without regard to the principles of conflicts of law.

4. Severability. Each provision of this Amendment shall be considered severable, and if for any reason any provision or provisions herein are determined to be invalid, unenforceable or illegal under any existing or future law, such invalidity, unenforceability or illegality shall not impair the operation of or affect those portions of this Amendment which are valid, enforceable and legal.

(Signature pages follow)

IN WITNESS WHEREOF, this Amendment has been executed as of the Effective Date.

SOLE MEMBER:

CINER WYOMING HOLDING CO.,
a Delaware corporation

By:____________________
Name: Oguz Erkan
Title: President & CEO

EXHIBIT A

DIRECTORS

1. Atilla Ciner
2. Alec G. Dreyer
3. Michael E. Ducey
4. Oğuz Erkan
5. Thomas W. Jasper
6. Matthew H. Mead
7. Ahmet Tohma
8. Gürsel Usta

AMENDMENT NO. 4 TO
FIRST AMENDED AND RESTATED AGREEMENT
OF
LIMITED PARTNERSHIP
OF
CINER RESOURCES LP

February 10, 2022

This Amendment No. 4 (this "**Amendment**") to the First Amended and Restated Agreement of Limited Partnership of Ciner Resources LP (the "**Partnership**"), dated as of September 18, 2013, as amended by Amendment No. 1 thereto, dated as of May 2, 2014, as further amended by Amendment No. 2 thereto, dated as of November 5, 2015, as further amended by Amendment No. 3 thereto, dated as of April 28, 2017 (collectively, the "**Partnership Agreement**") is hereby adopted effective as of the date hereof by Sisecam Resource Partners LLC, a Delaware limited liability company (the "**General Partner**"), as general partner of the Partnership. Capitalized terms used but not defined herein have the respective meanings given to such terms in the Partnership Agreement. Each reference to "hereof", "herein", "hereunder", "hereby" and "this Agreement" in the Partnership Agreement shall, from and after the effective date of this Amendment, refer to the Partnership Agreement as amended by this Amendment.

WHEREAS, Section 2.2 of the Partnership Agreement provides that the General Partner may change the name of the Partnership at any time and from time to time;

WHEREAS, Section 13.2(a) of the Partnership Agreement provides that the General Partner, without the approval of any Partner, may amend any provision of the Partnership Agreement to reflect a change in the name of the Partnership; and

WHEREAS, acting pursuant to the power and authority granted to it under Sections 2.2 and 13.2(a) of the Partnership Agreement, the General Partner has determined to change the name of the Partnership and amend the Partnership Agreement to reflect such change of name.

NOW THEREFORE, the General Partner does hereby amend the Partnership Agreement as follows:

Section 1. Amendments.

(a). The definition of "General Partner" in Section 1.1 of the Partnership Agreement is hereby deleted in its entirety and the following definition shall be substituted in its place:

> "***General Partner***" means Sisecam Resource Partners LLC, a Delaware limited liability company, and its successors and permitted assigns that are admitted to the Partnership as general partner of the Partnership, in its capacity as general partner of the Partnership (except as the context otherwise requires).

(b). All other references to "Ciner Resource Partners LLC" and/or "General Partner" in the Partnership Agreement shall be deemed to refer to "Sisecam Resource Partners LLC."

(c). The definition of "Partnership" in Section 1.1 of the Partnership Agreement is hereby deleted in its entirety and the following definition shall be substituted in its place:

"***Partnership***" means Sisecam Resources LP, a Delaware limited partnership.

(d). The first sentence of Section 2.2 of the Partnership Agreement is hereby amended to read:

The name of the Partnership shall be "Sisecam Resources LP."

(e). All other references to "Ciner Resources LP" and/or the "Company" in the Partnership Agreement shall be deemed to refer to "Sisecam Resources LP."

(f). The definition of "Operating Company" in Section 1.1 of the Partnership Agreement is hereby deleted in its entirety and the following definition shall be substituted in its place:

"***Operating Company***" means Sisecam Wyoming LLC, a Delaware limited liability company, and any successors thereto.

(g). All references to "Ciner Wyoming Holding Co." and/or "Ciner Holdings" in the Partnership Agreement shall be deemed to refer to "Sisecam Chemicals Wyoming LLC."

(h). All references to "Ciner Resources Corporation" in the Partnership Agreement shall be deemed to refer to "Sisecam Chemicals Resources LLC."

Section 2. No Other Amendments.

Except as expressly modified and amended herein, the Partnership Agreement shall remain unchanged and in full force and effect.

Section 3. Governing Law.

This Amendment shall be construed in accordance with and governed by the laws of the State of Delaware, without regard to the principles of conflicts of law.

[Signature Page Follows]

IN WITNESS WHEREOF, this Amendment has been executed as of the date first above written.

PARTNERSHIP:

CINER RESOURCES LP

By: Ciner Resource Partners LLC,
its general partner

By: ____________________
Name: Oguz Erkan
Title: President, Chief Executive Officer and Director

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "CINER RESOURCE PARTNERS LLC", CHANGING ITS NAME FROM "CINER RESOURCE PARTNERS LLC" TO "SISECAM RESOURCE PARTNERS LLC", FILED IN THIS OFFICE ON THE EIGHTEENTH DAY OF FEBRUARY, A.D. 2022, AT 10:49 O`CLOCK A.M.

5322532 8100
SR# 20220586528

Authentication: 202710226
Date: 02-18-22

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 10:49 AM 02/18/2022
FILED 10:49 AM 02/18/2022
SR 20220586528 - File Number 5322532

STATE OF DELAWARE
CERTIFICATE OF AMENDMENT
OF
THE CERTIFICATE OF FORMATION
OF
CINER RESOURCE PARTNERS LLC

Pursuant to Section 18-202 of the

Limited Liability Company Act of the State of Delaware

Ciner Resource Partners LLC, a limited liability company duly organized and existing under the Limited Liability Company Act of the State of Delaware (the "**Company**"), does hereby certify that:

1. The name of the Company is: Ciner Resource Partners LLC.

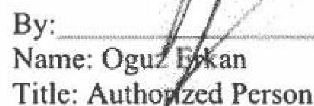
2. The Certificate of Formation of the Company is hereby amended by deleting the first paragraph thereof and inserting the following in lieu thereof:

   "FIRST: The name of the limited liability company is Sisecam Resource Partners LLC (hereinafter referred to as the "Company")."

3. This Certificate of Amendment shall be effective on the date of filing with the Secretary of State of the State of Delaware.

4. The foregoing amendment was duly adopted in accordance with the provisions of Section 18-302(d) of the Limited Liability Company Act of the State of Delaware.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Amendment on 10th day of February, 2022.



By:____________________
Name: Oguz Erkan
Title: Authorized Person

AMENDMENT NO. 2 TO
AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT
OF
CINER RESOURCE PARTNERS LLC

This Amendment No. 2 (this "Amendment") to the Amended and Restated Limited Liability Company Agreement of Ciner Resource Partners LLC (the "Company"), dated as of September 18, 2013, as amended by that certain Amendment No. 1, dated as of November 5, 2015 (the "LLC Agreement") is hereby adopted effective as of December 14, 2021 (the "Effective Date"), by Ciner Wyoming Holding Co., a Delaware corporation (the "Sole Member"), as the sole member of the Company. Capitalized terms used but not defined herein have the respective meanings given to such terms in the LLC Agreement. Each reference to "hereof," "hereto," "herein," "hereunder," "hereby" and "this Agreement" in the LLC Agreement shall, from and after the effective date of this Amendment, refer to the LLC Agreement as amended by this Amendment.

WHEREAS, Section 11.5 of the LLC Agreement provides that the LLC Agreement may be amended only by a written instrument executed by the Sole Member; and

WHEREAS, acting pursuant to the power and authority granted to it under Section 11.5 of the LLC Agreement, the Sole Member has determined to amend the LLC Agreement to increase the maximum number of directors constituting the board of the Company from nine (9) to eleven (11) directors.

NOW THEREFORE, the Sole Member does hereby amend the LLC Agreement as follows:

Section 1. Amendments.

(a) Exhibit A to the LLC Agreement is hereby deleted in its entirety and replaced with Exhibit A hereto.

(b) Section 5.2 of the LLC Agreement is hereby deleted in its entirety and replaced with the following:

"Section 5.2 *Number; Qualification; Tenure.*

(a) The number of Directors constituting the Board shall be at least three and no more than eleven, and may be fixed from time to time pursuant to a resolution adopted by the Sole Member. Each Director shall be elected or approved by the Sole Member and shall continue in office until the removal of such Director in accordance with the provisions of this Agreement or until the earlier death or resignation of such Director.

(b) The Directors of the Company in office as of the effective date of the second amendment to this Agreement are set forth on Exhibit A hereto."

2. Confirmation of LLC Agreement. Except as so modified pursuant to this Amendment, the LLC Agreement is ratified and confirmed in all respects and shall continue in full force and effect. The LLC Agreement, as amended by this Amendment, is deemed effective as of the Effective Date.

3. Governing Law. This Amendment shall be governed by, and construed under, the laws of the State of Delaware, without regard to the principles of conflicts of law.

4. Severability. Each provision of this Amendment shall be considered severable, and if for any reason any provision or provisions herein are determined to be invalid, unenforceable or illegal under any existing or future law, such invalidity, unenforceability or illegality shall not impair the operation of or affect those portions of this Amendment which are valid, enforceable and legal.

(Signature pages follow)

IN WITNESS WHEREOF, this Amendment has been executed as of the Effective Date.

SOLE MEMBER:

CINER WYOMING HOLDING CO.,
a Delaware corporation

By:__________________________
Name: Oguz Erkan
Title: President & CEO

EXHIBIT A

DIRECTORS

1. Atilla Ciner
2. Alec G. Dreyer
3. Michael E. Ducey
4. Oğuz Erkan
5. Thomas W. Jasper
6. Matthew H. Mead
7. Ahmet Tohma
8. Gürsel Usta

AMENDMENT NO. 3 TO
AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT
OF
CINER RESOURCE PARTNERS LLC

February 10, 2022

This Amendment No. 3 (this "**Amendment**") to the Amended and Restated Limited Liability Company Agreement of Ciner Resource Partners LLC (the "**Company**") dated as of September 18, 2013, as amended by that Amendment No. 1 thereto, dated November 5, 2015, and as further amended by Amendment No.2 thereto, dated December 14, 2021 (collectively, the "**LLC Agreement**"), is hereby adopted effective as of the date hereof ("**Effective Date**") by Sisecam Chemicals Wyoming LLC, a Delaware limited liability company, as the sole member of the Company ("**Sole Member**"). Capitalized terms used but not defined herein have the respective meanings given to such terms in the LLC Agreement. Each reference to "hereof", "herein", "hereunder", "hereby", and "this Agreement" in the LLC Agreement shall, from and after the Effective Date, refer to the LLC Agreement as amended by this Amendment.

WHEREAS, Section 11.5 of the LLC Agreement provides that the LLC Agreement may be amended only by a written instrument executed by the Sole Member; and

WHEREAS, acting pursuant to the power and authority granted to it under Section 11.5 of the LLC Agreement, the Sole Member has determined to amend the LLC Agreement to, among other things, reflect the change of name and Directors of the Company.

NOW THEREFORE, the Sole Member does hereby amend the LLC Agreement as follows:

Section 1. Amendments.

(a). All references to "Ciner Resource Partners LLC" and/or the "Company" in the LLC Agreement shall be deemed to refer to "Sisecam Resource Partners LLC."

(b). All references to "Ciner Wyoming Holding Co." and/or the "Sole Member" in the LLC Agreement shall be deemed to refer to "Sisecam Chemicals Wyoming LLC."

(c). The definition of "Partnership" in Section 1.1 of the LLC Agreement is hereby deleted in its entirety and the following definition shall be substituted in its place:

""***Partnership***" means Sisecam Resources LP, a Delaware limited partnership."

(d). Section 2.2 of the LLC Agreement is hereby deleted in its entirety and the following shall be substituted in its place:

Section 2.2 "*Name*. The name of the Company is "Sisecam Resource Partners LLC" and all Company business must be conducted in that name or such other names that comply with the applicable law as the Board or the Sole Member may select."

(e). Exhibit A to the LLC Agreement is hereby deleted in its entirety and replaced with a new Exhibit A attached hereto.

(f). Section 11.2 of the LLC Agreement is hereby deleted in its entirety and the following shall be substituted in its place:

> Section 11.2 *Notices*. All notices, demands, requests, consents, approvals or other communications (collectively, "Notices") required or permitted to be given hereunder or which are given with respect to this Agreement shall be in writing and shall be personally served, delivered by reputable air courier service with charges prepaid, or transmitted by hand delivery or facsimile, addressed as set forth below, or to such other address as such party shall have specified most recently by written notice. Notice shall be deemed given on the date of service or transmission if personally served or transmitted by facsimile. Notice otherwise sent as provided herein shall be deemed given upon delivery of such notice:
>
> To the Company:
>
> Sisecam Resource Partners LLC
> Five Concourse Parkway, Suite 2500
> Atlanta, GA 30328
> Attn: General Counsel
>
> To the Sole Member:
>
> Sisecam Chemicals Wyoming LLC
> Five Concourse Parkway, Suite 2500
> Atlanta, GA 30328
> Attn: General Counsel

Section 2. No Other Amendments.

Except as expressly modified and amended herein, the LLC Agreement shall remain unchanged and in full force and effect.

Section 3. Governing Law.

This Amendment shall be construed in accordance with and governed by the laws of the State of Delaware, without regard to the principles of conflicts of law.

[Signature Page Follows]

IN WITNESS WHEREOF, the Sole Member has executed this Amendment as of the Effective Date.

SOLE MEMBER:

SISECAM CHEMICALS WYOMING LLC

By:____________________
Name: Oguz Erkan
Title: President & CEO

EXHIBIT A

DIRECTORS

1. Oguz Erkan
2. Mustafa Gorkem Elvcrici
3. Abdullah Kilinc
4. Selma Oner
5. Tahsin Burhan Ergene
6. Hande Eroz
7. Gokhan Guralp
8. Huseyin Kuscu
9. Michael E. Ducey
10. Alec Dreyer
11. Thomas Jasper

EXHIBIT 4.1

DESCRIPTION OF SISECAM RESOURCES LP's SECURITIES

REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of December 31, 2021, Sisecam Resources LP (the "Partnership," "we," "our," or "us") had a single class of security registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended: common units representing limited partner interests (the "common units"). References to our "general partner" or "Sisecam GP" refer to Sisecam Resource Partners LLC. References to "Ciner Enterprises," refer to Ciner Enterprises Inc.; references to "Sisecam USA" refer to Sisecam Chemicals USA Inc.; and references to "SCW LLC" refer to Sisecam Chemicals Wyoming LLC (formerly known as Ciner Wyoming Holding Co.). The following description of common units is a summary and, as such, we do not deem them to be complete. It is subject to, and qualified in its entirety by, reference to the First Amended and Restated Agreement of Limited Partnership of Sisecam Resources LP, dated as of September 18, 2013 (as amended, our "partnership agreement"), which is incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.1 is a part. Please refer to our partnership agreement for additional information.

DESCRIPTION OF THE COMMON UNITS

The Common Units

The common units are a class of limited partner interests in us. The holders of common units are entitled to participate in partnership distributions and exercise the rights or privileges available to limited partners under our partnership agreement. For a description of the rights and preferences of holders of common units in and to Partnership cash distributions, please read this section and "Provisions of Our Partnership Agreement Relating to Cash Distributions" below. For a description of certain other rights and privileges of limited partners under our partnership agreement, including voting rights, please read "Description of Our Partnership Agreement" below.

Listing

Our common units are traded on The New York Stock Exchange under the symbol "SIRE."

Transfer Agent and Registrar

Duties

Equiniti Trust Company (formerly Wells Fargo Bank, N.A.) serves as the registrar and transfer agent for the common units. We will pay all fees charged by the transfer agent for transfers of common units except the following, which must be paid by unitholders:

- surety bond premiums to replace lost or stolen certificates, taxes and other governmental charges;
- special charges for services requested by a holder of a common unit; and
- other similar fees or charges.

There will be no charge to unitholders for disbursements of our cash distributions. We will indemnify the transfer agent, its agents and each of their stockholders, directors, officers and employees against all claims and losses that may arise out of acts performed or omitted for its activities in that capacity, except for any liability due to any gross negligence or intentional misconduct of the indemnified person or entity.

Resignation or Removal

The transfer agent may resign, by notice to us, or be removed by us. The resignation or removal of the transfer agent will become effective upon our appointment of a successor transfer agent and registrar and its acceptance of the appointment. If no successor has been appointed or has not accepted its appointment within 30 days of the resignation or removal, our general partner may act as the transfer agent and registrar until a successor is appointed

Transfer of Common Units

Upon the transfer of a common unit in accordance with our partnership agreement, the transferee of the common unit shall be admitted as a limited partner with respect to the common units transferred when such transfer and admission are reflected in our books and records. Each transferee:

- represents that the transferee has the capacity, power and authority to become bound by our partnership agreement;

- automatically agrees to be bound by the terms and conditions of, and is deemed to have executed, our partnership agreement; and

- gives the consents, waivers, acknowledgments and approvals contained in our partnership agreement.

Our general partner will cause any transfers to be recorded on our books and records from time to time as necessary to accurately reflect transfers but no less frequently than quarterly.

We may, at our discretion, treat the nominee holder of a common unit as the absolute owner. In that case, the beneficial holder's rights are limited solely to those that it has against the nominee holder as a result of any agreement between the beneficial owner and the nominee holder.

Common units are securities and any transfers are subject to the laws governing the transfer of securities. In addition to other rights acquired upon transfer, the transferor gives the transferee the right to become a substituted limited partner in our partnership for the transferred common units.

Until a common unit has been transferred on our books, we and the transfer agent may treat the record holder of the common unit as the absolute owner for all purposes, except as otherwise required by law or securities exchange regulations.

Number of Units

As of March 10, 2022, we had outstanding 19,788,208 common units and 399,000 general partner units.

PROVISIONS OF OUR PARTNERSHIP AGREEMENT RELATING TO CASH DISTRIBUTIONS

Set forth below is a summary of the significant provisions of our partnership agreement that relate to cash distributions.

Distributions of Available Cash

Our partnership agreement requires that, within 60 days after the end of each quarter, we distribute our available cash to unitholders of record on the applicable record date.

Available cash generally means, for any quarter, all cash and cash equivalents on hand at the end of that quarter:

- less, the amount of cash reserves established by our general partner to:
  - provide for the proper conduct of our business (including reserves for our future capital expenditures and for anticipated future credit needs subsequent to that quarter);
  - comply with applicable law, any of our debt instruments or other agreements; or
  - provide funds for distributions to our unitholders and to our general partner for any one or more of the next four quarters (provided that our general partner may not establish cash reserves for distributions if the effect of the establishment of such reserves will prevent us from distributing the minimum quarterly distribution on all common units and any cumulative arrearages on such common units for the current quarter);
- plus, if our general partner so determines, all or any portion of the cash on hand on the date of determination of available cash for the quarter, resulting from working capital borrowings made subsequent to the end of such quarter.

The purpose and effect of the last bullet point above is to allow our general partner, if it so decides, to use cash received by us after the end of the quarter but on or before the date of determination of available cash for the quarter, including cash on hand from working capital borrowings made after the end of the quarter but on or before the date of determination of available cash for that quarter, to pay distributions to unitholders. Under our partnership agreement, working capital borrowings are generally borrowings that are made under a credit facility, commercial paper facility or similar financing arrangement, and in all cases are used solely for working capital purposes or to pay distributions to partners, and with the intent of the borrower to repay such borrowings within 12 months with funds other than from additional working capital borrowings.

Our general partner has considerable discretion in determining the amount of available cash, the amount of distributions and the decision to make any distribution. Although our partnership agreement requires that we distribute all of our available cash quarterly, there is no guarantee that we will make quarterly cash distributions to our unitholders at our current quarterly distribution level of $0.650 per unit, at the minimum quarterly distribution level (as listed below) or at any other rate, and we have no legal obligation to do so.

General Partner Interest and Incentive Distribution Rights

Our partnership agreement provides that our general partner initially is entitled, with respect to its general partner interest, to 2.0% of all distributions that we make prior to our liquidation. Our general partner has the right, but not

the obligation, to contribute up to a proportionate amount of capital to us in order to maintain a 2% general partner interest if we issue additional units. Our general partner's initial 2% interest in our cash distributions will be proportionately reduced if we issue additional units in the future (other than the issuance of common units upon a reset of the incentive distribution rights), and our general partner does not contribute a proportionate amount of capital to us in order to maintain its 2% general partner interest. As of December 31, 2021, our general partner held an approximate 2% general partner interest.

Our general partner currently holds incentive distribution rights that represent the right to receive increasing percentages, up to a maximum of 48%, of the available cash we distribute from operating surplus (as defined in our partnership agreement) after we have achieved the minimum quarterly distribution and the target distribution levels. Our general partner currently holds the incentive distribution rights, but may transfer these rights separately from its general partner interest, subject to certain restrictions in our partnership agreement.

Percentage Allocations of Distributions from Operating Surplus

The following table illustrates the percentage allocations of distributions from operating surplus between the unitholders and our general partner based on the specified target distribution levels. The amounts set forth under the column heading "Marginal Percentage Interest in Distributions" are the approximate percentage interests of our general partner and the unitholders in any distributions from operating surplus we distribute up to and including the corresponding amount in the column "Total Quarterly Distribution per Unit Target Amount." The percentage interests shown for our unitholders and our general partner for the minimum quarterly distribution also apply to quarterly distribution amounts that are less than the minimum quarterly distribution.

Under our partnership agreement, our general partner has considerable discretion to determine the amount of available cash (as defined therein) for distribution each quarter to the Partnership's unitholders, including the discretion to establish cash reserves that would limit the amount of available cash eligible for distribution to the Partnership's unitholders for any quarter. The Partnership does not guarantee that it will pay the target amount of the minimum quarterly distribution listed below (or any distributions) on its units in any quarter. The percentage interests set forth below for our general partner (1) include its 2.0% general partner interest, (2) assume that our general partner has contributed any additional capital necessary to maintain its 2.0% general partner interest, (3) assume that our general partner has not transferred its incentive distribution rights and (4) assume that we do not issue additional classes of equity securities.

	Total Quarterly Distribution per Unit Target Amount	Marginal Percentage Interest in Distributions	
			General Partner
Minimum Quarterly Distribution	$0.50000	98.0%	2.0%
First Target Distribution	above $0.5000 up to $0.5750	98.0%	2.0%
Second Target Distribution	above $0.5750 up to $0.6250	85.0%	15.0%
Third Target Distribution	above $0.6250 up to $0.7500	75.0%	25.0%
Thereafter	above $0.7500	50.0%	50.0%

Distributions of Cash Upon Liquidation

If we dissolve in accordance with our partnership agreement, we will sell or otherwise dispose of our assets in a process called liquidation. We will first apply the proceeds of liquidation to the payment of our creditors. We will distribute any remaining proceeds to the unitholders and our general partner, in accordance with their capital account balances, as adjusted to reflect any gain or loss upon the sale or other disposition of our assets in liquidation. Any

further net gain recognized upon liquidation will be allocated in a manner that takes into account the incentive distribution rights of our general partner.

DESCRIPTION OF OUR PARTNERSHIP AGREEMENT

The following is a summary of the material provisions of our partnership agreement. Please refer to our partnership agreement for additional information, which is incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.1 is a part. We summarize the following provisions of our partnership agreement elsewhere in this Exhibit 4.1:

- with regard to the rights and preferences of holders of common units in and to Partnership cash distributions, please read "Provisions of Our Partnership Agreement Relating to Cash Distributions" above; and

- with regard to the transfer of common units, please read "Description of the Common Units—Transfer of Common Units" above.

Capital Contributions

Unitholders are not obligated to make additional capital contributions, except as described under "—Limited Liability" below.

For a discussion of our general partner's right to contribute capital to maintain an approximate 2% general partner interest if we issue additional units, please read "—Issuance of Additional Interests" below.

Voting Rights

The following is a summary of the unitholder vote required for approval of the matters specified below. Matters that require the approval of a "unit majority" require the approval of a majority of the outstanding common units, voting as a single class.

In voting their common units, our general partner and its affiliates will have no duty or obligation whatsoever to us or the limited partners, including any duty to act in the best interests of us or the limited partners, other than the implied contractual covenant of good faith and fair dealing.

Issuance of additional units	No approval right.
Amendment of our partnership agreement	Certain amendments may be made by our general partner without the approval of the unitholders. Other amendments generally require the approval of a unit majority. Please read "—Amendment of Our Partnership Agreement" below.
Merger of our Partnership or the sale of all or substantially all of our assets	Unit majority in certain circumstances. Please read "—Merger, Consolidation, Conversion, Sale or Other Disposition of Assets" below.
Dissolution of our Partnership	Unit majority. Please read "—Dissolution" below.
Continuation of our business upon dissolution	Unit majority. Please read "—Dissolution" below.
Withdrawal of our general partner	Under most circumstances, the approval of unitholders holding at least a majority of the outstanding common units, excluding common units held by our general partner and its affiliates, is required for the withdrawal of our general partner prior to September 30, 2023 in a manner that would cause a dissolution of our Partnership.
Removal of our general partner	Not less than 66 2/3% of the outstanding units, voting as a single class, including units held by our general partner and its affiliates.
Transfer of the general partner interest	No approval right.
Transfer of incentive distribution rights	No approval right.
Reset of incentive distribution rights	No approval right.
Transfer of ownership interests in our general partner	No approval right.

If any person or group other than our general partner and its affiliates acquires beneficial ownership of 20% or more of any class of units, that person or group loses voting rights on all of its units. This loss of voting rights does not apply to any person or group that acquires the units from our general partner or its affiliates and any transferees of that person or group approved by our general partner or to any person or group who acquires the units with the specific prior approval of our general partner.

Applicable Law; Forum, Venue and Jurisdiction

Our partnership agreement is governed by Delaware law. Our partnership agreement requires that any claims, suits, actions or proceedings:

- arising out of or relating in any way to our partnership agreement (including any claims, suits or actions to interpret, apply or enforce the provisions of our partnership agreement or the duties, obligations or liabilities among limited partners or of limited partners to us, or the rights or powers of, or restrictions on, the limited partners or us);

- brought in a derivative manner on our behalf;

- asserting a claim of breach of a duty (including a fiduciary duty) owed by any director, officer or other employee of us or our general partner, or owed by our general partner, to us or the limited partners;

- asserting a claim arising pursuant to any provision of the Delaware Revised Uniform Limited Partnership Act, as amended (the "Delaware Act"); or

- asserting a claim governed by the internal affairs doctrine;

shall be exclusively brought in the Court of Chancery of the State of Delaware, regardless of whether such claims, suits, actions or proceedings sound in contract, tort, fraud or otherwise, are based on common law, statutory, equitable, legal or other grounds, or are derivative or direct claims. Each of the partners and each person or group holding any beneficial interest in us is irrevocably consenting to these limitations and provisions regarding claims, suits, actions or proceedings and submitting to the exclusive jurisdiction of the Court of Chancery of the State of Delaware in connection with any such claims, suits, actions or proceedings.

Limited Liability

Assuming that a limited partner does not participate in the control of our business within the meaning of the Delaware Act and that it otherwise acts in conformity with the provisions of our partnership agreement, its liability under the Delaware Act will be limited, subject to possible exceptions, to the amount of capital it is obligated to contribute to us for its common units plus its share of any undistributed profits and assets. However, if it were determined that the right, or exercise of the right, by the limited partners as a group:

- to remove or replace our general partner;

- to approve some amendments to our partnership agreement; or

- to take other action under our partnership agreement;

constituted "participation in the control" of our business for purposes of the Delaware Act, then the limited partners could be held personally liable for our obligations under the laws of Delaware, to the same extent as our general partner. This liability would extend to persons who transact business with us under the reasonable belief that the limited partner is a general partner. Neither our partnership agreement nor the Delaware Act specifically provides for legal recourse against our general partner if a limited partner were to lose limited liability through any fault of our general partner. While this does not mean that a limited partner could not seek legal recourse, we know of no precedent for this type of a claim in Delaware case law.

Under the Delaware Act, a limited partnership may not make a distribution to a partner if, after the distribution, all liabilities of the limited partnership, other than liabilities to partners on account of their partnership interests and liabilities for which the recourse of creditors is limited to specific property of the partnership, would exceed the fair value of the assets of the limited partnership. For the purpose of determining the fair value of the assets of a limited partnership, the Delaware Act provides that the fair value of property subject to liability for which recourse of creditors is limited shall be included in the assets of the limited partnership only to the extent that the fair value of that property exceeds the nonrecourse liability. The Delaware Act provides that a limited partner who receives a distribution and knew at the time of the distribution that the distribution was in violation of the Delaware Act shall be liable to the limited partnership for the amount of the distribution for three years.

Our subsidiary conducts business in Wyoming, but we may have subsidiaries that conduct business in other states or countries in the future. Maintenance of our limited liability as owner of our operating subsidiaries may require compliance with legal requirements in the jurisdictions in which the operating subsidiaries conduct business, including qualifying our subsidiaries to do business there.

Limitations on the liability of members or limited partners for the obligations of a limited liability company or limited partnership have not been clearly established in many jurisdictions. If, by virtue of our ownership interest in our subsidiaries or otherwise, it were determined that we were conducting business in any jurisdiction without compliance with the applicable limited partnership or limited liability company statute, or that the right or exercise of the right by the limited partners as a group to remove or replace our general partner, to approve some amendments to our partnership agreement, or to take other action under our partnership agreement constituted "participation in the control" of our business for purposes of the statutes of any relevant jurisdiction, then the limited partners could be held personally liable for our obligations under the law of that jurisdiction to the same extent as our general partner under the circumstances. We will operate in a manner that our general partner considers reasonable and necessary or appropriate to preserve the limited liability of the limited partners.

Issuance of Additional Interests

Our partnership agreement authorizes us to issue an unlimited number of additional partnership interests (except for general partner interests) for the consideration and on the terms and conditions determined by our general partner without the approval of any limited partners.

It is possible that we will fund acquisitions through the issuance of additional common units or other partnership interests. Holders of any additional common units we issue will be entitled to share equally with the then-existing common unitholders in our distributions. In addition, the issuance of additional common units or other partnership interests may dilute the value of the interests of the then-existing common unitholders in our net assets.

In accordance with Delaware law and the provisions of our partnership agreement, we may also issue additional partnership interests that, as determined by our general partner, may have rights to distributions or special voting rights to which the common units are not entitled. In addition, our partnership agreement does not prohibit our subsidiaries from issuing equity interests, which may effectively rank senior to the common units.

Upon issuance of additional limited partner interests (other than the issuance of common units in connection with a reset of the incentive distribution target levels), our general partner will be entitled, but not required, to make additional capital contributions to the extent necessary to maintain a 2% general partner interest in us. Our general partner's approximate 2% interest in us will be reduced if we issue additional units in the future and our general partner does not contribute a proportionate amount of capital to us to maintain an approximate 2% general partner interest. Moreover, our general partner has the right, which it may from time to time assign in whole or in part to any of its affiliates, to purchase common units or other partnership interests or to make additional capital contributions to us whenever, and on the same terms that, we issue partnership interests to persons other than our general partner and its affiliates, to the extent necessary to maintain the percentage interest of our general partner and its affiliates, including such interest represented by common units, that existed immediately prior to each issuance. The common unitholders will not have preemptive rights under our partnership agreement to acquire additional common units or other partnership interests.

Amendment of Our Partnership Agreement

General

Amendments to our partnership agreement may be proposed only by our general partner. However, our general partner has no duty or obligation to propose any amendment and may decline to do so free of any duty or obligation whatsoever to us or the limited partners, including any duty to act in the best interests of us or the limited partners, other than the implied contractual covenant of good faith and fair dealing. In order to adopt a proposed amendment, other than the amendments discussed below, our general partner is required to seek written approval of the holders of the number of units required to approve the amendment or to call a meeting of the limited partners to consider and vote upon the proposed amendment. Except as described below, an amendment must be approved by a unit majority.

Prohibited Amendments

No amendment may be made that would:

- enlarge the obligations of any limited partner without its consent, unless approved by at least a majority of the type or class of limited partner interests so affected; or

- enlarge the obligations of, restrict in any way any action by or rights of, or reduce in any way the amounts distributable, reimbursable or otherwise payable by us to our general partner or any of its affiliates without the consent of our general partner, which consent may be given or withheld in its sole discretion.

The provisions of our partnership agreement preventing the amendments having the effects described in the clauses above can be amended upon the approval of the holders of at least 90.0% of the outstanding units, voting as a single class (including units owned by our general partner and its affiliates). As of March 10, 2022, SCW LLC owned an aggregate of 14,551,000 common units, representing an aggregate 73.5% of the common units in us.

No Limited Partner Approval

Our general partner may generally make amendments to our partnership agreement without the approval of any limited partner to reflect:

- a change in our name, the location of our principal place of business, our registered agent or our registered office;

- the admission, substitution, withdrawal or removal of partners in accordance with our partnership agreement;

- a change that our general partner determines to be necessary or appropriate to qualify or continue our qualification as a limited partnership or other entity in which the limited partners have limited liability under the laws of any state or to ensure that neither we nor any of our subsidiaries will be treated as an association taxable as a corporation or otherwise taxed as an entity for U.S. federal income tax purposes;

- an amendment that is necessary, in the opinion of our counsel, to prevent us or our general partner or its directors, officers, agents or trustees from in any manner being subjected to the provisions of the Investment Company Act of 1940, the Investment Advisors Act of 1940 or "plan asset" regulations adopted under the Employee Retirement Income Security Act of 1974, or ERISA, each as amended, whether or not substantially similar to plan asset regulations currently applied or proposed;

- an amendment that our general partner determines to be necessary or appropriate in connection with authorization or issuance of additional partnership interests;

- any amendment expressly permitted in our partnership agreement to be made by our general partner acting alone;

- an amendment effected, necessitated or contemplated by a merger agreement or plan of conversion that has been approved under the terms of our partnership agreement;

- any amendment that our general partner determines to be necessary or appropriate for the formation by us of, or our investment in, any corporation, partnership, joint venture, limited liability company or other entity, as otherwise permitted by our partnership agreement;

- a change in our fiscal year or taxable year and any other changes that our general partner determines to be necessary or appropriate as a result of such change;

- conversions into, mergers with or conveyances to another limited liability entity that is newly formed and has no assets, liabilities or operations at the time of the conversion, merger or conveyance other than those it receives by way of the conversion, merger or conveyance; or

- any other amendments substantially similar to any of the matters described in the clauses above.

In addition, our general partner may make amendments to our partnership agreement, without the approval of any limited partner, if our general partner determines that those amendments:

- do not adversely affect the limited partners, considered as a whole, or any particular class of limited partners, in any material respect;

- are necessary or appropriate to satisfy any requirements, conditions or guidelines contained in any opinion, directive, order, ruling or regulation of any federal or state agency or judicial authority or contained in any federal or state statute;

- are necessary or appropriate to facilitate the trading of limited partner interests or to comply with any rule, regulation, guideline or requirement of any securities exchange on which the limited partner interests are or will be listed for trading;

- are necessary or appropriate for any action taken by our general partner relating to splits or combinations of units under the provisions of our partnership agreement; or

- are required to effect the intent expressed in this prospectus or the intent of the provisions of our partnership agreement or are otherwise contemplated by our partnership agreement.

Opinion of Counsel and Unitholder Approval

Any amendment that our general partner determines adversely affects in any material respect one or more particular classes of limited partners will require the approval of at least a majority of the class or classes so affected, but no vote will be required by any class or classes of limited partners that our general partner determines are not adversely affected in any material respect. Any amendment that would have a material adverse effect on the rights or preferences of any type or class of outstanding units in relation to other classes of units will require the approval of at least a majority of the type or class of units so affected. Any amendment that would reduce the voting percentage required to take any action other than to remove the general partner or call a meeting of unitholders is required to be approved by written consent or the affirmative vote of limited partners whose aggregate outstanding units constitute not less than the voting requirement sought to be reduced. Any amendment that would increase the percentage of units required to remove the general partner or call a meeting of unitholders must be approved by written consent or the affirmative vote of limited partners whose aggregate outstanding units constitute not less than the percentage sought to be increased. For amendments of the type not requiring unitholder approval, our general partner will not be required to obtain an opinion of counsel that an amendment will neither result in a loss of limited liability to the limited partners nor result in our being treated as a taxable entity for U.S. federal income tax purposes in connection with any of the amendments. No other amendments to our partnership agreement will become effective without the approval of holders of at least 90% of the outstanding units, voting as a single class, unless we first obtain an opinion of counsel to the effect that the amendment will not affect the limited liability under applicable law of any of our limited partners.

Merger, Consolidation, Conversion, Sale or Other Disposition of Assets

A merger, consolidation or conversion of us requires the prior consent of our general partner. However, our general partner will have no duty or obligation to consent to any merger, consolidation or conversion and may decline to do so free of any duty or obligation whatsoever to us or the limited partners, including any duty to act in good faith or in the best interest of us or the limited partners, other than the implied contractual covenant of good faith and fair dealing.

In addition, our partnership agreement generally prohibits our general partner, without the prior approval of the holders of a unit majority from causing us to sell, exchange or otherwise dispose of all or substantially all of our assets in a single transaction or a series of related transactions, including by way of merger, consolidation or other combination. Our general partner may, however, mortgage, pledge, hypothecate or grant a security interest in all or substantially all of our assets without such approval. Our general partner may also sell all or substantially all of our assets under a foreclosure or other realization upon those encumbrances without such approval. Finally, our general partner may consummate any merger with another limited liability entity without the prior approval of our unitholders if we are the surviving entity in the transaction, our general partner has received an opinion of counsel regarding limited liability and tax matters, the transaction would not result in an amendment to our partnership agreement (requiring unitholder approval, each of our units will be an identical unit of our Partnership following the transaction and the partnership interests to be issued do not exceed 20% of our outstanding partnership interests (other than incentive distribution rights) immediately prior to the transaction. If the conditions specified in our partnership agreement are satisfied, our general partner may convert us or any of our subsidiaries into a new limited liability entity or merge us or any of our subsidiaries into, or convey all of our assets to, a newly formed entity, if the sole purpose of that conversion, merger or conveyance is to effect a mere change in our legal form into another limited liability entity, we have received an opinion of counsel regarding limited liability and tax matters and the governing instruments of the new entity provide the limited partners and our general partner with the same rights and obligations as contained in our partnership agreement. Our unitholders are not entitled to dissenters' rights of appraisal under our partnership agreement or applicable Delaware law in the event of a conversion, merger or consolidation, a sale of substantially all of our assets or any other similar transaction or event.

Dissolution

We will continue as a limited partnership until dissolved under our partnership agreement. We will dissolve upon:

- the election of our general partner to dissolve us, if approved by the holders of units representing a unit majority;
- there being no limited partners, unless we are continued without dissolution in accordance with applicable Delaware law;
- the entry of a decree of judicial dissolution of our partnership; or
- the withdrawal or removal of our general partner or any other event that results in its ceasing to be our general partner other than by reason of a transfer of its general partner interest in accordance with our partnership agreement or its withdrawal or removal following the approval and admission of a successor.

Upon a dissolution under the last clause above, the holders of a unit majority may also elect, within 90 days thereafter, to continue our business on the same terms and conditions described in our partnership agreement by appointing as a successor general partner an individual or entity approved by the holders of units representing a unit majority, subject to our receipt of an opinion of counsel to the effect that:

- the action would not result in the loss of limited liability under Delaware law of any limited partner; and
- neither we nor any of our subsidiaries would be treated as an association taxable as a corporation or otherwise be taxable as an entity for U.S. federal income tax purposes upon the exercise of that right to continue (to the extent not already so treated or taxed).

Liquidation and Distribution of Proceeds

Upon our dissolution, unless our business is continued, the liquidator authorized to wind up our affairs will, acting with all of the powers of our general partner that are necessary or appropriate, dispose of our assets and apply the proceeds of the liquidation as described in "Provisions of Our Partnership Agreement Relating to Cash Distributions—Distributions of Cash Upon Liquidation" above. The liquidator may defer liquidation or distribution of our assets for a reasonable period of time or distribute assets to partners in kind if it determines that a sale would be impractical or would cause undue loss to our partners.

Withdrawal or Removal of Our General Partner

Except as described below, our general partner has agreed not to withdraw voluntarily as our general partner prior to September 30, 2023 without obtaining the approval of the holders of at least a majority of the outstanding common units, excluding common units held by our general partner and its affiliates, and furnishing an opinion of counsel regarding limited liability and tax matters. On or after September 30, 2023, our general partner may withdraw as general partner without first obtaining approval of any unitholder by giving 90 days' written notice, and that withdrawal will not constitute a violation of our partnership agreement. Notwithstanding the information above, our general partner may withdraw without unitholder approval upon 90 days' notice to the limited partners if at least 50% of the outstanding common units are held or controlled by one person and its affiliates, other than our general partner

and its affiliates. In addition, our partnership agreement permits our general partner, in some instances, to sell or otherwise transfer all of its general partner interest in us without the approval of the unitholders. Please read "—Transfer of General Partner Interest" below.

If our general partner gives notice of withdrawal, the holders of a unit majority may, prior to the effective date of such withdrawal, elect a successor to that withdrawing general partner. If a successor is not elected, or is elected but an opinion of counsel regarding limited liability and tax matters cannot be obtained, we will be dissolved, wound up and liquidated, unless within a specified period after that notice of withdrawal, the holders of a unit majority agree in writing to continue our business and to appoint a successor general partner. Please read "—Dissolution" above.

Our general partner may not be removed unless that removal is approved by the vote of the holders of not less than 66 2/3% of the outstanding units, voting together as a single class, including units held by our general partner and its affiliates, and we receive an opinion of counsel regarding limited liability and tax matters. Any removal of our general partner is also subject to the approval of a successor general partner by the vote of the holders of a majority of the outstanding common units, voting as a separate class, including those held by our general partner and its affiliates. The ownership of more than 33 1/3% of the outstanding units by our general partner and its affiliates gives them the ability to prevent our general partner's removal. As of March 10, 2022, SCW LLC owns approximately 73.5% of our outstanding common units.

In the event of the removal of our general partner under circumstances where cause exists or withdrawal of our general partner where that withdrawal violates our partnership agreement, a successor general partner will have the option to purchase the general partner interest and incentive distribution rights of the departing general partner and its affiliates for a cash payment equal to the fair market value of those interests. Under all other circumstances where our general partner withdraws or is removed by the limited partners, the departing general partner will have the option to require the successor general partner to purchase the general partner interest and the incentive distribution rights of the departing general partner and its affiliates for fair market value. In each case, this fair market value will be determined by agreement between the departing general partner and the successor general partner. If no agreement is reached within 30 days after the effective date of such departing general partner's withdrawal or removal, an independent investment banking firm or other independent expert selected by the departing general partner and the successor general partner will determine the fair market value. Or, if the departing general partner and the successor general partner cannot agree upon an expert within 45 days after the effective date of such withdrawal or removal, then an expert chosen by agreement of the experts selected by each of them will determine the fair market value.

If the option described above is not exercised by either the departing general partner or the successor general partner, the departing general partner's general partner interest and all its and its affiliates' incentive distribution rights will automatically convert into common units equal to the fair market value of those interests as determined by an investment banking firm or other independent expert selected in the manner described in the preceding paragraph.

In addition, we will be required to reimburse the departing general partner for all amounts due the departing general partner, including, all employee-related liabilities, including severance liabilities, incurred in connection with the termination of any employees employed for our benefit by the departing general partner or its affiliates.

Transfer of General Partner Interest

At any time, our general partner may transfer all or any of its general partner interest to another person without the approval of any limited partner or any other person. As a condition of this transfer, the transferee must, among

other things, assume the rights and duties of our general partner, agree to be bound by the provisions of our partnership agreement and furnish an opinion of counsel regarding limited liability and tax matters.

Transfer of Ownership Interests in the General Partner

At any time, Ciner Enterprises and Sisecam USA and their respective affiliates may sell or transfer all or part of their ownership interests in our general partner to an affiliate or third-party without the approval of our unitholders.

Transfer of Incentive Distribution Rights

At any time, our general partner or any other holder of incentive distribution rights may sell or transfer its incentive distribution rights without the approval of any limited partner or any other person.

Change of Management Provisions

Our partnership agreement contains specific provisions that are intended to discourage a person or group from attempting to remove Sisecam GP as our general partner or from otherwise changing our management. Please read "—Withdrawal or Removal of Our General Partner" above for a discussion of certain consequences of the removal of our general partner. If any person or group, other than our general partner and its affiliates, acquires beneficial ownership of 20% or more of any class of units, that person or group loses voting rights on all of its units. This loss of voting rights does not apply in certain circumstances. Please read "—Meetings; Voting" below.

Our partnership agreement also provides that if our general partner is removed as our general partner under circumstances where cause does not exist and units held by our general partner and its affiliates are not voted in favor of that removal, our general partner will have the right to convert its general partner units and its incentive distribution rights into common units or to receive cash in exchange for those interests based on the fair market value of those interests as of the effective date of its removal.

Limited Call Right

If at any time our general partner and its affiliates own more than 80% of the total limited partner interests of any class then outstanding, our general partner will have the right, which it may assign and transfer in whole or in part to any of its affiliates or beneficial owners or to us, exercisable at its option to purchase all, but not less than all, of the limited partner interests of the class then outstanding held by unaffiliated persons, as of a record date to be selected by our general partner, on at least 10, but not more than 90, days' notice. The purchase price in the event of this purchase is the greater of:

- the highest cash price paid by our general partner or any of its affiliates for any limited partner interests of the class purchased within the 90 days preceding the date on which our general partner first mails notice of its election to purchase those limited partner interests; and

- the average of the daily closing prices of the Partnership securities of such class over the 20 consecutive trading days preceding the date that is three business days before the date the notice is mailed.

As a result of our general partner's right to purchase outstanding limited partner interests, a holder of limited partner interests may have his limited partner interests purchased at an undesirable time or at a price that may be lower

than market prices at various times prior to such purchase or lower than a unitholder may anticipate the market price to be in the future. The tax consequences to a unitholder of the exercise of this call right are the same as a sale by that unitholder of his common units in the market.

Redemption of Ineligible Holders

In order to avoid a substantial risk of cancellation or forfeiture of any property, including any governmental permit, endorsement or other authorization, in which we have an interest as the result of any federal, state or local law or regulation concerning the nationality, citizenship or other related status of any unitholder, our general partner may at any time request unitholders to certify as to, or provide other information with respect to, their nationality, citizenship or other related status.

The certifications as to nationality, citizenship or other related status can be changed in any manner our general partner determines is necessary or appropriate to implement its original purpose.

If a unitholder fails to furnish the certification or other requested information within a reasonable period of time specified by our general partner or if our general partner determines, with the advice of counsel, upon review of such certification or other information that a unitholder does not meet the status set forth in the certification, we will have the right to redeem all of the units held by such unitholder at the current market price (the date of determination of which will be the date fixed for redemption).

The purchase price will be paid in cash or by delivery of a promissory note, as determined by our general partner. Any such promissory note will bear interest at the rate of 5.0% annually and be payable in three equal annual installments of principal and accrued interest, commencing one year after the redemption date. Further, the units will not be entitled to any allocations of income or loss, distributions or voting rights while held by such unitholder.

Meetings; Voting

Except as described below regarding a person or group owning 20% or more of any class of units then outstanding, record holders of units on the record date will be entitled to notice of, and to vote at, meetings of our limited partners and to act upon matters for which approvals may be solicited.

Our general partner does not anticipate that any meeting of our unitholders will be called in the foreseeable future. Any action that is required or permitted to be taken by the unitholders may be taken either at a meeting of the unitholders or without a meeting if consents in writing describing the action so taken are signed by holders of the number of units necessary to authorize or take that action at a meeting. Meetings of the limited partners may be called by our general partner or by unitholders owning at least 20% of the outstanding units of the class or classes for which a meeting is proposed. Unitholders may vote either in person or by proxy at meetings. The holders of a majority of the outstanding units of the class or classes for which a meeting has been called, represented in person or by proxy, will constitute a quorum, unless any action by the unitholders requires approval by holders of a greater percentage of the units, in which case the quorum will be the greater percentage.

Each record holder of a unit has a vote according to his percentage interest in us, although additional limited partner interests having special voting rights could be issued. Please read "Description of Our Partnership Agreement—Issuance of Additional Interests" above. However, if at any time any person or group, other than our general partner and its affiliates, or a direct or subsequently approved transferee of our general partner or its affiliates and purchasers specifically approved by our general partner, acquires, in the aggregate, beneficial ownership of 20%

or more of any class of units then outstanding, that person or group will lose voting rights on all of its units and the units may not be voted on any matter and will not be considered to be outstanding when sending notices of a meeting of unitholders, calculating required votes, determining the presence of a quorum or for other similar purposes. Common units held in nominee or street name account will be voted by the broker or other nominee in accordance with the instruction of the beneficial owner unless the arrangement between the beneficial owner and his nominee provides otherwise.

Any notice, demand, request, report or proxy material required or permitted to be given or made to record common unitholders under our partnership agreement will be delivered to the record holder by us or by the transfer agent.

Status as Limited Partner

By transfer of common units in accordance with our partnership agreement, each transferee of common units shall be admitted as a limited partner with respect to the common units transferred when such transfer and admission are reflected in our books and records. Except as described under "—Limited Liability" above, the common units will be fully paid, and unitholders will not be required to make additional contributions.

Indemnification

Under our partnership agreement, in most circumstances, we will indemnify the following persons, to the fullest extent permitted by law, from and against all losses, claims, damages or similar events:

- our general partner;
- any departing general partner;
- any person who is or was an affiliate of our general partner or any departing general partner;
- any person who is or was a manager, managing member, general partner, director, officer, employee, agent, fiduciary or trustee of our Partnership, our subsidiaries, our general partner, any departing general partner or any of their affiliates;
- any person who is or was serving at the request of a general partner, any departing general partner or any of their respective affiliates as a manager, managing member, general partner, director, officer, employee, agent, fiduciary or trustee of another person owing a fiduciary duty to us or our subsidiaries; and
- any person designated by our general partner.

Any indemnification under these provisions will only be out of our assets. Unless our general partner otherwise agrees, it will not be personally liable for, or have any obligation to contribute or lend funds or assets to us to enable us to effectuate, indemnification. We may purchase insurance against liabilities asserted against and expenses incurred by persons for our activities, regardless of whether we would have the power to indemnify the person against liabilities under our partnership agreement.

Reimbursement of Expenses

Our partnership agreement requires us to reimburse our general partner and its affiliates for all direct and indirect expenses they incur or payments they make on our behalf and all other expenses allocable to us or otherwise incurred by our general partner and its affiliates in connection with operating our business. Our partnership agreement does not set a limit on the amount of expenses for which our general partner and its affiliates may be reimbursed. These expenses may include salary, bonus, incentive compensation and other amounts paid to persons who perform services for us or on our behalf and expenses allocated to our general partner by its affiliates. Our general partner is entitled to determine in good faith the expenses that are allocable to us.

Books and Reports

Our general partner is required to keep appropriate books of our business at our principal offices. These books will be maintained for both tax and financial reporting purposes on an accrual basis. For tax and fiscal reporting purposes, our fiscal year is the calendar year.

We will furnish or make available to record holders of our common units, within 105 days after the close of each fiscal year, an annual report containing audited consolidated financial statements and a report on those consolidated financial statements by our independent public accountants. Except for our fourth quarter, we will also furnish or make available summary financial information within 50 days after the close of each quarter. We will be deemed to have made any such report available if we file such report with the United States Securities and Exchange Commission (the "SEC") on EDGAR or make the report available on our or the SEC's website.

We will furnish each record holder with information reasonably required for federal, state and local tax reporting purposes within 90 days after the close of each calendar year. This information is expected to be furnished in summary form so that some complex calculations normally required of partners can be avoided. Our ability to furnish this summary information to our unitholders will depend on their cooperation in supplying us with specific information. Every unitholder will receive information to assist him in determining his federal and state tax liability and in filing his federal and state income tax returns, regardless of whether he supplies us with the necessary information.

Right to Inspect Our Books and Records

Our partnership agreement provides that a limited partner can, for a purpose reasonably related to his interest as a limited partner, upon reasonable written demand stating the purpose of such demand and at his own expense, have furnished to him:

- a current list of the name and last known business, residence or mailing address of each partner;
- information as to the amount of cash, and a description and statement of the agreed value of any other capital contribution, contributed or to be contributed by each partner and the date on which each became a partner;
- copies of our partnership agreement, our certificate of limited partnership and related amendments thereto; and
- certain information regarding the status of our business and financial condition.

Under our partnership agreement, however, each of our limited partners and other persons who acquire interests in our partnership interests, do not have rights to receive information from us or any of the persons we indemnify as described above under "—Indemnification" above for the purpose of determining whether to pursue litigation or assist

in pending litigation against us or those indemnified persons relating to our affairs, except pursuant to the applicable rules of discovery relating to the litigation commenced by the person seeking information.

Our general partner may, and intends to, keep confidential from the limited partners trade secrets or other information the disclosure of which our general partner believes in good faith is not in our best interests or that we are required by law or by agreements with third parties to keep confidential.

Registration Rights

Under our partnership agreement, we have agreed to register for resale under the Securities Act of 1933, as amended (the "Securities Act") and applicable state securities laws any common units or other limited partner interests proposed to be sold by our general partner or any of its affiliates or their assignees if an exemption from the registration requirements of the Securities Act is not otherwise available. These registration rights continue for two years following any withdrawal or removal of our general partner. We are obligated to pay all expenses incidental to the registration, excluding underwriting discounts and commissions on registrable securities and fees and expenses of counsel and advisors to selling holders.

AMENDMENT NO. 2 TO
LIMITED LIABILITY COMPANY AGREEMENT
OF
CINER WYOMING LLC

February 10, 2022

This Amendment No. 2 (this "**Amendment**") to the Limited Liability Company Agreement of Ciner Wyoming LLC (the "**Company**") dated as of June 30, 2014, as amended by Amendment No. 1 thereto dated November 5, 2015 (collectively, the "**LLC Agreement**"), is hereby adopted effective as of the date hereof by the Board of Managers of the Company (the "**Board**"). Capitalized terms used but not defined herein have the respective meanings given to such terms in the LLC Agreement. Each reference to "hereof", "herein", "hereunder", "hereby", and "this Agreement" in the LLC Agreement shall, from and after the effective date of this Amendment, refer to the LLC Agreement as amended by this Amendment.

WHEREAS, Section 8.1(a) of the LLC Agreement provides that the LLC Agreement may be amended for the purposes stated herein by the affirmative vote of a majority of the members of the Board; and

WHEREAS, acting pursuant to the power and authority granted to it under Section 8.1(a) of the LLC Agreement, the Board has unanimously adopted and approved a resolution to amend the LLC Agreement to, among other things, change the name of the Company.

NOW THEREFORE, the LLC Agreement of the Company is hereby amended as follows:

Section 1. Amendments.

(a). Section 1.2 of the LLC Agreement is hereby deleted in its entirety and the following shall be substituted in its place:

> "*Name*. The name of the Company is Sisecam Wyoming LLC, a Delaware limited liability company."

(b). The definition of "Company" in Section 1.7 of the LLC Agreement is hereby deleted in its entirety and the following definition shall be substituted in its place:

> ""Company" means Sisecam Wyoming LLC as continued pursuant to this Agreement and the reconstituted company continuing the business of this Company in the event of a dissolution as provided in Section 10 hereof."

(c). All other references to "Ciner Wyoming LLC" and/or the "Company" in the LLC Agreement shall be deemed to refer to "Sisecam Wyoming LLC."

(d). All references to "Ciner Resources LP" and/or "OCI" in the LLC Agreement shall be deemed to refer to "Sisecam Resources LP."

(e). All references to "Ciner Resource Partners LLC" in the LLC Agreement shall be deemed to refer to "Sisecam Resource Partners LLC."

(f). All references to "Ciner Resources Corporation" in the LLC Agreement shall be deemed to refer to "Sisecam Chemicals Resources LLC."

Section 2. No Other Amendments.

Except as expressly modified and amended herein, the LLC Agreement shall remain unchanged and in full force and effect.

Section 3. Governing Law.

This Amendment shall be construed in accordance with and governed by the laws of the State of Delaware, without regard to the principles of conflicts of law.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has executed this Amendment on the first date set forth above.

COMPANY:

CINER WYOMING LLC

By:____________________________
Name: Oguz Erkan
Title: President

CREDIT AGREEMENT

Dated as of October 28, 2021

among

CINER WYOMING LLC,
as the Borrower,

CERTAIN SUBSIDIARIES OF THE BORROWER IDENTIFIED HEREIN,
as the Guarantors,

BANK OF AMERICA, N.A.,
as Administrative Agent, Swing Line Lender and an L/C Issuer,

and

THE OTHER LENDERS PARTY HERETO

Arranged By:

BOFA SECURITIES, INC.
and
PNC CAPITAL MARKETS LLC,
as Joint Lead Arrangers and Joint Bookrunners

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CREDIT AGREEMENT

This CREDIT AGREEMENT is entered into as of October 28, 2021 among CINER WYOMING LLC, a Delaware limited liability company (the "Borrower"), the Guarantors (defined herein), the Lenders (defined herein) and BANK OF AMERICA, N.A., as Administrative Agent, Swing Line Lender and an L/C Issuer.

The Borrower has requested that the Lenders provide a revolving credit facility for the purposes set forth herein, and the Lenders are willing to do so on the terms and conditions set forth herein.

In consideration of the mutual covenants and agreements herein contained, the parties hereto covenant and agree as follows:

ARTICLE I

DEFINITIONS AND ACCOUNTING TERMS

1.01 Defined Terms.

As used in this Agreement, the following terms shall have the meanings set forth below:

"2020 Financial Statements" means the audited consolidated balance sheet of the Borrower and its Subsidiaries for the fiscal year ended December 31, 2020, and the related consolidated statements of income or operations, shareholders' equity and cash flows of the Borrower and its Subsidiaries for such fiscal year, including the notes thereto.

"Accepting Lenders" has the meaning specified in Section 11.06(g).

"Acquisition" means, with respect to any Person, the acquisition by such Person, in a single transaction or in a series of related transactions, of either (a) all or substantially all of the property of, or a line of business, division or operating group of, another Person or (b) at least a majority of the Voting Equity Interests of another Person, in each case whether or not involving a merger or consolidation with such other Person.

"Administrative Agent" means Bank of America in its capacity as administrative agent under any of the Loan Documents, or any successor administrative agent.

"Administrative Agent's Office" means the Administrative Agent's address and, as appropriate, account as set forth on Schedule 11.02 or such other address or account as the Administrative Agent may from time to time notify the Borrower and the Lenders.

"Administrative Questionnaire" means an Administrative Questionnaire in a form approved by the Administrative Agent.

"Affected Financial Institution" means (a) any EEA Financial Institution or (b) any UK Financial Institution.

"Affiliate" means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

"Aggregate Revolving Commitments" means the Revolving Commitments of all the Lenders. The amount of the Aggregate Revolving Commitments in effect on the Closing Date is Two Hundred Twenty-Five Million Dollars ($225,000,000).

"Agreement" means this Credit Agreement.

"Applicable Percentage" means with respect to any Lender at any time, with respect to such Lender's Revolving Commitment at any time, the percentage (carried out to the ninth decimal place) of the Aggregate Revolving Commitments represented by such Lender's Revolving Commitment at such time; provided that if the commitment of each Lender to make Revolving Loans and the obligation of the L/C Issuer to make L/C Credit Extensions have been terminated pursuant to Section 9.02 or if the Aggregate Revolving Commitments have expired, then the Applicable Percentage of each Lender shall be determined based on the Applicable Percentage of such Lender most recently in effect, giving effect to any subsequent assignments. The initial Applicable Percentage of each Lender is set forth opposite the name of such Lender on Schedule 2.01 or in the Assignment and Assumption pursuant to which such Lender becomes a party hereto. The Applicable Percentages shall be subject to adjustment as provided in Section 2.15.

"Applicable Rate" means the following percentages per annum, based upon the Consolidated Leverage Ratio as set forth in the most recent Compliance Certificate received by the Administrative Agent pursuant to Section 7.02(a):

Pricing Tier	Consolidated Leverage Ratio	BSBY Rate Loans	Base Rate Loans	Commitment Fee
1	< 1.25:1.00	1.50%	0.50%	0.225%
2	≥ 1.25:1.00 but < 1.75:1.00	1.75%	0.75%	0.250%
3	≥ 1.75:1.00 but < 2.25:1.00	2.00%	1.00%	0.275%
4	≥ 2.25:1.00 but < 3.00:1.00	2.25%	1.25%	0.300%
5	≥ 3.00:1.00 but < 3.50:1.00	2.50%	1.50%	0.325%
6	≥ 3.50:1.00	2.75%	1.75%	0.350%

Any increase or decrease in the Applicable Rate resulting from a change in the Consolidated Leverage Ratio shall become effective as of the first Business Day immediately following the earlier of (i) the date a Compliance Certificate is delivered, or (ii) the date a Compliance Certificate is required to be delivered, in each case pursuant to Section 7.02(a); provided, however, that if a Compliance Certificate is not delivered when due in accordance with such Section, then, upon the request of the Required Lenders, Pricing Tier 4 shall apply as of the first Business Day after the date on which such Compliance Certificate was required to have been delivered and shall remain in effect until the first Business Day immediately following the date on which such Compliance Certificate is delivered in accordance with Section 7.02(a) whereupon the Applicable Rate shall be adjusted based upon the calculation of the Consolidated Leverage Ratio contained in such Compliance Certificate. The Applicable Rate in effect from the Closing Date through the first Business Day immediately following the date a Compliance Certificate is required to be delivered pursuant to Section 7.02(a) for the fiscal quarter ending December 31, 2021 shall be determined based upon Pricing Tier 2. Notwithstanding anything to the contrary contained in this definition, the determination of the Applicable Rate for any period shall be subject to the provisions of Section 2.10(b).

"Approved Fund" means any Fund that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

"Arranger" means BofA Securities, Inc. and PNC Capital Markets LLC, in their capacities as joint lead arrangers and joint bookrunners.

"Assignment and Assumption" means an assignment and assumption entered into by a Lender and an Eligible Assignee (with the consent of any party whose consent is required by Section 11.06(b)), and accepted by the Administrative Agent, in substantially the form of Exhibit 11.06 or any other form (including electronic documentation generated by MarkitClear or other electronic platform) approved by the Administrative Agent.

"Attributable Indebtedness" means, with respect to any Person on any date, (a) in respect of any capital lease, the capitalized amount thereof that would appear on a balance sheet of such Person prepared as of such date in accordance with GAAP, (b) in respect of any Synthetic Lease Obligation, the capitalized amount of the remaining lease payments under the relevant lease that would appear on a balance sheet of such Person prepared as of such date in accordance with GAAP if such lease were accounted for as a capital lease, (c) in respect of any Securitization Transaction, the outstanding principal amount of such financing, after taking into account reserve accounts and making appropriate adjustments, determined by the Administrative Agent in its reasonable judgment and (d) in respect of any Sale and Leaseback Transaction, the present value (discounted in accordance with GAAP at the debt rate implied in the applicable lease) of the obligations of the lessee for rental payments during the term of such lease.

"Availability Period" means, with respect to the Revolving Commitments, the period from and including the Closing Date to the earliest of (a) the Maturity Date, (b) the date of termination of the Aggregate Revolving Commitments pursuant to Section 2.06, and (c) the date of termination of the commitment of each Lender to make Loans and of the obligation of the L/C Issuer to make L/C Credit Extensions pursuant to Section 9.02.

"Bail-In Action" means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

"Bail-In Legislation" means, (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, rule, regulation or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

"Bank of America" means Bank of America, N.A. and its successors.

"Base Rate" means for any day a fluctuating rate per annum equal to the highest of (a) the Federal Funds Rate plus 1/2 of 1% (b) the rate of interest in effect for such day as publicly announced from time to time by Bank of America as its "prime rate", (c) the BSBY Rate plus 1.00% and (d) 1.00%. The "prime rate" is a rate set by Bank of America based upon various factors including Bank of America's costs and desired return, general economic conditions and other factors, and is used as a reference point for pricing some loans, which may be priced at, above, or below such announced rate. Any change in such prime rate announced by Bank of America shall take effect at the opening of business on the day specified in the public announcement of such change. If the Base Rate is being used as an alternate rate of interest pursuant to Section 3.03 hereof, then the Base Rate shall be the greater of clauses (a), (b) and (d) above and shall be determined without reference to clause (c) above.

"Base Rate Loan" means a Loan that bears interest based on the Base Rate.

"Beneficial Ownership Certification" means a certification regarding beneficial ownership required by the Beneficial Ownership Regulation.

"Beneficial Ownership Regulation" means 31 C.F.R. § 1010.230.

"Benefit Plan" means any of (a) an "employee benefit plan" (as defined in ERISA) that is subject to Title I of ERISA, (b) a "plan" as defined in and subject to Section 4975 of the Internal Revenue Code or (c) any Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Internal Revenue Code) the assets of any such "employee benefit plan" or "plan".

"Bloomberg" means Bloomberg Index Services Limited.

"Borrower" has the meaning specified in the introductory paragraph hereto.

"Borrower Materials" has the meaning specified in Section 7.02.

"Borrowing" means a borrowing consisting of simultaneous Loans of the same Type and, in the case of BSBY Rate Loans, having the same Interest Period made by each of the Lenders pursuant to Section 2.01.

"BSBY" means the Bloomberg Short-Term Bank Yield Index rate.

"BSBY Rate" means:

(a) for any Interest Period with respect to a BSBY Rate Loan, the rate per annum equal to the BSBY Screen Rate two Business Days prior to the commencement of such Interest Period with a term equivalent to such Interest Period; provided that if the rate is not published on such determination date then BSBY Rate means the BSBY Screen Rate on the first Business Day immediately prior thereto; and

(b) for any interest calculation with respect to a Base Rate Loan on any date, the rate per annum equal to the BSBY Screen Rate with a term of one month commencing that day;

provided that if the BSBY Rate determined in accordance with either of the foregoing clauses (a) or (b) of this definition would otherwise be less than zero (0), the BSBY Rate shall be deemed zero (0) for purposes of this Agreement.

"BSBY Rate Loan" means a Loan that bears interest at a rate based on clause (a) of the definition of BSBY Rate.

"BSBY Screen Rate" means the Bloomberg Short-Term Bank Yield Index rate administered by Bloomberg (or any successor administrator satisfactory to the Administrative Agent) and published on the applicable Reuters screen page (or such other commercially available source providing such quotations as may be designated by the Administrative Agent from time to time).

"Business" has the meaning specified in Section 6.09.

"Business Day" means any day other than a Saturday, Sunday or other day on which commercial banks are authorized to close under the Laws of, or are in fact closed in, the state where the

Administrative Agent's Office is located and, if such day relates to any BSBY Rate Loan, in New York City.

"Cash Collateralize" means to pledge and deposit with or deliver to the Administrative Agent, for the benefit of one or more of the L/C Issuer or the Lenders, as collateral for L/C Obligations or obligations of the Lenders to fund participations in respect of L/C Obligations, cash or deposit account balances or, if the Administrative Agent and the L/C Issuer shall agree in their reasonable discretion, other credit support, in each case pursuant to documentation in form and substance reasonably satisfactory to the Administrative Agent and the L/C Issuer. "Cash Collateral" shall have a meaning correlative to the foregoing and shall include the proceeds of such cash collateral and other credit support.

"Cash Equivalents" means, as at any date, (a) securities issued or directly and fully guaranteed or insured by the United States or any agency or instrumentality thereof (provided that the full faith and credit of the United States is pledged in support thereof) having maturities of not more than twenty-four (24) months from the date of acquisition, (b) Dollar denominated time deposits and certificates of deposit of (i) any Lender, (ii) any domestic commercial bank of recognized standing having capital and surplus in excess of $500,000,000 or (iii) any bank whose short-term commercial paper rating from S&P is at least A-1 or the equivalent thereof or from Moody's is at least P-1 or the equivalent thereof (any such bank being an "Approved Bank"), in each case with maturities of not more than two hundred seventy (270) days from the date of acquisition, (c) commercial paper and variable or fixed rate notes issued by any Approved Bank (or by the parent company thereof) or any variable rate notes issued by, or guaranteed by, any domestic entity rated A-1 (or the equivalent thereof) or better by S&P or P-1 (or the equivalent thereof) or better by Moody's and maturing within six (6) months of the date of acquisition, (d) repurchase agreements entered into by any Person with a bank or trust company (including any Lender) or recognized securities dealer having capital and surplus in excess of $500,000,000 for direct obligations issued by or fully guaranteed by the United States in which such Person shall have a perfected first priority security interest (subject to no other Liens) and having, on the date of purchase thereof, a fair market value of at least 100% of the amount of the repurchase obligations and (e) investments, classified in accordance with GAAP as current assets, in money market investment programs registered under the Investment Company Act of 1940 which are administered by reputable financial institutions having capital of at least $500,000,000 and the portfolios of which are limited to Investments of the character described in the foregoing clauses (a) through (d).

"Cash Management Agreement" means any agreement that is not prohibited by the terms hereof to provide treasury or cash management services, including deposit accounts, overnight draft, credit cards, debit cards, p cards (including, purchasing cards and commercial cards), funds transfer, automated clearinghouse, zero balance accounts, returned check concentration, controlled disbursement, lockbox, account reconciliation and reporting and trade finance services and other cash management services.

"Cash Management Bank" means any Person that (a) at the time it enters into a Cash Management Agreement, is a Lender or the Administrative Agent or an Affiliate of a Lender or the Administrative Agent, (b) in the case of any Cash Management Agreement in effect on or prior to the Closing Date, is, as of the Closing Date or within thirty (30) days thereafter, a Lender or the Administrative Agent or an Affiliate of a Lender or the Administrative Agent and a party to a Cash Management Agreement or (c) within thirty (30) days after the time it enters into the applicable Cash Management Agreement, becomes a Lender, the Administrative Agent or an Affiliate of a Lender or the Administrative Agent, in each case, in its capacity as a party to such Cash Management Agreement.

"Change in Law" means the occurrence, after the Closing Date, of any of the following: (a) the adoption or taking effect of any Law, (b) any change in any Law or in the administration, interpretation, implementation or application thereof by any Governmental Authority or (c) the making or issuance of

any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Authority; provided that notwithstanding anything herein to the contrary, (i) the Dodd Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (ii) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case (of clause (i) and clause (ii)) be deemed to be a "Change in Law", regardless of the date enacted, adopted or issued.

"Change of Control" means an event or series of events by which, except as a result of a Foreclosure Event, the Specified Owners cease at any time to (a) own and control, of record and beneficially, directly or indirectly, at least fifty-one percent (51%) of the Voting Equity Interests in the Borrower or (b) have the ability to elect a majority of the board of directors, board of managers or equivalent governing body of the Borrower.

"Closing Date" means the date hereof.

"Collateral" means all of the property and assets indicated in the Collateral Documents as being subject to Liens in favor of the Administrative Agent for the benefit of the Secured Parties.

"Collateral Documents" means a collective reference to the Security Agreement, each of the collateral assignments, pledge agreements, account control agreements or other similar agreements delivered by any Loan Party pursuant to the terms of Section 7.14 or any of the other Loan Documents.

"Commitment Fee" has the meaning specified in Section 2.09(a).

"Commodity Exchange Act" means the Commodity Exchange Act (7 U.S.C. Section 1 et seq.).

"Competitor" means each Person listed in Schedule 11.06, as such Schedule may be updated from time to time with the approval of the Administrative Agent (such approval not to be unreasonably withheld or delayed); provided that (i) no such updates may be made during the continuance of an Event of Default and (ii) the addition of any Person to Schedule 11.06 shall not apply retroactively to disqualify a Person from being a Lender or participant if such Person had acquired an assignment or participation interest in the Revolving Loans or Revolving Commitments prior to the addition of such Person to Schedule 11.06.

"Compliance Certificate" means a certificate substantially in the form of Exhibit 7.02.

"Conforming Changes" means, with respect to the use, administration of or any conventions associated with BSBY or any proposed Successor Rate, as applicable, any conforming changes to the definitions of Base Rate, BSBY and Interest Period, timing and frequency of determining rates and making payments of interest and other technical, administrative or operational matters (including, for the avoidance of doubt, the definition of Business Day, timing of borrowing requests or prepayment, conversion or continuation notices and length of lookback periods) as may be appropriate, in the discretion of the Administrative Agent, to reflect the adoption and implementation of such applicable rate, and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent determines that adoption of any portion of such market practice is not administratively feasible or that no market practice for the administration of such rate exists, in such other manner of administration as the Administrative Agent determines is reasonably necessary in connection with the administration of this Agreement and any other Loan Document).

"Connection Income Taxes" means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

"Consolidated EBITDA" means, for any period, for the Borrower and its Subsidiaries on a consolidated basis, an amount equal to Consolidated Net Income for such period plus the following to the extent deducted (and not previously added-back) in calculating such Consolidated Net Income: (a) Consolidated Interest Charges for such period, (b) the provision for federal, state, local and foreign income taxes payable for such period, (c) depreciation and amortization expense for such period, (d) all transaction, fees, costs and expenses (including reasonable fees, expenses and disbursement of counsel and professional advisors) incurred through the Closing Date in connection with the financings evidenced by this Agreement, (e) non-cash mark-to-market adjustments to carrying values of derivative instruments, (f) non-recurring non-cash restructuring charges, (g) any losses realized from the disposal, abandonment or discontinuance of operations (exclusive of its operating loss); minus (h) any (i) non-cash gain items corresponding to clauses (e) and (f) above and (ii) any gain items corresponding to clause (g) above (exclusive of its operating income), in each case to the extent included in calculating Consolidated Net Income; provided that in the event that the Borrower or any of its Subsidiaries makes any cash payment in respect of any non-cash item corresponding to clause (e) or (f) above, such cash payment shall be deducted from Consolidated EBITDA in the period in which such cash payment is made. Notwithstanding anything herein or in the application of GAAP to the contrary, Consolidated EBITDA shall include the full amount of EBITDA of the Borrower and its Subsidiaries on a consolidated basis, regardless of whether any such Subsidiary is required to be consolidated under GAAP. The historical Consolidated EBITDA for any entities (A) that are acquired by the Borrower or any of its Subsidiaries (whether before or after the Closing Date) as permitted under the Loan Documents will be included in the calculation of Consolidated EBITDA for any period ending on or after the effective date of such acquisition and (B) that are disposed of by the Borrower or any of its Subsidiaries (whether before or after the Closing Date) will be excluded in the calculation of EBITDA for any period ending on or after the effective date of such disposition, in each case in accordance with the definition of "Pro Forma Basis".

"Consolidated Funded Indebtedness" means, as of any date of determination, Funded Indebtedness of the Borrower and its Subsidiaries on a consolidated basis.

"Consolidated Interest Charges" means, for any period, for the Borrower and its Subsidiaries on a consolidated basis, the sum of (a) all interest, premium payments, debt discount, fees, charges and related expenses in connection with borrowed money (including capitalized interest) or in connection with the deferred purchase price of assets (other than trade accounts payable in the ordinary course of business), in each case to the extent treated as interest in accordance with GAAP, plus (b) the portion of rent expense with respect to such period under capital leases that is treated as interest in accordance with GAAP plus (c) the implied interest component of Synthetic Lease Obligations with respect to such period.

"Consolidated Interest Coverage Ratio" means, as of any date of determination, the ratio of (a) Consolidated EBITDA for the period of the four fiscal quarters most recently ended to (b) Consolidated Interest Charges for the period of the four fiscal quarters most recently ended.

"Consolidated Leverage Ratio" means, as of any date of determination, the ratio of (a) Consolidated Funded Indebtedness as of such date to (b) Consolidated EBITDA for the period of the four fiscal quarters most recently ended.

"Consolidated Net Income" means, for any period, for the Borrower and its Subsidiaries on a consolidated basis, net income for such period; provided that Consolidated Net Income shall exclude (a) extraordinary gains and extraordinary losses for such period, (b) the net income of any Subsidiary during such period to the extent that the declaration or payment of dividends or similar distributions by

such Subsidiary of such income is not permitted by operation of the terms of its Organization Documents, any agreement or instrument to which any Loan Party is party or Law applicable to such Subsidiary during such period (unless any such terms are waived by the applicable parties), except that the Borrower's equity in any net loss of any such Subsidiary for such period shall be included in determining Consolidated Net Income and (c) any income (or loss) for such period of any Person if such Person is not a Subsidiary, except that the Borrower's equity in the net income of any such Person for such period shall be included in Consolidated Net Income up to the aggregate amount of cash actually distributed by such Person during such period to the Borrower or a Subsidiary as a dividend or other distribution (and in the case of a dividend or other distribution to a Subsidiary, such Subsidiary is not precluded from further distributing such amount to the Borrower as described in clause (b) of this proviso).

"Contractual Obligation" means, as to any Person, any provision of any obligation of such Person under any agreement, instrument or other undertaking to which such Person is a party or by which it or any of its property is bound.

"Control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through the ability to exercise voting power, by contract or otherwise. "Controlling" and "Controlled" have meanings correlative thereto. Without limiting the generality of the foregoing, a Person shall be deemed to be Controlled by another Person if such other Person possesses, directly or indirectly, power to vote 10% or more of the securities having ordinary voting power for the election of directors, managing general partners or the equivalent of such Person.

"Covered Entity" means any of the following: (i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or (iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

"Credit Extension" means each of the following: (a) a Borrowing and (b) an L/C Credit Extension.

"Daily Simple SOFR" with respect to any applicable determination date means the secured overnight financing rate ("SOFR") published on such date by the Federal Reserve Bank of New York, as the administrator of the benchmark (or a successor administrator) on the Federal Reserve Bank of New York's website (or any successor source).

"Debtor Relief Laws" means the Bankruptcy Code of the United States, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief Laws of the United States or other applicable jurisdictions from time to time in effect.

"Default" means any event or condition that constitutes an Event of Default or that, with the giving of any notice, the passage of time, or both, would be an Event of Default.

"Default Rate" means (a) when used with respect to Obligations other than Letter of Credit Fees, an interest rate equal to (i) the Base Rate plus (ii) the Applicable Rate, if any, applicable to Base Rate Loans plus (iii) 2% per annum; provided, however, that with respect to a BSBY Rate Loan, the Default Rate shall be an interest rate equal to the interest rate (including any Applicable Rate) otherwise applicable to such Loan plus 2% per annum and (b) when used with respect to Letter of Credit Fees, a rate equal to the Applicable Rate for Revolving Loans that are BSBY Rate Loans plus 2% per annum.

"Defaulting Lender" means, subject to Section 2.15(d), any Lender that (a) has failed to (i) fund all or any portion of its Loans within two (2) Business Days of the date such Loans were required to be funded hereunder unless such Lender notifies the Administrative Agent and the Borrower in writing that such failure is the result of such Lender's good faith determination that one or more conditions precedent to funding under Section 5.02 (each of which conditions precedent, together with any applicable default, shall be specifically identified with supporting facts in such writing) has not been satisfied, or (ii) pay to the Administrative Agent, the L/C Issuer, the Swing Line Lender or any other Lender any other amount required to be paid by it hereunder (including in respect of its participation in Letters of Credit or Swing Line Loans) within two (2) Business Days of the date when due, (b) has notified the Borrower, the Administrative Agent, the L/C Issuer or the Swing Line Lender in writing that it does not intend to comply with its funding obligations hereunder, or has made a public statement to that effect (unless such writing or public statement relates to such Lender's obligation to fund a Loan hereunder and states that such position is based on such Lender's good faith determination that a condition precedent to funding under Section 5.02 (which condition precedent, together with any applicable default, shall be specifically identified with supporting facts in such writing or public statement) cannot be satisfied), (c) has failed, within three (3) Business Days after written request by the Administrative Agent or the Borrower, to confirm in writing to the Administrative Agent and the Borrower that it will comply with its prospective funding obligations hereunder (provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon receipt of such written confirmation by the Administrative Agent and the Borrower), or (d) has, or has a direct or indirect parent company that has, (i) become the subject of a proceeding under any Debtor Relief Law, (ii) had appointed for it a receiver, custodian, conservator, trustee, administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or assets, including the Federal Deposit Insurance Corporation or any other state or federal regulatory authority acting in such a capacity or (iii) become the subject of a Bail-In Action; provided that a Lender shall not be a Defaulting Lender solely by virtue of the ownership or acquisition of any Equity Interest in that Lender or any direct or indirect parent company thereof by a Governmental Authority so long as such ownership interest does not result in or provide such Lender with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Lender (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Lender. Any determination by the Administrative Agent that a Lender is a Defaulting Lender under any one or more of clauses (a) through (d) above, and of the effective date of such status, shall be conclusive and binding absent manifest error, and such Lender shall be deemed to be a Defaulting Lender (subject to Section 2.15(d)) as of the date established therefor by the Administrative Agent in a written notice of such determination, which shall be delivered by the Administrative Agent to the Borrower, the L/C Issuer, the Swing Line Lender and each other Lender promptly following such determination.

"Designated Jurisdiction" means any country or territory to the extent that such country or territory itself is the subject of any Sanction.

"Disposition" or "Dispose" means the sale, transfer, license, lease or other disposition of any property by the Borrower or any Subsidiary, including any Sale and Leaseback Transaction and any sale, assignment, transfer or other disposal, with or without recourse, of any notes or accounts receivable or any rights and claims associated therewith, but excluding (a) the sale, lease, license, transfer or other disposition of inventory in the ordinary course of business; (b) the sale, lease, license, transfer or other disposition of any property that is obsolete, worn-out, replaced, excess or no longer used or useful in the conduct of business of the Borrower and its Subsidiaries; (c) the sale, lease, license, transfer or other disposition of property to the Borrower or any Subsidiary; provided, that if the transferor of such property is a Loan Party then the transferee thereof must be a Loan Party; (d) the sale, lease, license, transfer or other disposition (including providing any discount) of accounts receivable in connection with the collection or compromise thereof; (e) licenses, sublicenses, leases or subleases granted to others not

interfering in any material respect with the business of the Borrower and its Subsidiaries; (f) the sale, transfer or other disposition of cash or Cash Equivalents for fair market value; (g) any Recovery Event; (h) the abandonment of intellectual property or other proprietary rights of such Person that are, in the reasonable business judgment of such Person, of no material value and no longer practicable to maintain or useful in the conduct of the business of such Person; (i) dispositions of property to the extent that (1) such property is substantially simultaneously exchanged for credit against the purchase price of similar or replacement property or (2) the proceeds of such disposition are promptly applied to the purchase price of such replacement property in any event within one hundred eighty (180) days, (j) lease or sublease of real property in the ordinary course of business to any third party in an arm's length commercial transaction that does not interfere in any material respect with the business of the Borrower or any of its Subsidiaries; and (k) the surrender or waiver of contractual rights or settlement, release or surrender of any contract, test or other litigation claims in the ordinary course of business.

"Disqualified Equity Interests" means any Equity Interest that, by its terms (or by the terms of any security or other Equity Interest into which it is convertible or for which it is exchangeable), or upon the happening of any event or condition, (a) matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, or is redeemable at the option of the holder thereof, in whole or in part, on or prior to the date which is ninety-one (91) days after the Maturity Date, (b) is convertible into or exchangeable for (i) debt securities or (ii) any Equity Interests referred to in clause (a) above, in each case at any time prior to the date which is ninety-one (91) days after the Maturity Date, (c) contains any repurchase obligation that may come into effect either (i) prior to payment in full of all Obligations (other than (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount) or (ii) prior to the date that is ninety-one (91) days after the Maturity Date or (d) provides for scheduled payments of cash dividends or distributions prior to the date that is ninety-one (91) days after the Maturity Date.

"Dollar" and "$" mean lawful money of the United States.

"Domestic Subsidiary" means any Subsidiary that is organized under the laws of any state of the United States or the District of Columbia.

"EEA Financial Institution" means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clause (a) or (b) of this definition and is subject to consolidated supervision with its parent.

"EEA Member Country" means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

"EEA Resolution Authority" means any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

"Eligible Assignee" means any Person that meets the requirements to be an assignee under Section 11.06(b)(iii) and (v) (subject to such consents, if any, as may be required under Section 11.06(b)(iii)).

"Enterprises" means Ciner Enterprises, Inc., a Delaware corporation.

"Environmental Laws" means any and all federal, state, local and foreign statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, permits, concessions, grants, franchises, licenses, agreements or governmental restrictions relating to pollution and the protection of the environment or the release of any materials of potential environmental concern into the environment, including those related to releases of hazardous substances or wastes, air emissions and discharges to waste or public sewer systems.

"Environmental Liability" means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of the Borrower or any Subsidiary directly or indirectly resulting from or based upon (a) violation of any Environmental Law, (b) the generation, use, handling, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the release or threatened release of any Hazardous Materials into the environment or (e) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

"Equity Interests" means, with respect to any Person, all of the shares of capital stock of (or other ownership or profit interests in) such Person, all of the warrants, options or other rights for the purchase or acquisition from such Person of shares of capital stock of (or other ownership or profit interests in) such Person, all of the securities convertible into or exchangeable for shares of capital stock of (or other ownership or profit interests in) such Person or warrants, rights or options for the purchase or acquisition from such Person of such shares (or such other interests), and all of the other ownership or profit interests in such Person (including partnership, member or trust interests therein), whether voting or nonvoting, and whether or not such shares, warrants, options, rights or other interests are outstanding on any date of determination.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the rules and regulations promulgated thereunder.

"ERISA Affiliate" means any trade or business (whether or not incorporated) under common control with a Loan Party within the meaning of Sections 414(b) or (c) of the Internal Revenue Code (and Sections 414(m) and (o) of the Internal Revenue Code for purposes of provisions relating to Section 412 of the Internal Revenue Code).

"ERISA Event" means (a) a Reportable Event with respect to a Pension Plan; (b) the withdrawal of a Loan Party or any ERISA Affiliate from a Pension Plan subject to Section 4063 of ERISA during a plan year in which such entity was a "substantial employer" as defined in Section 4001(a)(2) of ERISA or a cessation of operations that is treated as such a withdrawal under Section 4062(e) of ERISA; (c) a complete or partial withdrawal by a Loan Party or any ERISA Affiliate from a Multiemployer Plan; (d) the filing of a notice of intent to terminate, the treatment of a Pension Plan amendment as a termination under Section 4041 or 4041A of ERISA; (e) the institution by the PBGC of proceedings to terminate a Pension Plan; (f) any event or condition which constitutes grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Pension Plan; (g) the determination by the actuary of a Loan Party that any Pension Plan is considered an at-risk plan or a plan in endangered or critical status within the meaning of Sections 430, 431 and 432 of the Internal Revenue Code or Sections 303, 304 and 305 of ERISA; (h) the imposition of any liability under Title IV of ERISA,

other than for PBGC premiums due but not delinquent under Section 4007 of ERISA, upon any Loan Party or any ERISA Affiliate or (i) a failure by any Loan Party or any ERISA Affiliate to meet all applicable requirements under the Pension Funding Rules in respect of a Pension Plan or the failure by any Loan Party or any ERISA Affiliate to make any required contribution to a Multiemployer Plan.

"EU Bail-In Legislation Schedule" means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

"Event of Default" has the meaning specified in Section 9.01.

"Excluded Property" means, with respect to any Loan Party, (a) any owned or leased real property, (b) unless reasonably requested by the Administrative Agent or the Required Lenders, any IP Rights for which a perfected Lien thereon is not effected either by filing of a Uniform Commercial Code financing statement or by appropriate evidence of such Lien being filed in either the United States Copyright Office or the United States Patent and Trademark Office, (c) unless reasonably requested by the Administrative Agent or the Required Lenders, any personal property (other than personal property described in clause (b) above) for which the attachment or perfection of a Lien thereon is not governed by the Uniform Commercial Code, (d) the Equity Interests of any Foreign Subsidiary to the extent not required to be pledged to secure the Obligations pursuant to Section 7.14(a), (e) any property which, subject to the terms of Section 8.03(e), is subject to a Lien of the type described in Section 8.01(i) to the extent the document providing such Lien prohibits such Loan Party from granting any other Liens in such property, (f) any lease, license, contract, property right or agreement to which any Loan Party is a party or any of its rights or interests thereunder if and only for so long as the grant of a Lien in any such lease, license, contract, property right or agreement will (i) violate any law, rule or regulation applicable to such Loan Party, (ii) result in or will constitute a breach, termination, or default under any such lease, license, contract, property right or agreement, (iii) result in or will constitute the abandonment, invalidation or enforceability of any right, title or interest of such Loan Party in any such lease, license, contract, property right or agreement, or (iv) requires any third-party consent not obtained by such Loan Party under any such lease, license, contract, property right or agreement except (A) in the case of clauses (i) through (iv), other than to the extent that any such term would be rendered ineffective pursuant to Section 9-406, 9-407, 9-408 or 9-409 of the applicable UCC or any other applicable Law or principles of equity and (B) the foregoing exclusions with respect to this clause (f) shall not apply to (1) monies due or to become due to a Loan Party in respect of such lease, license, contract, property right or agreement, or (2) any and all proceeds from the sale, transfer, assignment, license, lease or other dispositions of such lease, license, contract, property right or agreement; (g) deposit accounts maintained solely for the purpose of funding payroll, payroll taxes, withholding tax, employee wage and benefit payments and other tax and employee fiduciary accounts, (h) trust accounts maintained solely on behalf of a Loan Party's customers in the ordinary course of business; (i) any trademark application of a Loan Party filed with the United States Patent and Trademark Office on an "intent-to-use" basis, until such time as a statement of use is filed with and duly accepted by the United States Patent and Trademark Office (only to the extent that, and solely during the period in which, the grant of a security interest therein would impair the validity or enforceability of such intent-to-use trademark applications under applicable federal law); and (j) any assets for which the Administrative Agent determines that (i) the costs of obtaining a security interest is excessive in relation to the value of the security to be afforded thereby or (ii) obtaining such security interest is not commercially practicable.

"Excluded Subsidiaries" means, collectively, (a) any non-Wholly Owned Subsidiary of the Borrower (until such time as such Subsidiary becomes a Wholly Owned Subsidiary of the Borrower), (b) any Foreign Subsidiary and (c) any Domestic Subsidiary that is not a Material Domestic Subsidiary.

"Excluded Swap Obligation" means, with respect to any Guarantor, any Swap Obligation if, and to the extent that, all or a portion of the Guaranty of such Guarantor of, or the grant under a Loan Document by such Guarantor of a security interest to secure, such Swap Obligation (or any Guarantee thereof) is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such Guarantor's failure for any reason to constitute an "eligible contract participant" as defined in the Commodity Exchange Act (determined after giving effect to Section 4.08 and any and all guarantees of such Guarantor's Swap Obligations by other Loan Parties) at the time the Guaranty of such Guarantor, or grant by such Guarantor of a security interest, becomes effective with respect to such Swap Obligation. If a Swap Obligation arises under a Master Agreement governing more than one Swap Contract, such exclusion shall apply to only the portion of such Swap Obligation that is attributable to Swap Contracts for which such Guaranty or security interest is or becomes illegal.

"Excluded Taxes" means any of the following Taxes imposed on or with respect to any Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its Lending Office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Revolving Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or Revolving Commitment (other than pursuant to an assignment request by the Borrower under Section 11.13) or (ii) such Lender changes its Lending Office, except in each case to the extent that, pursuant to Section 3.01(a)(ii), (a)(iii) or (c), amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its Lending Office, (c) Taxes attributable to such Recipient's failure to comply with Section 3.01(e) and (d) any U.S. federal withholding Taxes imposed pursuant to FATCA.

"Existing Indebtedness" has the meaning specified in Section 5.01(f).

"Existing Letters of Credit" means those Letters of Credit outstanding on the Closing Date and identified on Schedule 2.03.

"Existing WE Soda Facility" means that certain Facilities Agreement originally dated as of August 1, 2018 by and among Ciner Enterprises Inc., a Delaware corporation, and WE Soda Ltd., a U.K. corporation, as borrowers, Lucid Agency Services Limited, as agent, and the lenders from time to time party thereto, as amended pursuant to that certain Amendment Letter dated as of August 6, 2018, as further amended and restated pursuant to the 2020 Amendment and Restatement Agreement, as further amended pursuant to a Consent Letter dated November 10, 2020, as further amended and restated pursuant to the 2021 Amendment and Restatement Agreement, and as m ay be further amended, modified or restated from time to time.

"FASB ASC" means the Accounting Standards Codification of the Financial Accounting Standards Board.

"FATCA" means Sections 1471 through 1474 of the Internal Revenue Code, as of the Closing Date (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof and any agreements entered into pursuant to Section 1471(b)(1) of the Internal Revenue Code.

"Federal Funds Open Rate" for any day shall mean the rate per annum (based on a year of three hundred sixty (360) days and actual days elapsed) which is the daily federal funds open rate as quoted by ICAP North America, Inc. (or any successor) as set forth on the Bloomberg Screen BTMM for that day opposite the caption "OPEN" (or on such other substitute Bloomberg Screen that displays such rate), or as set forth on such other recognized electronic source used for the purpose of displaying such rate as selected by the Administrative Agent (for purposes of this definition, an "Alternate Source") (or if such rate for such day does not appear on the Bloomberg Screen BTMM (or any substitute screen) or on any Alternate Source, or if there shall at any time, for any reason, no longer exist a Bloomberg Screen BTMM (or any substitute screen) or any Alternate Source, a comparable replacement rate determined by the Administrative Agent at such time (which determination shall be conclusive absent manifest error)); provided however, that if such day is not a Business Day, the Federal Funds Open Rate for such day shall be the "open" rate on the immediately preceding Business Day. If and when the Federal Funds Open Rate changes, the rate of interest with respect to any advance to which the Federal Funds Open Rate applies will change automatically without notice to the Borrower, effective on the date of any such change.

"Federal Funds Rate" for any day shall mean the rate per annum (based on a year of three hundred sixty (360) days and actual days elapsed and rounded upward to the nearest 1/100 of 1%) announced by the Federal Reserve Bank of New York (or any successor) on such day as being the weighted average of the rates on overnight federal funds transactions, as computed and announced by such Federal Reserve Bank (or any successor) in substantially the same manner as such Federal Reserve Bank computes and announces the weighted average it refers to as the "Federal Funds Rate" as of the date of this Agreement; provided, if such Federal Reserve Bank (or its successor) does not announce such rate on any day, the "Federal Funds Rate" for such day shall be the Federal Funds Rate for the last day on which such rate was announced.

"Fee Letter" means (a) the fee letter agreement dated October 27, 2021 among the Borrower, Bank of America and BofA Securities, Inc. and (b) the fee letter agreement dated October 27, 2021 among the Borrower, PNC Bank, National Association and PNC Capital Markets LLC.

"Foreclosure Event" means any foreclosure upon, and or involuntary sale or other transfer of direct or indirect ownership in the Borrower that causes the Specified Owners to cease to (a) own and control, of record and beneficially, directly or indirectly at least fifty-one percent (51%) of the Voting Equity Interests in the Borrower or (b) have the ability to elect a majority of the board of directors, board of managers or equivalent governing body of the Borrower.

"Foreign Lender" means (a) if the Borrower is a U.S. Person, a Lender that is not a U.S. Person, and (b) if the Borrower is not a U.S. Person, a Lender that is resident or organized under the Laws of a jurisdiction other than that in which the Borrower is resident for tax purposes. For purposes of this definition, the United States, each State thereof and the District of Columbia shall be deemed to constitute a single jurisdiction.

"Foreign Subsidiary" means any Subsidiary that is not a Domestic Subsidiary.

"FRB" means the Board of Governors of the Federal Reserve System of the United States.

"Fronting Exposure" means, at any time there is a Defaulting Lender, (a) with respect to the L/C Issuer, such Defaulting Lender's Applicable Percentage of the outstanding L/C Obligations other than L/C Obligations as to which such Defaulting Lender's participation obligation has been reallocated to other Lenders or Cash Collateralized in accordance with the terms hereof, and (b) with respect to the Swing Line Lender, such Defaulting Lender's Applicable Percentage of Swing Line Loans other than

Swing Line Loans as to which such Defaulting Lender's participation obligation has been reallocated to other Lenders in accordance with the terms hereof.

"Fund" means any Person (other than a natural Person) that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its activities.

"Funded Indebtedness" of any Person means all Indebtedness of such Person other than Indebtedness described in clause (f) of the definition thereof; provided, that, any Indebtedness that arises under a revolving credit agreement or revolving credit line shall only constitute "Funded Indebtedness" to the extent of (a) any amount actually drawn and outstanding under such agreement or credit line plus (b) the aggregate maximum face amount of letters of credit issued thereunder or in connection therewith.

"GAAP" means generally accepted accounting principles in the United States set forth in the opinions and pronouncements of the Accounting Principles Board and the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board consistently applied.

"Governmental Authority" means the government of the United States or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

"Guarantee" means, as to any Person, (a) any obligation, contingent or otherwise, of such Person guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation payable or performable by another Person (the "primary obligor") in any manner, whether directly or indirectly, and including any obligation of such Person, direct or indirect, (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation, (ii) to purchase or lease property, securities or services for the primary purpose of assuring the obligee in respect of such Indebtedness or other obligation of the payment or performance of such Indebtedness or other obligation, (iii) to maintain working capital, equity capital or any other financial statement condition or liquidity or level of income or cash flow of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation, or (iv) entered into for the primary purpose of assuring in any other manner the obligee in respect of such Indebtedness or other obligation of the payment or performance thereof or to protect such obligee against loss in respect thereof (in whole or in part), or (b) any Lien on any assets of such Person securing any Indebtedness or other obligation of any other Person, whether or not such Indebtedness or other obligation is assumed by such Person (or any right, contingent or otherwise, of any holder of such Indebtedness to obtain any such Lien); provided that the term "Guarantee" shall not include endorsements of instruments for deposit or collection in the ordinary course of business or customary and reasonable indemnity obligations. The amount of any Guarantee shall be the lesser of (x) an amount equal to the stated or determinable amount of the related primary obligation, or portion thereof, in respect of which such Guarantee is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by the guaranteeing Person in good faith and (y) the value of the property subject to a lien, to the extent that such obligation is non-recourse other than to such property. The term "Guarantee" as a verb has a corresponding meaning.

"Guarantor Joinder Agreement" means a joinder agreement substantially in the form of Exhibit 7.12 executed and delivered by a Domestic Subsidiary (other than an Excluded Subsidiary) in accordance with the provisions of Section 7.12 or any similar other documents as the Administrative Agent shall reasonably deem appropriate for such purpose.

"Guarantors" means, collectively, (a) each Domestic Subsidiary identified as a "Guarantor" on the signature pages hereto, (b) each Person that joins as a Guarantor pursuant to Section 7.12, (c) with respect to (i) Obligations under any Secured Hedge Agreement, (ii) Obligations under any Secured Cash Management Agreement and (iii) any Swap Obligation of a Specified Loan Party (determined before giving effect to Sections 4.01 and 4.08) under the Guaranty, the Borrower, and (d) the successors and permitted assigns of the foregoing; provided, that no Excluded Subsidiary will be required to be a Guarantor hereunder.

"Guaranty" means the Guaranty made by the Guarantors in favor of the Administrative Agent, the L/C Issuer, the Lenders and the other holders of the Obligations pursuant to Article IV.

"Hazardous Materials" means all explosive or radioactive substances or wastes and all hazardous or toxic substances, wastes or other pollutants, including petroleum or petroleum distillates, asbestos or asbestos-containing materials, polychlorinated biphenyls, infectious or medical wastes and all other substances or wastes of any nature regulated pursuant to any Environmental Law.

"Hedge Bank" means any Person in its capacity as a party to a Swap Contract with the Borrower or any Subsidiary provided that (a) at the time such Person enters into such Swap Contract, such Person is a Lender or an Affiliate of a Lender or (b) such Swap Contract exists on the Closing Date and such Person is a Lender or an Affiliate of a Lender on the Closing Date.

"Honor Date" has the meaning set forth in Section 2.03(c).

"IFRS" means international accounting standards within the meaning of IAS Regulation 1606/2002 to the extent applicable to the relevant financial statements delivered under or referred to herein.

"Indebtedness" means, as to any Person at a particular time, without duplication, all of the following, whether or not included as indebtedness or liabilities in accordance with GAAP:

(a) all obligations, whether current or long-term, for borrowed money (including Obligations hereunder) and all obligations evidenced by bonds, debentures, notes, loan agreements or other similar instruments;

(b) all purchase money indebtedness;

(c) the maximum amount available to be drawn under letters of credit (including standby and commercial), bankers' acceptances, bank guaranties, surety bonds and similar instruments;

(d) all obligations (including earn-out obligations) in respect of the deferred purchase price of property or services (other than trade accounts payable in the ordinary course of business);

(e) the Attributable Indebtedness of capital leases, Synthetic Lease Obligations, Sale and Leaseback Transactions and Securitization Transactions;

(f) the Swap Termination Value of any Swap Contract;

(g) indebtedness (excluding prepaid interest thereon) secured by a Lien on property owned or being purchased by such Person (including indebtedness arising under conditional sales

or other title retention agreements), whether or not such indebtedness shall have been assumed by such Person or is limited in recourse (with the amount thereof being measured as the lesser of the amount of such Indebtedness or that fair market value of such property);

(h) all obligations to purchase, redeem, retire, defease or otherwise make any payment prior to the Maturity Date in respect of any Equity Interests or any warrant, right or option to acquire such Equity Interests, valued, in the case of a redeemable preferred interest, at the greater of its voluntary or involuntary liquidation preference plus accrued and unpaid dividends; provided that in no event shall obligations in respect of any of the following constitute Indebtedness: (i) any of the foregoing obligations with respect to any Equity Interests of the Borrower set forth in the respective Organization Documents of the Borrower; (ii) Permitted Tax Distributions; and (iii) the declaration or approval by, or consent of, a board of directors, partnership committee or general partner (or similar governing body or Person) of, and the corresponding making or payment of, any such purchase, redemption, retirement, defeasance or payment permitted hereunder;

(i) without duplication, all Guarantees in respect of any of the foregoing; and

(j) all Indebtedness of the types referred to in clauses (a) through (i) above of any partnership or joint venture (other than a joint venture that is itself a corporation or limited liability company) in which such Person is a general partner or a joint venturer, except to the extent that such Indebtedness is expressly made non-recourse to such Person.

Notwithstanding the foregoing, the term Indebtedness shall not include (1) Intercompany Indebtedness, (2) deferred or prepaid revenue or (3) any earn-out obligation or other contingent obligation in respect of Indebtedness under clause (d) of this definition until such obligation becomes a liability on the balance sheet of such Person in accordance with GAAP.

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Loan Party under any Loan Document and (b) to the extent not otherwise described in (a), Other Taxes.

"Indemnitee" has the meaning specified in Section 11.04(b).

"Information" has the meaning specified in Section 11.07.

"Intercompany Indebtedness" means (a) Indebtedness owing by a Loan Party or a Subsidiary of a Loan Party to another Loan Party or a Subsidiary of a Loan Party if the corresponding Investment is permitted under Section 8.02, (b) Indebtedness owing by a Loan Party to a Loan Party and (c) Indebtedness owing by a Subsidiary that is not a Loan Party to a Subsidiary that is not a Loan Party.

"Interest Payment Date" means (a) as to any BSBY Rate Loan, the last day of each Interest Period applicable to such Loan and the Maturity Date; provided, however, that if any Interest Period for a BSBY Rate Loan exceeds three (3) months, the respective dates that fall every three (3) months after the beginning of such Interest Period shall also be Interest Payment Dates; and (b) as to any Base Rate Loan (including a Swing Line Loan), the last Business Day of each March, June, September and December and the Maturity Date.

"Interest Period" means, as to each BSBY Rate Loan, the period commencing on the date such BSBY Rate Loan is disbursed or converted to or continued as a BSBY Rate Loan and ending on the date

one, three or six months thereafter (in each case, subject to availability), as selected by the Borrower in its Loan Notice; provided that:

(a) any Interest Period that would otherwise end on a day that is not a Business Day shall be extended to the next succeeding Business Day unless, in the case of a BSBY Rate Loan, such Business Day falls in another calendar month, in which case such Interest Period shall end on the next preceding Business Day;

(b) any Interest Period pertaining to a BSBY Rate Loan that begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period) shall end on the last Business Day of the calendar month at the end of such Interest Period; and

(c) no Interest Period shall extend beyond the Maturity Date.

"Interim Financial Statements" means the unaudited consolidated financial statements of the Borrower and its Subsidiaries for the fiscal quarter ending June 30, 2021, including balance sheets and statements of income or operations, shareholders' equity and cash flows.

"Internal Revenue Code" means the Internal Revenue Code of 1986.

"Investment" means, as to any Person, any direct or indirect acquisition or investment by such Person, pursuant to (a) the purchase or other acquisition of Equity Interests of another Person, (b) a loan, advance or capital contribution to, Guarantee or assumption of debt of, or purchase or other acquisition of any other debt or equity participation or interest in, another Person, including any partnership or joint venture interest in such other Person, or (c) an Acquisition. For purposes of covenant compliance, the amount of any Investment shall be the amount actually invested, without adjustment for subsequent increases or decreases in the value of such Investment.

"IP Rights" has the meaning specified in Section 6.17.

"IRS" means the United States Internal Revenue Service.

"ISP" means, with respect to any Letter of Credit, the "International Standby Practices 1998" published by the Institute of International Banking Law & Practice, Inc. (or such later version thereof as may be in effect at the time of issuance).

"Issuer Documents" means with respect to any Letter of Credit, the Letter of Credit Application, and any other document, agreement and instrument entered into by the L/C Issuer and the Borrower (or any Subsidiary) or in favor of the L/C Issuer and relating to such Letter of Credit.

"Laws" means, collectively, all international, foreign, federal, state and local statutes, treaties, rules, binding guidelines, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the binding interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, binding requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case having the force of law.

"L/C Advance" means, with respect to each Lender, such Lender's funding of its participation in any L/C Borrowing in accordance with its Applicable Percentage.

"L/C Borrowing" means an extension of credit resulting from a drawing under any Letter of Credit which has not been reimbursed on the date when made or refinanced as a Borrowing of Revolving Loans.

"L/C Credit Extension" means, with respect to any Letter of Credit, the issuance thereof or extension of the expiry date thereof, or the increase of the amount thereof.

"L/C Issuer" means each of (a) Bank of America in its capacity as issuer of Letters of Credit hereunder or (b) any successor issuer of Letters of Credit hereunder. The term "L/C Issuer" when used with respect to a Letter of Credit or the L/C Obligations relating to a Letter of Credit shall refer to the L/C Issuer that issued such Letter of Credit.

"L/C Obligations" means, as at any date of determination, without duplication, the aggregate amount available to be drawn under all outstanding Letters of Credit plus the aggregate of all Unreimbursed Amounts, including all L/C Borrowings. For purposes of computing the amount available to be drawn under any Letter of Credit, the amount of such Letter of Credit shall be determined in accordance with Section 1.06. For all purposes of this Agreement, if on any date of determination a Letter of Credit has expired by its terms but any amount may still be drawn thereunder by reason of the operation of Rule 3.14 of the ISP, such Letter of Credit shall be deemed to be "outstanding" in the amount so remaining available to be drawn.

"Lenders" means each of the Persons identified as a "Lender" on the signature pages hereto, each other Person that becomes a "Lender" in accordance with this Agreement and their successors and assigns and, unless the context requires otherwise, includes the Swing Line Lender.

"Lender Party" and "Lender Recipient Party" means collectively, the Lenders, the Swing Line Lender and the L/C Issuer.

"Lending Office" means, as to any Lender, the office or offices of such Lender described as such in such Lender's Administrative Questionnaire, or such other office or offices as a Lender may from time to time notify the Borrower and the Administrative Agent.

"Letter of Credit" means (a) any letter of credit issued hereunder providing for the payment of cash upon the honoring of a presentation thereunder, (b) the Existing Letters of Credit and (c) any replacements of any of the foregoing. A Letter of Credit may be a commercial letter of credit or a standby letter of credit.

"Letter of Credit Application" means an application and agreement for the issuance or amendment of a Letter of Credit in the form from time to time in use by the L/C Issuer.

"Letter of Credit Expiration Date" means the day that is seven (7) days prior to the Maturity Date then in effect (or, if such day is not a Business Day, the next preceding Business Day).

"Letter of Credit Fee" has the meaning specified in Section 2.03(h).

"Letter of Credit Sublimit" means an amount equal to Forty Million Dollars ($40,000,000). The Letter of Credit Sublimit is part of, and not in addition to, the Aggregate Revolving Commitments.

"Lien" means any mortgage, pledge, hypothecation, encumbrance, lien (statutory or other), charge, or preference, priority or other security interest or preferential arrangement in the nature of a security interest of any kind or nature whatsoever (including any conditional sale or other title retention

agreement, any easement, right of way or other encumbrance on title to real property, and any assignment, deposit arrangement, financing lease having substantially the same economic effect as any of the foregoing).

"Loan" means an extension of credit by a Lender to the Borrower under Article II in the form of a Revolving Loan or Swing Line Loan.

"Loan Documents" means this Agreement, each Note, each Issuer Document, each Guarantor Joinder Agreement, the Fee Letter, the Collateral Documents, and any agreement creating or perfecting rights in Cash Collateral pursuant to the provisions of Section 2.14 (but specifically excluding Secured Hedge Agreements and Secured Cash Management Agreements).

"Loan Modification Agreement" has the meaning specified in Section 11.06(g).

"Loan Modification Offer" has the meaning specified in Section 11.06(g).

"Loan Notice" means a notice of (a) a Borrowing of Revolving Loans, (b) a conversion of Loans from one Type to the other, or (c) a continuation of BSBY Rate Loans, in each case pursuant to Section 2.02(a), which, if in writing, shall be substantially in the form of Exhibit 2.02 or such other form as may be approved by the Administrative Agent (including any form on an electronic platform or electronic transmission system as shall be approved by the Administrative Agent), appropriately completed and signed by a Responsible Officer of the Borrower.

"Loan Parties" means, collectively, the Borrower and each Guarantor.

"Master Agreement" has the meaning specified in the definition of "Swap Contract."

"Material Adverse Effect" means (a) a material adverse change in, or a material adverse effect upon, the operations, business, assets, properties, liabilities (actual or contingent) or condition (financial or otherwise) of the Borrower and its Subsidiaries taken as a whole; (b) a material impairment of the ability of any Loan Party to perform its obligations under any Loan Document to which it is a party; or (c) a material adverse effect upon the legality, validity, binding effect or enforceability against any Loan Party of any Loan Document to which it is a party.

"Material Domestic Subsidiary" means any Material Subsidiary that is a Domestic Subsidiary.

"Material Indebtedness" means any Indebtedness (other than Indebtedness arising under the Loan Documents and Indebtedness arising under Swap Contracts) of the Borrower or any of the Borrower's Subsidiaries having an aggregate principal amount (including undrawn committed or available amounts and including amounts owing to all creditors under any combined or syndicated credit arrangement) of more than the Threshold Amount.

"Material Subsidiary" means, at any date of determination, any (a) Subsidiary of the Borrower that individually has or (b) Subsidiary of the Borrower that, when taken together with all other Subsidiaries that are not Material Subsidiaries, in the aggregate has, in either case, revenues, assets or earnings in an amount equal to at least 5% of (i) the consolidated revenues of the Borrower and its Subsidiaries for the most recently completed fiscal quarter for which the Administrative Agent has received financial statements of the Borrower and its Subsidiaries pursuant to Section 7.01(a) or (b), (ii) the consolidated assets of the Borrower and its Subsidiaries as of the last day of the most recently completed fiscal quarter for which the Administrative Agent has received financial statements of the Borrower and its Subsidiaries pursuant to Section 7.01(a) or (b), or (iii) the consolidated net earnings of

the Borrower and its Subsidiaries for the most recently completed fiscal quarter for which the Administrative Agent has received financial statements of the Borrower and its Subsidiaries pursuant to Section 7.01(a) or (b), in each case determined in accordance with GAAP for such period.

"Maturity Date" means October 28, 2026; provided, however, that, if such date is not a Business Day, the Maturity Date shall be the next preceding Business Day.

"Minimum Collateral Amount" means, at any time, (i) with respect to Cash Collateral consisting of cash or deposit account balances provided to reduce or eliminate Fronting Exposure during the existence of a Defaulting Lender, an amount equal to 102% of the Fronting Exposure of the L/C Issuer with respect to Letters of Credit issued and outstanding at such time and (ii) with respect to Cash Collateral consisting of cash or deposit account balances provided in accordance with the provisions of Section 2.14(a)(i), (a)(ii) or (a)(iii), an amount equal to 102% of the Outstanding Amount of all L/C Obligations.

"Moody's" means Moody's Investors Service, Inc. and any successor thereto.

"Multiemployer Plan" means any employee benefit plan of the type described in Section 4001(a)(3) of ERISA, to which any Loan Party or any ERISA Affiliate makes or is obligated to make contributions, or during the preceding five (5) plan years, has made or been obligated to make contributions.

"Multiple Employer Plan" means a Plan which has two or more contributing sponsors (including any Loan Party or any ERISA Affiliate) at least two of whom are not under common control, as such a plan is described in Section 4064 of ERISA.

"Non-Consenting Lender" means any Lender that does not approve any consent, waiver or amendment that (a) requires the approval of all Lenders or all affected Lenders in accordance with the terms of Section 11.01 and (b) has been approved by the Required Lenders.

"Non-Defaulting Lender" means, at any time, each Lender that is not a Defaulting Lender at such time.

"Note" has the meaning specified in Section 2.11(a).

"Notice of Loan Prepayment" means a notice of prepayment with respect to a Loan, which shall be substantially in the form of Exhibit 2.05 or such other form as may be approved by the Administrative Agent (including any form on an electronic platform or electronic transmission system as shall be approved by the Administrative Agent), appropriately completed and signed by a Responsible Officer.

"Obligations" means, with respect to each Loan Party, (a) all advances to, and debts, liabilities, obligations, covenants and duties of, any Loan Party arising under any Loan Document or otherwise with respect to any Loan or Letter of Credit and (b) all obligations of the Borrower or any Subsidiary owing to a Cash Management Bank or a Hedge Bank in respect of Secured Cash Management Agreements or Secured Hedge Agreements, in each case whether direct or indirect (including those acquired by assumption), absolute or contingent, due or to become due, now existing or hereafter arising and including interest and fees that accrue after the commencement by or against any Loan Party or any Affiliate thereof of any proceeding under any Debtor Relief Laws naming such Person as the debtor in such proceeding, regardless of whether such interest and fees are allowed claims in such proceeding; provided that the "Obligations" of a Guarantor shall exclude any Excluded Swap Obligations with respect to such Guarantor.

"OFAC" means the Office of Foreign Assets Control of the United States Department of the Treasury.

"Organization Documents" means, (a) with respect to any corporation, the certificate or articles of incorporation and the bylaws (or equivalent or comparable constitutive documents with respect to any non-U.S. jurisdiction); (b) with respect to any limited liability company, the certificate or articles of formation or organization and operating agreement; and (c) with respect to any partnership, joint venture, trust or other form of business entity, the partnership, joint venture or other applicable agreement of formation or organization and any agreement, instrument, filing or notice with respect thereto filed in connection with its formation or organization with the applicable Governmental Authority in the jurisdiction of its formation or organization and, if applicable, any certificate or articles of formation or organization of such entity.

"Other Connection Taxes" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 3.06).

"Outstanding Amount" means (a) with respect to any Loans on any date, the aggregate outstanding principal amount thereof after giving effect to any borrowings and prepayments or repayments of any Loans occurring on such date; and (b) with respect to any L/C Obligations on any date, the amount of such L/C Obligations on such date after giving effect to any L/C Credit Extension occurring on such date and any other changes in the aggregate amount of the L/C Obligations as of such date, including as a result of any reimbursements by the Borrower of Unreimbursed Amounts.

"Participant" has the meaning specified in Section 11.06(d).

"Participant Register" has the meaning specified in Section 11.06(d).

"PBGC" means the Pension Benefit Guaranty Corporation.

"Pension Funding Rules" means the rules of the Internal Revenue Code and ERISA regarding minimum funding standards with respect to Pension Plans and set forth in Sections 412, 430, 431, 432 and 436 of the Internal Revenue Code and Sections 302, 303, 304 and 305 of ERISA.

"Pension Plan" means any employee pension benefit plan (including a Multiple Employer Plan or a Multiemployer Plan) that is maintained or is contributed to by any Loan Party and any ERISA Affiliate or with respect to which any Loan Party or any ERISA Affiliate has any liability and is either covered by Title IV of ERISA or is subject to the minimum funding standards under Section 412 of the Internal Revenue Code.

"Permitted Acquisition" means an Investment consisting of an Acquisition by the Borrower or any Subsidiary, provided that (a) no Default or Event of Default shall have occurred and be continuing or

would result from such Acquisition, (b) the property acquired (or the property of the Person acquired) in such Acquisition is used or useful in the same or a similar line of business as the Borrower and its Subsidiaries were engaged in on the Closing Date (or any reasonable extensions or expansions thereof), (c) in the case of an Acquisition of the Equity Interests of another Person, the board of directors (or other comparable governing body) of such other Person shall have duly approved such Acquisition, (d) the Borrower shall have delivered to the Administrative Agent a Pro Forma Compliance Certificate demonstrating that the Loan Parties would be in compliance with the financial covenants set forth in Section 8.11 recomputed as of the end of the period of the four fiscal quarters most recently ended for which the Borrower has delivered financial statements pursuant to Section 7.01(a) or (b) after giving effect to such Acquisition on a Pro Forma Basis, (e) the representations and warranties made by the Loan Parties in each Loan Document shall be true and correct in all material respects at and as if made as of the date of such Acquisition (after giving effect thereto) and (f) there shall be no cash and non-cash consideration limitation with respect to any such Acquisition so long as the financial covenant set forth in Section 8.11(a) (as set forth in a Pro Forma Compliance Certificate with calculations recomputed as of the end of the period of the four fiscal quarters most recently ended for which the Borrower has delivered financial statements pursuant to Section 7.01(a) or (b) after giving effect to such Acquisition on a Pro Forma Basis) is less than 3.25:1.0; otherwise, the aggregate cash and non-cash consideration (including assumed Indebtedness (in the case of an asset (as opposed to Equity Interest) acquisition), the good faith estimate by the Borrower of the maximum amount of any deferred purchase price obligations (including earn-out payments), but excluding the fair market value of Equity Interests issued or transferred to the sellers of such Person or assets, and provided that any portion of any deferred purchase price or assumed obligations that at any time after the consummation of such Acquisition that have been determined by the parties to the Acquisition to no longer be required to be paid in accordance with the underlying acquisition documents shall not be included for purposes of this calculation) for any such Acquisition shall not exceed $10,000,000.

"Permitted Amendments" has the meaning specified in Section 11.06(g).

"Permitted Liens" means, at any time, Liens in respect of property of the Borrower or any Subsidiary permitted to exist at such time pursuant to the terms of Section 8.01.

"Permitted Tax Distributions" shall mean, with respect to any fiscal year or portion thereof that the Borrower (a) is treated as a partnership, S corporation or other or disregarded entity under the Internal Revenue Code, or (b) files a consolidated, combined, unitary or similar Tax return with its direct or indirect parent, cash distributions paid by the Borrower to its equityholder(s) in respect of federal, state and local income tax liabilities (including estimates thereof and any tax deficiencies or other subsequent adjustments to tax liabilities) attributable to the ultimate taxpayers' ownership interests.

"Person" means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

"Plan" means any employee benefit plan within the meaning of Section 3(3) of ERISA (including a Pension Plan), maintained for employees of any Loan Party or any ERISA Affiliate or any such Plan to which any Loan Party or any ERISA Affiliate is required to contribute on behalf of any of its employees.

"Platform" has the meaning specified in Section 7.02.

"Pro Forma Basis" means, with respect to any transaction, that for purposes of calculating the financial covenants set forth in Section 8.11, such transaction shall be deemed to have occurred as of the first day of the most recent four fiscal quarter period preceding the date of such transaction for which the Borrower was required to deliver financial statements pursuant to Section 7.01(a) or (b). In connection

with the foregoing, (a) with respect to any Disposition or Recovery Event, (i) income statement and cash flow statement items (whether positive or negative) attributable to the property disposed of shall be excluded to the extent relating to any period occurring prior to the date of such transaction and (ii) Indebtedness which is retired shall be excluded and deemed to have been retired as of the first day of the applicable period and (b) with respect to any Acquisition, (i) income statement and cash flow statement items attributable to the Person or property acquired shall be included to the extent relating to any period applicable in such calculations to the extent (A) such items are not otherwise included in such income statement and cash flow statement items for the Borrower and its Subsidiaries in accordance with GAAP or in accordance with any defined terms set forth in Section 1.01 and (B) such items are supported by financial statements or other information reasonably satisfactory to the Administrative Agent, (ii) any Indebtedness incurred or assumed by the Borrower or any Subsidiary (including the Person or property acquired) in connection with such transaction and any Indebtedness of the Person or property acquired which is not retired in connection with such transaction (A) shall be deemed to have been incurred as of the first day of the applicable period and (B) if such Indebtedness has a floating or formula rate, shall have an implied rate of interest for the applicable period for purposes of this definition determined by utilizing the rate which is or would be in effect with respect to such Indebtedness as at the relevant date of determination and (iii) the Pro Forma Cost Savings with respect to any period shall be included in the calculation of Consolidated EBITDA.

"Pro Forma Compliance Certificate" means a certificate of a Responsible Officer of the Borrower containing reasonably detailed calculations of the financial covenants set forth in Section 8.11 recomputed as of the end of the period of the four fiscal quarters most recently ended for which the Borrower has delivered financial statements pursuant to Section 7.01(a) or (b) after giving effect to the applicable transaction on a Pro Forma Basis.

"Pro Forma Cost Savings" means, with respect to any period, the reduction in net costs and related adjustments that, without duplication, were directly attributable to any Acquisition, merger, reorganization or consolidation permitted hereunder that occurred during such period; provided that any such reductions in net costs and related adjustments are set forth in an officers' certificate signed by the Borrower's (or its general partner's) chief financial officer which states (a) the amount of such reduction in net costs and related adjustments and (b) that such reduction in net costs and related adjustments are based on the reasonable good faith beliefs of the officers executing such officers' certificate at the time of such execution.

"Public Lender" has the meaning specified in Section 7.02.

"Qualified ECP Guarantor" means, in respect of any Swap Obligation, each Loan Party that has total assets exceeding $10,000,000 at the time the relevant Guarantee or grant of the relevant security interest becomes effective with respect to such Swap Obligation or such other Person that constitutes an "eligible contract participant" under the Commodity Exchange Act or any regulations promulgated thereunder and can cause another Person to qualify as an "eligible contract participant" at such time by entering into a keepwell under Section 1a(18)(A)(v)(II) of the Commodity Exchange Act.

"Recipient" means the Administrative Agent, any Lender, the L/C Issuer or any other recipient of any payment to be made by or on account of any obligation of any Loan Party hereunder.

"Recovery Event" means any loss of, damage to or destruction of, or any condemnation or other taking for public use of, any property of the Borrower or any Subsidiary.

"Register" has the meaning specified in Section 11.06(c).

"Related Parties" means, with respect to any Person, such Person's Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors, consultants, service providers and representatives of such Person and of such Person's Affiliates.

"Relevant Governmental Body" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

"Reportable Event" means any of the events set forth in Section 4043(c) of ERISA, other than events for which the thirty (30) day notice period has been waived.

"Request for Credit Extension" means (a) with respect to a Borrowing, conversion or continuation of Loans, a Loan Notice, (b) with respect to an L/C Credit Extension, a Letter of Credit Application, and (c) with respect to a Swing Line Loan, a Swing Line Loan Notice.

"Required Approval" has the meaning specified in Section 11.06(g).

"Required Lenders" means, at any time, at least two (2) Lenders having Total Credit Exposures representing more than 50% of the Total Credit Exposures of all Lenders (provided that if (i) there is only one Lender, then such Lender shall constitute the Required Lenders and (ii) for purposes of this definition, a Lender, its Affiliates and its Approved Funds shall collectively be deemed to constitute a single Lender). The Total Credit Exposure of any Defaulting Lender shall be disregarded in determining Required Lenders at any time; provided that the amount of any participation in any Swing Line Loan and Unreimbursed Amounts that such Defaulting Lender has failed to fund that have not been reallocated to and funded by another Lender shall be deemed to be held by the Lender that is the Swing Line Lender or L/C Issuer, as the case may be, in making such determination.

"Rescindable Amount" has the meaning set forth in Section 2.12(b)(ii).

"Resolution Authority" means an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

"Responsible Officer" means (a) the chief executive officer, president, chief financial officer, treasurer, assistant treasurer or controller of a Loan Party, (b) solely for purposes of the delivery of incumbency certificates pursuant to Section 5.01 or 7.12, the secretary or any assistant secretary of a Loan Party and any other officer or employee of the applicable Loan Party so designated by any of the foregoing officers in a notice to the Administrative Agent (including, without limitation, a designation of any such officer or employee as an attorney in fact) and (c) solely for purposes of notices given pursuant to Article II, any other officer or employee of the applicable Loan Party so designated by any of the foregoing officers in a notice to the Administrative Agent or any other officer or employee of the applicable Loan Party designated in or pursuant to an agreement between the applicable Loan Party and the Administrative Agent. Any document delivered hereunder that is signed by a Responsible Officer of a Loan Party shall be conclusively presumed to have been authorized by all necessary corporate, partnership and/or other action on the part of such Loan Party and such Responsible Officer shall be conclusively presumed to have acted on behalf of such Loan Party. To the extent requested by the Administrative Agent, the Borrower will provide an incumbency certificate and appropriate authorization documentation, in form and substance reasonably satisfactory to the Administrative Agent with respect to any Responsible Officer.

"Restricted Payment" means, with respect to any Person, any dividend or other distribution (whether in cash, securities or other property) with respect to any Equity Interests of such Person, or any

payment (whether in cash, securities or other property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, defeasance, acquisition, cancellation or termination of any such Equity Interests or on account of any return of capital to such Person's stockholders, partners or members (or the equivalent Person thereof); provided, for clarity, neither the conversion of convertible debt into capital stock nor the purchase, redemption, retirement, acquisition, cancellation or termination of convertible debt in exchange for the issuance of Equity Interests (other than Disqualified Equity Interests) shall be a Restricted Payment hereunder.

"Revolving Commitment" means, as to each Lender, its obligation to (a) make Revolving Loans to the Borrower pursuant to Section 2.01 (subject to Section 2.01(b)), (b) purchase participations in L/C Obligations, and (c) purchase participations in Swing Line Loans, in an aggregate principal amount at any one time outstanding not to exceed the amount set forth opposite such Lender's name on Schedule 2.01 or in the Assignment and Assumption pursuant to which such Lender becomes a party hereto, as such amount may be adjusted from time to time in accordance with this Agreement (including pursuant to Section 2.01(b)).

"Revolving Credit Exposure" means, as to any Lender at any time, without duplication, the aggregate principal amount at such time of its outstanding Revolving Loans and such Lender's participation in L/C Obligations and Swing Line Loans at such time.

"Revolving Loan" has the meaning specified in Section 2.01(a).

"S&P" means Standard & Poor's Financial Services LLC, a subsidiary of S&P Global Inc., and any successor thereto.

"Sale and Leaseback Transaction" means, with respect to any Person, any arrangement, directly or indirectly, whereby such Person shall sell or transfer any property used or useful in its business, whether now owned or hereafter acquired, and thereafter rent or lease such property or other property that it intends to use for substantially the same purpose or purposes as the property being sold or transferred.

"Sanction(s)" means any international economic sanction administered or enforced by the United States Government, including OFAC, the United Nations Security Council, the European Union, Her Majesty's Treasury or other relevant sanctions authority.

"SEC" means the Securities and Exchange Commission, or any Governmental Authority succeeding to any of its principal functions.

"Secured Cash Management Agreement" means any Cash Management Agreement that is entered into by and between the Borrower or any Subsidiary and any Cash Management Bank with respect to such Cash Management Agreement. For the avoidance of doubt, a holder of Obligations in respect of Secured Cash Management Agreements shall be subject to the last paragraph of Section 9.03 and Section 10.11.

"Secured Hedge Agreement" means any Swap Contract that is entered into by and between the Borrower or any Subsidiary and any Hedge Bank with respect to such Swap Contract. For the avoidance of doubt, a holder of Obligations in respect of Secured Hedge Agreements shall be subject to the last paragraph of Section 9.03 and Section 10.11.

"Secured Parties" means, collectively, the Administrative Agent, the Lenders, the L/C Issuer, the Hedge Banks, the Cash Management Banks, the Indemnitees and each co-agent or sub-agent appointed by the Administrative Agent from time to time pursuant to Section 10.05.

"Secured Party Designation Notice" shall mean a notice from any Lender or an Affiliate of a Lender substantially in the form of Exhibit 9.03.

"Securitization Transaction" means, with respect to any Person, any financing transaction or series of financing transactions (including factoring arrangements) pursuant to which such Person or any Subsidiary of such Person may sell, convey or otherwise transfer, or grant a security interest in, accounts, payments, receivables, rights to future lease payments or residuals or similar rights to payment to a special purpose subsidiary or affiliate of such Person.

"Security Agreement" means the security and pledge agreement executed by each of the Loan Parties in favor of the Administrative Agent, for the benefit of the holders of the Obligations.

"SOFR Adjustment" with respect to Daily Simple SOFR means 0.26161% (26.161 basis points); and with respect to Term SOFR means 0.11448% (11.448 basis points) for an interest period of one-month's duration, 0.26161% (26.161 basis points;) for an interest period of three-month's duration, 0.42826% (42.826 basis points) for an interest period of six-months' duration, and 0.71513% (71.513 basis points) for an interest period of twelve–months' duration.

"Solvent" or "Solvency" means, with respect to any Person as of a particular date, that on such date (a) such Person is able to pay its debts and other liabilities, contingent obligations and other commitments as they mature in the ordinary course of business, (b) such Person does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person's ability to pay such debts and liabilities as they mature in the ordinary course of business, (c) such Person is not engaged in a business or a transaction, and is not about to engage in a business or a transaction, for which such Person's property would constitute unreasonably small capital under applicable Laws and after giving due consideration to the prevailing practice in the industry in which such Person is engaged or is to engage, (d) the fair value of the property of such Person is greater than the total amount of liabilities, including contingent liabilities, of such Person and (e) the present fair salable value of the property of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured. In computing the amount of contingent liabilities at any time, it is intended that such liabilities will be computed at the amount which, in light of all the facts and circumstances existing at such time, represents the amount that can reasonably be expected to become an actual or matured liability.

"Specified Capital Expansion Holiday" means the period consisting of four (4) full fiscal quarters after the Borrower has (i) made capital expenditures related to the Specified Capital Expansion (or other capital expansion project approved by the board of directors, board of managers or equivalent governing body of the Borrower) of at least $200,000,000 and (ii) provided written notice to the Administrative Agent that the Borrower is electing to initiate such Specified Capital Expansion Holiday.

"Specified Capital Expansion" means expansion activities related to the Borrower's soda ash operations in Wyoming which have been approved in writing by the Borrower's board of directors, board of managers or equivalent governing body.

"Specified Loan Party" has the meaning specified in Section 4.08.

"Specified Owners" means, collectively, any or all of the following: (a) Turgay Ciner, (b) any trust or other estate-planning vehicle established for the benefit of Turgay Ciner, or (c) the estate of Turgay Ciner.

"Subsidiary" of a Person means a corporation, partnership, joint venture, limited liability company or other business entity of which a majority of the shares of Voting Equity Interests is at the time beneficially owned, or the management of which is otherwise controlled, directly, or indirectly through one or more intermediaries, or both, by such Person. Unless otherwise specified, all references herein to a "Subsidiary" or to "Subsidiaries" shall refer to a Subsidiary or Subsidiaries of the Borrower.

"Swap Contract" means (a) any and all rate swap transactions, basis swaps, credit derivative transactions, forward rate transactions, commodity swaps, commodity options, forward commodity contracts, equity or equity index swaps or options, bond or bond price or bond index swaps or options or forward bond or forward bond price or forward bond index transactions, interest rate options, forward foreign exchange transactions, cap transactions, floor transactions, collar transactions, currency swap transactions, cross-currency rate swap transactions, currency options, spot contracts, or any other similar transactions or any combination of any of the foregoing (including any options to enter into any of the foregoing), whether or not any such transaction is governed by or subject to any master agreement, and (b) any and all transactions of any kind, and the related confirmations, which are subject to the terms and conditions of, or governed by, any form of master agreement published by the International Swaps and Derivatives Association, Inc., any International Foreign Exchange Master Agreement, or any other master agreement (any such master agreement, together with any related schedules, a "Master Agreement"), including any such obligations or liabilities under any Master Agreement.

"Swap Obligation" means with respect to any Guarantor any obligation to pay or perform under any agreement, contract or transaction that constitutes a "swap" within the meaning of Section 1a(47) of the Commodity Exchange Act.

"Swap Termination Value" means, in respect of any one or more Swap Contracts, after taking into account the effect of any legally enforceable netting agreement relating to such Swap Contracts, (a) for any date on or after the date such Swap Contracts have been closed out and termination value(s) determined in accordance therewith, such termination value(s) and (b) for any date prior to the date referenced in clause (a), the amount(s) determined as the mark-to-market value(s) for such Swap Contracts, as determined based upon one or more mid-market or other readily available quotations provided by any recognized dealer in such Swap Contracts (which may include a Lender or any Affiliate of a Lender).

"Swing Line Lender" means Bank of America in its capacity as provider of Swing Line Loans, or any successor swing line lender hereunder.

"Swing Line Loan" has the meaning specified in Section 2.04(a).

"Swing Line Loan Notice" means a notice of a Borrowing of Swing Line Loans pursuant to Section 2.04(b), which, if in writing, shall be substantially in the form of Exhibit 2.04 or such other form as approved by the Administrative Agent (including any form on an electronic platform or electronic transmission system as shall be approved by the Administrative Agent), appropriately completed and signed by a Responsible Officer of the Borrower.

"Swing Line Sublimit" means an amount equal to Twenty Million Dollars ($20,000,000). The Swing Line Sublimit is part of, and not in addition to, the Aggregate Revolving Commitments.

"Syndication Agent" means Bank of America, in its capacity as Syndication Agent.

"Synthetic Lease Obligation" means the monetary obligation of a Person under (a) a so-called synthetic, off-balance sheet or tax retention lease, or (b) an agreement for the use or possession of

property creating obligations that do not appear on the balance sheet of such Person but which, upon the insolvency or bankruptcy of such Person, would be characterized as the indebtedness of such Person (without regard to accounting treatment).

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

"Term SOFR" means, for the applicable corresponding Interest Period of BSBY (or if any Interest Period does not correspond to an interest period applicable to SOFR, the closest corresponding interest period of SOFR, and if such interest period of SOFR corresponds equally to two Interest Periods of BSBY, the corresponding interest period of the shorter duration shall be applied) the forward-looking term rate based on SOFR that has been selected or recommended by the Relevant Governmental Body.

"Threshold Amount" means, with respect to the Borrower and its Subsidiaries, $5,000,000.

"Total Credit Exposure" means, as to any Lender at any time, without duplication, the unused Revolving Commitments of such Lender at such time, the outstanding Loans of such Lender at such time and such Lender's participation in L/C Obligations and Swing Line Loans at such time.

"Total Revolving Outstandings" means the aggregate Outstanding Amount of, without duplication, all Revolving Loans, all Swing Line Loans and all L/C Obligations.

"Type" means, with respect to any Loan, its character as a Base Rate Loan or a BSBY Rate Loan.

"UCP" means, with respect to any Letter of Credit, the Uniform Customs and Practice for Documentary Credits, International Chamber of Commerce ("ICC") Publication No. 600 (or such later version thereof as may be in effect at the time of issuance).

"UK Financial Institution" means any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended form time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person subject to IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

"UK Resolution Authority" means the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

"United States" and "U.S." mean the United States of America.

"Unreimbursed Amount" has the meaning specified in Section 2.03(c)(i).

"U.S. Person" means any Person that is a "United States Person" as defined in Section 7701(a)(30) of the Internal Revenue Code.

"U.S. Tax Compliance Certificate" has the meaning specified in Section 3.01(f)(ii)(B)(3).

"Voting Equity Interests" means, with respect to any Person, Equity Interests issued by such Person the holders of which are ordinarily, in the absence of contingencies, entitled to vote for the election of directors (or persons performing similar functions) of such Person, even though the right so to vote has been suspended by the happening of such a contingency.

"Wholly Owned Subsidiary" means, with respect to any Person, any other Person 100% of whose Equity Interests are at the time owned by such Person directly or indirectly through other Persons 100% of whose Equity Interests are at the time owned, directly or indirectly, by such Person. Unless otherwise specified, all references herein to a "Wholly Owned Subsidiary" or to "Wholly Owned Subsidiaries" shall refer to a Wholly Owned Subsidiary or Wholly Owned Subsidiaries of the Borrower.

"Write-Down and Conversion Powers" means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

1.02 Other Interpretive Provisions.

With reference to this Agreement and each other Loan Document, unless otherwise specified herein or in such other Loan Document:

(a) The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include," "includes" and "including" shall be deemed to be followed by the phrase "without limitation." The word "will" shall be construed to have the same meaning and effect as the word "shall." Unless the context requires otherwise, (i) any definition of or reference to any agreement, instrument or other document (including any Organization Document) shall be construed as referring to such agreement, instrument or other document as from time to time amended, amended and restated, supplemented, replaced, refinanced or otherwise modified (subject to any restrictions on such amendments, restatements, supplements, replacements, refinancings or modifications set forth herein or in any other Loan Document), (ii) any reference herein to any Person shall be construed to include such Person's successors and assigns, (iii) the words "hereto", "herein," "hereof" and "hereunder," and words of similar import when used in any Loan Document, shall be construed to refer to such Loan Document in its entirety and not to any particular provision thereof, (iv) all references in a Loan Document to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, the Loan Document in which such references appear, (v) any reference to any Law or law shall include all statutory and regulatory rules, regulations, orders and provisions consolidating, amending, replacing or interpreting such Law or law and any reference to any law or regulation shall, unless otherwise specified, refer to such law or regulation as amended, modified or supplemented from time to time, and (vi) the words "asset" and "property" shall be construed to have the same meaning and effect and to refer to any and all assets and properties, tangible and intangible, real and personal, including cash, securities, accounts and contract rights.

(b) In the computation of periods of time from a specified date to a later specified date, the word "from" means "from and including;" the words "to" and "until" each mean "to but excluding;" and the word "through" means "to and including."

(c) Section headings herein and in the other Loan Documents are included for convenience of reference only and shall not affect the interpretation of this Agreement or any other Loan Document.

(d) Wherever the phrase "to the knowledge of any Loan Party" or words of similar import relating to the knowledge or the awareness of any Loan Party are used in this Agreement or any other Loan Document, such phrase shall mean and refer to the actual knowledge of a Responsible Officer of any Loan Party.

(e) Any requirement under this Agreement that a matter be appropriate, satisfactory or acceptable to the Administrative Agent (or any words of similar import) shall mean, in each case, the Administrative Agent acting reasonably.

(f) All references to the "payment in full" of the Obligations or "as long as any of the Obligations shall be outstanding" or words of similar import shall mean to exclude (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount.

(g) All references to the payment of fees and expenses of the Administrative Agent or any Lender (other than counsel fees and expenses) shall mean the reasonable and documented out-of-pocket fees; and, with respect to the fees and expenses of counsel, shall not include any fees or expenses of internal counsel to the Administrative Agent or any Lender.

(h) Any reference herein to a merger, transfer, consolidation, amalgamation, assignment, sale, disposition or transfer, or similar term, shall be deemed to apply to a division of or by a limited liability company, or an allocation of assets to a series of a limited liability company (or the unwinding of such a division or allocation), as if it were a merger, transfer, consolidation, amalgamation, assignment, sale, disposition or transfer, or similar term, as applicable, to, of or with a separate Person. Any division of a limited liability company shall constitute a separate Person hereunder (and each division of any limited liability company that is a Subsidiary, joint venture or any other like term shall also constitute such a Person or entity).

1.03 Accounting Terms; Changes in GAAP; Calculation of Financial Covenants on a Pro Forma Basis.

(a) Generally. All accounting terms not specifically or completely defined herein shall be construed in conformity with, and all financial data (including financial ratios and other financial calculations) required to be submitted pursuant to this Agreement shall be prepared in conformity with, GAAP applied on a consistent basis, as in effect from time to time, applied in a manner consistent with that used in preparing the 2020 Financial Statements, except as otherwise specifically prescribed herein. Notwithstanding the foregoing, for purposes of determining compliance with any covenant (including the computation of any financial covenant) contained herein, (i) Indebtedness of the Borrower and its Subsidiaries shall be deemed to be carried at 100% of the outstanding principal amount thereof, and the effects of FASB ASC 825 and FASB ASC 470-20 on financial liabilities shall be disregarded, (ii) all liability amounts shall be determined excluding any liability relating to any operating lease, all asset amounts shall be

determined excluding any right-of-use assets relating to any operating lease, all amortization amounts shall be determined excluding any amortization of a right-of-use asset relating to any operating lease, and all interest amounts shall be determined excluding any deemed interest comprising a portion of fixed rent payable under any operating lease, in each case to the extent that such liability, asset, amortization or interest pertains to an operating lease under which the covenantor or a member of its consolidated group is the lessee and would not have been accounted for as such under GAAP as in effect on December 31, 2015, and (iii) all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to herein shall be made, without giving effect to any election under FASB ASC Topic 825 "Financial Instruments" (or any other financial accounting standard having a similar result or effect) to value any Indebtedness of the Borrower or any Subsidiary at "fair value", as defined therein. For purposes of determining the amount of any outstanding Indebtedness, no effect shall be given to any election by the Borrower to measure an item of Indebtedness using fair value (as permitted by Financial Accounting Standards Board Accounting Standards Codification 825–10–25 (formerly known as FASB 159) or any similar accounting standard).

(b) Changes in GAAP. If at any time any change in GAAP (including the adoption of IFRS) would affect the computation of any financial ratio or requirement set forth in any Loan Document, and either the Borrower or the Required Lenders shall so request, the Administrative Agent, the Lenders and the Loan Parties shall negotiate in good faith to amend such ratio or requirement to preserve the original intent thereof in light of such change in GAAP (subject to the approval of the Borrower and the Required Lenders); provided that, until so amended, (i) such ratio or requirement shall continue to be computed in accordance with GAAP prior to such change therein and (ii) the Borrower shall provide to the Administrative Agent and the Lenders financial statements and other documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP. Without limiting the foregoing, leases shall continue to be classified and accounted for on a basis consistent with that reflected in the 2020 Financial Statements for all purposes of this Agreement, notwithstanding any change in GAAP relating thereto, unless the parties hereto shall enter into a mutually acceptable amendment addressing such changes, as provided for above.

(c) Consolidation of Variable Interest Entities. All references herein to consolidated financial statements of the Borrower and its Subsidiaries or to the determination of any amount for the Borrower and its Subsidiaries on a consolidated basis or any similar reference shall, in each case, be deemed to include each variable interest entity that the Borrower is required to consolidate pursuant to FASB ASC 810 as if such variable interest entity were a Subsidiary as defined herein.

(d) Calculation of Financial Covenants on a Pro Forma Basis. Notwithstanding the above, the parties hereto acknowledge and agree that all calculations of the financial covenants in Section 8.11 (including for purposes of determining the Applicable Rate) shall be made on a Pro Forma Basis with respect to any Acquisition, Disposition or Recovery Event occurring during the applicable period.

1.04 Rounding.

Any financial ratios required to be maintained by the Loan Parties pursuant to this Agreement (or required to be satisfied in order for a specific action to be permitted under this Agreement) shall be calculated by dividing the appropriate component by the other component, carrying the result to one place

more than the number of places by which such ratio is expressed herein and rounding the result up or down to the nearest number.

1.05 Times of Day.

Unless otherwise specified, all references herein to times of day shall be references to Eastern time (daylight or standard, as applicable).

1.06 Letter of Credit Amounts.

Unless otherwise specified herein, the amount of a Letter of Credit at any time shall be deemed to be the stated amount of such Letter of Credit in effect at such time; provided, however, that with respect to any Letter of Credit that, by its terms or the terms of any Issuer Document related thereto, provides for one or more automatic increases in the stated amount thereof, the amount of such Letter of Credit shall be deemed to be the maximum stated amount of such Letter of Credit after giving effect to all such increases, whether or not such maximum stated amount is in effect at such time.

1.07 Rates.

The Administrative Agent does not warrant, nor accept responsibility, nor shall the Administrative Agent have any liability with respect to the administration, submission or any other matter related to any reference rate referred to herein or with respect to any rate (including, for the avoidance of doubt, the selection of such rate and any related spread or other adjustment) that is an alternative or replacement for or successor to any such rate (including, without limitation, any Successor Rate) (or any component of any of the foregoing) or the effect of any of the foregoing, or of any Conforming Changes. The Administrative Agent and its affiliates or other related entities may engage in transactions or other activities that affect any reference rate referred to herein, or any alternative, successor or replacement rate (including, without limitation, any Successor Rate) (or any component of any of the foregoing) or any related spread or other adjustments thereto, in each case, in a manner adverse to the Borrower. The Administrative Agent may select information sources or services in its reasonable discretion to ascertain any reference rate referred to herein or any alternative, successor or replacement rate (including, without limitation, any Successor Rate) (or any component of any of the foregoing), in each case pursuant to the terms of this Agreement, and shall have no liability to the Borrower, any Lender or any other person or entity for damages of any kind, including direct or indirect, special, punitive, incidental or consequential damages, costs, losses or expenses (whether in tort, contract or otherwise and whether at law or in equity), for any error or other action or omission related to or affecting the selection, determination, or calculation of any rate (or component thereof) provided by any such information source or service.

ARTICLE II

THE REVOLVING COMMITMENTS AND CREDIT EXTENSIONS

2.01 Revolving Loans.

(a) Subject to the terms and conditions set forth herein, each Lender severally agrees to make loans (each such loan, a "Revolving Loan") to the Borrower in Dollars from time to time on any Business Day during the Availability Period in an aggregate amount not to exceed at any time outstanding the amount of such Lender's Revolving Commitment; provided, however, that after giving effect to any Borrowing of Revolving Loans, (i) the Total Revolving Outstandings shall not exceed the Aggregate Revolving Commitments, and (ii) the Revolving Credit Exposure of any Lender shall not exceed such Lender's Revolving Commitment. Within the limits of each

Lender's Revolving Commitment, and subject to the other terms and conditions hereof, the Borrower may borrow under this Section 2.01, prepay under Section 2.05, and reborrow under this Section 2.01. Revolving Loans may be Base Rate Loans or BSBY Rate Loans, or a combination thereof, as further provided herein.

(b) Increases of the Aggregate Revolving Commitments. The Borrower shall have the right, upon at least five (5) Business Days' prior written notice to the Administrative Agent, to increase the Aggregate Revolving Commitments by up to $250,000,000 in the aggregate in one or more increases from time to time at any time prior to the date that is six (6) months prior to the Maturity Date then in effect, subject, however, in any such case, to satisfaction of the following conditions precedent:

(i) any such increase shall be in a minimum principal amount of $5,000,000 and in integral multiples of $1,000,000 in excess thereof;

(ii) no Default or Event of Default shall exist before and immediately after giving effect to such increase;

(iii) no existing Lender shall be under any obligation to increase its Revolving Commitment and any such decision whether to increase its Revolving Commitment shall be in such Lender's sole and absolute discretion;

(iv) (1) any new Lender providing a Revolving Commitment in connection with any increase in Aggregate Revolving Commitments shall be approved (such approval not to be unreasonably withheld or delayed) by the Administrative Agent and join this Agreement by executing such joinder documents reasonably satisfactory to the Borrower and the Administrative Agent and/or (2) any existing Lender electing to increase its Revolving Commitment shall have executed a commitment agreement reasonably satisfactory to such existing Lender, the Borrower and the Administrative Agent;

(v) any such increase in the Aggregate Revolving Commitments shall be subject to receipt by the Administrative Agent of (x) reasonably satisfactory opinions of legal counsel to the Loan Parties (including, to the extent required, local counsel to the Loan Parties), addressed to the Administrative Agent and each Lender, (y) a certificate of each Loan Party dated as of the date of such increase signed by a Responsible Officer of such Loan Party, (I) certifying and attaching the Organization Documents of such Loan Party, (II) certifying and attaching the resolutions adopted by such Loan Party approving or consenting to such increase, (III) certifying that the conditions set forth in Section 5.02 (other than the delivery of a Loan Notice) have been satisfied and (IV) certifying that the Loan Parties shall be in compliance, on a Pro Forma Basis after giving effect to the incurrence of any such increase in the Aggregate Revolving Commitments, with the financial covenants set forth in Section 8.11 and (z) such documents and certifications as the Administrative Agent may reasonably require to evidence that each Loan Party is duly organized or formed, and is validly existing, in good standing and qualified to engage in business in its state of organization or formation;

(vi) to the extent that the joinder or commitment agreements described in clause (iv) above provide for an applicable margin of, and/or commitment fee for, additional Revolving Commitments greater than the Applicable Rate and/or Commitment Fee with respect to the existing Revolving Commitments at such time, the Applicable

Rate and/or the Commitment Fee (as applicable) for the existing Revolving Commitments shall be increased automatically (without the consent of any Person) such that the Applicable Rate and/or the Commitment Fee (as applicable) for such existing Revolving Commitments is not less than the applicable margin and/or the commitment fee (as applicable) for such additional Revolving Commitments;

(vii) subject to clause (vi) above, the terms and conditions of any Loan Document applicable to any increased Revolving Commitments shall be the same as the terms and conditions applicable to the Revolving Commitments immediately prior to giving effect to such increase;

(viii) if any Revolving Loans are outstanding at the time of the increase in the Aggregate Revolving Commitments, the Borrower shall, if applicable, prepay one or more existing Revolving Loans (such prepayment to be subject to Section 3.05) in an amount necessary such that after giving effect to the increase in the Aggregate Revolving Commitments, each Lender will hold its pro rata share (based on its Applicable Percentage of the increased Aggregate Revolving Commitments) of outstanding Revolving Loans; provided, that, for the avoidance of doubt, immediately after such prepayment, the Borrower shall automatically borrow from such new or increased Revolving Commitments the exact amount so prepaid such that the aggregate amount of Revolving Loans outstanding immediately prior to such prepayment, and immediately after such borrowing, shall be the same;

(ix) None of the Lenders, the Administrative Agent and the Arranger shall have any responsibility for arranging any such increase without such party's prior written agreement; and

(x) The Letter of Credit Sublimit and the Swing Line Sublimit shall not be increased as a result of any increase in the Aggregate Revolving Commitments (without the consent of the Required Lenders and the L/C Issuer and/or Swing Line Lender, as appropriate).

2.02 Borrowings, Conversions and Continuations of Loans.

(a) Each Borrowing, each conversion of Loans from one Type to the other, and each continuation of BSBY Rate Loans shall be made upon the Borrower's irrevocable notice to the Administrative Agent, which may be given by (A) telephone or (B) a Loan Notice. Each such notice must be received by the Administrative Agent not later than 11:00 a.m. (i) three (3) Business Days prior to the requested date of any Borrowing of, conversion to or continuation of, BSBY Rate Loans or of any conversion of BSBY Rate Loans to Base Rate Loans, and (ii) on the requested date of any Borrowing of Base Rate Loans. Each telephonic notice by the Borrower pursuant to this Section 2.02(a) must be confirmed promptly by delivery to the Administrative Agent of a Loan Notice. Each Borrowing of, conversion to or continuation of BSBY Rate Loans shall be in a principal amount of $1,000,000 or a whole multiple of $100,000 in excess thereof. Except as provided in Sections 2.03(c) and 2.04(c), each Borrowing of or conversion to Base Rate Loans shall be in a principal amount of $500,000 or a whole multiple of $100,000 in excess thereof. Each Loan Notice (whether telephonic or written) shall specify (i) whether the Borrower is requesting a Borrowing, a conversion of Loans from one Type to the other, or a continuation of BSBY Rate Loans, (ii) the requested date of the Borrowing, conversion or continuation, as the case may be (which shall be a Business Day), (iii) the principal amount of Loans to be borrowed, converted or continued, (iv) the Type of Loans to be borrowed or to which existing Loans are to

be converted, and (v) if applicable, the duration of the Interest Period with respect thereto. If the Borrower fails to specify a Type of a Loan in a Loan Notice or if the Borrower fails to give a timely notice requesting a conversion or continuation, then the applicable Loans shall be made as, or converted to, Base Rate Loans. Any such automatic conversion to Base Rate Loans shall be effective as of the last day of the Interest Period then in effect with respect to the applicable BSBY Rate Loans. If the Borrower requests a Borrowing of, conversion to, or continuation of BSBY Rate Loans in any Loan Notice, but fails to specify an Interest Period, it will be deemed to have specified an Interest Period of one (1) month.

(b) Following receipt of a Loan Notice, the Administrative Agent shall promptly notify each Lender of the amount of its Applicable Percentage of the applicable Loans, and if no timely notice of a conversion or continuation is provided by the Borrower, the Administrative Agent shall notify each Lender of the details of any automatic conversion to Base Rate Loans described in the preceding clause. In the case of a Borrowing, each Lender shall make the amount of its Loan available to the Administrative Agent in immediately available funds at the Administrative Agent's Office not later than 2:00 p.m. on the Business Day specified in the applicable Loan Notice provided that if any Lender fails to remit such funds to the Administrative Agent prior to such time, the Administrative Agent may elect in its sole discretion to fund with its own funds such Lender's Applicable Percentage of such Loans on such borrowing date, and such Lender shall be subject to the repayment obligation in Section 2.12(b). Upon satisfaction of the applicable conditions set forth in Section 5.02 (and, if such Borrowing is the initial Credit Extension, Section 5.01), the Administrative Agent shall make all funds so received available to the Borrower in like funds as received by the Administrative Agent either by (i) crediting the account of the Borrower on the books of Bank of America with the amount of such funds or (ii) wire transfer of such funds, in each case in accordance with instructions provided to (and reasonably acceptable to) the Administrative Agent by the Borrower; provided, however, that if, on the date the Loan Notice with respect to a Borrowing of Revolving Loans is given by the Borrower, there are L/C Borrowings outstanding, then the proceeds of such Borrowing, first, shall be applied to the payment in full of any such L/C Borrowings and second, shall be made available to the Borrower as provided above.

(c) Except as otherwise provided herein, a BSBY Rate Loan may be continued or converted only on the last day of the Interest Period for such BSBY Rate Loan. Upon the occurrence and during the continuance of an Event of Default, no Loans may be requested as, converted to or continued as BSBY Rate Loans without the consent of the Required Lenders.

(d) The Administrative Agent shall promptly notify the Borrower and the Lenders of the interest rate applicable to any Interest Period for BSBY Rate Loans upon determination of such interest rate.

(e) After giving effect to all Borrowings, all conversions of Loans from one Type to the other, and all continuations of Loans as the same Type, there shall not be more than eight (8) Interest Periods in effect.

(f) Notwithstanding anything to the contrary in this Agreement, any Lender may exchange, continue or rollover all of the portion of its Loans in connection with any refinancing, extension, loan modification or similar transaction permitted by the terms of this Agreement, pursuant to a cashless settlement mechanism approved by the Borrower, the Administrative Agent, and such Lender.

(g) With respect to BSBY, the Administrative Agent will have the right to make Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Conforming Changes will become effective without any further action or consent of any other party to this Agreement or any other Loan Document; provided that, with respect to any such amendment effected, the Administrative Agent shall post each such amendment implementing such Conforming Changes to the Borrower and the Lenders reasonably promptly after such amendment becomes effective.

(h) This Section 2.02 shall not apply to Swing Line Loans.

2.03 Letters of Credit.

(a) The Letter of Credit Commitment.

(i) Subject to the terms and conditions set forth herein, (A) the L/C Issuer agrees, in reliance upon the agreements of the Lenders set forth in this Section 2.03, (1) from time to time on any Business Day during the period from the Closing Date until the Letter of Credit Expiration Date, to issue Letters of Credit in Dollars for the account of the Borrower or any Subsidiary, and to amend or extend Letters of Credit previously issued by it, in accordance with clause (b) below, and (2) to honor drawings under the Letters of Credit; and (B) the Lenders severally agree to participate in Letters of Credit issued for the account of the Borrower or any Subsidiary and any drawings thereunder; provided that after giving effect to any L/C Credit Extension with respect to any Letter of Credit, (x) the Total Revolving Outstandings shall not exceed the Aggregate Revolving Commitments, (y) the Revolving Credit Exposure of any Lender shall not exceed such Lender's Revolving Commitment and (z) the Outstanding Amount of the L/C Obligations shall not exceed the Letter of Credit Sublimit. Each request by the Borrower for the issuance or amendment of a Letter of Credit shall be deemed to be a representation by the Borrower that the L/C Credit Extension so requested complies with the conditions set forth in the proviso to the preceding sentence. Within the foregoing limits, and subject to the terms and conditions hereof, the Borrower's ability to obtain Letters of Credit shall be fully revolving, and accordingly the Borrower may, during the foregoing period, obtain Letters of Credit to replace Letters of Credit that have expired or that have been drawn upon and reimbursed. All Existing Letters of Credit shall be deemed to have been issued pursuant hereto, and from and after the Closing Date shall be subject to and governed by the terms and conditions hereof and shall be deemed to be a Letter of Credit hereunder.

(ii) The L/C Issuer shall not issue any Letter of Credit if:

(A) subject to Section 2.03(b)(iii), the expiry date of the requested Letter of Credit would occur more than twelve (12) months after the date of issuance or last extension, unless the L/C Issuer and the Lenders (other than Defaulting Lenders) holding a majority of the Revolving Credit Exposure (other than the Revolving Credit Exposure with respect to any Defaulting Lender) have approved such expiry date; or

(B) the expiry date of such requested Letter of Credit would occur after the Letter of Credit Expiration Date, unless the L/C Issuer and all the Lenders that have Revolving Commitments have approved such expiry date.

(iii) The L/C Issuer shall not be under any obligation to issue any Letter of Credit if:

(A) any order, judgment or decree of any Governmental Authority or arbitrator shall by its terms purport to enjoin or restrain the L/C Issuer from issuing such Letter of Credit, or any Law applicable to the L/C Issuer or any request or directive (whether or not having the force of law) from any Governmental Authority with jurisdiction over the L/C Issuer shall prohibit the issuance of letters of credit generally or such Letter of Credit in particular or shall impose upon the L/C Issuer with respect to such Letter of Credit any material restriction, reserve or capital requirement (for which the L/C Issuer is not otherwise compensated hereunder) not in effect on the Closing Date, or shall impose upon the L/C Issuer any unreimbursed loss, cost or expense which was not applicable on the Closing Date and which the L/C Issuer in good faith deems material to it;

(B) the issuance of such Letter of Credit would violate one or more policies of the L/C Issuer applicable to letters of credit generally;

(C) except as otherwise agreed by the Administrative Agent and the L/C Issuer, such Letter of Credit is in an initial stated amount less than $500,000;

(D) such Letter of Credit is to be denominated in a currency other than Dollars;

(E) any Lender is at that time a Defaulting Lender, unless the L/C Issuer has entered into arrangements, including the delivery of Cash Collateral, reasonably satisfactory to the L/C Issuer (in its sole discretion reasonably exercised) with the Borrower or such Defaulting Lender to eliminate the L/C Issuer's actual or potential Fronting Exposure (after giving effect to Section 2.15(b)) with respect to the Defaulting Lender arising from either the Letter of Credit then proposed to be issued or that Letter of Credit and all other L/C Obligations as to which the L/C Issuer has actual or potential Fronting Exposure, as it may elect in its sole discretion reasonably exercised; or

(F) such Letter of Credit contains any provisions for automatic reinstatement of the stated amount after any drawing thereunder.

(iv) The L/C Issuer shall not amend any Letter of Credit if the L/C Issuer would not be permitted at such time to issue such Letter of Credit in its amended form under the terms hereof.

(v) The L/C Issuer shall be under no obligation to amend any Letter of Credit if (A) the L/C Issuer would have no obligation at such time to issue such Letter of Credit in its amended form under the terms hereof, or (B) the beneficiary of such Letter of Credit does not accept the proposed amendment to such Letter of Credit.

(vi) The L/C Issuer shall act on behalf of the Lenders with respect to any Letters of Credit issued by it and the documents associated therewith, and the L/C Issuer shall have all of the benefits and immunities (A) provided to the Administrative Agent in

Article X with respect to any acts taken or omissions suffered by the L/C Issuer in connection with Letters of Credit issued by it or proposed to be issued by it and Issuer Documents pertaining to such Letters of Credit as fully as if the term "Administrative Agent" as used in Article X included the L/C Issuer with respect to such acts or omissions, and (B) as additionally provided herein with respect to the L/C Issuer.

(b) Procedures for Issuance and Amendment of Letters of Credit; Auto-Extension Letters of Credit.

(i) Each Letter of Credit shall be issued or amended, as the case may be, upon the request of the Borrower delivered to the L/C Issuer (with a copy to the Administrative Agent) in the form of a Letter of Credit Application, appropriately completed and signed by a Responsible Officer of the Borrower. Such Letter of Credit Application may be sent by facsimile, by United States mail, by overnight courier, by electronic transmission using the system provided by the L/C Issuer, by personal delivery or by any other means acceptable to the L/C Issuer. Such Letter of Credit Application must be received by the L/C Issuer and the Administrative Agent not later than 11:00 a.m. at least three (3) Business Days (or such later date and time as the Administrative Agent and the L/C Issuer may agree in a particular instance in their sole discretion) prior to the proposed issuance date or date of amendment, as the case may be. In the case of a request for an initial issuance of a Letter of Credit, such Letter of Credit Application shall specify in form and detail reasonably satisfactory to the L/C Issuer: (A) the proposed issuance date of the requested Letter of Credit (which shall be a Business Day); (B) the amount thereof; (C) the expiry date thereof; (D) the name and address of the beneficiary thereof; (E) the documents to be presented by such beneficiary in case of any drawing thereunder; (F) the full text of any certificate to be presented by such beneficiary in case of any drawing thereunder; (G) the purpose and nature of the requested Letter of Credit; and (H) such other matters as the L/C Issuer may reasonably require. In the case of a request for an amendment of any outstanding Letter of Credit, such Letter of Credit Application shall specify in form and detail reasonably satisfactory to the L/C Issuer (A) the Letter of Credit to be amended; (B) the proposed date of amendment thereof (which shall be a Business Day); (C) the nature of the proposed amendment; and (D) such other matters as the L/C Issuer may reasonably require. Additionally, the Borrower shall furnish to the L/C Issuer and the Administrative Agent such other documents and information pertaining to such requested Letter of Credit issuance or amendment, including any Issuer Documents, as the L/C Issuer or the Administrative Agent may reasonably require.

(ii) Promptly after receipt of any Letter of Credit Application, the L/C Issuer will confirm with the Administrative Agent (by telephone or in writing) that the Administrative Agent has received a copy of such Letter of Credit Application from the Borrower and, if not, the L/C Issuer will provide the Administrative Agent with a copy thereof. Unless the L/C Issuer has received written notice from any Lender, the Administrative Agent or any Loan Party, at least one (1) Business Day prior to the requested date of issuance or amendment of the applicable Letter of Credit, that one or more applicable conditions contained in Article V shall not then be satisfied, then, subject to the terms and conditions hereof, the L/C Issuer shall, on the requested date, issue a Letter of Credit for the account of the Borrower or the applicable Subsidiary or enter into the applicable amendment, as the case may be, in each case in accordance with the L/C Issuer's usual and customary business practices. Immediately upon the issuance of each Letter of Credit, each Lender shall be deemed to, and hereby irrevocably and

unconditionally agrees to, purchase from the L/C Issuer a risk participation in such Letter of Credit in an amount equal to the product of such Lender's Applicable Percentage times the amount of such Letter of Credit.

(iii) If the Borrower so requests in any applicable Letter of Credit Application, the L/C Issuer may, in its sole discretion, agree to issue a Letter of Credit that has automatic extension provisions (each, an "Auto-Extension Letter of Credit"); provided that any such Auto-Extension Letter of Credit must permit the L/C Issuer to prevent any such extension at least once in each twelve (12) month period (commencing with the date of issuance of such Letter of Credit) by giving prior notice to the beneficiary thereof not later than a day (the "Non-Extension Notice Date") in each such twelve (12) month period to be agreed upon at the time such Letter of Credit is issued. Unless otherwise directed by the L/C Issuer, the Borrower shall not be required to make a specific request to the L/C Issuer for any such extension. Once an Auto-Extension Letter of Credit has been issued, the Lenders shall be deemed to have authorized (but may not require) the L/C Issuer to permit the extension of such Letter of Credit at any time to an expiry date not later than the Letter of Credit Expiration Date; provided, however, that the L/C Issuer shall not permit any such extension if (A) the L/C Issuer has determined that it would not be permitted, or would have no obligation, at such time to issue such Letter of Credit in its revised form (as extended) under the terms hereof (by reason of the provisions of clause (ii) or (iii) of Section 2.03(a) or otherwise), or (B) it has received notice (which may be by telephone or in writing) on or before the day that is seven (7) Business Days before the Non-Extension Notice Date (1) from the Administrative Agent that the Required Lenders have elected not to permit such extension or (2) from the Administrative Agent, any Lender or any Loan Party that one or more of the applicable conditions specified in Section 5.02 is not then satisfied, and in each case directing the L/C Issuer not to permit such extension.

(iv) If the Borrower so requests in any applicable Letter of Credit Application, the L/C Issuer may, in its sole discretion, agree to issue a Letter of Credit that permits the automatic reinstatement of all or a portion of the stated amount thereof after any drawing thereunder (each, an "Auto-Reinstatement Letter of Credit"). Unless otherwise directed by the L/C Issuer, the Borrower shall not be required to make a specific request to the L/C Issuer to permit such reinstatement. Once an Auto-Reinstatement Letter of Credit has been issued, except as provided in the following sentence, the Lenders shall be deemed to have authorized (but may not require) the L/C Issuer to reinstate all or a portion of the stated amount thereof in accordance with the provisions of such Letter of Credit. Notwithstanding the foregoing, if such Auto-Reinstatement Letter of Credit permits the L/C Issuer to decline to reinstate all or any portion of the stated amount thereof after a drawing thereunder by giving notice of such non-reinstatement within a specified number of days after such drawing (the "Non-Reinstatement Deadline"), the L/C Issuer shall not permit such reinstatement if it has received a notice (which may be by telephone or in writing) on or before the day that is seven (7) Business Days before the Non-Reinstatement Deadline (A) from the Administrative Agent that the Required Lenders have elected not to permit such reinstatement or (B) from the Administrative Agent, any Lender or any Loan Party that one or more of the applicable conditions specified in Section 5.02 is not then satisfied (treating such reinstatement as an L/C Credit Extension for purposes of this clause) and, in each case, directing the L/C Issuer not to permit such reinstatement.

(v) Promptly after its delivery of any Letter of Credit or any amendment to a Letter of Credit to an advising bank with respect thereto or to the beneficiary thereof, the L/C Issuer will also deliver to the Borrower and the Administrative Agent a true and complete copy of such Letter of Credit or amendment.

(c) Drawings and Reimbursements; Funding of Participations.

(i) Upon receipt from the beneficiary of any Letter of Credit of any notice of drawing under such Letter of Credit, the L/C Issuer shall notify the Borrower and the Administrative Agent thereof. Not later than 11:00 a.m. on the date of any payment by the L/C Issuer under a Letter of Credit (each such date, an "Honor Date"), the Borrower shall reimburse the L/C Issuer through the Administrative Agent in an amount equal to the amount of such drawing; provided that the Borrower has received notice of such payment by 11:00 a.m. on such Honor Date, and if the Borrower receives notice of such payment after such time, the Borrower shall make such payment not later than 11:00 a.m. on the Business Day following receipt of such notice (together with interest thereon). If the Borrower fails to so reimburse the L/C Issuer by such time, the Administrative Agent shall promptly notify each Lender of the Honor Date, the amount of the unreimbursed drawing (the "Unreimbursed Amount"), and the amount of such Lender's Applicable Percentage thereof. In such event, the Borrower shall be deemed to have requested a Borrowing of Base Rate Loans to be disbursed on the Honor Date in an amount equal to the Unreimbursed Amount, without regard to the minimum and multiples specified in Section 2.02 for the principal amount of Base Rate Loans, but subject to the unutilized portion of the Aggregate Revolving Commitments and the conditions set forth in Section 5.02 (other than the delivery of a Loan Notice). Any notice given by the L/C Issuer or the Administrative Agent pursuant to this Section 2.03(c)(i) may be given by telephone if immediately confirmed in writing; provided that the lack of such an immediate confirmation shall not affect the conclusiveness or binding effect of such notice.

(ii) Each Lender shall upon any notice pursuant to Section 2.03(c)(i) make funds available (and the Administrative Agent may apply Cash Collateral provided for this purpose) for the account of the L/C Issuer at the Administrative Agent's Office in an amount equal to its Applicable Percentage of the Unreimbursed Amount not later than 2:00 p.m. on the Business Day specified in such notice by the Administrative Agent, whereupon, subject to the provisions of Section 2.03(c)(iii), each Lender that so makes funds available shall be deemed to have made a Revolving Loan that is a Base Rate Loan to the Borrower in such amount. The Administrative Agent shall remit the funds so received to the L/C Issuer.

(iii) With respect to any Unreimbursed Amount that is not fully refinanced by a Borrowing of Base Rate Loans because the conditions set forth in Section 5.02 (other than delivery of a Loan Notice) cannot be satisfied or for any other reason, the Borrower shall be deemed to have incurred from the L/C Issuer an L/C Borrowing in the amount of the Unreimbursed Amount that is not so refinanced, which L/C Borrowing shall be due and payable on demand (together with interest) and shall bear interest at the Default Rate. In such event, each Lender's payment to the Administrative Agent for the account of the L/C Issuer pursuant to Section 2.03(c)(ii) shall be deemed payment in respect of its participation in such L/C Borrowing and shall constitute an L/C Advance from such Lender in satisfaction of its participation obligation under this Section 2.03.

(iv) Until each Lender funds its Revolving Loan or L/C Advance pursuant to this Section 2.03(c) to reimburse the L/C Issuer for any amount drawn under any Letter of Credit, interest in respect of such Lender's Applicable Percentage of such amount shall be solely for the account of the L/C Issuer.

(v) Each Lender's obligation to make Revolving Loans or L/C Advances to reimburse the L/C Issuer for amounts drawn under Letters of Credit, as contemplated by this Section 2.03(c), shall be absolute and unconditional and shall not be affected by any circumstance, including (A) any setoff, counterclaim, recoupment, defense or other right which such Lender may have against the L/C Issuer, the Borrower, any Subsidiary or any other Person for any reason whatsoever; (B) the occurrence or continuance of a Default; or (C) any other occurrence, event or condition, whether or not similar to any of the foregoing; provided, however, that each Lender's obligation to make Revolving Loans pursuant to this Section 2.03(c) is subject to the conditions set forth in Section 5.02 (other than delivery by the Borrower of a Loan Notice). No such making of an L/C Advance shall relieve or otherwise impair the obligation of the Borrower to reimburse the L/C Issuer for the amount of any payment made by the L/C Issuer under any Letter of Credit, together with interest as provided herein.

(vi) If any Lender fails to make available to the Administrative Agent for the account of the L/C Issuer any amount required to be paid by such Lender pursuant to the foregoing provisions of this Section 2.03(c) by the time specified in Section 2.03(c)(ii), then, without limiting the other provisions of this Agreement, the L/C Issuer shall be entitled to recover from such Lender (acting through the Administrative Agent), on demand, such amount with interest thereon for the period from the date such payment is required to the date on which such payment is immediately available to the L/C Issuer at a rate per annum equal to the greater of the Federal Funds Rate and a rate determined by the L/C Issuer in accordance with banking industry rules on interbank compensation, plus any administrative, processing or similar fees customarily charged by the L/C Issuer in connection with the foregoing. If such Lender pays such amount (with interest and fees as aforesaid), the amount so paid shall constitute such Lender's Revolving Loan included in the relevant Borrowing or L/C Advance in respect of the relevant L/C Borrowing, as the case may be. A certificate of the L/C Issuer submitted to any Lender (through the Administrative Agent) with respect to any amounts owing under this clause (vi) shall be conclusive absent manifest error.

(d) Repayment of Participations.

(i) At any time after the L/C Issuer has made a payment under any Letter of Credit and has received from any Lender such Lender's L/C Advance in respect of such payment in accordance with Section 2.03(c), if the Administrative Agent receives for the account of the L/C Issuer any payment in respect of the related Unreimbursed Amount or interest thereon (whether directly from the Borrower or otherwise, including proceeds of Cash Collateral applied thereto by the Administrative Agent), the Administrative Agent will distribute to such Lender its Applicable Percentage thereof in the same funds as those received by the Administrative Agent.

(ii) If any payment received by the Administrative Agent for the account of the L/C Issuer pursuant to Section 2.03(c)(i) is required to be returned under any of the circumstances described in Section 11.05 (including pursuant to any settlement entered into by the L/C Issuer in its discretion), each Lender shall pay to the Administrative

Agent for the account of the L/C Issuer its Applicable Percentage thereof on demand of the Administrative Agent, plus interest thereon from the date of such demand to the date such amount is returned by such Lender, at a rate per annum equal to the Federal Funds Rate from time to time in effect. The obligations of the Lenders under this clause shall survive the payment in full of the Obligations and the termination of this Agreement.

(e) Obligations Absolute. The obligation of the Borrower to reimburse the L/C Issuer for each drawing under each Letter of Credit and to repay each L/C Borrowing and the obligation of each Lender to make L/C Advances shall be absolute, unconditional and irrevocable, and shall be paid strictly in accordance with the terms of this Agreement under all circumstances, including the following:

(i) any lack of validity or enforceability of such Letter of Credit, this Agreement or any other Loan Document;

(ii) the existence of any claim, counterclaim, setoff, defense or other right that the Borrower or any Subsidiary may have at any time against any beneficiary or any transferee of such Letter of Credit (or any Person for whom any such beneficiary or any such transferee may be acting), the L/C Issuer or any other Person, whether in connection with this Agreement, the transactions contemplated hereby or by such Letter of Credit or any agreement or instrument relating thereto, or any unrelated transaction;

(iii) any draft, demand, certificate or other document presented under such Letter of Credit proving to be forged, fraudulent, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect; or any loss or delay in the transmission or otherwise of any document required in order to make a drawing under such Letter of Credit;

(iv) waiver by the L/C Issuer of any requirement that exists for the L/C Issuer's protection and not the protection of the Borrower or any waiver by the L/C Issuer which does not in fact materially prejudice the Borrower;

(v) honor of a demand for payment presented electronically even if such Letter of Credit requires that demand be in the form of a draft;

(vi) any payment made by the L/C Issuer in respect of an otherwise complying item presented after the date specified as the expiration date of, or the date by which documents must be received under such Letter of Credit if presentation after such date is authorized by the UCC or the ISP, as applicable;

(vii) any payment by the L/C Issuer under such Letter of Credit against presentation of a draft or certificate that does not strictly comply with the terms of such Letter of Credit; or any payment made by the L/C Issuer under such Letter of Credit to any Person purporting to be a trustee in bankruptcy, debtor-in-possession, assignee for the benefit of creditors, liquidator, receiver or other representative of or successor to any beneficiary or any transferee of such Letter of Credit, including any arising in connection with any proceeding under any Debtor Relief Law;

(viii) the failure of the Borrower or any other Person to comply with the conditions set forth in Sections 2.02 or 5.02 or as otherwise set forth in this Agreement

for the making of a Loan, it being acknowledged that such conditions are not required for the making of L/C Borrowings and the obligation of the Lenders to make L/C Advances;

(ix) the solvency of, or any acts or omissions by, any beneficiary of any Letter of Credit, or any other Person having a role in any transaction or obligation relating to a Letter of Credit, or the existence, nature, quality, quantity, condition, value or other characteristic of any property or services relating to a Letter of Credit;

(x) any failure by the L/C Issuer or any of its Affiliates to issue any Letter of Credit in the form requested by the Borrower, unless the L/C Issuer has received written notice from the Borrower of such failure within three (3) Business Days after the L/C Issuer shall have furnished such Borrower and the Administrative Agent a copy of such Letter of Credit and such error is material and no drawing has been made thereon prior to receipt of such notice;

(xi) any adverse change in the business, operations, properties, assets, condition (financial or otherwise) or prospects of the Borrower or the subsidiaries of the Borrower;

(xii) any breach of this Agreement or any other Loan Document by any party thereto;

(xiii) the occurrence or continuance of a proceeding under any Debtor Relief Law with respect to the Borrower or any subsidiary;

(xiv) the fact that an Event of Default shall have occurred and be continuing;

(xv) the fact that the Letter of Credit Expiration Date shall have passed or this Agreement or the Revolving Commitments hereunder shall have been terminated; or

(xvi) any other circumstance or happening whatsoever, whether or not similar to any of the foregoing, including any other circumstance that might otherwise constitute a defense available to, or a discharge of, the Borrower or any Subsidiary.

The Borrower shall promptly examine a copy of each Letter of Credit and each amendment thereto that is delivered to it and, in the event of any claim of noncompliance with the Borrower's instructions or other irregularity, the Borrower will immediately notify the L/C Issuer. The Borrower shall be conclusively deemed to have waived any such claim against the L/C Issuer and its correspondents unless such notice is given as aforesaid.

(f) Role of L/C Issuer. Each Lender and the Borrower agree that, in paying any drawing under a Letter of Credit, the L/C Issuer shall not have any responsibility to obtain any document (other than any sight draft, certificates and documents expressly required by such Letter of Credit) or to ascertain or inquire as to the validity or accuracy of any such document or the authority of the Person executing or delivering any such document. None of the L/C Issuer, the Administrative Agent, any of their respective Related Parties nor any correspondent, participant or assignee of the L/C Issuer shall be liable to any Lender for (i) any action taken or omitted in connection herewith at the request or with the approval of the Lenders or the Required Lenders, as applicable; (ii) any action taken or omitted in the absence of gross negligence, bad faith or willful misconduct; (iii) the due execution, effectiveness, validity or enforceability of any document or instrument related to any Letter of Credit or Issuer Document even if it should in

fact prove to be in any or all respects invalid, insufficient, inaccurate, fraudulent or forged (even if the L/C Issuer or its Affiliates shall have been notified thereof); (iv) errors, omissions, interruptions or delays in transmission or delivery of any messages, by mail, cable, telegraph, telex or otherwise, whether or not they be in cipher; (v) errors in interpretation of technical terms; (vi) any loss or delay in the transmission or otherwise of any document required in order to make a drawing under any such Letter of Credit or of the proceeds thereof; (vii) the misapplication by the beneficiary of any such Letter of Credit of the proceeds of any drawing under such Letter of Credit; or (viii) any consequences arising from causes beyond the control of the L/C Issuer or its Affiliates, as applicable, including any act or omission of any governing authority, and none of the above shall affect or impair, or prevent the vesting of, any of the L/C Issuer's or its Affiliates rights or powers hereunder. The Borrower hereby assumes all risks of the acts or omissions of any beneficiary or transferee with respect to its use of any Letter of Credit; provided, however, that this assumption is not intended to, and shall not, preclude the Borrower from pursuing such rights and remedies as it may have against the beneficiary or transferee at law or under any other agreement. None of the L/C Issuer, the Administrative Agent, any of their respective Related Parties nor any correspondent, participant or assignee of the L/C Issuer shall be liable or responsible for any of the matters described in clauses (i) through (xvi) of Section 2.03(e); provided, however, that anything in such clauses to the contrary notwithstanding, the Borrower may have a claim against the L/C Issuer, and the L/C Issuer may be liable to the Borrower, to the extent, but only to the extent, of any direct, as opposed to consequential or exemplary, damages suffered by the Borrower which the Borrower proves were caused by the L/C Issuer's willful misconduct, bad faith or gross negligence or the L/C Issuer's willful failure to pay under any Letter of Credit after the presentation to it by the beneficiary of a sight draft and certificate(s) strictly complying with the terms and conditions of a Letter of Credit. In furtherance and not in limitation of the foregoing, the L/C Issuer (i) may accept documents that appear on their face to be in order, without responsibility for further investigation, regardless of any notice or information to the contrary, (ii) shall not be responsible for the validity or sufficiency of any instrument transferring or assigning or purporting to transfer or assign a Letter of Credit or the rights or benefits thereunder or proceeds thereof, in whole or in part, which may prove to be invalid or ineffective for any reason, (iii) may rely on any oral or other communication believed in good faith by the L/C Issuer to have been authorized or given by or on behalf of the applicant for a Letter of Credit, (iv) may honor a previously dishonored presentation under a Letter of Credit, whether such dishonor was pursuant to a court order, to settle or compromise any claim of wrongful dishonor, or otherwise, and shall be entitled to reimbursement to the same extent as if such presentation had initially been honored, together with any interest paid by the L/C Issuer; (v) may honor any drawing that is payable upon presentation of a statement advising negotiation or payment, upon receipt of such statement (even if such statement indicates that a draft or other document is being delivered separately), and shall not be liable for any failure of any such draft or other document to arrive, or to conform in anyway with the relevant Letter of Credit; (vi) may pay any paying or negotiating bank claiming that it rightfully honored under the laws or practices of the place where such bank is located; and (vii) may settle or adjust any claim or demand made on the L/C Issuer in any way related to any order issued at the applicant's request to an air carrier, a letter of guarantee or of indemnity issued to a carrier or any similar document (each an "Order") and honor any drawing in connection with any Letter of Credit that is the subject of such Order, notwithstanding that any drafts or other documents presented in connection with such Letter of Credit fail to conform in any way with such Letter of Credit. The L/C Issuer shall provide to the Administrative Agent a list of outstanding Letters of Credit (together with type, amounts and denominated currency) issued by it on a monthly basis. The L/C Issuer may send a Letter of Credit or conduct any communication to or from the beneficiary via the Society for Worldwide Interbank Financial Telecommunication ("SWIFT") message or overnight courier, or any other commercially reasonable means of communicating with a beneficiary.

(g) Applicability of ISP; Limitation of Liability. Unless otherwise expressly agreed by the L/C Issuer and the Borrower when a Letter of Credit is issued (including any such agreement applicable to an Existing Letter of Credit), such Letter of Credit shall be subject either to the rules of the UCP or the rules of ISP, as determined by the L/C Issuer. Notwithstanding the foregoing, the L/C Issuer shall not be responsible to the Borrower for, and the L/C Issuer's rights and remedies against the Borrower shall not be impaired by, any action or inaction of the L/C Issuer required or permitted under any Law, order, or practice that is required or permitted to be applied to any Letter of Credit or this Agreement, including the Law or any order of a jurisdiction where the L/C Issuer or the beneficiary is located, the practice stated in the ISP or in the decisions, opinions, practice statements, or official commentary of the ICC Banking Commission, the Bankers Association for Finance and Trade - International Financial Services Association (BAFT-IFSA), or the Institute of International Banking Law & Practice, whether or not any Letter of Credit chooses such Law or practice.

(h) Letter of Credit Fees. The Borrower shall pay to the Administrative Agent for the account of each Lender in accordance, subject to Section 2.15, with its Applicable Percentage a Letter of Credit fee (the "Letter of Credit Fee") for each Letter of Credit equal to the Applicable Rate for Revolving Loans that are BSBY Rate Loans times the daily amount available to be drawn under such Letter of Credit. For purposes of computing the daily amount available to be drawn under any Letter of Credit, the amount of such Letter of Credit shall be determined in accordance with Section 1.06. Letter of Credit Fees shall be (i) due and payable on the first Business Day after the end of each March, June, September and December, commencing with the first such date to occur after the issuance of such Letter of Credit, on the Letter of Credit Expiration Date and thereafter on demand; and (ii) computed on a quarterly basis in arrears. If there is any change in the Applicable Rate during any quarter, the daily amount available to be drawn under each Letter of Credit shall be computed and multiplied by the Applicable Rate separately for each period during such quarter that such Applicable Rate was in effect. Notwithstanding anything to the contrary contained herein, upon the request of the Required Lenders, while any Event of Default exists, all Letter of Credit Fees shall accrue at the Default Rate.

(i) Fronting Fee and Documentary and Processing Charges Payable to L/C Issuer. The Borrower shall pay directly to the L/C Issuer for its own account a fronting fee (i) with respect to each commercial Letter of Credit, at the rate specified in the Fee Letter, computed on the amount of such Letter of Credit, and payable upon the issuance thereof, (ii) with respect to any amendment of a commercial Letter of Credit increasing the amount of such Letter of Credit, at a rate separately agreed between the Borrower and the L/C Issuer, computed on the amount of such increase, and payable upon the effectiveness of such amendment, and (iii) with respect to each standby Letter of Credit, at the rate per annum specified in the Fee Letter, computed on the daily amount available to be drawn under such Letter of Credit on a quarterly basis in arrears. Such fronting fee shall be due and payable on the tenth Business Day after the end of each March, June, September and December in respect of the most recently-ended quarterly period (or portion thereof, in the case of the first payment), commencing with the first such date to occur after the issuance of such Letter of Credit, on the Letter of Credit Expiration Date and thereafter on demand. For purposes of computing the daily amount available to be drawn under any Letter of Credit, the amount of such Letter of Credit shall be determined in accordance with Section 1.06. In addition, the Borrower shall pay directly to the L/C Issuer for its own account the customary issuance, presentation, amendment and other processing fees, and other standard out-of-pocket costs and charges, of the L/C Issuer relating to letters of credit as from time to time in effect. Such customary fees and standard out-of-pocket costs and charges are due and payable on demand and are nonrefundable.

(j) Conflict with Issuer Documents. The Borrower agrees to be bound by the terms of the L/C Issuer's application and agreement for Letters of Credit and the L/C Issuer's written regulations and customary practices relating to Letters of Credit, though such interpretation may be different from the Borrower's own. In the event of any conflict between the terms hereof and the terms of any Issuer Document, the terms hereof shall control.

(k) Letters of Credit Issued for Subsidiaries. Notwithstanding that a Letter of Credit issued or outstanding hereunder is in support of any obligations of, or is for the account of, a Subsidiary, the Borrower shall be obligated to reimburse the L/C Issuer hereunder for any and all drawings under such Letter of Credit. The Borrower hereby acknowledges that the issuance of Letters of Credit for the account of Subsidiaries inures to the benefit of the Borrower, and that the Borrower's business derives substantial benefits from the businesses of such Subsidiaries.

2.04 Swing Line Loans.

(a) Swing Line Facility. Subject to the terms and conditions set forth herein, the Swing Line Lender, in reliance upon the agreements of the other Lenders set forth in this Section 2.04, may in its sole discretion, cancelable at any time for any reason whatsoever, make loans (each such loan, a "Swing Line Loan") to the Borrower in Dollars from time to time on any Business Day during the Availability Period in an aggregate amount not to exceed at any time outstanding the amount of the Swing Line Sublimit, notwithstanding the fact that such Swing Line Loans, when aggregated with the Applicable Percentage of the Outstanding Amount of Revolving Loans and L/C Obligations of the Lender acting as Swing Line Lender, may exceed the amount of such Lender's Revolving Commitment; provided, however, that (i) after giving effect to any Swing Line Loan, (A) the Total Revolving Outstandings shall not exceed the Aggregate Revolving Commitments and (B) the Revolving Credit Exposure of any Lender shall not exceed such Lender's Revolving Commitment, (ii) the Borrower shall not use the proceeds of any Swing Line Loan to refinance any outstanding Swing Line Loan and (iii) the Swing Line Lender shall not be under any obligation to make any Swing Line Loan if it shall determine (which determination shall be conclusive and binding absent manifest error) that it has, or by such Credit Extension would reasonably be expected to have, Fronting Exposure. Within the foregoing limits, and subject to the other terms and conditions hereof, the Borrower may borrow under this Section 2.04, prepay under Section 2.05, and reborrow under this Section 2.04. Each Swing Line Loan shall be a Base Rate Loan. Immediately upon the making of a Swing Line Loan, each Lender shall be deemed to, and hereby irrevocably and unconditionally agrees to, purchase from the Swing Line Lender a risk participation in such Swing Line Loan in an amount equal to the product of such Lender's Applicable Percentage times the amount of such Swing Line Loan.

(b) Borrowing Procedures. Each Borrowing of Swing Line Loans shall be made upon the Borrower's irrevocable notice to the Swing Line Lender and the Administrative Agent, which may be given by (A) telephone (and promptly confirmed in writing) or (B) a Swing Line Loan Notice. Each such notice must be received by the Swing Line Lender and the Administrative Agent not later than 1:00 p.m. on the requested borrowing date, and shall specify (i) the amount to be borrowed, which shall be a minimum principal amount of $100,000 and integral multiples of $100,000 in excess thereof, and (ii) the requested borrowing date, which shall be a Business Day. Each such telephonic notice must be confirmed promptly by delivery to the Swing Line Lender and the Administrative Agent of a Swing Line Loan Notice. Promptly after receipt by the Swing Line Lender of any telephonic Swing Line Loan Notice, the Swing Line Lender will confirm with the Administrative Agent (by telephone or in writing) that the Administrative Agent has also received such Swing Line Loan Notice and, if not, the Swing Line

Lender will notify the Administrative Agent (by telephone or in writing) of the contents thereof. Unless the Swing Line Lender has received notice (by telephone or in writing) from the Administrative Agent (including at the request of any Lender) prior to 2:00 p.m. on the date of the proposed Borrowing of Swing Line Loans (A) directing the Swing Line Lender not to make such Swing Line Loan as a result of the limitations set forth in the first proviso to the first sentence of Section 2.04(a), or (B) that one or more of the applicable conditions specified in Article V is not then satisfied, then, subject to the terms and conditions hereof, the Swing Line Lender will, not later than 3:00 p.m. on the borrowing date specified in such Swing Line Loan Notice, make the amount of its Swing Line Loan available to the Borrower at its office by either, at the option of the Borrower, by crediting the account of the Borrower on the books of the Swing Line Lender in immediately available funds or by wire transfer of such funds in accordance with instructions provided by the Borrower.

(c) Refinancing of Swing Line Loans.

(i) The Swing Line Lender at any time in its sole discretion may request, on behalf of the Borrower (which hereby irrevocably authorizes the Swing Line Lender to so request on its behalf), that each Lender make a Base Rate Loan in an amount equal to such Lender's Applicable Percentage of the amount of Swing Line Loans then outstanding. Such request shall be made in writing (which written request shall be deemed to be a Loan Notice for purposes hereof) and in accordance with the requirements of Section 2.02, without regard to the minimum and multiples specified therein for the principal amount of Base Rate Loans, but subject to the unutilized portion of the Aggregate Revolving Commitments and the conditions set forth in Section 5.02. The Swing Line Lender shall furnish the Borrower with a copy of the applicable Loan Notice promptly after delivering such notice to the Administrative Agent. Each Lender shall make an amount equal to its Applicable Percentage of the amount specified in such Loan Notice available to the Administrative Agent in immediately available funds (and the Administrative Agent may apply Cash Collateral available with respect to the applicable Swing Line Loan) for the account of the Swing Line Lender at the Administrative Agent's Office not later than 2:00 p.m. on the day specified in such Loan Notice (provided that such Lender receives such Loan Notice from the Administrative Agent by 12:00 noon on such Business Day), whereupon, subject to Section 2.04(c)(ii), each Lender that so makes funds available shall be deemed to have made a Revolving Loan that is a Base Rate Loan to the Borrower in such amount. The Administrative Agent shall remit the funds so received to the Swing Line Lender.

(ii) If for any reason any Swing Line Loan cannot be refinanced by such a Borrowing of Revolving Loans in accordance with Section 2.04(c)(i), the request for Base Rate Loans submitted by the Swing Line Lender as set forth herein shall be deemed to be a request by the Swing Line Lender that each of the Lenders fund its risk participation in the relevant Swing Line Loan and each Lender's payment to the Administrative Agent for the account of the Swing Line Lender pursuant to Section 2.04(c)(i) shall be deemed payment in respect of such participation.

(iii) If any Lender fails to make available to the Administrative Agent for the account of the Swing Line Lender any amount required to be paid by such Lender pursuant to the foregoing provisions of this Section 2.04(c) by the time specified in Section 2.04(c)(i), the Swing Line Lender shall be entitled to recover from such Lender (acting through the Administrative Agent), on demand, such amount with interest thereon for the period from the date such payment is required to the date on which such payment

is immediately available to the Swing Line Lender at a rate per annum equal to the greater of the Federal Funds Rate and a rate determined by the Swing Line Lender in accordance with banking industry rules on interbank compensation, plus any administrative, processing or similar fees customarily charged by the Swing Line Lender in connection with the foregoing. If such Lender pays such amount (with interest and fees as aforesaid), the amount so paid shall constitute such Lender's Revolving Loan included in the relevant Borrowing or funded participation in the relevant Swing Line Loan, as the case may be. A certificate of the Swing Line Lender submitted to any Lender (through the Administrative Agent) with respect to any amounts owing under this clause (iii) shall be conclusive absent manifest error.

(iv) Each Lender's obligation to make Revolving Loans or to purchase and fund risk participations in Swing Line Loans pursuant to this Section 2.04(c) shall be absolute and unconditional and shall not be affected by any circumstance, including (A) any setoff, counterclaim, recoupment, defense or other right that such Lender may have against the Swing Line Lender, the Borrower, any Subsidiary or any other Person for any reason whatsoever, (B) the occurrence or continuance of a Default, or (C) any other occurrence, event or condition, whether or not similar to any of the foregoing; provided, however, that each Lender's obligation to make Revolving Loans pursuant to this Section 2.04(c) is subject to the conditions set forth in Section 5.02 (other than receipt of a Loan Notice). No such funding of risk participations shall relieve or otherwise impair the obligation of the Borrower to repay Swing Line Loans, together with interest as provided herein.

(d) Repayment of Participations.

(i) At any time after any Lender has purchased and funded a risk participation in a Swing Line Loan, if the Swing Line Lender receives any payment on account of such Swing Line Loan, the Swing Line Lender will distribute to such Lender its Applicable Percentage thereof in the same funds as those received by the Swing Line Lender.

(ii) If any payment received by the Swing Line Lender in respect of principal or interest on any Swing Line Loan is required to be returned by the Swing Line Lender under any of the circumstances described in Section 11.05 (including pursuant to any settlement entered into by the Swing Line Lender in its discretion), each Lender shall pay to the Swing Line Lender its Applicable Percentage thereof on demand of the Administrative Agent, plus interest thereon from the date of such demand to the date such amount is returned, at a rate per annum equal to the Federal Funds Rate. The Administrative Agent will make such demand upon the request of the Swing Line Lender. The obligations of the Lenders under this clause shall survive the payment in full of the Obligations and the termination of this Agreement.

(e) Interest for Account of Swing Line Lender. The Swing Line Lender shall be responsible for invoicing the Borrower for interest on the Swing Line Loans. Until each Lender funds its Revolving Loans that are Base Rate Loans or risk participation pursuant to this Section 2.04 to refinance such Lender's Applicable Percentage of any Swing Line Loan, interest in respect of such Applicable Percentage shall be solely for the account of the Swing Line Lender.

(f) Payments Directly to Swing Line Lender. The Borrower shall make all payments of principal and interest in respect of the Swing Line Loans directly to the Swing Line Lender.

2.05 Prepayments.

(a) Voluntary Prepayments of Loans.

(i) Revolving Loans. The Borrower may, upon delivery to the Administrative Agent of a Notice of Loan Prepayment, at any time or from time to time voluntarily prepay Revolving Loans in whole or in part without premium or penalty; provided that (A) such notice must be received by the Administrative Agent not later than 11:00 a.m. (1) three (3) Business Days prior to any date of prepayment of BSBY Rate Loans and (2) on the date of prepayment of Base Rate Loans; (B) any such prepayment of BSBY Rate Loans shall be in a principal amount of $500,000 or a whole multiple of $100,000 in excess thereof (or, if less, the entire principal amount thereof then outstanding); and (C) any prepayment of Base Rate Loans shall be in a principal amount of $500,000 or a whole multiple of $100,000 in excess thereof (or, if less, the entire principal amount thereof then outstanding). Each such notice shall specify the date and amount of such prepayment and the Type(s) of Loans to be prepaid and, if BSBY Rate Loans are to be prepaid, the Interest Period(s) of such Loans. The Administrative Agent will promptly notify each Lender of its receipt of each such notice, and of the amount of such Lender's Applicable Percentage of such prepayment. If such notice is given by the Borrower, the Borrower shall make such prepayment and the payment amount specified in such notice shall be due and payable on the date specified therein. Any prepayment of a BSBY Rate Loan shall be accompanied by all accrued interest on the amount prepaid, together with any additional amounts required pursuant to Section 3.05. Subject to Section 2.15, each such prepayment shall be applied to the Loans of the Lenders in accordance with their respective Applicable Percentages.

(ii) Swing Line Loans. The Borrower may, upon delivery to the Swing Line Lender of a Notice of Loan Prepayment (with a copy to the Administrative Agent), at any time or from time to time, voluntarily prepay Swing Line Loans in whole or in part without premium or penalty; provided that (i) such notice must be received by the Swing Line Lender and the Administrative Agent not later than 1:00 p.m. on the date of the prepayment, and (ii) any such prepayment shall be in a minimum principal amount of $100,000 or a whole multiple of $100,000 in excess thereof (or, if less, the entire principal thereof then outstanding). Each such notice shall specify the date and amount of such prepayment. If such notice is given by the Borrower, the Borrower shall make such prepayment and the payment amount specified in such notice shall be due and payable on the date specified therein.

(iii) Notwithstanding anything herein to the contrary, the Borrower may rescind any notice of prepayment under this Section 2.05(a) if such prepayment would have resulted from the refinancing of all or a portion of the Loans, which refinancing shall not be consummated or shall otherwise be delayed.

(b) Mandatory Prepayments of Loans.

(i) Revolving Commitments. If for any reason the Total Revolving Outstandings at any time exceed the Aggregate Revolving Commitments then in effect, the Borrower shall immediately prepay Revolving Loans and/or Swing Line Loans and/or Cash Collateralize the L/C Obligations in an aggregate amount equal to such excess; provided, however, that the Borrower shall not be required to Cash Collateralize the L/C Obligations pursuant to this Section 2.05(b)(i) unless after the prepayment in full of the

Revolving Loans and Swing Line Loans the Total Revolving Outstandings exceed the Aggregate Revolving Commitments then in effect.

(ii) Foreclosure Event. After the occurrence of a Foreclosure Event, no later than the earlier of (x) fifteen (15) months and one (1) day following the last date the filing of Ciner Resources LP's next quarterly report on Form 10-Q or annual report on Form 10-K (as applicable) with the U.S. Securities and Exchange Commission is due (or, if Ciner Resources LP is no longer required by applicable law to file such reports, the last date such filing would have been due) and (y) eighteen (18) months and one (1) day following the Foreclosure Event, the Borrower shall prepay in full the outstanding principal amount of all Revolving Loans and/or Swing Line Loans and Cash Collateralize all L/C Obligations; provided, for purposes of clarity, no additional Borrowing or L/C Borrowing shall be permitted upon the occurrence of a Foreclosure Event.

(iii) Application of Mandatory Prepayments. All amounts required to be paid pursuant to this Section 2.05(b) shall be applied first, ratably to the L/C Borrowings and the Swing Line Loans, second, to the outstanding Revolving Loans, and, third, to Cash Collateralize the remaining L/C Obligations. Within the parameters of the applications set forth above, prepayments shall be applied first to Base Rate Loans and then to Eurodollar Rate Loans in direct order of Interest Period maturities. All prepayments under this Section 2.05(b) shall be subject to Section 3.05, but otherwise without premium or penalty, and shall be accompanied by interest on the principal amount prepaid through the date of prepayment.

2.06 Termination or Reduction of Aggregate Revolving Commitments.

The Borrower may, upon notice to the Administrative Agent, terminate the Aggregate Revolving Commitments, or from time to time permanently reduce the Aggregate Revolving Commitments; provided that (i) any such notice shall be received by the Administrative Agent not later than 11:00 a.m. three (3) Business Days prior to the date of termination or reduction, (ii) any such partial reduction shall be in an aggregate amount of $500,000 or any whole multiple of $500,000 in excess thereof, (iii) the Borrower shall not terminate or reduce the Aggregate Revolving Commitments if, after giving effect thereto and to any concurrent prepayments hereunder, the Total Revolving Outstandings would exceed the Aggregate Revolving Commitments and (iv) if, after giving effect to any reduction of the Aggregate Revolving Commitments, the Letter of Credit Sublimit or the Swing Line Sublimit exceeds the amount of the Aggregate Revolving Commitments, such sublimit shall be automatically reduced by the amount of such excess. The Administrative Agent will promptly notify the Lenders of any such notice of termination or reduction of the Aggregate Revolving Commitments. Any reduction of the Aggregate Revolving Commitments shall be applied to the Revolving Commitment of each Lender according to its Applicable Percentage. All fees accrued until the effective date of any termination of the Aggregate Revolving Commitments shall be paid on the effective date of such termination. Notwithstanding anything herein to the contrary, the Borrower may rescind any notice of termination of Aggregate Revolving Commitments under this Section 2.06 if such termination would have resulted from the refinancing of all or a portion of the Loans, which refinancing shall not be consummated or shall otherwise be delayed.

2.07 Repayment of Loans.

(a) Revolving Loans. The Borrower shall repay to the Lenders on the Maturity Date, unless accelerated sooner pursuant to Section 9.02, the aggregate principal amount of all Revolving Loans outstanding on such date.

(b) Swing Line Loans. The Borrower shall repay each Swing Line Loan on the earlier to occur of (i) the date ten (10) Business Days after such Swing Line Loan is made and (ii) the Maturity Date unless accelerated sooner pursuant to Section 9.02.

2.08 Interest.

(a) Subject to the provisions of clause (b) below, (i) each BSBY Rate Loan shall bear interest on the outstanding principal amount thereof for each Interest Period at a rate per annum equal to the BSBY Rate for such Interest Period plus the Applicable Rate; (ii) each Base Rate Loan shall bear interest on the outstanding principal amount thereof from the applicable borrowing date at a rate per annum equal to the Base Rate plus the Applicable Rate; and (iii) each Swing Line Loan shall bear interest on the outstanding principal amount thereof from the applicable borrowing date at a rate per annum equal to the Base Rate plus the Applicable Rate.

(b) (i) If any amount payable by the Borrower under any Loan Document is not paid when due (after giving effect to any applicable grace periods), whether at stated maturity, by acceleration or otherwise, then such unpaid amount shall thereafter bear interest at a fluctuating interest rate per annum at all times equal to the Default Rate to the fullest extent permitted by applicable Laws.

(ii) Accrued and unpaid interest on past due amounts (including interest on past due interest) shall be due and payable upon demand.

(c) Interest on each Loan shall be due and payable in arrears on each Interest Payment Date applicable thereto and at such other times as may be specified herein. Interest hereunder shall be due and payable in accordance with the terms hereof before and after judgment, and before and after the commencement of any proceeding under any Debtor Relief Law.

2.09 Fees.

In addition to certain fees described in clauses (h) and (i) of Section 2.03:

(a) Commitment Fee. The Borrower shall pay to the Administrative Agent, for the account of each Lender in accordance with its Applicable Percentage, a commitment fee (the "Commitment Fee") equal to the product of (i) the Applicable Rate times (ii) the actual daily amount by which the Aggregate Revolving Commitments exceed the sum of (A) the Outstanding Amount of Revolving Loans and (B) the Outstanding Amount of L/C Obligations, subject to adjustment as provided in Section 2.15. For the avoidance of doubt, the Outstanding Amount of Swing Line Loans shall not be counted towards or considered usage of the Aggregate Revolving Commitments for purposes of determining the Commitment Fee. The Commitment Fee shall accrue at all times during the Availability Period, including at any time during which one or more of the conditions in Article V is not met, and shall be due and payable quarterly in arrears on the last Business Day of each March, June, September and December, commencing with the first such date to occur after the Closing Date, and on the last day of the Availability Period; provided, that (A) no Commitment Fee shall accrue on the Revolving Commitment of a Defaulting Lender so long as such Lender shall be a Defaulting Lender and (B) subject to Section 2.15, any Commitment Fee accrued with respect to the Revolving Commitment of a Defaulting Lender during the period prior to the time such Lender became a Defaulting Lender and unpaid at such time shall not be payable by the Borrower so long as such Lender shall be a Defaulting Lender. The Commitment Fee shall be calculated quarterly in arrears, and if there is any change in the

Applicable Rate during any quarter, the actual daily amount shall be computed and multiplied by the Applicable Rate separately for each period during such quarter that such Applicable Rate was in effect.

(b) Other Fees.

(i) The Borrower shall pay to the Arranger and the Administrative Agent for their own respective accounts fees in the amounts and at the times specified in the Fee Letter. Such fees shall be fully earned when paid and shall not be refundable for any reason whatsoever.

(ii) The Borrower shall pay to the Lenders such fees as shall have been separately agreed upon in writing in the amounts and at the times so specified. Such fees shall be fully earned when paid and shall not be refundable for any reason whatsoever.

2.10 Computation of Interest and Fees; Retroactive Adjustments of Applicable Rate.

(a) All computations of interest for Base Rate Loans (including Base Rate Loans determined by reference to the BSBY Rate) shall be made on the basis of a year of three hundred sixty-five (365) or three hundred sixty-six (366) days, as the case may be, and actual days elapsed. All other computations of fees and interest shall be made on the basis of a three hundred sixty (360) day year and actual days elapsed (which results in more fees or interest, as applicable, being paid than if computed on the basis of a three hundred sixty-five (365) day year). Interest shall accrue on each Loan for the day on which the Loan is made, and shall not accrue on a Loan, or any portion thereof, for the day on which the Loan or such portion is paid, provided that any Loan that is repaid on the same day on which it is made shall, subject to Section 2.12(a), bear interest for one (1) day. Each determination by the Administrative Agent of an interest rate or fee hereunder shall be conclusive and binding for all purposes, absent manifest error.

(b) If, as a result of any restatement of or other adjustment to the financial statements of the Borrower or for any other reason, the Borrower or the Lenders determine that (i) the Consolidated Leverage Ratio as calculated by the Borrower as of any applicable date was inaccurate and (ii) a proper calculation of the Consolidated Leverage Ratio would have resulted in higher pricing for such period, the Borrower shall promptly and retroactively be obligated to pay to the Administrative Agent for the account of the applicable Lenders or the L/C Issuer, as the case may be, promptly on demand by the Administrative Agent (or, after the occurrence of an actual or deemed entry of an order for relief with respect to the Borrower under Debtor Relief Laws, automatically and without further action by the Administrative Agent, any Lender or the L/C Issuer), an amount equal to the excess of the amount of interest and fees that should have been paid for such period over the amount of interest and fees actually paid for such period. This paragraph shall not limit the rights of the Administrative Agent, any Lender or the L/C Issuer, as the case may be, under this Agreement. The Borrower's obligations under this paragraph shall survive the termination of the Aggregate Revolving Commitments and the repayment of all other Obligations hereunder.

2.11 Evidence of Debt.

(a) The Credit Extensions made by each Lender shall be evidenced by one or more accounts or records maintained by such Lender and by the Administrative Agent in the ordinary course of business. The accounts or records maintained by the Administrative Agent and each Lender shall be conclusive absent manifest error of the amount of the Credit Extensions made by

the Lenders to the Borrower and the interest and payments thereon. Any failure to so record or any error in doing so shall not, however, limit or otherwise affect the obligation of the Borrower hereunder to pay any amount owing with respect to the Obligations. In the event of any conflict between the accounts and records maintained by any Lender and the accounts and records of the Administrative Agent in respect of such matters, the accounts and records of the Administrative Agent shall control in the absence of manifest error. Upon the request of any Lender made through the Administrative Agent, the Borrower shall execute and deliver to such Lender (through the Administrative Agent) a promissory note, which shall evidence such Lender's Loans in addition to such accounts or records. Each such promissory note shall be in the form of Exhibit 2.11 (a "Note"). Each Lender may attach schedules to its Note and endorse thereon the date, Type (if applicable), amount and maturity of its Loans and payments with respect thereto.

(b) In addition to the accounts and records referred to in clause (a) above, each Lender and the Administrative Agent shall maintain in accordance with its usual practice accounts or records evidencing the purchases and sales by such Lender of participations in Letters of Credit and Swing Line Loans. In the event of any conflict between the accounts and records maintained by the Administrative Agent and the accounts and records of any Lender in respect of such matters, the accounts and records of the Administrative Agent shall control in the absence of manifest error.

2.12 Payments Generally; Administrative Agent's Clawback.

(a) General. All payments to be made by the Borrower or any other Loan Party shall be made free and clear of and without condition or deduction for any counterclaim, defense, recoupment or setoff. Except as otherwise expressly provided herein, all payments by the Borrower hereunder shall be made to the Administrative Agent, for the account of the respective Lenders to which such payment is owed, at the Administrative Agent's Office in Dollars and in immediately available funds not later than 2:00 p.m. on the date specified herein. The Administrative Agent will promptly distribute to each Lender its Applicable Percentage (or other applicable share as provided herein) of such payment in like funds as received by wire transfer to such Lender's Lending Office. All payments received by the Administrative Agent after 2:00 p.m. shall be deemed received on the next succeeding Business Day and any applicable interest or fee shall continue to accrue. Except as set forth in the definition of "Interest Period", if any payment to be made by the Borrower shall come due on a day other than a Business Day, payment shall be made on the next following Business Day, and such extension of time shall be reflected in computing interest or fees, as the case may be.

(b) (i) Funding by Lenders; Presumption by Administrative Agent. Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Borrowing of BSBY Rate Loans (or, in the case of any Borrowing of Base Rate Loans, prior to 12:00 noon on the date of such Borrowing) that such Lender will not make available to the Administrative Agent such Lender's share of such Borrowing, the Administrative Agent may assume that such Lender has made such share available on such date in accordance with Section 2.02 (or, in the case of a Borrowing of Base Rate Loans, that such Lender has made such share available in accordance with and at the time required by Section 2.02) and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Borrowing available to the Administrative Agent, then the applicable Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount in immediately available funds with interest thereon, for each day from and including the date such amount is made available to the Borrower to but excluding the date of payment to the Administrative Agent, at (A) in the case of

a payment to be made by such Lender, the greater of the Federal Funds Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation, plus any administrative, processing or similar fees customarily charged by the Administrative Agent in connection with the foregoing, and (B) in the case of a payment to be made by the Borrower, the interest rate applicable to Base Rate Loans. If the Borrower and such Lender shall pay such interest to the Administrative Agent for the same or an overlapping period, the Administrative Agent shall promptly remit to the Borrower the amount of such interest paid by the Borrower for such period. If such Lender pays its share of the applicable Borrowing to the Administrative Agent, then the amount so paid shall constitute such Lender's Loan included in such Borrowing. Any payment by the Borrower shall be without prejudice to any claim the Borrower may have against a Lender that shall have failed to make such payment to the Administrative Agent.

(ii) Payments by Borrower; Presumptions by Administrative Agent. Unless the Administrative Agent shall have received notice from the Borrower prior to the time at which any payment is due to the Administrative Agent for the account of the Lenders or the L/C Issuer hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders or the L/C Issuer, as the case may be, the amount due.

With respect to any payment that the Administrative Agent makes for the account of the Lenders or the L/C Issuer hereunder as to which the Administrative Agent determines (which determination shall be conclusive absent manifest error) that any of the following applies (such payment referred to as the "Rescindable Amount") : (1) the Borrower has not in fact made such payment; (2) the Administrative Agent has made a payment in excess of the amount so paid by the Borrower (whether or not then owed); or (3) the Administrative Agent has for any reason otherwise erroneously made such payment; then each of the Lenders or the L/C Issuer, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the Rescindable Amount so distributed to such Lender or the L/C Issuer, in immediately available funds with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at the greater of the Federal Funds Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation.

A notice of the Administrative Agent to any Lender or the Borrower with respect to any amount owing under this clause (b) shall be conclusive, absent manifest error.

(c) Failure to Satisfy Conditions Precedent. If any Lender makes available to the Administrative Agent funds for any Loan to be made by such Lender as provided in the foregoing provisions of this Article II, and such funds are not made available to the Borrower by the Administrative Agent because the applicable conditions to the applicable Credit Extension set forth in Article V are not satisfied or waived in accordance with the terms hereof, the Administrative Agent promptly shall return such funds (in like funds as received from such Lender) to such Lender, without interest.

(d) Obligations of Lenders Several. The obligations of the Lenders hereunder to make Loans, to fund participations in Letters of Credit and Swing Line Loans and to make payments pursuant to Section 11.04(c) are several and not joint. The failure of any Lender to make any Loan, to fund any such participation or to make any payment under Section 11.04(c) on any date required hereunder shall not relieve any other Lender of its corresponding obligation to

do so on such date, and no Lender shall be responsible for the failure of any other Lender to so make its Loan, to purchase its participation or to make its payment under Section 11.04(c).

(e) Funding Source. Nothing herein shall be deemed to obligate any Lender to obtain the funds for any Loan in any particular place or manner or to constitute a representation by any Lender that it has obtained or will obtain the funds for any Loan in any particular place or manner.

(f) Insufficient Funds. If at any time insufficient funds are received by and available to the Administrative Agent to pay fully all amounts of principal, L/C Borrowings, interest and fees then due hereunder, such funds shall be applied (i) first, toward payment of interest and fees then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of interest and fees then due to such parties, and (ii) second, toward payment of principal and L/C Borrowings then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of principal and L/C Borrowings then due to such parties.

2.13 Sharing of Payments by Lenders.

If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any of the Loans made by it, or the participations in L/C Obligations or in Swing Line Loans held by it resulting in such Lender's receiving payment of a proportion of the aggregate amount of such Loans or participations and accrued interest thereon greater than its pro rata share thereof as provided herein, then the Lender receiving such greater proportion shall (a) notify the Administrative Agent of such fact, and (b) purchase (for cash at face value) participations in the Loans and subparticipations in L/C Obligations and Swing Line Loans of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Loans and other amounts owing them, provided that:

(i) if any such participations or subparticipations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations or subparticipations shall be rescinded and the purchase price restored to the extent of such recovery, without interest; and

(ii) the provisions of this Section shall not be construed to apply to (A) any payment made by or on behalf of the Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender), (B) the application of Cash Collateral provided for in Section 2.14 or (C) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans or subparticipations in L/C Obligations or Swing Line Loans to any assignee or participant, other than an assignment to the Borrower or any Subsidiary (as to which the provisions of this Section shall apply).

Each Loan Party consents to the foregoing and agrees, to the extent it may effectively do so under applicable Law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against such Loan Party rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of such Loan Party in the amount of such participation.

2.14 Cash Collateral.

(a) Certain Credit Support Events. If (i) the L/C Issuer has honored any full or partial drawing request under any Letter of Credit and such drawing has resulted in an L/C Borrowing, (ii) as of the Letter of Credit Expiration Date, any L/C Obligation for any reason remains outstanding, (iii) the Borrower shall be required to provide Cash Collateral pursuant to Section 9.02(c) or (iv) there shall exist a Defaulting Lender, the Borrower shall immediately (in the case of clause (iii) above) or within two (2) Business Days (in all other cases) following any request by the Administrative Agent or the L/C Issuer provide Cash Collateral in an amount not less than the applicable Minimum Collateral Amount (determined in the case of Cash Collateral provided pursuant to clause (iv) above, after giving effect to Section 2.15(b) and any Cash Collateral provided by the Defaulting Lender).

(b) Grant of Security Interest. The Borrower, and to the extent provided by any Defaulting Lender, such Defaulting Lender, hereby grants to (and subjects to the control of) the Administrative Agent, for the benefit of the Administrative Agent, the L/C Issuer and the Lenders, and agrees to maintain, a first priority security interest (subject to Liens permitted under Section 8.01(m)) in all Cash Collateral, all as security for the obligations to which such Cash Collateral may be applied pursuant to Section 2.14(c). If at any time the Administrative Agent determines that Cash Collateral is subject to any right or claim of any Person other than the Administrative Agent or the L/C Issuer as herein provided (other than Liens permitted under Section 8.01(m)), or that the total amount of such Cash Collateral is less than the Minimum Collateral Amount, the Borrower will, promptly upon demand by the Administrative Agent, pay or provide to the Administrative Agent additional Cash Collateral in an amount sufficient to eliminate such deficiency (provided that if the Cash Collateral is more than the Minimum Collateral Amount, upon the request of the Borrower, the Administrative Agent will promptly pay, provide or distribute to the Borrower a portion of the Cash Collateral equal to the amount of such excess or surplus). All Cash Collateral (other than credit support not constituting funds subject to deposit) shall be maintained in blocked, non-interest bearing deposit accounts at the Administrative Agent or an Affiliate thereof. The Borrower shall pay on demand therefor from time to time all customary and reasonable account opening, activity and other administrative fees and charges in connection with the maintenance and disbursement of Cash Collateral.

(c) Application. Notwithstanding anything to the contrary contained in this Agreement, Cash Collateral provided under any of this Section 2.14 or Sections 2.03, 2.05, 2.15 or 9.02 in respect of Letters of Credit shall be held and applied to the satisfaction of the specific L/C Obligations, obligations to fund participations therein (including, as to Cash Collateral provided by a Defaulting Lender, any interest accrued on such obligation) and other obligations for which the Cash Collateral was so provided, prior to any other application of such property as may otherwise be provided for herein.

(d) Release. Cash Collateral (or the appropriate portion thereof) provided to reduce Fronting Exposure or to secure other obligations shall be released promptly following (i) the elimination of the applicable Fronting Exposure or other obligations giving rise thereto (including by the termination of Defaulting Lender status of the applicable Lender (or, as appropriate, its assignee following compliance with Section 11.06(b)(vi))) or (ii) the determination by the Administrative Agent and the L/C Issuer that there exists excess Cash Collateral; provided, however, (x) any such release shall be without prejudice to, and any disbursement or other transfer of Cash Collateral shall be and remain subject to, any other Lien conferred under the Loan Documents and the other applicable provisions of the Loan Documents, and (y) the Person providing Cash Collateral and the L/C Issuer may agree that Cash Collateral shall not be released but instead held to support future anticipated Fronting Exposure or other obligations.

2.15 Defaulting Lenders.

(a) Adjustments. Notwithstanding anything to the contrary contained in this Agreement, if any Lender becomes a Defaulting Lender, then, until such time as that Lender is no longer a Defaulting Lender, to the extent permitted by applicable Law:

(i) Waivers and Amendments. Such Defaulting Lender's right to approve or disapprove any amendment, waiver or consent with respect to this Agreement shall be restricted as set forth in the definition of "Required Lenders" and Section 11.01.

(ii) Defaulting Lender Waterfall. Any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Article IX or otherwise) or received by the Administrative Agent from a Defaulting Lender pursuant to Section 11.08 shall be applied at such time or times as may be reasonably determined by the Administrative Agent as follows: first, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; second, to the payment on a pro rata basis of any amounts owing by such Defaulting Lender to the L/C Issuer or Swing Line Lender hereunder; third, to Cash Collateralize the L/C Issuer's Fronting Exposure with respect to such Defaulting Lender in accordance with Section 2.14; fourth, as the Borrower may request (so long as no Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as reasonably determined by the Administrative Agent; fifth, if so reasonably determined by the Administrative Agent and the Borrower, to be held in a deposit account and released pro rata in order to (x) satisfy such Defaulting Lender's potential future funding obligations with respect to Loans under this Agreement and (y) Cash Collateralize the L/C Issuer's future Fronting Exposure with respect to such Defaulting Lender with respect to future Letters of Credit issued under this Agreement, in accordance with Section 2.14; sixth, to the payment of any amounts owing to the Lenders, the L/C Issuer or Swing Line Lender as a result of any judgment of a court of competent jurisdiction obtained by any Lender, the L/C Issuer or the Swing Line Lender against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; seventh, so long as no Default exists, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and eighth, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; provided that if (x) such payment is a payment of the principal amount of any Loans or L/C Borrowings in respect of which such Defaulting Lender has not fully funded its appropriate share, and (y) such Loans were made or the related Letters of Credit were issued at a time when the conditions set forth in Section 5.02 were satisfied or waived, such payment shall be applied solely to pay the Loans of, and L/C Obligations owed to, all Non-Defaulting Lenders on a pro rata basis prior to being applied to the payment of any Loans of, or L/C Obligations owed to, such Defaulting Lender until such time as all Loans and funded and unfunded participations in L/C Obligations and Swing Line Loans are held by the Lenders pro rata in accordance with the Revolving Commitments hereunder without giving effect to Section 2.15(b). Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender or to post Cash Collateral pursuant to this Section 2.15(a)(ii) shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(iii) Certain Fees.

(A) No Defaulting Lender shall be entitled to receive any fee payable under Section 2.09(a) for any period during which that Lender is a Defaulting Lender (and the Borrower shall not be required to pay any such fee that otherwise would have been required to have been paid to that Defaulting Lender).

(B) Each Defaulting Lender shall be entitled to receive Letter of Credit Fees for any period during which that Lender is a Defaulting Lender only to the extent allocable to its Applicable Percentage of the stated amount of Letters of Credit for which it has provided Cash Collateral pursuant to Section 2.14.

(C) With respect to any Letter of Credit Fee not required to be paid to any Defaulting Lender pursuant to clause (B) above, the Borrower shall (x) pay to each Non-Defaulting Lender that portion of any such fee otherwise payable to such Defaulting Lender with respect to such Defaulting Lender's participation in L/C Obligations that has been reallocated to such Non-Defaulting Lender pursuant to Section 2.15(b) below, (y) pay to the L/C Issuer the amount of any such fee otherwise payable to such Defaulting Lender to the extent allocable to such L/C Issuer's Fronting Exposure to such Defaulting Lender, and (z) not be required to pay the remaining amount of any such fee.

(b) Reallocation of Applicable Percentages to Reduce Fronting Exposure. All or any part of such Defaulting Lender's participation in L/C Obligations and Swing Line Loans shall be reallocated among the Non-Defaulting Lenders in accordance with their respective Applicable Percentages (calculated without regard to such Defaulting Lender's Revolving Commitment) but only to the extent that (x) the applicable conditions set forth in Section 5.02 are satisfied at the time of such reallocation (and, unless the Borrower shall have otherwise notified the Administrative Agent at such time, the Borrower shall be deemed to have represented and warranted that such conditions are satisfied at such time), and (y) such reallocation does not cause the aggregate Revolving Credit Exposure of any Non-Defaulting Lender to exceed such Non-Defaulting Lender's Revolving Commitment. Subject to Section 11.21, no reallocation hereunder shall constitute a waiver or release of any claim of any party hereunder against a Defaulting Lender arising from that Lender having become a Defaulting Lender, including any claim of a Non-Defaulting Lender as a result of such Non-Defaulting Lender's increased exposure following such reallocation.

(c) Cash Collateral, Repayment of Swing Line Loans. If the reallocation described in Section 2.15(b) above cannot, or can only partially, be effected, the Borrower shall, without prejudice to any right or remedy available to it hereunder or under applicable Law, (x) first, prepay Swing Line Loans in an amount equal to the Swing Line Lenders' Fronting Exposure and (y) second, Cash Collateralize the L/C Issuers' Fronting Exposure in accordance with the procedures set forth in Section 2.14.

(d) Defaulting Lender Cure. If the Borrower, the Administrative Agent, the Swing Line Lender and the L/C Issuer agree in writing that a Lender is no longer a Defaulting Lender, the Administrative Agent will so notify the parties hereto, whereupon as of the effective date specified in such notice and subject to any conditions set forth therein (which may include arrangements with respect to any Cash Collateral), that Lender will, to the extent applicable,

purchase at par that portion of outstanding Loans of the other Lenders or take such other actions as the Administrative Agent may reasonably determine to be necessary to cause the Loans and funded and unfunded participations in Letters of Credit and Swing Line Loans to be held on a pro rata basis by the Lenders in accordance with their Applicable Percentages (without giving effect to Section 2.15(b)), whereupon such Lender will cease to be a Defaulting Lender; provided that no adjustments will be made retroactively with respect to fees accrued or payments made by or on behalf of the Borrower while that Lender was a Defaulting Lender; and provided, further, that except to the extent otherwise expressly agreed by the affected parties, no change hereunder from Defaulting Lender to Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender.

(e) New Swing Line Loans/Letters of Credit. So long as any Lender is a Defaulting Lender, (i) the Swing Line Lender shall not be required to fund any Swing Line Loans unless it is satisfied that it will have no Fronting Exposure after giving effect to such Swing Line Loan and (ii) the L/C Issuer shall not be required to issue, extend, increase, reinstate or renew any letter of Credit unless it is satisfied that it will have no Fronting Exposure after giving effect thereto.

ARTICLE III

TAXES, YIELD PROTECTION AND ILLEGALITY

3.01 Taxes.

(a) Defined Terms. For purposes of this Section 3.01, the term "applicable Law" includes FATCA and the term "Lender" includes any L/C Issuer.

(b) Payments Free of Taxes; Obligation to Withhold; Payments on Account of Taxes.

(i) Any and all payments by or on account of any obligation of any Loan Party under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable Laws. If any applicable Laws (as determined in the good faith discretion of the Administrative Agent) require the deduction or withholding of any Tax from any such payment by the Administrative Agent or a Loan Party, then the Administrative Agent or such Loan Party shall be entitled to make such deduction or withholding, upon the basis of the information and documentation to be delivered pursuant to clause (f) below.

(ii) If any Loan Party or the Administrative Agent shall be required by the Internal Revenue Code to withhold or deduct any Taxes, including both United States Federal backup withholding and withholding taxes, from any payment, then (A) the Administrative Agent shall withhold or make such deductions as are determined by the Administrative Agent to be required based upon the information and documentation it has received pursuant to clause (f) below, (B) the Administrative Agent shall timely pay the full amount withheld or deducted to the relevant Governmental Authority in accordance with the Internal Revenue Code, and (C) to the extent that the withholding or deduction is made on account of Indemnified Taxes, the sum payable by the applicable Loan Party shall be increased as necessary so that after any required withholding or the making of all required deductions (including deductions applicable to additional sums payable under this Section 3.01) the applicable Recipient receives an amount equal to the sum it would have received had no such withholding or deduction been made for Indemnified Taxes.

(iii) If any Loan Party or the Administrative Agent shall be required by any applicable Laws other than the Internal Revenue Code to withhold or deduct any Taxes from any payment, then (A) such Loan Party or the Administrative Agent, as required by such Laws, shall withhold or make such deductions as are determined by it to be required based upon the information and documentation it has received pursuant to clause (f) below, (B) such Loan Party or the Administrative Agent, to the extent required by such Laws, shall timely pay the full amount withheld or deducted to the relevant Governmental Authority in accordance with such Laws, and (C) to the extent that the withholding or deduction is made on account of Indemnified Taxes, the sum payable by the applicable Loan Party shall be increased as necessary so that after any required withholding or the making of all required deductions (including deductions applicable to additional sums payable under this Section 3.01) the applicable Recipient receives an amount equal to the sum it would have received had no such withholding or deduction been made for Indemnified Taxes.

(c) Payment of Other Taxes by the Loan Parties. Without limiting the provisions of clause (b) above, the Loan Parties shall timely pay to the relevant Governmental Authority in accordance with applicable Law, or at the option of the Administrative Agent timely reimburse it for the payment of, any Other Taxes.

(d) Tax Indemnifications.

(i) Each of the Loan Parties shall, and does hereby, jointly and severally indemnify each Recipient, and shall make payment in respect thereof within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 3.01) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient, and any penalties, interest and reasonable expenses arising therefrom or with respect thereto (except for any penalties or interest with respect to such Indemnified Taxes that are determined by a court of competent jurisdiction by a final and nonappealable judgment to have resulted from the bad faith, gross negligence or willful misconduct of the Administrative Agent, any Lender or the L/C Issuer), whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender or the L/C Issuer (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender or the L/C Issuer, shall be conclusive absent manifest error. Each of the Loan Parties shall, and does hereby, jointly and severally indemnify the Administrative Agent, and shall make payment in respect thereof within ten (10) days after demand therefor, for any amount which a Lender or the L/C Issuer for any reason fails to pay indefeasibly to the Administrative Agent as required pursuant to Section 3.01(d)(ii) below.

(ii) Each Lender and the L/C Issuer shall, and does hereby, severally indemnify, and shall make payment in respect thereof within ten (10) days after demand therefor, (A) the Administrative Agent against any Indemnified Taxes attributable to such Lender or the L/C Issuer (but only to the extent that any Loan Party has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of the Loan Parties to do so), (B) the Administrative Agent and the Loan Parties, as applicable, against any Taxes attributable to such Lender's failure to comply with the provisions of Section 11.06(d) relating to the maintenance of a Participant Register and (C) the Administrative Agent and the Loan Parties, as applicable, against

any Excluded Taxes attributable to such Lender or the L/C Issuer, in each case, that are payable or paid by the Administrative Agent or a Loan Party in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender and the L/C Issuer hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender or the L/C Issuer, as the case may be, under this Agreement or any other Loan Document against any amount due to the Administrative Agent under this clause (ii).

(e) Evidence of Payments. Upon request by any Loan Party or the Administrative Agent, as the case may be, after any payment of Taxes by such Loan Party or by the Administrative Agent to a Governmental Authority as provided in this Section 3.01, such Loan Party shall deliver to the Administrative Agent or the Administrative Agent shall deliver to such Loan Party, as the case may be, the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of any return required by Laws to report such payment or other evidence of such payment reasonably satisfactory to such Loan Party or the Administrative Agent, as the case may be.

(f) Status of Lenders; Tax Documentation.

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 3.01(f)(ii)(A), 3.01(f)(ii)(B) and 3.01(f)(ii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Person,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed originals of IRS Form W-8BEN or W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) executed originals of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Internal Revenue Code, (x) a certificate substantially in the form of Exhibit 3.01-1 to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Internal Revenue Code, a "10 percent shareholder" of the Borrower within the meaning of Section 881(c)(3)(B) of the Internal Revenue Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Internal Revenue Code (a "U.S. Tax Compliance Certificate") and (y) executed originals of IRS Form W-8BEN or W-8BEN-E; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN or W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit 3.01-2 or Exhibit 3.01-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit 3.01-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary

documentation as may be prescribed by applicable law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Internal Revenue Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Internal Revenue Code) and such additional documentation reasonably requested by the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the Closing Date.

(iii) Each Lender agrees that if any form or certification it previously delivered pursuant to this Section 3.01 expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

(g) Treatment of Certain Refunds. Unless required by applicable Laws, at no time shall the Administrative Agent have any obligation to file for or otherwise pursue on behalf of a Lender or the L/C Issuer, or have any obligation to pay to any Lender or the L/C Issuer, any refund of Taxes withheld or deducted from funds paid for the account of such Lender or the L/C Issuer, as the case may be. If any Recipient determines, in its sole discretion exercised in good faith, that it has received a refund (including any application or carryover of such refund amount to reduce any amount otherwise payable to the refunding Governmental Authority) of any Taxes as to which it has been indemnified by any Loan Party or with respect to which any Loan Party has paid additional amounts pursuant to this Section 3.01, it shall pay to the Loan Party an amount equal to such refund (but only to the extent of indemnity payments made, or additional amounts paid, by a Loan Party under this Section 3.01 with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) incurred by such Recipient, and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund), provided that the Loan Party, upon the request of the Recipient, agrees to repay the amount paid over to the Loan Party (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) to the Recipient in the event the Recipient is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this clause, in no event will the applicable Recipient be required to pay any amount to the Loan Party pursuant to this clause the payment of which would place the Recipient in a less favorable net after-Tax position than such Recipient would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This clause shall not be construed to require any Recipient to make available its tax returns (or any other information relating to its taxes that it deems confidential) to any Loan Party or any other Person.

(h) Survival. Each party's obligations under this Section 3.01 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender or the L/C Issuer, the termination of the Aggregate Revolving Commitments and the repayment, satisfaction or discharge of all other Obligations.

3.02 Illegality.

If any Lender determines in good faith that any Law has made it unlawful, or that any Governmental Authority has asserted that it is unlawful, for any Lender or its Lending Office to perform any of its obligations hereunder or to make, maintain or fund or charge interest with respect to any Credit Extension, or to determine or charge interest rates based upon the BSBY Rate, or any Governmental Authority has imposed material restrictions on the authority of such Lender to purchase or sell, or to take deposits of, Dollars in the London interbank market, then, upon notice thereof by such Lender to the Borrower (through the Administrative Agent), (a) any obligation of such Lender to make or continue BSBY Rate Loans or to convert Base Rate Loans to BSBY Rate Loans shall be suspended, and (b) if such notice asserts the illegality of such Lender making or maintaining Base Rate Loans the interest rate on which is determined by reference to the BSBY Rate component of the Base Rate, the interest rate on which Base Rate Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the BSBY Rate component of the Base Rate, in each case until such Lender notifies the Administrative Agent and the Borrower that the circumstances giving rise to such determination no longer exist. Upon receipt of such notice, (x) the Borrower shall, upon demand from such Lender (with a copy to the Administrative Agent), prepay or, if applicable, convert all BSBY Rate Loans of such Lender to Base Rate Loans (the interest rate on which Base Rate Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the BSBY Rate component of the Base Rate), either on the last day of the Interest Period therefor, if such Lender may lawfully continue to maintain such BSBY Rate Loans to such day, or immediately, if such Lender may not lawfully continue to maintain such BSBY Rate Loans and (y) if such notice asserts the illegality of such Lender determining or charging interest rates based upon the BSBY Rate, the Administrative Agent shall during the period of such suspension compute the Base Rate applicable to such Lender without reference to the BSBY Rate component thereof until the Administrative Agent is advised in writing by such Lender that it is no longer illegal for such Lender to determine or charge interest rates based upon the BSBY Rate. Upon any such prepayment or conversion, the Borrower shall also pay accrued interest on the amount so prepaid or converted, together with any additional amounts required pursuant to Section 3.05.

3.03 Inability to Determine Rates.

(a) If in connection with any request for a BSBY Rate Loan or a conversion to or continuation thereof, as applicable, (i) the Administrative Agent determines (which determination shall be conclusive absent manifest error) that (A) no Successor Rate has been determined in accordance with Section 3.03(b), and the circumstances under clause (i) of Section 3.03(b) or the Scheduled Unavailability Date has occurred (as applicable), or (B) adequate and reasonable means do not otherwise exist for determining BSBY for any requested Interest Period with respect to a proposed BSBY Rate Loan or in connection with an existing or proposed Base Rate Loan or (ii) the Administrative Agent or the Required Lenders determine that for any reason that the BSBY Rate for any requested Interest Period with respect to a proposed BSBY Rate Loan does not adequately and fairly reflect the cost to such Lenders of funding such BSBY Rate Loan, the Administrative Agent will promptly so notify the Borrower and each Lender. Thereafter, (x) the obligation of the Lenders to make or maintain BSBY Rate Loans or to convert Base Rate Loans to BSBY Rate Loans shall be suspended (to the extent of the affected BSBY Rate Loans or Interest Periods), and (y) in the event of a determination described in the preceding sentence with

respect to the BSBY component of the Base Rate, the utilization of the BSBY Rate component in determining the Base Rate shall be suspended, in each case until the Administrative Agent (or, in the case of a determination by the Required Lenders described in clause (ii) of this Section 3.03(a), until the Administrative Agent upon instruction of the Required Lenders) revokes such notice. Upon receipt of such notice, (i) the Borrower may revoke any pending request for a Borrowing of, or conversion to, or continuation of BSBY Rate Loans (to the extent of the affected BSBY Rate Loans or Interest Periods) or, failing that, will be deemed to have converted such request into a request for a Borrowing of Base Rate Loans in the amount specified therein and (ii) any outstanding BSBY Rate Loans shall be deemed to have been converted to Base Rate Loans immediately at the end of their respective applicable Interest Period.

(b) Notwithstanding anything to the contrary in this Agreement or any other Loan Documents, if the Administrative Agent determines (which determination shall be conclusive absent manifest error), or the Borrower or Required Lenders notify the Administrative Agent (with, in the case of the Required Lenders, a copy to the Borrower) that the Borrower or Required Lenders (as applicable) have determined, that:

(i) adequate and reasonable means do not exist for ascertaining one month, three month and six month interest periods of BSBY, including, without limitation, because the BSBY Screen Rate is not available or published on a current basis and such circumstances are unlikely to be temporary; or

(ii) Bloomberg or any successor administrator of the BSBY Screen Rate or a Governmental Authority having jurisdiction over the Administrative Agent or Bloomberg or such administrator with respect to its publication of BSBY, in each case acting in such capacity, has made a public statement identifying a specific date after which one month, three month and six month interest periods of BSBY or the BSBY Screen Rate shall or will no longer be made available, or permitted to be used for determining the interest rate of U.S. dollar denominated syndicated loans, or shall or will otherwise cease; provided, that, at the time of such statement, there is no successor administrator that is satisfactory to the Administrative Agent, that will continue to provide such interest periods of BSBY after such specific date (the latest date on which one month, three month and six month interest periods of BSBY or the BSBY Screen Rate are no longer available permanently or indefinitely, the "Scheduled Unavailability Date");

then, on a date and time determined by the Administrative Agent (any such date, the "BSBY Replacement Date"), which date shall be at the end of an Interest Period or on the relevant interest payment date, as applicable, for interest calculated and, solely with respect to clause (ii) above, no later than the Scheduled Unavailability Date, BSBY will be replaced hereunder and under any Loan Document with, subject to the proviso below, the first available alternative set forth in the order below for any payment period for interest calculated that can be determined by the Administrative Agent, in each case, without any amendment to, or further action or consent of any other party to, this Agreement or any other Loan Document (the "Successor Rate"):

(x) Term SOFR plus the SOFR Adjustment; and

(y) Daily Simple SOFR plus the SOFR Adjustment;

provided that, if initially BSBY is replaced with the rate contained in clause (y) above (Daily Simple SOFR plus the SOFR Adjustment) and subsequent to such replacement, the Administrative Agent determines that Term SOFR has become available and is administratively feasible for the Administrative Agent in its sole discretion, and the Administrative Agent notifies the Borrower and each Lender of such availability, then from and after the beginning of the Interest Period, relevant interest payment date or payment period for interest calculated, in each case, commencing no less than thirty (30) days after the date of such notice, the Successor Rate shall be Term SOFR plus the SOFR Adjustment.

If the Successor Rate is Daily Simple SOFR plus the SOFR Adjustment, all interest payments will be payable on a quarterly basis.

Notwithstanding anything to the contrary herein, (i) if the Administrative Agent determines that neither of the alternatives set forth in clauses (x) and (y) above is available on or prior to the BSBY Replacement Date or (ii) if the events or circumstances of the type described in Section 3.03(b)(i) or (ii) have occurred with respect to the Successor Rate then in effect, then in each case, the Administrative Agent and the Borrower may amend this Agreement solely for the purpose of replacing BSBY or any then current Successor Rate in accordance with this Section 3.03 at the end of any Interest Period, relevant interest payment date or payment period for interest calculated, as applicable, with another alternate benchmark rate giving due consideration to any evolving or then existing convention for similar U.S. dollar denominated credit facilities syndicated and agented in the United States for such alternative benchmarks and, in each case, including any mathematical or other adjustments to such benchmark giving due consideration to any evolving or then existing convention for similar U.S. dollar denominated credit facilities syndicated and agented in the United States for such benchmarks, which adjustment or method for calculating such adjustment shall be published on an information service as selected by the Administrative Agent from time to time in its reasonable discretion and may be periodically updated. For the avoidance of doubt, any such proposed rate and adjustments shall constitute a Successor Rate. Any such amendment shall become effective at 5:00 p.m. on the fifth Business Day after the Administrative Agent shall have posted such proposed amendment to all Lenders and the Borrower unless, prior to such time, Lenders comprising the Required Lenders have delivered to the Administrative Agent written notice that such Required Lenders object to such amendment.

The Administrative Agent will promptly (in one or more notices) notify the Borrower and each Lender of the implementation of any Successor Rate.

Any Successor Rate shall be applied in a manner consistent with market practice; provided that to the extent such market practice is not administratively feasible for the Administrative Agent, such Successor Rate shall be applied in a manner as otherwise reasonably determined by the Administrative Agent.

Notwithstanding anything else herein, if at any time any Successor Rate so determined would otherwise be less than zero percent (0%), the Successor Rate will be deemed to be zero percent (0%) for the purposes of this Agreement and the other Loan Documents.

If the Successor Rate includes a SOFR-based rate, then, as of the BSBY Replacement Date, the Applicable Rate that applies to the Commitment Fee set forth in Section 2.09(a) shall increase by the percentage points equal to the SOFR Adjustment for an interest period of one month's duration.

In connection with the implementation of a Successor Rate, the Administrative Agent will have the right to make Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Conforming Changes will become effective without any further action or consent of any other party to this Agreement; provided

that, with respect to any such amendment effected, the Administrative Agent shall post each such amendment implementing such Conforming Changes to the Borrower and the Lenders reasonably promptly after such amendment becomes effective.

For purposes of this Section 3.03, those Lenders that either have not made, or do not have an obligation under this Agreement to make, the relevant Loans in Dollars shall be excluded from any determination of Required Lenders.

3.04 Increased Costs.

(a) Increased Costs Generally. If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, any Lender (except any reserve requirement reflected in the BSBY Rate) or the L/C Issuer;

(ii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) impose on any Lender or the L/C Issuer or the London interbank market any other condition, cost or expense affecting this Agreement or BSBY Rate Loans made by such Lender or any Letter of Credit or participation therein;

and the result of any of the foregoing shall be to increase the cost to such Lender of making, converting to, continuing or maintaining any Loan the interest on which is determined by reference to the BSBY Rate (or of maintaining its obligation to make any such Loan), or to increase the cost to such Lender or the L/C Issuer of participating in, issuing or maintaining any Letter of Credit (or of maintaining its obligation to participate in or to issue any Letter of Credit), or to reduce the amount of any sum received or receivable by such Lender or the L/C Issuer hereunder (whether of principal, interest or any other amount) then, upon request of such Lender or the L/C Issuer, the Borrower will pay to such Lender or the L/C Issuer, as the case may be, such additional amount or amounts as will compensate such Lender or the L/C Issuer, as the case may be, for such additional costs incurred or reduction suffered.

(b) Capital Requirements. If any Lender or the L/C Issuer determines that any Change in Law affecting such Lender or the L/C Issuer or any Lending Office of such Lender or such Lender's or the L/C Issuer's holding company, if any, regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's or the L/C Issuer's capital or on the capital of such Lender's or the L/C Issuer's holding company, if any, as a consequence of this Agreement, the Revolving Commitments of such Lender or the Loans made by, or participations in Letters of Credit or Swing Line Loans held by, such Lender, or the Letters of Credit issued by the L/C Issuer, to a level below that which such Lender or the L/C Issuer or such Lender's or the L/C Issuer's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or the L/C Issuer's policies and the policies of such Lender's or the L/C Issuer's holding company with respect to capital adequacy), then from time to time the Borrower will pay to such Lender or the L/C Issuer, as the case may

be, such additional amount or amounts as will compensate such Lender or the L/C Issuer or such Lender's or the L/C Issuer's holding company for any such reduction suffered.

(c) Certificates for Reimbursement. A certificate of a Lender or the L/C Issuer setting forth the amount or amounts necessary to compensate such Lender or the L/C Issuer or its holding company, as the case may be, as specified in clause (a) or (b) of this Section and delivered to the Borrower shall be conclusive absent manifest error. The Borrower shall pay such Lender or the L/C Issuer, as the case may be, the amount shown as due on any such certificate within ten (10) days after receipt thereof.

(d) Delay in Requests. Failure or delay on the part of any Lender or the L/C Issuer to demand compensation pursuant to the foregoing provisions of this Section shall not constitute a waiver of such Lender's or the L/C Issuer's right to demand such compensation, provided that the Borrower shall not be required to compensate a Lender or the L/C Issuer pursuant to the foregoing provisions of this Section for any increased costs incurred or reductions suffered more than nine (9) months prior to the date that such Lender or the L/C Issuer, as the case may be, notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's or the L/C Issuer's intention to claim compensation therefor (except that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the nine (9) month period referred to above shall be extended to include the period of retroactive effect thereof).

3.05 Compensation for Losses.

Upon demand of any Lender (with a copy to the Administrative Agent) from time to time, the Borrower shall promptly compensate such Lender for and hold such Lender harmless from any loss, cost or expense incurred by it as a result of:

(a) any continuation, conversion, payment or prepayment of any BSBY Rate Loan on a day other than the last day of the Interest Period for such Loan (whether voluntary, mandatory, automatic, by reason of acceleration, or otherwise);

(b) any failure by the Borrower (for a reason other than the failure of such Lender to make a Loan) to prepay, borrow, continue or convert any BSBY Rate Loan on the date or in the amount notified by the Borrower; or

(c) any assignment of a BSBY Rate Loan on a day other than the last day of the Interest Period therefor as a result of a request by the Borrower pursuant to Section 11.13.

Such loss, cost or expense shall be limited to the actual loss, cost or expense arising from any actual liquidation or reemployment of funds obtained by it to maintain such Loan or from fees payable to terminate the deposits from which such funds were obtained. The Borrower shall also pay any customary and reasonable administrative fees charged by such Lender in connection with the foregoing.

For purposes of calculating amounts payable by the Borrower to the Lenders under this Section 3.05, each Lender shall be deemed to have funded each BSBY Rate Loan made by it at the BSBY Rate used in determining the BSBY Rate for such Loan by a matching deposit or other borrowing in the London interbank eurodollar market for a comparable amount and for a comparable period, whether or not such BSBY Rate Loan was in fact so funded.

3.06 Mitigation of Obligations; Replacement of Lenders.

(a) Designation of a Different Lending Office. If any Lender requests compensation under Section 3.04, or the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender, the L/C Issuer, or any Governmental Authority for the account of any Lender or the L/C Issuer pursuant to Section 3.01, or if any Lender gives a notice pursuant to Section 3.02, then at the request of the Borrower such Lender or the L/C Issuer, as applicable, shall use reasonable efforts to designate a different Lending Office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the reasonable judgment of such Lender or the L/C Issuer, as applicable, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 3.01 or 3.04, as the case may be, in the future, or eliminate the need for the notice pursuant to Section 3.02, as applicable, and (ii) in each case, would not subject such Lender or the L/C Issuer, as the case may be, to any material unreimbursed cost or expense and would not otherwise be materially disadvantageous to such Lender or the L/C Issuer, as the case may be. The Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender or the L/C Issuer in connection with any such designation or assignment.

(b) Replacement of Lenders. If any Lender requests compensation under Section 3.04, or if the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 3.01 and, in each case, such Lender has declined or is unable to designate a different lending office in accordance with Section 3.06(a), the Borrower may replace such Lender in accordance with Section 11.13.

3.07 Survival.

All of the Loan Parties' obligations under this Article III shall survive termination of the Aggregate Revolving Commitments, repayment of all other Obligations hereunder and resignation of the Administrative Agent.

ARTICLE IV

GUARANTY

4.01 The Guaranty.

Each of the Guarantors hereby jointly and severally guarantees to the Administrative Agent, the L/C Issuer, the Lenders and each other holder of Obligations as hereinafter provided, as primary obligor and not as surety, the prompt payment of the Obligations in full when due (whether at stated maturity, as a mandatory prepayment, by acceleration, as a mandatory cash collateralization or otherwise) strictly in accordance with the terms thereof. The Guarantors hereby further agree that if any of the Obligations is not paid in full when due (whether at stated maturity, as a mandatory prepayment, by acceleration, as a mandatory cash collateralization or otherwise), the Guarantors will, jointly and severally, promptly pay the same, without any demand or notice whatsoever, and that in the case of any extension of time of payment or renewal of any of the Obligations, the same will be promptly paid in full when due (whether at extended maturity, as a mandatory prepayment, by acceleration, as a mandatory cash collateralization or otherwise) in accordance with the terms of such extension or renewal.

Notwithstanding any provision to the contrary contained herein or in any other of the Loan Documents or the other documents relating to the Obligations, the obligations of each Guarantor under this Agreement and the other Loan Documents shall not exceed an aggregate amount equal to the largest amount that would not render such obligations subject to avoidance under applicable Debtor Relief Laws.

4.02 Obligations Unconditional.

The obligations of the Guarantors under Section 4.01 are joint and several, absolute and unconditional, irrespective of the value, genuineness, validity, regularity or enforceability of any of the Loan Documents or other documents relating to the Obligations, or any substitution, release, impairment or exchange of any other guarantee of or security for any of the Obligations, and, to the fullest extent permitted by applicable Law, irrespective of any other circumstance whatsoever which might otherwise constitute a legal or equitable discharge or defense of a surety or guarantor (other than the defense that the Loans have been paid in full), it being the intent of this Section 4.02 that the obligations of the Guarantors hereunder shall be absolute and unconditional under any and all circumstances. Each Guarantor agrees that such Guarantor shall have no right of subrogation, indemnity, reimbursement or contribution against the Borrower or any other Guarantor for amounts paid under this Article IV until such time as the Obligations (other than (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount) have been paid in full and the Revolving Commitments have expired or terminated. Without limiting the generality of the foregoing, it is agreed that, to the fullest extent permitted by Law, the occurrence of any one or more of the following shall not alter or impair the liability of any Guarantor hereunder, which shall remain absolute and unconditional as described above:

(a) at any time or from time to time, without notice to any Guarantor, the time for any performance of or compliance with any of the Obligations shall be extended, or such performance or compliance shall be waived;

(b) any of the acts mentioned in any of the provisions of any of the Loan Documents or any other document relating to the Obligations shall be done or omitted;

(c) the maturity of any of the Obligations shall be accelerated, or any of the Obligations shall be modified, supplemented or amended in any respect, or any right under any of the Loan Documents or any other document relating to the Obligations shall be waived or any other guarantee of any of the Obligations or any security therefor shall be released, impaired or exchanged in whole or in part or otherwise dealt with;

(d) any Lien granted to, or in favor of, the Administrative Agent or any other holder of the Obligations as security for any of the Obligations shall fail to attach or be perfected; or

(e) any of the Obligations shall be determined to be void or voidable (including for the benefit of any creditor of any Guarantor) or shall be subordinated to the claims of any Person (including any creditor of any Guarantor).

With respect to its obligations hereunder, each Guarantor hereby expressly waives diligence, presentment, demand of payment, protest and all notices whatsoever (other than any notices required to be delivered pursuant to the terms of the Loan Documents) and any requirement that the Administrative Agent or any other holder of the Obligations exhaust any right, power or remedy or proceed against any Person under any of the Loan Documents or any other document relating to the Obligations or against any other Person under any other guarantee of, or security for, any of the Obligations.

4.03 Reinstatement.

The obligations of each Guarantor under this Article IV shall be automatically reinstated if and to the extent that for any reason any payment by or on behalf of any Person in respect of the Obligations is rescinded or must be otherwise restored by any holder of any of the Obligations, whether as a result of any Debtor Relief Law or otherwise, and each Guarantor agrees that it will indemnify the Administrative Agent and each other holder of the Obligations on demand for all reasonable and documented out-of-pocket costs and expenses (including the fees, charges and disbursements of one primary outside counsel and one local counsel in each relevant jurisdiction for the Administrative Agent and the holders of the Obligations taken as a whole and, in the case of an actual or potential conflict of interest, one additional counsel in each relevant jurisdiction to each group of affected Administrative Agent and/or holder(s) of the Obligations similarly situated taken as a whole) incurred by the Administrative Agent or such holder of the Obligations in connection with such rescission or restoration, including any such costs and expenses incurred in defending against any claim alleging that such payment constituted a preference, fraudulent transfer or similar payment under any Debtor Relief Law.

4.04 Certain Additional Waivers.

Each Guarantor agrees that such Guarantor shall have no right of recourse to security for the Obligations, except through the exercise of rights of subrogation pursuant to Section 4.02 and through the exercise of rights of contribution pursuant to Section 4.06.

4.05 Remedies.

The Guarantors agree that, to the fullest extent permitted by Law, as between the Guarantors, on the one hand, and the Administrative Agent and the other holders of the Obligations, on the other hand, the Obligations may be declared to be forthwith due and payable as specified in Section 9.02 (and shall be deemed to have become automatically due and payable in the circumstances specified in Section 9.02) for purposes of Section 4.01 notwithstanding any stay, injunction or other prohibition preventing such declaration (or preventing the Obligations from becoming automatically due and payable) as against any other Person and that, in the event of such declaration (or the Obligations being deemed to have become automatically due and payable), the Obligations (whether or not due and payable by any other Person) shall forthwith become due and payable by the Guarantors for purposes of Section 4.01. The Guarantors acknowledge and agree that their obligations hereunder are secured in accordance with the terms of the Collateral Documents and that the holders of the Obligations may exercise their remedies thereunder in accordance with the terms thereof.

4.06 Rights of Contribution.

The Guarantors agree among themselves that, in connection with payments made hereunder, each Guarantor shall have contribution rights against the other Guarantors as permitted under applicable Law. Such contribution rights shall be subordinate and subject in right of payment to the obligations of such Guarantors under the Loan Documents and no Guarantor shall exercise such rights of contribution until the Obligations (other than (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount) have been paid in full and the Revolving Commitments have terminated.

4.07 Guarantee of Payment; Continuing Guarantee.

The guarantee in this Article IV is a guaranty of payment and not of collection, is a continuing guarantee, and shall apply to the Obligations whenever arising.

4.08 Keepwell.

Each Loan Party that is a Qualified ECP Guarantor at the time the Guaranty in this Article IV by any Loan Party that is not then an "eligible contract participant" under the Commodity Exchange Act (a "Specified Loan Party") or the grant of a security interest under the Loan Documents by any such Specified Loan Party, in either case, becomes effective with respect to any Swap Obligation, hereby jointly and severally, absolutely, unconditionally and irrevocably undertakes to provide such funds or other support to each Specified Loan Party with respect to such Swap Obligation as may be needed by such Specified Loan Party from time to time to honor all of its obligations under this Guaranty and the other Loan Documents in respect of such Swap Obligation (but, in each case, only up to the maximum amount of such liability that can be hereby incurred without rendering such Qualified ECP Guarantor's obligations and undertakings under this Article IV voidable under applicable Debtor Relief Laws, and not for any greater amount). The obligations and undertakings of each Qualified ECP Guarantor under this Section 4.08 shall remain in full force and effect until the Obligations (other than (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount) have been paid and performed in full. Each Loan Party intends this Section 4.08 to constitute, and this Section 4.08 shall be deemed to constitute, a "keepwell, support, or other agreement" for the benefit of each Specified Loan Party for all purposes of the Commodity Exchange Act.

4.09 Appointment of Borrower.

Each of the Loan Parties hereby appoints the Borrower to act as its agent for all purposes of this Agreement, the other Loan Documents and all other documents and electronic platforms entered into in connection herewith and agrees that (a) the Borrower may execute such documents and provide such authorizations on behalf of such Loan Parties as the Borrower deems appropriate in its sole discretion and each Loan Party shall be obligated by all of the terms of any such document and/or authorization executed on its behalf, (b) any notice or communication delivered by the Administrative Agent, L/C Issuer or a Lender to the Borrower shall be deemed delivered to each Loan Party and (c) the Administrative Agent, L/C Issuer or the Lenders may accept, and be permitted to rely on, any document, authorization, instrument or agreement executed by the Borrower on behalf of each of the Loan Parties.

ARTICLE V

CONDITIONS PRECEDENT TO CREDIT EXTENSIONS

5.01 Conditions of Effectiveness.

This Agreement shall be effective upon satisfaction of the following conditions precedent in each case in a manner reasonably satisfactory to the Administrative Agent and each Lender:

(a) Loan Documents. Receipt by the Administrative Agent of executed counterparts of this Agreement and each Note requested by any Lender, each properly executed by a Responsible Officer of the signing Loan Party (or the general partner thereof).

(b) Opinions of Counsel. Receipt by the Administrative Agent of reasonably satisfactory opinions of legal counsel to the Loan Parties (including, to the extent required, local counsel to the Loan Parties), addressed to the Administrative Agent and each Lender, dated as of the Closing Date.

(c) Organization Documents, Resolutions, Etc. Receipt by the Administrative Agent of the following:

(i) copies of the Organization Documents of each Loan Party certified, in the case of each certificate of limited partnership, certificate of formation or certificate of incorporation, to be true and complete as of a recent date by the appropriate Governmental Authority of the state or other jurisdiction of its incorporation or organization, where applicable, and certified by a secretary or assistant secretary of such Loan Party (or its general partner) to be true and correct as of the Closing Date;

(ii) such certificates of resolutions or other action, incumbency certificates and/or other certificates of Responsible Officers of each Loan Party as the Administrative Agent may reasonably require evidencing the identity, authority and capacity of each Responsible Officer thereof authorized to act as a Responsible Officer in connection with this Agreement and the other Loan Documents to which such Loan Party is a party; and

(iii) such documents and certifications as the Administrative Agent may reasonably require to evidence that each Loan Party is duly organized or formed, and is validly existing, in good standing and qualified to engage in business in its state of organization or formation.

(d) Evidence of Insurance. Receipt by the Administrative Agent of copies of insurance policies, declaration pages, certificates, and endorsements of insurance evidencing liability and property insurance meeting the requirements set forth herein or in the Loan Documents or as required by the Administrative Agent (provided that evidence of insurance shall only be required with respect to U.S. assets).

(e) Financial Statements. The Administrative Agent and the Lenders shall have received copies of the financial statements referred to in Section 6.05, each in form and substance satisfactory to each of them.

(f) Personal Property Collateral. The Administrative Agent shall have received, in form and substance satisfactory to the Administrative Agent:

(i) (A) searches of UCC filings or analogous public filings in the jurisdiction of incorporation or formation, as applicable, of each Loan Party and each jurisdiction where any Collateral is located or where a filing would need to be made in order to perfect the Administrative Agent's security interest in the Collateral, copies of the financing statements on file in such jurisdictions and evidence that no Liens exist other than Permitted Liens and (B) tax lien, judgment and bankruptcy searches;

(ii) searches of ownership of Intellectual Property in the appropriate governmental offices and such patent/trademark/copyright filings as requested by the Administrative Agent in order to perfect the Administrative Agent's security interest in the Intellectual Property;

(iii) completed UCC financing statements for each appropriate jurisdiction as is necessary, in the Administrative Agent's sole discretion, to perfect the Administrative Agent's security interest in the Collateral;

(iv) stock or membership certificates, if any, evidencing the Pledged Equity and undated stock or transfer powers duly executed in blank; in each case to the extent such Pledged Equity is certificated;

(v) to the extent required to be delivered, filed, registered or recorded pursuant to the terms and conditions of the Collateral Documents, all instruments, documents (including relevant page(s) of the share register book of the company showing the pledge registration) and chattel paper in the possession of any of the Loan Parties, together with allonges or assignments as may be necessary or appropriate to create and perfect the Administrative Agent's and the Lenders' security interest in the Collateral; and

(vi) in the case of any personal property Collateral located at a premises leased by a Loan Party, estoppel letters, consents and waivers from the landlords on such real property as may be reasonably required by the Administrative Agent.

(g) Closing Certificate. Receipt by the Administrative Agent of a certificate signed by a Responsible Officer of the Borrower as of the Closing Date certifying that (i) there has not occurred, since December 31, 2020, any event or condition that has had, or could be reasonably expected, either individually or in the aggregate, to have, a Material Adverse Effect, (ii) there are no actions, suits, investigations, proceedings, claims or disputes pending or, to the knowledge of the Loan Parties, threatened or contemplated, at law, in equity, in arbitration or before any Governmental Authority, by or against the Borrower or any of its Subsidiaries or against any of their properties or revenues that (x) purport to affect performance under this Agreement or any other Loan Document or (y) could be reasonably expected, either individually or in the aggregate, to have, a Material Adverse Effect, and (iii) the conditions specified in Sections 5.02(a) and (b) have been satisfied as of the Closing Date.

(h) Solvency Certificate. Receipt by the Administrative Agent of a certificate signed by a Responsible Officer of the Borrower as of the Closing Date attesting to the Solvency of each Loan Party before and after giving effect to the transactions contemplated hereby.

(i) Refinance of Existing Indebtedness. The Borrower and its Subsidiaries shall have repaid all outstanding Indebtedness (other than Indebtedness permitted under Section 8.03) (the "Existing Indebtedness") excluding unasserted contingent indemnification or reimbursement obligations not then due and owing, and terminated all commitments to extend credit with respect to the Existing Indebtedness, and all Liens securing the Existing Indebtedness shall have been released.

(j) KYC; Beneficial Ownership. Upon the reasonable request of any Lender made at least three (3) days prior to the Closing Date, the Borrower shall have provided to such Lender, and such Lender shall be reasonably satisfied with, the documentation and other information so requested in connection with applicable "know your customer" and anti-money-laundering rules and regulations, including, without limitation, the Patriot Act, in each case at least three (3) days prior to the Closing Date and (y) at least three (3) days prior to the Closing Date, any Loan Party that qualifies as a "legal entity customer" under the Beneficial Ownership Regulation shall have

delivered, to each Lender that so requests, a Beneficial Ownership Certification in relation to such Loan Party.

(k) Consents. Receipt by the Administrative Agent of evidence that all members, boards of directors, governmental, shareholder and material third party consents and approvals necessary in connection with the entering into of this Agreement have been obtained, all applicable waiting periods shall have expired without any action being taken by any authority that could restrain, prevent or impose any material adverse condition on the Loan Parties and their Subsidiaries or the transactions contemplated hereby, or that could seek or threaten any of the foregoing, and no Law or regulation shall be applicable which, in the reasonably judgment of the Administrative Agent, could have such effect.

(l) Fees. Receipt by the Administrative Agent, the Arranger and the Lenders of any fees required to be paid on or before the Closing Date.

(m) Attorney Costs. The Borrower shall have paid all reasonable and documented out-of-pocket fees, charges and disbursements of outside counsel to the Administrative Agent and Arranger (directly to such counsel if requested by the Administrative Agent and/or the Arranger) to the extent invoiced prior to or on the Closing Date, plus such additional amounts of such fees, charges and disbursements as shall constitute its reasonable estimate of such fees, charges and disbursements incurred or to be incurred by it through the closing proceedings (provided that such estimate shall not thereafter preclude a final settling of accounts between the Borrower, the Administrative Agent and the Arranger).

Without limiting the generality of the provisions of the last paragraph of Section 10.03, for purposes of determining compliance with the conditions specified in this Section 5.01, each Lender that has signed this Agreement shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless the Administrative Agent shall have received notice from such Lender prior to the proposed Closing Date specifying its objection thereto.

5.02 Conditions to all Credit Extensions.

The obligation of each Lender to honor any Request for Credit Extension (other than a Loan Notice requesting only a conversion of Loans to the other Type or a continuation of BSBY Rate Loans) is subject to the following conditions precedent:

(a) The representations and warranties of each Loan Party contained in Article VI or any other Loan Document, or which are contained in any document furnished at any time under or in connection herewith or therewith, shall be true and correct in all material respects (except to the extent any such representation and warranty is qualified by materiality, in which case, such representation and warranty shall be true and correct in all respects after giving effect to such materiality qualification) on and as of the date of such Credit Extension, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct in all material respects (except to the extent any such representation and warranty is qualified by materiality, in which case, such representation and warranty shall be true and correct in all respects after giving effect to such materiality qualification) as of such earlier date.

(b) No Default or Event of Default shall exist at the time of or would result from such proposed Credit Extension or from the application of the proceeds thereof.

(c) The Administrative Agent and, if applicable, the L/C Issuer or the Swing Line Lender shall have received a Request for Credit Extension in accordance with the requirements hereof (except as otherwise provided in Section 2.03(c)(i) and Section 2.04(c)(i)).

(d) No Foreclosure Event shall have occurred.

Each Request for Credit Extension (other than a Loan Notice requesting only a conversion of Loans to the other Type or a continuation of BSBY Rate Loans) submitted by the Borrower shall be deemed to be a representation and warranty that the conditions specified in Sections 5.02(a) and (b) have been satisfied on and as of the date of the applicable Credit Extension.

ARTICLE VI

REPRESENTATIONS AND WARRANTIES

The Loan Parties represent and warrant to the Administrative Agent and the Lenders that:

6.01 Existence, Qualification and Power.

The Borrower and each of its Subsidiaries (a) is duly organized or formed, validly existing and, as applicable, in good standing under the Laws of the jurisdiction of its incorporation or organization, (b) has all requisite power and authority and all requisite governmental licenses, authorizations, consents and approvals to (i) own or lease its assets and carry on its business and (ii) execute, deliver and perform its obligations under the Loan Documents to which it is a party, and (c) is duly qualified and is licensed and, as applicable, in good standing under the Laws of each jurisdiction where its ownership, lease or operation of properties or the conduct of its business requires such qualification or license; except in each case referred to in clause (b)(i) or (c), to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect.

6.02 Authorization; No Contravention.

The execution, delivery and performance by each Loan Party of each Loan Document to which such Person is party have been duly authorized by all necessary corporate or other organizational action, and do not (a) contravene the terms of any of such Person's Organization Documents; (b) conflict with or result in any breach or contravention of, or the creation of any Lien (other than a Permitted Lien) under, or require any payment to be made under (i) any Contractual Obligation to which such Person is a party or affecting such Person or the properties of such Person or any of its Subsidiaries or (ii) any order, injunction, writ or decree of any Governmental Authority or any arbitral award to which such Person or its property is subject; or (c) violate any Law, except in each case referred to in clause (b) and (c), to the extent that such conflict, breach, creation, payment or violation could not reasonably be expected to have a Material Adverse Effect.

6.03 Governmental Authorization; Other Consents.

No approval, consent, exemption, authorization, or other action by, or notice to, or filing with, any Governmental Authority or any other Person is necessary or required in connection with the execution, delivery or performance by, or enforcement against, any Loan Party of this Agreement or any other Loan Document other than (i) those that have already been obtained and are in full force and effect, (ii) filings to perfect the Liens created by the Collateral Documents, and (iii) such approvals, consents,

exemptions, authorizations, actions, notices or filings that the failure to obtain could not reasonably be in expected to have a Material Adverse Effect.

6.04 Binding Effect.

Each Loan Document, when delivered hereunder, has been duly executed and delivered by each Loan Party that is party thereto. Each Loan Document constitutes a legal, valid and binding obligation of each Loan Party party thereto, enforceable against such Loan Party that is party thereto in accordance with its terms (subject to the effect of any applicable bankruptcy, moratorium, insolvency, reorganization or other similar laws affecting the enforceability of creditors rights generally and to the effect of general principles of equity which may limit the availability of equitable remedies whether in a proceeding at law or in equity).

6.05 Financial Statements; No Material Adverse Effect.

(a) The 2020 Financial Statements (i) were prepared in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein; and (ii) fairly present in all material respects the financial condition of the Borrower and its Subsidiaries as of the last day of the period covered thereby and their results of operations for the period covered thereby in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein.

(b) The Interim Financial Statements (i) were prepared in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein; and (ii) fairly present in all material respects the financial condition of the Borrower and its Subsidiaries as of the last day of the period covered thereby and their results of operations for the period covered thereby, subject, in the case of clauses (i) and (ii), to the absence of footnotes and to normal year-end audit adjustments;

(c) The financial statements delivered pursuant to Section 7.01(a) and (b) have been prepared in accordance with GAAP (except as may otherwise be permitted under Section 7.01(a) and (b)) and present fairly in all material respects (on the basis disclosed in the footnotes to such financial statements) the consolidated and consolidating financial condition, results of operations and cash flows of the Borrower and its Subsidiaries as of the dates thereof and for the periods covered thereby.

(d) Since the date of the 2020 Financial Statements, there has been no event or circumstance that has had or could reasonably be expected to have a Material Adverse Effect.

6.06 Litigation.

There are no actions, suits, proceedings, claims or disputes pending or, to the knowledge of the Responsible Officers of the Loan Parties, threatened or contemplated, at law, in equity, in arbitration or before any Governmental Authority, by or against the Borrower or any Subsidiary or against any of their properties or revenues that, if determined adversely, could reasonably be expected to have a Material Adverse Effect.

6.07 No Default.

(a) Neither the Borrower nor any Subsidiary is in default under or with respect to any Contractual Obligation that could reasonably be expected to have a Material Adverse Effect.

(b) No Default has occurred and is continuing.

6.08 Ownership of Property; Liens.

Each of the Borrower and its Subsidiaries has good record and marketable title in fee simple to, or valid leasehold interests in, all real property necessary or used in the ordinary conduct of its business, except for Permitted Liens and for such defects in title as could not reasonably be expected to have a Material Adverse Effect. The property of the Borrower and its Subsidiaries is not subject to any Liens other than Permitted Liens.

6.09 Environmental Compliance.

Except as could not reasonably be expected to have a Material Adverse Effect:

(a) Each of the Borrower and its Subsidiaries is in compliance with Environmental Laws applicable to the facilities and real properties owned, leased or operated by the Borrower or any Subsidiary (the "Facilities") or applicable to the businesses operated by the Borrower or any Subsidiary (the "Businesses"), and there is no current violation of any Environmental Law by the Borrower or any Subsidiary with respect to the Facilities or the Businesses, and, to the knowledge of the Responsible Officers of the Loan Parties, there are no present conditions at the Facilities or related to the Businesses that would reasonably be expected to give rise to liability of the Borrower or any Subsidiary under any applicable Environmental Laws.

(b) Neither the Borrower nor any Subsidiary, nor, to the knowledge of the Responsible Officers of the Loan Parties, any other Person, has caused any of the Facilities to contain, or to have previously contained, any Hazardous Materials at, on or under the Facilities in amounts or concentrations that constitute or constituted an unresolved violation by the Borrower or any Subsidiary of, or could reasonably be expected to give rise to liability of the Borrower or any Subsidiary under, Environmental Laws.

(c) Neither the Borrower nor any Subsidiary has received any written or unequivocal verbal notice of, or written inquiry from any Governmental Authority regarding, any violation, alleged violation, non-compliance, liability or potential liability regarding environmental matters or compliance with Environmental Laws with regard to any of the Facilities or the Businesses that is unresolved, nor to the knowledge of the Responsible Officers of the Loan Parties, is any such notice being threatened.

(d) Hazardous Materials have not been transported or disposed of from the Facilities, or generated, treated, stored or disposed of at, on or under any of the Facilities or any other location, in each case by or on behalf of the Borrower or any Subsidiary in violation of, or in a manner that would be reasonably likely to give rise to liability under, any applicable Environmental Law.

(e) No judicial proceeding or governmental or administrative action is pending or, to the knowledge of the Responsible Officers of the Loan Parties, threatened, under any Environmental Law to which the Borrower or any Subsidiary is or, to the knowledge of the Responsible Officers of the Loan Parties, will be named as a party, nor are there any consent decrees or other decrees, consent orders, administrative orders or other governmental orders, or other administrative or judicial requirements (outside the ordinary course of compliance with Environmental Law applicable to the Borrower and any Subsidiary) outstanding under any Environmental Law with respect to the Borrower, any Subsidiary, the Facilities or the Businesses.

(f) There has been no release or threat of release of Hazardous Materials at or from the Facilities by the Borrower or any Subsidiary or, to the knowledge of the Responsible Officers of the Loan Parties, by any other person, or arising from or related to the operations (including disposal) of the Borrower or any Subsidiary in connection with the Facilities or otherwise in connection with the Businesses, in violation of or in amounts or in a manner that could reasonably be expected to give rise to liability under Environmental Laws.

6.10 Insurance.

The properties of the Borrower and its Subsidiaries are insured with insurance companies not Affiliates of the Borrower that the Borrower has reasonably determined are financially sound and reputable, in such amounts, with such deductibles and covering such risks as the Borrower has reasonably determined as are customarily carried by companies engaged in similar businesses and owning similar properties in localities where the Borrower or the applicable Subsidiary operates. If at any time any owned real property is pledged as collateral hereunder, the Borrower shall and shall cause each appropriate Loan Party to (A) maintain, if available, fully paid flood hazard insurance on all real property that is located in a special flood hazard area and that constitutes collateral hereunder, on such terms and in such amounts as required by The National Flood Insurance Reform Act of 1994, the Federal Flood Disaster Protection Act and rules and regulations promulgated thereunder or as otherwise required by the Administrative Agent or any Lender, (B) furnish to the Administrative Agent evidence of the renewal (and payment of renewal premiums therefor) of all such policies prior to the expiration or lapse thereof, and (C) furnish to the Administrative Agent prompt written notice of any re-designation of any such improved real property into or out of a special flood hazard area.

6.11 Taxes.

The Borrower and its Subsidiaries have filed all federal and state income tax returns and reports required to be filed, and have paid all federal and state income taxes, assessments, fees and other governmental charges levied or imposed upon them or their properties, income or assets otherwise due and payable, except those which are being contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves have been provided in accordance with GAAP. There is no proposed tax assessment against the Borrower or any Subsidiary that would, if made, have a Material Adverse Effect. Neither the Borrower nor any Subsidiary is party to any tax sharing agreement.

6.12 ERISA Compliance.

(a) Each Plan is in compliance in all respects with the applicable provisions of ERISA, the Internal Revenue Code and other federal or state laws, except as would not have a Material Adverse Effect. Each Pension Plan that is intended to be a qualified plan under Section 401(a) of the Internal Revenue Code has received a favorable determination letter or is subject to a favorable opinion letter from the IRS to the effect that the form of such Plan is qualified under Section 401(a) of the Internal Revenue Code and the trust related thereto has been determined by the IRS to be exempt from federal income tax under Section 501(a) of the Internal Revenue Code, or an application for such a letter is currently being processed by or will timely be submitted to the IRS. To the knowledge of the Loan Parties, nothing has occurred that would reasonably be expected to have an adverse effect on such letter, except as would not have a Material Adverse Effect.

(b) There are no pending or, to the knowledge of the Loan Parties, threatened claims, actions or lawsuits, or action by any Governmental Authority, with respect to any Plan that could reasonably be expected to have a Material Adverse Effect. There has been no prohibited

transaction or violation of the fiduciary responsibility rules with respect to any Plan that has resulted or would reasonably be expected to result in a Material Adverse Effect.

(c) Except as would not reasonably be expected to result in a Material Adverse Effect, (i) no ERISA Event has occurred, and no Loan Party nor any ERISA Affiliate is aware of any fact, event or circumstance that would reasonably be expected to constitute or result in an ERISA Event with respect to any Pension Plan or Multiemployer Plan; (ii) as of the most recent valuation date for any Pension Plan, the funding target attainment percentage (as defined in Section 430(d)(2) of the Internal Revenue Code) is 60% or higher and no Loan Party nor any ERISA Affiliate knows of any facts or circumstances that could reasonably be expected to cause the funding target attainment percentage for any such plan to drop below 60% as of the most recent valuation date; (iii) no Loan Party nor any ERISA Affiliate has incurred any liability to the PBGC other than for the payment of premiums, and there are no premium payments which have become due that are unpaid; (iv) neither the Borrower nor any ERISA Affiliate has engaged in a transaction that is subject to Section 4069 or Section 4212(c) of ERISA; and (v) no Pension Plan has been terminated by the plan administrator thereof nor by the PBGC, and no event or circumstance has occurred or exists that could reasonably be expected to cause the PBGC to institute proceedings under Title IV of ERISA to terminate any Pension Plan.

(d) Neither the Borrower nor any ERISA Affiliate maintains or contributes to, or has any unsatisfied obligation to contribute to, or liability under, any active or terminated Pension Plan other than (i) on the Closing Date, those listed on Schedule 6.12 hereto and (ii) thereafter, Pension Plans not otherwise prohibited by this Agreement.

(e) The Borrower represents and warrants that the Borrower is not and will not be using "plan assets" (within the meaning of Section 3(42) of ERISA or otherwise) of one or more Benefit Plans with respect to the Borrower's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Revolving Commitments or this Agreement.

6.13 Subsidiaries; Equity Interests; Loan Parties.

As of the Closing Date, the Borrower has no Subsidiaries other than those specifically disclosed on Schedule 6.13, and all of the outstanding Equity Interests in such Subsidiaries have been validly issued, are fully paid and non-assessable and are owned by a Loan Party in the amounts specified on Schedule 6.13 free and clear of all Liens except those created under the Collateral Documents. As of the Closing Date, no Loan Party has any equity investments in any other corporation or entity other than those specifically disclosed on Schedule 6.13. All of the outstanding Equity Interests in the Borrower have been validly issued, are fully paid and non-assessable and are owned by Ciner Resources LP and NRP Trona LLC in the amounts specified on Schedule 6.13 free and clear of all Liens except those created under the Collateral Documents. Set forth on Schedule 6.13 is a complete and accurate list of all Loan Parties, showing as of the Closing Date (as to each Loan Party) the jurisdiction of its incorporation, the address of its principal place of business and its U.S. taxpayer identification number or, in the case of any non-U.S. Loan Party that does not have a U.S. taxpayer identification number, its unique identification number issued to it by the jurisdiction of its incorporation. The copy of the charter of each Loan Party and each amendment thereto provided pursuant to Section 5.01(c) is a true and correct copy of each such document, each of which is valid and in full force and effect.

6.14 Use of Proceeds; Margin Regulations; Investment Company Act.

(a) The proceeds of all Credit Extensions have been used for the purposes set forth in Section 7.11.

(b) The Borrower is not engaged and will not engage, principally or as one of its important activities, in the business of purchasing or carrying margin stock (within the meaning of Regulation U issued by the FRB), or extending credit for the purpose of purchasing or carrying margin stock. Following the application of the proceeds of each Borrowing or drawing under each Letter of Credit, not more than 25% of the value of the assets (either of the Borrower only or of the Borrower and its Subsidiaries on a consolidated basis) subject to the provisions of Section 8.01 or Section 8.05 or subject to any restriction contained in any agreement or instrument between the Borrower and any Lender or any Affiliate of any Lender relating to Indebtedness and within the scope of Section 9.01(e) will be margin stock.

(c) None of the Loan Parties and their Subsidiaries is or is required to be registered as an "investment company" under the Investment Company Act of 1940.

6.15 Disclosure.

No written report, financial statement, certificate or other information (other than projections, pro forma financial information and information of a general economic or industry nature) (taken as a whole) furnished (in writing) by or on behalf of any Loan Party to the Administrative Agent or any Lender in connection with the transactions contemplated hereby and the negotiation of this Agreement or delivered hereunder or under any other Loan Document (in each case, as modified or supplemented by other information so furnished) contains any material misstatement of fact or omits to state any material fact necessary to make the statements therein (taken as a whole), in the light of the circumstances under which they were made, not misleading; provided that, it is understood and agreed that for purposes of this Section 6.15, such reports, statements, certificates and information shall not include projections, pro forma financial information or any information of a general economic or industry nature. With respect to projected financial information, pro forma financial information and information of a general economic or industry nature, the Loan Parties represent only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time delivered or furnished to the Administrative Agent or the Arranger, it being understood and recognized by the Administrative Agent, L/C Issuer, Swing Line Lender and the Lenders, that projections as to future events are not to be viewed as facts and that actual results during the period or periods covered by such projections may differ from the projected results.

6.16 Compliance with Laws.

Each of the Borrower and each Subsidiary is in compliance with the requirements of all Laws and all orders, writs, injunctions and decrees applicable to it or to its properties, except in such instances in which (a) such requirement of Law or order, writ, injunction or decree is being contested in good faith by appropriate proceedings diligently conducted or (b) the failure to comply therewith could not reasonably be expected to have a Material Adverse Effect.

6.17 Intellectual Property; Licenses, Etc.

Except to the extent it would not reasonably be expected to result in a Material Adverse Effect, the Borrower and its Subsidiaries own, or possess the right to use, all of the trademarks, service marks, trade names, copyrights, patents, patent rights, franchises, licenses and other intellectual property rights (collectively, "IP Rights") that are reasonably necessary for the operation of their respective businesses as currently conducted. Set forth on Schedule 6.17 is a list of (i) all IP Rights registered or pending registration with the United States Copyright Office or the United States Patent and Trademark Office that as of the Closing Date a Loan Party owns and (ii) all material licenses under which a Borrower or any Subsidiary has been granted exclusive rights by a third party to IP Rights registered with the United States

Copyright Office or the United States Patent and Trademark Office as of the Closing Date (excluding licenses for off-the-shelf software). Except for such claims and infringements that would not reasonably be expected to have a Material Adverse Effect, no claim has been asserted and is pending by any Person before any court or Governmental Authority challenging or questioning the use of any IP Rights by the Borrower or any Subsidiary or the validity or effectiveness of any IP Rights owned by a Borrower or any Subsidiary, and, to the knowledge of the Responsible Officers of the Loan Parties, the use of any IP Rights by the Borrower or any Subsidiary, the granting of a right or a license in respect of any IP Rights from the Borrower or any Subsidiary does not infringe on any rights of any other Person. As of the Closing Date, none of the IP Rights owned by any Loan Party is subject to any exclusive licensing agreement or similar arrangement except as set forth on Schedule 6.17.

6.18 Solvency.

The Loan Parties (a) are Solvent on a consolidated basis and (b) do not intend, in any transaction contemplated by any Loan Document, to hinder, delay or defraud either present or future creditors or any other person to which such Person is or will become, through such transaction, indebted.

6.19 Business Locations; Taxpayer Identification Number.

Set forth on Schedule 6.19-1 is a list of all real property located in the United States that is owned or leased by any Loan Party as of the Closing Date (identifying whether such real property is owned or leased and which Loan Party owns or leases such real property). Set forth on Schedule 6.19-2 is the chief executive office, U.S. tax payer identification number and organizational identification number of each Loan Party as of the Closing Date. The exact legal name and state of organization of each Loan Party as of the Closing Date is as set forth on the signature pages hereto. Except as set forth on Schedule 6.19-3, as of the Closing Date, no Loan Party has during the five (5) years preceding the Closing Date (i) changed its legal name, (ii) changed its state of formation, or (iii) been party to a merger, consolidation or other change in structure.

6.20 OFAC.

Neither the Borrower nor any Subsidiary, nor, to the knowledge of the Borrower and its Subsidiaries, any director, officer, employee, agent, affiliate or representative thereof, is an individual or entity that is, or is owned or controlled by one or more individuals or entities that are (i) currently the subject or target of any Sanctions, (ii) included on OFAC's List of Specially Designated Nationals or HMT's Consolidated List of Financial Sanctions Targets, or any similar list enforced by any other relevant sanctions authority or (iii) located, organized or resident in a Designated Jurisdiction. The Borrower and its Subsidiaries have conducted their businesses in compliance with all applicable Sanctions and have instituted and maintained policies and procedures designed to promote and achieve compliance with such Sanctions.

6.21 Patriot Act; Anti-Corruption Laws.

(a) Each Loan Party is in compliance, in all material respects, with (i) the Trading with the Enemy Act, as amended, and each of the foreign assets control regulations of the United States Treasury Department (31 CFR, Subtitle B, Chapter V, as amended) and any other enabling legislation or executive order relating thereto, and (ii) the Uniting And Strengthening America By Providing Appropriate Tools Required To Intercept And Obstruct Terrorism (USA Patriot Act of 2001) (the "Patriot Act"). No part of the proceeds of the Loans will be used, directly or indirectly, for any payments to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to

obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended.

(b) The Loan Parties and their Subsidiaries have conducted their businesses in compliance with the United States Foreign Corrupt Practices Act of 1977, the UK Bribery Act 2010, and other similar anti-corruption legislation in other jurisdictions to the extent applicable based on the Loan Parties' and their Subsidiaries' business and international activities (if any), and have instituted and maintained policies and procedures designed to promote and achieve compliance with such laws.

6.22 Anti-Money Laundering Laws.

None of the Loan Parties (a) is under investigation by any Governmental Authority for, or has been charged with, or convicted of, money laundering, drug trafficking, terrorist-related activities or other money laundering predicate crimes under any applicable Law (collectively, "Anti-Money Laundering Laws"), (b) has been assessed civil penalties under any Anti-Money Laundering Laws or (c) has had any of its funds seized or forfeited in an action under any Anti-Money Laundering Laws. Each Loan Party has taken reasonable measures appropriate to the circumstances (in any event as required by applicable Law), to ensure that such Loan Party and its Subsidiaries each is and will continue to be in compliance with all applicable current and future Anti-Money Laundering Laws.

6.23 EEA Financial Institution.

No Loan Party is an EEA Financial Institution.

6.24 Covered Entities.

No Loan Party is a Covered Entity.

6.25 Beneficial Ownership Certification.

The information included in the Beneficial Ownership Certification, if applicable, is true and correct in all respects.

6.26 Perfection of Security Interests in the Collateral.

At all times, and except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally, the Collateral Documents providing for the grant of security interests or Liens upon personal property of the Loan Parties create in favor of the Administrative Agent for the benefit of the holders of the Obligations valid security interests in, and Liens on, the Collateral purported to be covered thereby, which security interests and Liens are perfected security interests and Liens, prior to all other Liens other than Permitted Liens (or, upon (i) the filing of appropriate UCC financing statements in the applicable financing offices and payment of applicable filing fees, and (ii) the taking possession or control by the Administrative Agent of Collateral with respect to which a security interest may be perfected only by possession or control).

ARTICLE VII

AFFIRMATIVE COVENANTS

So long as any Lender shall have any Revolving Commitment hereunder, any Loan or other Obligation hereunder shall remain unpaid or unsatisfied (other than (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount), the Loan Parties shall and shall cause each Subsidiary to:

7.01 Financial Statements.

Deliver to the Administrative Agent for further prompt distribution to each Lender, in form and detail reasonably satisfactory to the Administrative Agent:

(a) as soon as available, but in any event within ninety (90) days after the end of each fiscal year of the Borrower, commencing with the fiscal year ending December 31, 2021, a consolidated and consolidating balance sheet of the Borrower and its Subsidiaries as at the end of such fiscal year, and the related consolidated and consolidating statements of income or operations, changes in shareholders' equity and cash flows for such fiscal year, setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail and prepared in accordance with GAAP, and in the case of such consolidated statements audited and accompanied by a report and opinion of Deloitte & Touche LLP or another independent certified public accountant of nationally recognized standing reasonably acceptable to the Administrative Agent, which report and opinion shall be prepared in accordance with generally accepted auditing standards and shall not be subject to any "going concern" or like qualification or exception or any qualification or exception as to the scope of such audit (provided, for the avoidance of doubt, audited financial statements delivered pursuant to this Section 7.01(a) shall not be deemed to be qualified solely because of the inclusion of an "emphasis of matter" statement, explanatory note or like qualificiation or exception resulting solely from a potential or actual event of default with respect to the Existing WE Soda Facility or other debt or obligation of an indirect parent of the Borrower), and in the case of such consolidating statements certified by the chief executive officer, chief financial officer, treasurer or controller of the Borrower (or its general partner) to the effect that such statements are fairly stated in all material respects when considered in relation to the consolidated financial statements of the Borrower and its Subsidiaries;

(b) as soon as available, but in any event within forty-five (45) days after the end of each of the first three fiscal quarters of each fiscal year of the Borrower, commencing with the fiscal quarter ending March 31, 2021, a consolidated and consolidating balance sheet of the Borrower and its Subsidiaries as at the end of such fiscal quarter, the related consolidated and consolidating statements of income or operations for such fiscal quarter and for the portion of the Borrower's fiscal year then ended, and the related consolidated and consolidating statements of changes in shareholders' equity and cash flows for the portion of the Borrower's fiscal year then ended, in each case setting forth in comparative form, as applicable, the figures for the corresponding fiscal quarter of the previous fiscal year and the corresponding portion of the previous fiscal year, all in reasonable detail and in the case of such consolidated statements certified by the chief executive officer, chief financial officer, treasurer or controller of the Borrower (or its general partner) as fairly presenting in all material respects the financial condition, results of operations, shareholders' equity and cash flows of the Borrower and its Subsidiaries in accordance with GAAP, subject only to normal year-end audit adjustments and the absence of footnotes, and in the case of such consolidating statements certified by the chief executive officer, chief financial officer, treasurer or controller of the Borrower (or its general

partner) to the effect that such statements are fairly stated in all material respects when considered in relation to the consolidated financial statements of the Borrower and its Subsidiaries; and

(c) as soon as available, but in any event within thirty (30) days after the end of each fiscal year of the Borrower, commencing with the fiscal year ending December 31, 2021, forecasts prepared by management of the Borrower, in form reasonably satisfactory to the Administrative Agent, of consolidated balance sheets and statements of income or operations and cash flows of the Borrower and its Subsidiaries on a quarterly basis for the immediately following fiscal year (including the fiscal year in which the Maturity Date occurs).

As to any information contained in materials furnished pursuant to Section 7.02(c), the Borrower shall not be separately required to furnish such information under Section 7.01(a) or 7.01(b), but the foregoing shall not be in derogation of the obligation of the Borrower to furnish the information and materials described in Section 7.01(a) or 7.01(b) at the times specified therein.

7.02 Certificates; Other Information.

Deliver to the Administrative Agent for further distribution to each Lender, in form and detail reasonably satisfactory to the Administrative Agent:

(a) concurrently with the delivery of the financial statements referred to in Sections 7.01(a) and (b), a duly completed Compliance Certificate signed by the chief executive officer, chief financial officer, treasurer or controller of the Borrower (or its general partner) (which delivery may, unless the Administrative Agent requests executed originals, be by electronic communication including fax or email and shall be deemed to be an original authentic counterpart thereof for all purposes);

(b) promptly after the same are available, copies of each annual report, proxy or financial statement or other material report or communication (to the extent the same would be required to be delivered to stockholders of a public corporation pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, assuming that such Loan Party were a public corporation for purposes of determining this disclosure standard) sent to the equityholders of the Borrower, and copies of all annual, regular, periodic and special reports and registration statements which the Borrower or any Subsidiary may file or be required to file with the SEC under Section 13 or 15(d) of the Securities Exchange Act of 1934, and not otherwise required to be delivered to the Administrative Agent pursuant hereto;

(c) promptly after any request by the Administrative Agent, copies of any detailed audit reports, management letters or recommendations (in each case to the extent not client-attorney privileged communication) submitted to the board of directors (or the audit committee of the board of directors) of the Borrower by independent accountants in connection with the accounts or books of the Borrower or any Subsidiary, or any audit of any of them;

(d) promptly, and in any event within five (5) Business Days after receipt thereof by the Borrower or any Subsidiary, copies of each notice or other correspondence received from the SEC (or comparable agency in any applicable non-U.S. jurisdiction) concerning any investigation or possible investigation or other inquiry by such agency regarding financial or other operational results of the Borrower or any Subsidiary;

(e) promptly following any request therefor, information and documentation reasonably requested by the Administrative Agent or any Lender for purposes of compliance with

applicable "know your customer" and anti-money-laundering rules and regulations, including, without limitation, the Patriot Act;

(f) to the extent any Loan Party qualifies as a "legal entity customer" under the Beneficial Ownership Regulation, an updated Beneficial Ownership Certification promptly following any change in the information provided in the Beneficial Ownership Certification delivered to any Lender in relation to such Loan Party that would result in a change to the list of beneficial owners identified in such certification;

(g) promptly, and in any event within five (5) Business Days following the making of any Restricted Payment by the Borrower (other than any Permitted Tax Distribution) or the consummation of any Permitted Acquisition by the Borrower or any Subsidiary, written notice of such Restricted Payment or Permitted Acquisition as the case may be; and

(h) promptly, such additional information regarding the business, financial or corporate affairs of the Borrower or any Subsidiary, or compliance with the terms of the Loan Documents, as the Administrative Agent or any Lender may from time to time reasonably request.

Documents required to be delivered pursuant to Section 7.01(a) or 7.01(b) or Section 7.02(b) (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date (i) on which the Borrower posts such documents, or provides a link thereto on the Borrower's website on the Internet at the website address listed on Schedule 11.02; or (ii) on which such documents are posted on the Borrower's behalf on an Internet or intranet website, if any, to which each Lender and the Administrative Agent have access (whether a commercial, third-party website or whether sponsored by the Administrative Agent); provided that: the Borrower shall notify the Administrative Agent (by facsimile or electronic mail) (who will notify each Lender) of the posting of any such documents. The Administrative Agent shall have no obligation to request the delivery of or to maintain paper copies of the documents referred to above, and in any event shall have no responsibility to monitor compliance by the Borrower with any such request by a Lender for delivery, and each Lender shall be solely responsible for requesting delivery to it or maintaining its copies of such documents.

The Borrower hereby acknowledges that (a) the Administrative Agent and/or the Arranger may, but shall not be obligated to, make available to the Lenders and the L/C Issuer materials and/or information provided by or on behalf of the Borrower hereunder (collectively, "Borrower Materials") by posting the Borrower Materials on Debt Domain, IntraLinks, Syndtrak or another similar electronic system (the "Platform") and (b) certain of the Lenders (each a "Public Lender") may have personnel who do not wish to receive material non-public information with respect to the Borrower or its Affiliates, or the respective securities of any of the foregoing, and who may be engaged in investment and other market-related activities with respect to such Persons' securities. The Borrower hereby agrees that (w) all Borrower Materials that are to be made available to Public Lenders shall be clearly and conspicuously marked "PUBLIC" which, at a minimum, shall mean that the word "PUBLIC" shall appear prominently on the first page thereof; (x) by marking Borrower Materials "PUBLIC," the Borrower shall be deemed to have authorized the Administrative Agent, the Arranger, the L/C Issuer and the Lenders to treat such Borrower Materials as not containing any material non-public information with respect to the Borrower or its securities for purposes of United States federal and state securities laws (provided, however, that to the extent such Borrower Materials constitute Information, they shall be treated as set forth in Section 11.07); (y) all Borrower Materials marked "PUBLIC" are permitted to be made available through a portion of the Platform designated "Public Side Information;" and (z) the Administrative Agent and the Arranger shall be entitled to treat any Borrower Materials that are not marked "PUBLIC" as being suitable only for

posting on a portion of the Platform not designated "Public Side Information". Notwithstanding the foregoing, the Borrower shall be under no obligation to mark any Borrower Materials "PUBLIC."

7.03 Notices.

Promptly notify the Administrative Agent and each Lender of:

(a) the occurrence of any Default (provided that if such Default is subsequently cured within the time periods set forth herein, the failure to provide notice of such Default shall not itself result in an Event of Default hereunder).

(b) any matter that has resulted or could reasonably be expected to result in a Material Adverse Effect.

(c) without limiting the generality of the foregoing, the occurrence of any ERISA Event that has resulted or could reasonably be expected to result in a Material Adverse Effect.

(d) any material change in accounting policies or financial reporting practices by the Borrower or any Subsidiary, including any determination by the Borrower referred to in Section 2.10(b).

Each notice pursuant to this Section 7.03 shall be accompanied by a statement of a Responsible Officer of the Borrower setting forth details of the occurrence referred to therein and stating what action the Borrower has taken and proposes to take with respect thereto. Each notice pursuant to Section 7.03(a) shall describe with reasonable particularity any and all provisions of this Agreement and any other Loan Document that have been breached.

7.04 Payment of Taxes.

Pay and discharge as the same shall become due and payable all material tax liabilities, assessments and governmental charges or levies upon it or its properties or assets, unless the same are being contested in good faith by appropriate proceedings diligently conducted and adequate reserves in accordance with GAAP are being maintained by the Borrower or such Subsidiary.

7.05 Preservation of Existence, Etc.

(a) In the case of Borrower and any Material Subsidiary, preserve, renew and maintain in full force and effect its legal existence under the Laws of the jurisdiction of its organization except in a transaction permitted by Section 8.04 or 8.05.

(b) In the case of Borrower and any Material Subsidiary, preserve, renew and maintain in full force and effect its good standing under the Laws of the jurisdiction of its organization except in a transaction permitted by Section 8.04 or 8.05.

(c) In the case of Borrower and any Material Subsidiary, take all reasonable action to maintain all rights, privileges, permits, licenses and franchises necessary or desirable in the normal conduct of its business, except to the extent that the failure to do so could not reasonably be expected to have a Material Adverse Effect.

(d) In the case of Borrower and any Material Subsidiary, preserve or renew all of its IP Rights, the non-preservation or non-renewal of which could reasonably be expected to have a Material Adverse Effect.

7.06 Maintenance of Properties.

(a) Maintain, preserve and protect all of its material properties and equipment necessary in the operation of its business in good working order and condition, ordinary wear and tear excepted.

(b) Make all necessary repairs thereto and renewals and replacements thereof, except where the failure to do so could not reasonably be expected to have a Material Adverse Effect.

7.07 Maintenance of Insurance.

(a) Maintain with insurance companies not Affiliates of the Borrower that the Borrower reasonably determines are financially sound and reputable, insurance with respect to its properties and business against loss or damage as the Borrower reasonably determines to be of the kinds customarily insured against by Persons engaged in the same or similar business and owning similar properties in locations where the Borrower or any of its Subsidiaries operates, of such types, with such deductibles and in such amounts as the Borrower reasonably determines are customarily carried under similar circumstances by such other Persons.

(b) Cause the Administrative Agent and its successors and/or assigns to be named as lender's loss payee as its interest may appear, and/or additional insured with respect to any such insurance providing liability coverage or coverage in respect of any Collateral, and cause each provider of any such insurance to agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to the Administrative Agent, that it will give the Administrative Agent thirty (30) days (or such lesser amount as the Administrative Agent may agree) prior written notice before any such policy or policies shall be canceled.

7.08 Compliance with Laws.

Comply with the requirements of all Laws (including Environmental Laws) and all orders, writs, injunctions and decrees applicable to it or to its business or property, except in such instances in which (a) such requirement of Law or order, writ, injunction or decree is being contested in good faith by appropriate proceedings diligently conducted; or (b) the failure to comply therewith could not reasonably be expected to have a Material Adverse Effect.

7.09 Books and Records.

(a) Maintain proper books of record and account, in which full, true and correct entries in material conformity with GAAP consistently applied shall be made of all financial transactions and matters involving the assets and business of the Borrower or such Subsidiary, as the case may be.

(b) Maintain such books of record and account in material conformity with all applicable requirements of any Governmental Authority having regulatory jurisdiction over the Borrower or such Subsidiary, as the case may be.

7.10 Inspection Rights.

Permit representatives and independent contractors of the Administrative Agent, and the representatives of any Lender accompanying the representatives and/or independent contractors of the Administrative Agent, to visit and inspect any of its properties, to examine its corporate, financial and operating records, and make copies thereof or abstracts therefrom, and, so long as a Responsible Officer of the Borrower (who shall make himself or herself promptly available upon request) is present, to discuss its affairs, finances and accounts with its directors, officers, and independent public accountants, all at the expense of the Borrower and at such reasonable times during normal business hours and as often as may be reasonably desired, upon reasonable advance notice to the Borrower; provided, however, that when an Event of Default has occurred and is continuing the Administrative Agent (or any of its respective representatives or independent contractors), and the representatives of any Lender accompanying the representatives and/or independent contractors of the Administrative Agent, may do any of the foregoing at the expense of the Borrower at any time during normal business hours and without advance notice; and provided, further, that notwithstanding the foregoing, so long as no Event of Default has occurred and is continuing, such visits and inspections shall not occur more than once per calendar year.

7.11 Use of Proceeds.

Use the proceeds of the Credit Extensions to (a) refinance the Existing Indebtedness (including continuation of the Existing Letters of Credit) and (b) for working capital, capital expenditures, Permitted Acquisitions and other lawful corporate, limited liability company purposes, provided that in no event shall the proceeds of the Credit Extensions be used in contravention of any Law or of any Loan Document.

7.12 Additional Guarantors.

Within forty-five (45) days (or such later date as the Administrative Agent may agree in its sole discretion) after any Person becomes a Domestic Subsidiary (other than any Excluded Subsidiary), cause such Person to (a) become a Guarantor by executing and delivering to the Administrative Agent a Guarantor Joinder Agreement and (b) deliver to the Administrative Agent such Organization Documents, customary resolutions and customary opinions of counsel (which shall cover, among other things, the legality, validity, binding effect and enforceability of the documentation referred to in clause (a)), all in form, content and scope reasonably satisfactory to the Administrative Agent.

7.13 Anti-Corruption Laws.

Conduct its business in compliance in all material respects with the United States Foreign Corrupt Practices Act of 1977, the UK Bribery Act 2010 and other applicable anti-corruption legislation in other jurisdictions and with all applicable Sanctions, and maintain policies and procedures designed to promote and achieve compliance with such laws and Sanctions.

7.14 Pledged Assets.

(a) Equity Interests. Within forty-five (45) days (or such later date as the Administrative Agent may agree in its sole discretion) after any Person becomes a Subsidiary of any Loan Party, cause (i) 100% of the issued and outstanding Equity Interests of each Domestic Subsidiary of any Loan Party and (ii) 66% of the issued and outstanding Equity Interests in each Subsidiary of a Loan Party that is (x) a "controlled foreign corporation" under Section 957 of the Internal Revenue Code (each, a "First-Tier Foreign Subsidiary") or (y) a disregarded entity substantially all of the assets of which consist (directly or indirectly through one or more other disregarded entities) of Equity Interests of one or more Subsidiaries of a Loan Party that are "controlled foreign corporations" under Section 957 of the Internal Revenue Code to be subject at

all times to a first priority, perfected Lien in favor of the Administrative Agent to secure the Obligations pursuant to the Collateral Documents, and, in connection with the foregoing, deliver to the Administrative Agent such other customary documentation as the Administrative Agent may reasonably request including, any filings and deliveries to perfect such Liens and customary opinions of counsel all in form and substance reasonably satisfactory to the Administrative Agent; provided that, notwithstanding the foregoing, none of the outstanding Equity Interests of (1) any Foreign Subsidiary that is not a First-Tier Foreign Subsidiary or (2) any Domestic Subsidiary of a Foreign Subsidiary that is a "controlled foreign corporation" (owned either directly or indirectly through one or more entities that are disregarded entities or partnerships for U.S. federal income tax purposes) shall be subject to this Section 7.14(a) or otherwise constitute Collateral.

(b) Personal Property. Within forty-five (45) days (or such later date as the Administrative Agent may agree in its sole discretion) of the acquisition by any Loan Party of any personal property (other than Excluded Property and Equity Interests), cause all such personal property (other than Excluded Property and Equity Interests) of each Loan Party to be subject at all times to first priority, perfected Liens (subject to Permitted Liens) in favor of the Administrative Agent for the benefit of the Lenders in order to secure the Obligations and, in connection with the foregoing, deliver to the Administrative Agent such other documentation as the Administrative Agent may request including filings and deliveries necessary to perfect such Liens, Organization Documents, resolutions, landlord's waivers and customary opinions of counsel to such Person, all in form, content and scope reasonably satisfactory to the Administrative Agent. Notwithstanding the foregoing, no Loan Party shall be required to enter into deposit account or securities account control agreements.

(c) Further Assurances. Promptly upon request by the Administrative Agent, or any Lender through the Administrative Agent, (a) correct any material defect or error that may be discovered in any Loan Document or in the execution, acknowledgment, filing or recordation thereof, and (b) do, execute, acknowledge, deliver, record, re-record, file, re-file, register and re-register any and all such further acts, deeds, certificates, assurances and other instruments as the Administrative Agent, or any Lender through the Administrative Agent, may reasonably require from time to time in order to (i) carry out more effectively the purposes of the Loan Documents, (ii) to the fullest extent permitted by applicable Law, subject any Loan Party's or any of its Subsidiaries' properties, assets, rights or interests to the Liens now or hereafter intended to be covered by any of the Collateral Documents, (iii) perfect and maintain the validity, effectiveness and priority of any of the Collateral Documents and any of the Liens intended to be created thereunder and (iv) assure, convey, grant, assign, transfer, preserve, protect and confirm more effectively unto the Secured Parties the rights granted or now or hereafter intended to be granted to the Secured Parties under any Loan Document or under any other instrument executed in connection with any Loan Document to which any Loan Party or any of its Subsidiaries is or is to be a party, and cause each of its Subsidiaries to do so.

7.15 Post-Closing Matters.

To the extent not delivered to the Administrative Agent on the Closing Date, not later than thirty (30) days following the Closing Date (or such later date as agreed by the Administrative Agent in its sole discretion), deliver to the Administrative Agent the property insurance certificate and insurance endorsements required by Section 7.07(b), in each case, as reasonably acceptable to the Administrative Agent.

ARTICLE VIII

NEGATIVE COVENANTS

So long as any Lender shall have any Revolving Commitment hereunder, any Loan or other Obligation hereunder shall remain unpaid or unsatisfied (other than (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount), no Loan Party shall, nor shall it permit any Subsidiary to:

8.01 Liens.

Create, incur, assume or suffer to exist any Lien upon any of its property, assets or revenues, whether now owned or hereafter acquired, other than the following:

(a) Liens pursuant to any Loan Document;

(b) Liens existing on the Closing Date and listed on Schedule 8.01 and any renewals or extensions thereof, provided that the property covered thereby is not increased;

(c) Liens (other than Liens imposed under ERISA) for taxes, assessments or governmental charges or levies not yet due or which are being contested in good faith and by reasonable and appropriate responses and/or proceedings diligently conducted, if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP;

(d) Liens of landlords, carriers, warehousemen, mechanics, materialmen and repairmen and other like Liens arising in the ordinary course of business, provided that such Liens secure only amounts not overdue for more than thirty (30) days or, if overdue for more than thirty (30) days, are being contested in good faith by reasonable and appropriate responses and/or proceedings diligently conducted for which adequate reserves determined in accordance with GAAP have been established;

(e) pledges or deposits in the ordinary course of business in connection with workers' compensation, unemployment insurance and other social security legislation, other than any Lien imposed by ERISA;

(f) deposits to secure the performance of bids, trade contracts and leases (other than Indebtedness), statutory obligations, surety and appeal bonds, revenue bonds, performance bonds and other obligations of a like nature incurred in the ordinary course of business;

(g) easements, rights-of-way, restrictions and other similar encumbrances affecting real property which, in the aggregate, do not materially detract from the value of the property subject thereto or materially interfere with the ordinary conduct of the business of the applicable Person;

(h) Liens securing judgments for the payment of money (or appeal or other surety bonds relating to such judgments) not constituting an Event of Default under Section 9.01(h);

(i) Liens securing Indebtedness permitted under Section 8.03(e) or (n); provided that (i) such Liens do not at any time encumber any property other than the property financed by such Indebtedness and (ii) such Liens attach to such property concurrently with or within ninety (90) days after the acquisition thereof;

(j) leases or subleases granted to others not interfering in any material respect with the business of the Borrower or any Subsidiary;

(k) any interest of title of a lessor under, and Liens arising from UCC financing statements (or equivalent filings, registrations or agreements in foreign jurisdictions) relating to, leases permitted by this Agreement;

(l) Liens deemed to exist in connection with Investments in repurchase agreements permitted under Section 8.02;

(m) bankers' liens and normal and customary rights of setoff upon deposits of cash in favor of banks or other depository institutions;

(n) Liens of a collection bank arising under Section 4-210 of the Uniform Commercial Code on items in the course of collection;

(o) Liens arising on any real property as a result of any eminent domain, condemnation or similar proceeding being commenced with respect to such real property;

(p) Liens securing Indebtedness permitted under Section 8.03(g);

(q) Liens of sellers of goods to the Borrowers and any of their Subsidiaries arising under Article 2 of the UCC or similar provisions of applicable law in the ordinary course of business, covering only the goods sold and securing only the unpaid purchase price for such goods and related expenses;

(r) Liens securing Indebtedness permitted under Section 8.03(k);

(s) licenses and sublicenses of intellectual property granted in the ordinary course of business;

(t) [reserved];

(u) Liens securing Secured Hedge Agreements and Secured Cash Management Agreements; and

(v) other Liens of a nature not contemplated in the foregoing clauses securing Indebtedness in an amount not to exceed, with respect to the Loan Parties and their Subsidiaries, $1,000,000 in the aggregate at any time outstanding.

Notwithstanding anything to the contrary in this Section 8.01 or in any other Loan Document, in no event shall the Loan Parties create, incur, assume or suffer to exist any Lien upon any mineral right or mining reserve owned or held by any of the Loan Parties, whether owned or leased by virtue of deed, contract or otherwise, other than a Lien permitted under clause (c), (d), (g), (o) or (v) of this Section 8.01.

8.02 Investments.

Make any Investments, except:

(a) Investments in the form of cash or Cash Equivalents;

(b) Investments outstanding on the Closing Date and set forth in Schedule 8.02 and any renewals, refinancing, amendments, replacements or extensions thereof that do not increase the amount thereof;

(c) (i) Investments in any Person that is a Loan Party prior to giving effect to such Investment and (ii) Investments by a Loan Party or any Subsidiary of a Loan Party in any Person that is not a Loan Party, provided that the aggregate amount of all such Investments does not exceed $1,000,000 in the aggregate during the term of this Agreement;

(d) Investments by any Subsidiary that is not a Loan Party in any other Subsidiary that is not a Loan Party;

(e) Investments consisting of extensions of credit in the nature of accounts receivable or notes receivable arising from the grant of trade credit in the ordinary course of business, and Investments received in satisfaction or partial satisfaction thereof from financially troubled account debtors to the extent reasonably necessary in order to prevent or limit loss;

(f) Guarantees permitted by Section 8.03;

(g) Permitted Acquisitions;

(h) lease, utility and similar deposits made in the ordinary course of business of the Borrower and its Subsidiaries, including investments consisting of pledges and deposits permitted under Section 8.01(f);

(i) contingent obligations with respect to any Swap Contract or hedging agreements otherwise permitted by this Agreement;

(j) loans or advances to customers of the Borrower or any Subsidiary in an aggregate amount not to exceed $250,000 at any one time outstanding;

(k) loans or advances to employees, officers and directors for business, travel and entertainment expenses in the ordinary course of business consistent with past practice;

(l) prepaid expenses in the ordinary course of business consistent with past practice;

(m) the creation of new Subsidiaries so long as the formation of such Subsidiary has complied with the requirements of Sections 7.12 or will comply therewithin prior to the deadlines provided therein;

(n) Investments received in connection with the bankruptcy or reorganization of suppliers or customers or other Persons and in settlement of delinquent obligation of, and disputes with, any such supplier, customer or other Person or upon foreclosure with respect to any secured Investment or other transfer of title with respect to such secured Investment;

(o) Investments of a Subsidiary acquired after the Closing Date to the extent that such Investments were made prior to, and not made in contemplation or in connection with, such acquisition, merger or consolidation;

(p) Investments constituting non-cash proceeds of sales, transfers and other dispositions of assets to the extent permitted under Section 8.05;

(q) [reserved];

(r) Indebtedness and Guarantees to the extent permitted under Section 8.01; and

(s) Investments of a nature not contemplated in the foregoing clauses in an amount not to exceed with respect to the Loan Parties and their Subsidiaries, $5,000,000 in the aggregate at any time outstanding.

8.03 Indebtedness.

Create, incur, assume or suffer to exist any Indebtedness, except:

(a) Indebtedness under the Loan Documents;

(b) Indebtedness outstanding on the Closing Date and set forth in Schedule 8.03 and any renewals, refinancings, amendments, replacements and extensions thereof; provided that (i) the amount of such Indebtedness is not increased at the time of such refinancing or extension except by an amount equal to a reasonable premium or other reasonable amount paid, and fees and expenses reasonably incurred, in connection with such refinancing or extension and by an amount equal to any existing commitments unutilized thereunder and (ii) the material terms taken as a whole of such refinancing or extension are not materially less favorable in any material respect to the Borrower and its Subsidiaries or the Lenders than the terms of the Indebtedness being refinanced or extended;

(c) Intercompany Indebtedness permitted under Section 8.02; provided that in the case of Indebtedness owing by a Loan Party to a Foreign Subsidiary (i) such Indebtedness shall be subordinated prior to the Obligations in a manner and to an extent reasonably acceptable to the Administrative Agent and (ii) such Indebtedness shall not be prepaid unless no Default exists immediately prior to or after giving effect to such prepayment;

(d) obligations (contingent or otherwise) existing or arising under any Swap Contract, provided that (i) such obligations are (or were) entered into by such Person in the ordinary course of business for the purpose of directly mitigating risks associated with liabilities, commitments, investments, assets, or property held or reasonably anticipated by such Person, or changes in the value of securities issued by such Person, and not for purposes of speculation or taking a "market view;" and (ii) such Swap Contract does not contain any provision exonerating the non-defaulting party from its obligation to make payments on outstanding transactions to the defaulting party;

(e) purchase money Indebtedness hereafter incurred to finance the purchase of fixed assets, and obligations in respect of capital leases and Synthetic Lease Obligations, and renewals, replacements, amendments, refinancings and extensions of the foregoing, provided that (i) the aggregate outstanding principal amount of all such Indebtedness shall not exceed $50,000,000 at

any one time outstanding; and (ii) such Indebtedness when incurred shall not exceed the purchase price of the asset(s) financed;

(f) Guarantees with respect to Indebtedness permitted under clauses (a) through (e) this Section 8.03; and

(g) Indebtedness in respect of worker's compensation claims, self-insurance obligations, bankers' acceptances and bid, performance bonds, revenue bonds, stay bonds, customs bonds, bid bonds, appeal bonds, surety bonds and similar obligations and trade-related letters of credit and performance and completion guarantees issued for the account of any Loan Party, in each case, incurred in the ordinary course of business;

(h) Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument drawn against insufficient funds in the ordinary course of business;

(i) Indebtedness arising in connection with the endorsement of instruments for deposit in the ordinary course of business;

(j) Indebtedness in the form of obligations under indemnification, purchase price adjustments, incentive, non-compete, consulting, deferred compensation, earn-out and similar obligations incurred in connection with any Permitted Acquisition;

(k) other Indebtedness of a nature not contemplated in the foregoing clauses in a principal amount not to exceed, with respect to the Loan Parties and their Subsidiaries, $1,000,000 in the aggregate at any time outstanding;

(l) Indebtedness representing deferred compensation to employees of the Borrower or any Subsidiary;

(m) [reserved]; and

(n) term loan Indebtedness provided by Banc of America Leasing & Capital LLC related to the Specified Capital Expansion; provided, that (i) the aggregate outstanding principal amount of all such Indebtedness shall not exceed $225,000,000 at any one time outstanding, (ii) such Indebtedness when incurred shall not exceed the purchase price of the asset(s) financed, (iii) if such term loan is secured, and upon the request of the Administrative Agent, the lenders providing such term loan (or their agent or representative) shall have entered into an intercreditor agreement in form and substance reasonably satisfactory to the Administrative Agent, (iv) on the date of the incurrence thereof, the Loan Parties would be in compliance with the financial covenants set forth in Section 8.11 on a Pro Forma Basis after giving effectt to such Indebtedness, (v) no Default or Event of Default then exists or would result therefrom and (vi) the terms of such Indebtedness are reasonably acceptable to the Administrative Agent.

8.04 Fundamental Changes.

Merge, dissolve, liquidate or consolidate with or into another Person, except that so long as no Default has occurred and is continuing or would result therefrom, (a) the Borrower may merge or consolidate with any of its Subsidiaries provided that the Borrower is the continuing or surviving Person, (b) any Subsidiary may merge or consolidate with any other Subsidiary provided that if a Loan Party is a party to such transaction, the continuing or surviving Person is a Loan Party, (c) subject to clause (a) and

(b) above, the Borrower or any Subsidiary may merge with any other Person in connection with a Permitted Acquisition or a Disposition permitted hereunder, (d) any Subsidiary may dissolve, liquidate or wind up its affairs at any time provided that such dissolution, liquidation or winding up, as applicable, could not have a Material Adverse Effect, and (e) any Subsidiary may Dispose of all or substantially all of its assets (whether as a contribution to capital, dividend, upon voluntary liquidation or otherwise) to the Borrower or to a Subsidiary; provided that if the transferor in such a transaction is a Loan Party, then the transferee must either be the Borrower or another Loan Party unless the transaction is otherwise permitted under Section 8.05.

8.05 Dispositions.

Make any Disposition unless (a) the consideration paid in connection therewith shall be not less than 75% cash or Cash Equivalents (it being understood that for the purposes of this clause (a), the following shall be deemed to be cash: (A) any liabilities (as shown on the Borrower's or such Subsidiary's most recent balance sheet provided hereunder or in the footnotes thereto) of the Borrower or such Subsidiary that are directly or indirectly assumed by the transferee with respect to the applicable disposition and for which all of the applicable Loan Parties shall have been validly released by all applicable creditors in writing, and (B) any securities received by such Loan Party from such transferee that are promptly (in any event, within ninety (90) days) converted by such Loan Party into cash or Cash Equivalents (to the extent of the cash or Cash Equivalents received)) and shall be in an amount not less than the fair market value of the property disposed of, (b) such transaction does not involve the sale or other disposition of a minority equity interest in any Subsidiary, (c) such transaction does not involve a sale or other disposition of receivables other than receivables owned by or attributable to other property concurrently being disposed of in a transaction otherwise permitted under this Section 8.05, and (d) the aggregate net book value of all of the assets disposed of by the Loan Parties and their Subsidiaries in all such transactions in any fiscal year of the Borrower shall not exceed $2,500,000. For the avoidance of doubt, to the extent described therein, the transactions in clauses (a) through (l) of the definition of "Disposition" are not restricted or limited by this Section 8.05.

8.06 Restricted Payments.

Make, directly or indirectly, any Restricted Payment, or incur any obligation (including contingent obligations to the extent the satisfaction of the contingencies is solely under the control of the Borrower or any of its Subsidiaries) to do so, except that:

(a) each Loan Party may declare and make Restricted Payments to any other Loan Party, and each Subsidiary that is not a Loan Party may declare and make Restricted Payments to any other Subsidiary that is not a Loan Party;

(b) the Borrower and each Subsidiary may declare and make dividend payments or other Restricted Payments payable solely in Equity Interests (other than Disqualified Equity Interests) of such Person;

(c) the Borrower and any Subsidiary may make cash dividends, distributions or other Restricted Payments to Persons that own Equity Interests therein, ratably according to their respective holdings of the type of Equity Interests in which such Restricting Payment is being made; provided, that, for the purpose of this clause (c) with respect to Restricted Payments by the Borrower (x) no Default or Event of Default has occurred and is continuing at the time such dividend, distribution or other Restricted Payment is declared or paid, (y) the Consolidated Leverage Ratio would be less than 3.25:1.0 on a Pro Forma Basis after giving effect to such

Restricted Payment, and (z) the Loan Parties shall be in compliance at such time on a Pro Forma Basis with the financial covenant set forth in Section 8.11(b); and

(d) the Borrower may make Permitted Tax Distributions.

8.07 Change in Nature of Business.

Engage in any material line of business substantially different from those lines of business conducted by the Borrower and its Subsidiaries on the Closing Date or any business reasonably related or ancillary thereto.

8.08 Transactions with Affiliates.

Enter into or permit to exist any transaction or series of transactions with any Affiliate of such Person other than (a) advances of working capital to any Loan Party, (b) transfers of cash and assets to any Loan Party, (c) transactions between or among the Borrower and any of its Subsidiaries (or between any such Subsidiaries) expressly permitted by Section 8.02, Section 8.03, Section 8.04, Section 8.05 or Section 8.06, (d) transaction (i) among Loan Parties or (ii) among Subsidiaries of the Borrower that are not Loan Parties, (e) normal and reasonable compensation and reimbursement of expenses and indemnification arrangements and benefit plans for current or former officers and directors (or persons in similar positions), (f) the issuance of Equity Interests by the Borrower to its equityholders, (g) the making of capital contributions by Enterprises or any of its Affiliates to the Borrower or any of its Subsidiaries, (h) the transfer of employees to the Borrower, (i) the license of trade or business names or marks in the ordinary course of business to or from the Borrower or any Subsidiary thereof or to any Affiliate thereof, and (j) except as otherwise specifically limited in this Agreement, other transactions which are on terms and conditions substantially as favorable to such Person as would be obtainable by it in a comparable arms-length transaction with a Person other than an Affiliate.

8.09 Burdensome Agreements.

Except as set forth in the Organization Documents of the Borrower as of the Closing Date (with such amendments, modifications or changes thereto that are not materially adverse to the Lenders), enter into, or permit to exist, any Contractual Obligation that (a) encumbers or restricts the ability of any such Person to (i) make Restricted Payments to any Loan Party, (ii) pay any Indebtedness or other obligation owed to any Loan Party, (iii) make loans or advances to any Loan Party, (iv) transfer any of its property to any Loan Party, (v) pledge its property pursuant to the Loan Documents or any renewals, refinancings, exchanges, refundings or extension thereof or (vi) act as a Loan Party pursuant to the Loan Documents or any renewals, refinancings, exchanges, refundings or extension thereof, except (in respect of any of the matters referred to in clauses (i)-(v) above) for (1) this Agreement and the other Loan Documents, (2) any document or instrument governing Indebtedness incurred pursuant to Section 8.03(b), (d) and (e), provided that any such restriction contained therein relates only to the asset or assets constructed or acquired in connection therewith, (3) any Permitted Lien or any document or instrument governing any Permitted Lien, provided that any such restriction contained therein relates only to the asset or assets subject to such Permitted Lien, (4) customary restrictions and conditions contained in any agreement relating to the sale of any property permitted under Section 8.05 pending the consummation of such sale, (5) encumbrances or restrictions that are customary restrictions on leases, sublicenses, licenses or asset sale agreements otherwise permitted under this Agreement or (6) encumbrances or restrictions that are customary provisions restricting the assignment of any agreement entered into in the ordinary course of business.

8.10 Use of Proceeds.

Use the proceeds of any Credit Extension, whether directly or indirectly, and whether immediately, incidentally or ultimately, to purchase or carry margin stock (within the meaning of Regulation U of the FRB) or to extend credit to others for the purpose of purchasing or carrying margin stock or to refund indebtedness originally incurred for such purpose.

8.11 Financial Covenants.

(a) Consolidated Leverage Ratio. Permit the Consolidated Leverage Ratio as of the end of each fiscal quarter of the Borrower, commencing with the fiscal quarter ending December 31, 2021, to be greater than 3.25:1.0; provided, however, during the Specified Capital Expansion Holiday, the Loan Parties shall not permit the Consolidated Leverage Ratio as of the end of each fiscal quarter of the Borrower to be greater than 3.75:1.00.

(b) Consolidated Interest Coverage Ratio. Permit the Consolidated Interest Coverage Ratio as of the end of any fiscal quarter of the Borrower, commencing with the fiscal quarter ending December 31, 2021, to be less than 3.00:1.00.

8.12 Organization Documents; Fiscal Year; Changes in Accounting Policy; Legal Name, State of Formation and Form of Entity.

(a) Amend, modify or change its Organization Documents in a manner materially adverse to the Lenders, other than amendments, modifications or changes in connection with capital contributions or the authorization or issuance of Equity Interests (other than any Disqualified Equity Interests).

(b) Change its fiscal year.

(c) Make any change in accounting policies or reporting practices, except as required by GAAP or applicable Law.

(d) In the case of any Loan Party, without providing ten (10) days prior written notice to the Administrative Agent (or such lesser period as the Administrative Agent may agree), change such Loan Party's name, state of formation or form of organization.

8.13 Ownership of Subsidiaries.

Notwithstanding any other provisions of this Agreement to the contrary, (a) permit any Person (other than the Borrower or any Wholly Owned Subsidiary) to own any Equity Interests of any Subsidiary, except to qualify directors where required by applicable Law or to satisfy other requirements of applicable Law with respect to the ownership of Equity Interests of Foreign Subsidiaries, or (b) permit any Subsidiary to issue or have outstanding any shares of Disqualified Equity Interests, except, in each case, to the extent set forth on Schedule 6.13.

8.14 Sale Leasebacks and Securitization Transactions.

Enter into any Sale and Leaseback Transaction or Securitization Transaction.

8.15 Sanctions.

Directly or indirectly, use the proceeds of any Credit Extension or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other individual or entity, to fund

any activities of or business with any individual or entity, or in any Designated Jurisdiction, that, at the time of such funding, is the subject of Sanctions, or in any other manner that will result in a violation by any individual or entity (including any individual or entity participating in the transaction, whether as Lender, Arranger, Administrative Agent, L/C Issuer, Swing Line Lender or otherwise) of Sanctions.

8.16 Anti-Corruption Laws.

Directly or indirectly use any Credit Extension or the proceeds of any Credit Extension for any purpose which would breach the United States Foreign Corrupt Practices Act of 1977, the UK Bribery Act 2010 or other similar anti-corruption legislation in other jurisdictions.

ARTICLE IX

EVENTS OF DEFAULT AND REMEDIES

9.01 Events of Default.

Any of the following shall constitute an Event of Default:

(a) Non-Payment. Any Loan Party fails to pay (i) when and as required to be paid herein, any amount of principal of any Loan or any L/C Obligation, or (ii) within three (3) Business Days after the same becomes due, any interest on any Loan or on any L/C Obligation, or any fee due hereunder, or (iii) within five (5) Business Days after the same becomes due, any other amount payable hereunder or under any other Loan Document; or

(b) Specific Covenants.

(i) Any Loan Party fails to perform or observe any term, covenant or agreement contained in any of Section 7.01 or 7.02 and such failure continues for five (5) Business Days; or

(ii) Any Loan Party fails to perform or observe any term, covenant or agreement contained in any of Section 7.03(a), 7.05(a), 7.07, 7.10, 7.11, 7.14 or Article VIII of this Agreement; or

(c) Other Defaults. Any Loan Party fails to perform or observe any other covenant or agreement (not specified in clause (a) or (b) above) contained in any Loan Document on its part to be performed or observed and such failure continues for thirty (30) days after the earlier of (i) the date on which a Responsible Officer of any Loan Party becomes aware of such failure or (ii) written notice thereof shall have been given to the Borrower by the Administrative Agent; or

(d) Representations and Warranties. Any representation, warranty, certification or statement of fact made or deemed made by or on behalf of any Loan Party herein, in any other Loan Document, or in any document delivered in connection herewith or therewith shall be incorrect or misleading in any material respect when made or deemed made; or

(e) Cross-Default. (i) The Borrower or any Material Subsidiary fails to make any payment when due beyond the applicable grace or cure period (whether by scheduled maturity, required prepayment, acceleration, demand, or otherwise) in respect of any Material Indebtedness; (ii) the Borrower or any Subsidiary fails to observe or perform any other agreement or condition relating to any Material Indebtedness or contained in any instrument or agreement

evidencing, securing or relating thereto, or any other event occurs, the effect of which default or other event is to cause, or to permit the holder or holders of such Material Indebtedness (or a trustee or agent on behalf of such holder or holders) to cause, with the giving of notice if required, such Material Indebtedness to become due or to be repurchased, prepaid, defeased or redeemed (automatically or otherwise) prior to its stated maturity, or an offer to repurchase, prepay, defease or redeem such Material Indebtedness to be made, prior to its stated maturity; or (iii) there occurs under any Swap Contract an Early Termination Date (as defined in such Swap Contract) resulting from (A) any event of default under such Swap Contract as to which the Borrower or any Subsidiary is the Defaulting Party (as defined in such Swap Contract) or (B) any Termination Event (as so defined) under such Swap Contract as to which the Borrower or any Subsidiary is an Affected Party (as so defined) and, in either event, the Swap Termination Value owed by the Borrower or such Subsidiary as a result thereof is greater than the Threshold Amount; or

(f) Insolvency Proceedings, Etc. The Borrower or any Material Subsidiary institutes or consents to the institution of any proceeding under any Debtor Relief Law, or makes an assignment for the benefit of creditors; or applies for or consents to the appointment of any receiver, trustee, custodian, conservator, liquidator, rehabilitator or similar officer for it or for all or any material part of its property; or any receiver, trustee, custodian, conservator, liquidator, rehabilitator or similar officer is appointed without the application or consent of such Person and the appointment continues undischarged or unstayed for sixty (60) calendar days; or any proceeding under any Debtor Relief Law relating to any such Person or to all or any material part of its property is instituted without the consent of such Person and continues undismissed or unstayed for sixty (60) calendar days, or an order for relief is entered in any such proceeding; or

(g) Inability to Pay Debts; Attachment. (i) The Borrower or any Material Subsidiary becomes unable or publicly admits in writing its inability or fails generally to pay its debts as they become due, or (ii) any writ or warrant of attachment or execution or similar process is issued or levied against all or substantially all of the property of any such Person and is not released, vacated or fully bonded within sixty (60) days after its issue or levy; or

(h) Judgments. There is entered against the Borrower or any Material Subsidiary (i) one or more final judgments or orders for the payment of money in an aggregate amount (as to all such judgments or orders) exceeding the Threshold Amount (to the extent not covered by independent third-party insurance as to which the insurer has been notified of the claim and does not dispute coverage), or (ii) any one or more non-monetary final judgments that have, or could reasonably be expected to have a Material Adverse Effect and, in either case, (A) enforcement proceedings are commenced by any creditor upon such judgment or order, or (B) there is a period of fifteen (15) consecutive days during which a stay of enforcement of such judgment, by reason of a pending appeal or otherwise, is not in effect; or

(i) ERISA. (i) An ERISA Event occurs with respect to a Pension Plan or Multiemployer Plan which has resulted or would reasonably be expected to result in liability of one or more Loan Parties under Title IV of ERISA to the Pension Plan, Multiemployer Plan or the PBGC in an aggregate amount in excess of the Threshold Amount, or (ii) one or more Loan Parties or any ERISA Affiliate fails to pay when due, after the expiration of any applicable grace period, any installment payment with respect to its withdrawal liability under Section 4201 of ERISA under a Multiemployer Plan in an aggregate amount in excess of the Threshold Amount; or

(j) Invalidity of Loan Documents. Any provision of any Loan Document, at any time after its execution and delivery and for any reason other than as expressly permitted

hereunder or thereunder or satisfaction in full of all the Obligations (other than (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount), ceases to be in full force and effect or ceases to give the Administrative Agent any of the Liens purported to be created thereby on a material portion of the Collateral; or any Loan Party contests in any manner the validity or enforceability of any provision of any Loan Document or the Liens purported to be created thereby; or any Loan Party denies that it has any or further liability or obligation under any provision of any Loan Document, revokes, terminates or rescinds, or purports to do so in writing available to the Administrative Agent, any Lender or any of their Related Parties, any Loan Document; or

(k) Change of Control. There occurs any Change of Control.

9.02 Remedies Upon Event of Default.

If any Event of Default occurs and is continuing,

(a) the Administrative Agent shall, at the request of, or may, with the consent of, the Required Lenders, take any or all of the following actions:

(i) declare the commitment of each Lender to make Loans and any obligation of the L/C Issuer to make L/C Credit Extensions to be terminated, whereupon such commitments and obligation shall be terminated;

(ii) declare the unpaid principal amount of all outstanding Loans, all interest accrued and unpaid thereon, and all other amounts owing or payable hereunder or under any other Loan Document to be immediately due and payable, without presentment, demand, protest or other notice of any kind, all of which are hereby expressly waived by the Borrower;

(iii) require that the Borrower Cash Collateralize the L/C Obligations (in an amount equal to the Minimum Collateral Amount with respect thereto); and

(iv) exercise on behalf of itself, the Lenders and the L/C Issuer all rights and remedies available to it, the Lenders and the L/C Issuer under the Loan Documents or applicable Law or at equity; and

(b) [reserved];

provided, however, that upon the occurrence of an actual or deemed entry of an order for relief with respect to the Borrower under Debtor Relief Laws, the obligation of each Lender to make Loans and any obligation of the L/C Issuer to make L/C Credit Extensions shall automatically terminate, the unpaid principal amount of all outstanding Loans and all interest and other amounts as aforesaid shall automatically become due and payable, and the obligation of the Borrower to Cash Collateralize the L/C Obligations as aforesaid shall automatically become effective, in each case without further act of the Administrative Agent, the L/C Issuer or any Lender.

9.03 Application of Funds.

After the exercise of remedies provided for in Section 9.02 (or after the Loans have automatically become immediately due and payable and the L/C Obligations have automatically been required to be Cash Collateralized as set forth in the proviso to Section 9.02), any amounts received on account of the Obligations shall, subject to the provisions of Sections 2.14 and 2.15, be applied by the Administrative Agent in the following order:

First, to payment of that portion of the Obligations constituting fees, indemnities, expenses and other amounts (including reasonable fees, charges and disbursements of counsel to the Administrative Agent and amounts payable under Article III) payable to the Administrative Agent in its capacity as such;

Second, to payment of that portion of the Obligations constituting fees, indemnities and other amounts (other than principal, interest and Letter of Credit Fees) payable to the Lenders and the L/C Issuer (including reasonable fees, charges and disbursements of counsel to the respective Lenders and the L/C Issuer and amounts payable under Article III), ratably among them in proportion to the respective amounts described in this clause Second payable to them;

Third, to payment of that portion of the Obligations constituting accrued and unpaid Letter of Credit Fees and interest on the Loans and L/C Borrowings, ratably among the Lenders and the L/C Issuer in proportion to the respective amounts described in this clause Third payable to them;

Fourth, to (a) payment of that portion of the Obligations constituting unpaid principal of the Loans and L/C Borrowings, (b) payment of Obligations then owing under any Secured Hedge Agreements, (c) payment of Obligations then owing under any Secured Cash Management Agreements and (d) Cash Collateralize that portion of L/C Obligations comprised of the aggregate undrawn amount of Letters of Credit, ratably among the Lenders, the L/C Issuer, the Hedge Banks and the Cash Management Banks in proportion to the respective amounts described in this clause Fourth held by them; and

Last, the balance, if any, after all of the Obligations (other than (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount) have been paid in full, to the Borrower or as otherwise required by Law.

Subject to Sections 2.03(c) and 2.14, amounts used to Cash Collateralize the aggregate undrawn amount of Letters of Credit pursuant to clause Fourth above shall be applied to satisfy drawings under such Letters of Credit as they occur. If any amount remains on deposit as Cash Collateral after all Letters of Credit have either been fully drawn or expired, such remaining amount shall be applied to the other Obligations, if any, in the order set forth above.

Excluded Swap Obligations with respect to any Guarantor shall not be paid with amounts received from such Guarantor or such Guarantor's assets, but appropriate adjustments shall be made with respect to payments from other Loan Parties to preserve the allocation to Obligations otherwise set forth above in this Section.

Notwithstanding the foregoing, Obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements shall be excluded from the application described above if the Administrative Agent has not received a Secured Party Designation Notice, together with such supporting documentation as the Administrative Agent may request, from the applicable Cash Management Bank or Hedge Bank, as the case may be. Each Cash Management Bank or Hedge Bank not a party to this Agreement that has given the notice contemplated by the preceding sentence shall, by such notice, be deemed to have acknowledged and accepted the appointment of the Administrative Agent pursuant to the terms of Article X for itself and its Affiliates as if a "Lender" party hereto.

ARTICLE X

ADMINISTRATIVE AGENT

10.01 Appointment and Authority.

Each of the Lenders and the L/C Issuer hereby irrevocably appoints Bank of America to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Article X are solely for the benefit of the Administrative Agent, the Lenders and the L/C Issuer, and neither the Borrower nor any other Loan Party shall have rights as a third party beneficiary of any of such provisions.

The Administrative Agent shall also act as the "collateral agent" under the Loan Documents, and each of the Lenders (in its capacities as a Lender, Swing Line Lender (if applicable), potential Hedge Banks and potential Cash Management Banks) and the L/C Issuer hereby irrevocably appoints and authorizes the Administrative Agent to act as the agent of such Lender and the L/C Issuer for purposes of acquiring, holding and enforcing any and all Liens on Collateral, together with such powers and discretion as are reasonably incidental thereto. In this connection, the Administrative Agent, as "collateral agent" and any co-agents, sub-agents and attorneys-in-fact appointed by the Administrative Agent pursuant to Section 10.05 for purposes of holding or enforcing any Lien on the Collateral (or any portion thereof) granted under the Collateral Documents, or for exercising any rights and remedies thereunder at the direction of the Administrative Agent, shall be entitled to the benefits of all provisions of this Article X and Article XI (including Section 11.04(c), as though such co-agents, sub-agents and attorneys-in-fact were the "collateral agent" under the Loan Documents) as if set forth in full herein with respect thereto.

10.02 Rights as a Lender.

The Person serving as the Administrative Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent and the term "Lender" or "Lenders" shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent hereunder in its individual capacity. Such Person and its Affiliates may accept deposits from, lend money to, act as the financial advisor or in any other advisory capacity for and generally engage in any kind of business with the Borrower or any Subsidiary or other Affiliate thereof as if such Person were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders.

10.03 Exculpatory Provisions.

(a) The Administrative Agent or the Arranger, as applicable, shall not have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder shall be administrative in nature. Without limiting the generality of the foregoing, the Administrative Agent or the Arranger, as applicable, and its Related Parties:

(i) shall not be subject to any fiduciary or other implied duties, regardless of whether a Default or Event of Default has occurred and is continuing;

(ii) shall not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Administrative Agent is required to exercise as directed in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein or in the other Loan Documents), provided that the Administrative Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent to liability or that is contrary to any Loan Document or applicable Law, including for the avoidance of doubt any action that may be in violation of the automatic stay under any Debtor Relief Law or that may effect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any Debtor Relief Law; and

(iii) shall not have any duty or responsibility to disclose, and shall not be liable for the failure to disclose, to any Lender or the L/C Issuer any credit or other information concerning the business, prospects, operations, property, financial and other condition or creditworthiness of any of the Loan Parties or any of their Affiliates that is communicated to, or in the possession of, the Administrative Agent, Arranger or any of their Related Parties in any capacity, except for notices, reports and other documents expressly required to be furnished to the Lenders by the Administrative Agent herein.

(b) Neither the Administrative Agent nor any of its Related Parties shall be liable for any action taken or not taken by the Administrative Agent under or in connection with this Agreement or any other Loan Document or the transactions contemplated hereby or thereby (i) with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary), or as the Administrative Agent shall believe in good faith shall be necessary, under the circumstances as provided in Sections 11.01 and 9.02) or (ii) in the absence of its own gross negligence or willful misconduct as determined by a court of competent jurisdiction by final and non-appealable judgment. The Administrative Agent shall be deemed not to have knowledge of any Default or Event of Default unless and until notice describing such Default or Event of Default is given in writing to the Administrative Agent by a Loan Party, a Lender or the L/C Issuer.

(c) Neither the Administrative Agent nor any of its Related Parties have any duty or obligation to any Lender or participant or any other Person to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document, or the creation, perfection or priority of any Lien purported to be created by the Collateral Documents, (v) the value or the sufficiency of any Collateral, or (vi) the satisfaction of

any condition set forth in Article V or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

10.04 Reliance by Administrative Agent.

The Administrative Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of a Loan, or the issuance, extension, renewal or increase of a Letter of Credit, that by its terms must be fulfilled to the satisfaction of a Lender or the L/C Issuer, the Administrative Agent may presume that such condition is satisfactory to such Lender or the L/C Issuer unless the Administrative Agent shall have received notice to the contrary from such Lender or the L/C Issuer prior to the making of such Loan or the issuance, extension, renewal or increase of such Letter of Credit. The Administrative Agent may consult with legal counsel (who may be counsel for the Loan Parties), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

10.05 Delegation of Duties.

The Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub agents appointed by the Administrative Agent. The Administrative Agent and any such sub agent may perform any and all of its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of this Article X shall apply to any such sub agent and to the Related Parties of the Administrative Agent and any such sub agent, and shall apply to their respective activities in connection with the syndication of the credit facilities provided for herein as well as activities as Administrative Agent. The Administrative Agent shall not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agents.

10.06 Resignation or Removal of Administrative Agent.

The Administrative Agent may at any time give notice of its resignation to the Lenders, the L/C Issuer and the Borrower. Upon receipt of any such notice of resignation, the Required Lenders shall have the right, with approval from the Borrower (so long as no Event of Default has occurred and is continuing), to appoint a successor, such approval not to be unreasonably withheld or delayed. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within thirty (30) days after the retiring Administrative Agent gives notice of its resignation (or such earlier day as shall be agreed by the Required Lenders) (the "Resignation Effective Date"), then the retiring Administrative Agent may (but shall not be obligated to), on behalf of the Lenders and the L/C Issuer, appoint a successor Administrative Agent; provided that in no event shall any such successor Administrative Agent be a Defaulting Lender. Whether or not a successor has been appointed, such resignation shall become effective in accordance with such notice on the Resignation Effective Date.

If the Person serving as Administrative Agent is a Defaulting Lender pursuant to clause (d) of the definition thereof, the Required Lenders may, to the extent permitted by applicable Law, by notice in

writing to the Borrower and such Person remove such Person as Administrative Agent and, with the approval from the Borrower (so long as no Event of Default has occurred and is continuing), appoint a successor, such approval not to be unreasonably withheld or delayed. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within thirty (30) days (or such earlier day as shall be agreed by the Required Lenders) (the "Removal Effective Date"), then such removal shall nonetheless become effective in accordance with such notice on the Removal Effective Date.

With effect from the Resignation Effective Date or the Removal Effective Date (as applicable) (i) the retiring or removed Administrative Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents (except that in the case of any collateral security held by the Administrative Agent on behalf of the Lenders or the L/C Issuer under any of the Loan Documents, the retiring or removed Administrative Agent shall continue to hold such collateral security until such time as a successor Administrative Agent is appointed) and (ii) all payments, communications and determinations provided to be made by, to or through the Administrative Agent shall instead be made by or to each Lender and the L/C Issuer directly, until such time as the Required Lenders appoint a successor Administrative Agent as provided for above in this Section 10.06. Upon the acceptance of a successor's appointment as Administrative Agent hereunder, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring (or retired) or removed Administrative Agent, and the retiring or removed Administrative Agent shall be discharged from all of its duties and obligations hereunder or under the other Loan Documents (if not already discharged therefrom as provided above in this Section). The fees payable by the Borrower to a successor Administrative Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Borrower and such successor. After the retiring or removed Administrative Agent's resignation hereunder and under the other Loan Documents, the provisions of this Article X and Section 11.04 shall continue in effect for the benefit of such retiring or removed Administrative Agent, its sub agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring or removed Administrative Agent was acting as Administrative Agent.

If Bank of America resigns as Administrative Agent under this Section 10.06, Bank of America shall also resign as an L/C Issuer. Upon the appointment of a successor Administrative Agent hereunder, such successor shall (i) succeed to all of the rights, powers, privileges and duties of Bank of America as the retiring L/C Issuer and Administrative Agent and Bank of America shall be discharged from all of its respective duties and obligations as L/C Issuer and Administrative Agent under the Loan Documents, and (ii) issue letters of credit in substitution for the Letters of Credit issued by Bank of America, if any, outstanding at the time of such succession or make other arrangement reasonably satisfactory to Bank of America to effectively assume the obligations of Bank of America with respect to such Letters of Credit.

10.07 Non-Reliance on Administrative Agent, the Arranger and the Other Lenders.

Each Lender and the L/C Issuer expressly acknowledges that none of the Administrative Agent nor the Arranger has made any representation or warranty to it, and that no act by the Administrative Agent or the Arranger hereafter taken, including any consent to, and acceptance of any assignment or review of the affairs of any Loan Party or any Affiliate thereof, shall be deemed to constitute any representation or warranty by the Administrative Agent or the Arranger to any Lender or the L/C Issuer as to any matter, including whether the Administrative Agent or the Arranger have disclosed material information in their (or their Related Parties') possession. Each Lender and the L/C Issuer represents to the Administrative Agent and the Arranger that it has, independently and without reliance upon the Administrative Agent, the Arranger, any other Lender or any of their Related Parties and based on such documents and information as it has deemed appropriate, made its own credit analysis of, appraisal of, and investigation into, the business, prospects, operations, property, financial and other condition and

creditworthiness of the Loan Parties and their Subsidiaries, and all applicable bank or other regulatory Laws relating to the transactions contemplated hereby, and made its own decision to enter into this Agreement and to extend credit to the Borrower hereunder. Each Lender and the L/C Issuer also acknowledges that it will, independently and without reliance upon the Administrative Agent, the Arranger, any other Lender or any of their Related Parties and based on such documents and information as it shall from time to time deem appropriate, continue to make its own credit analysis, appraisals and decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder, and to make such investigations as it deems necessary to inform itself as to the business, prospects, operations, property, financial and other condition and creditworthiness of the Loan Parties. Each Lender and the L/C Issuer represents and warrants that (i) the Loan Documents set forth the terms of a commercial lending facility and (ii) it is engaged in making, acquiring or holding commercial loans in the ordinary course and is entering into this Agreement as a Lender or L/C Issuer for the purpose of making, acquiring or holding commercial loans and providing other facilities set forth herein as may be applicable to such Lender or L/C Issuer, and not for the purpose of purchasing, acquiring or holding any other type of financial instrument, and each Lender and the L/C Issuer agrees not to assert a claim in contravention of the foregoing. Each Lender and the L/C Issuer represents and warrants that it is sophisticated with respect to decisions to make, acquire and/or hold commercial loans and to provide other facilities set forth herein, as may be applicable to such Lender or such L/C Issuer, and either it, or the Person exercising discretion in making its decision to make, acquire and/or hold such commercial loans or to provide such other facilities, is experienced in making, acquiring or holding such commercial loans or providing such other facilities.

10.08 No Other Duties, Etc.

Anything herein to the contrary notwithstanding, none of the agents, arrangers or bookrunners listed on the cover page hereof shall have any powers, duties or responsibilities under this Agreement or any of the other Loan Documents, except in its capacity, as applicable, as the Administrative Agent, a Lender or the L/C Issuer hereunder.

10.09 Authorization to Release Collateral and Guarantors.

The Lenders and L/C Issuer authorize the Administrative Agent to release any Lien held by the Administrative Agent on any Collateral or any Guarantor from its obligations under the Guaranty in accordance with the provisions of Section 11.19 and to execute and deliver any instruments, documents, and agreements necessary or desirable to evidence and confirm the release of any Collateral or Guarantor pursuant to Section 11.19 all without the further consent or joinder of any Lender. Upon request by the Administrative Agent at any time, the Lenders (or such other percentage or the Lenders whose consent may be required in accordance with Section 11.01) will confirm in writing the Administrative Agent's authority to release its interest in particular types or items of property, or to release any Guarantor from its obligations under the Guaranty pursuant to this Section 10.09 and Section 11.19.

10.10 No Reliance on Administrative Agent's Customer Identification Program.

Each Lender acknowledges and agrees that neither such Lender, nor any of its Affiliates, participants or assignees, may rely on the Administrative Agent to carry out such Lender's, Affiliate's, participant's or assignee's customer identification program, or other obligations required or imposed under or pursuant to the Patriot Act or the regulations thereunder, including the regulations contained in 31 CFR 103.121 (the "CIP Regulations"), or any other anti-terrorism law, including any programs involving any of the following items relating to or in connection with any of the Loan Parties, their Affiliates or their agents, the Loan Documents or the transactions hereunder or contemplated hereby: (i)

any identity verification procedures, (ii) any recordkeeping, (iii) comparisons with government lists, (iv) customer notices or (v) other procedures required under the CIP Regulations or such other Laws.

10.11 Secured Cash Management Agreements and Secured Hedge Agreements.

No Cash Management Bank or Hedge Bank that obtains the benefit of Section 9.03, the Guaranty or any Collateral by virtue of the provisions hereof or any Collateral Document shall have any right to notice of any action or to consent to, direct or object to any action hereunder or under any other Loan Document or otherwise in respect of the Collateral (including the release or impairment of any Collateral) (or to notice of or to consent to any amendment, waiver or modification of the provisions hereof or of the Guaranty or any Collateral Document) other than in its capacity as a Lender and, in such case, only to the extent expressly provided in the Loan Documents. Notwithstanding any other provision of this Article X to the contrary, the Administrative Agent shall not be required to verify the payment of, or that other satisfactory arrangements have been made with respect to, Obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements except to the extent expressly provided herein and unless the Administrative Agent has received a Secured Party Designation Notice of such Obligations, together with such supporting documentation as the Administrative Agent may request, from the applicable Cash Management Bank or Hedge Bank, as the case may be. The Administrative Agent shall not be required to verify the payment of, or that other satisfactory arrangements have been made with respect to, Obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements in the case of a Maturity Date.

10.12 Recovery of Erroneous Payments.

Without limitation of any other provision in this Agreement, if at any time the Administrative Agent makes a payment hereunder in error to any Lender Recipient Party, whether or not in respect of an Obligation due and owing by the Borrower at such time, where such payment is a Rescindable Amount, then in any such event, each Lender Recipient Party receiving a Rescindable Amount severally agrees to repay to the Administrative Agent forthwith on demand the Rescindable Amount received by such Lender Recipient Party in immediately available funds in the currency so received, with interest thereon, for each day from and including the date such Rescindable Amount is received by it to but excluding the date of payment to the Administrative Agent, at the greater of the Federal Funds Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation. Each Lender Recipient Party irrevocably waives any and all defenses, including any "discharge for value" (under which a creditor might otherwise claim a right to retain funds mistakenly paid by a third party in respect of a debt owed by another) or similar defense to its obligation to return any Rescindable Amount. The Administrative Agent shall inform each Lender Recipient Party promptly upon determining that any payment made to such Lender Recipient Party comprised, in whole or in part, a Rescindable Amount.

ARTICLE XI

MISCELLANEOUS

11.01 Amendments, Etc.

No amendment or waiver of any provision of this Agreement or any other Loan Document, and no consent to any departure by any Loan Party therefrom, shall be effective unless in writing signed by the Required Lenders and the applicable Loan Party, and acknowledged by the Administrative Agent (which acknowledgment shall not be unreasonably withheld, conditioned or delayed), and each such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given; provided, however, that

(a) no such amendment, waiver or consent shall:

(i) extend or increase the Revolving Commitment of any Lender (or reinstate any Revolving Commitment terminated pursuant to Section 9.02) without the written consent of such Lender (it being understood and agreed that a waiver of any condition precedent set forth in Section 5.02 or of any Default or a mandatory reduction in Revolving Commitments is not considered an extension or increase in Revolving Commitments of any Lender);

(ii) postpone any date fixed by this Agreement or any other Loan Document for any payment (excluding mandatory prepayments) of principal, interest, fees or other amounts due to the Lenders (or any of them) or any scheduled or mandatory reduction of the Revolving Commitments hereunder or under any other Loan Document without the written consent of each Lender directly affected thereby;

(iii) reduce (including any waiver or forgiveness of) the principal of, or the rate of interest specified herein on, any Loan or L/C Borrowing, or (subject to clause (i) of the final proviso to this Section 11.01) any fees or other amounts payable hereunder or under any other Loan Document without the written consent of each Lender entitled to receive such amount; provided, however, that only the consent of the Required Lenders shall be necessary (A) to amend the definition of "Default Rate" or to waive any obligation of the Borrower to pay interest or Letter of Credit Fees at the Default Rate or (B) to amend any financial covenant hereunder (or any defined term used therein) even if the effect of such amendment would be to reduce the rate of interest on any Loan or L/C Borrowing or to reduce any fee payable hereunder;

(iv) change Section 9.03, Section 2.05(b)(ii) or Section 2.13 in a manner that would alter the pro rata sharing of payments required thereby without the written consent of each Lender;

(v) change any provision of this Section 11.01(a) or the definition of "Required Lenders" without the written consent of each Lender;

(vi) release all or substantially all of the Collateral without the written consent of each Lender;

(vii) release the Borrower without the consent of each Lender, or, except in connection with a transaction permitted under Section 8.04 or Section 8.05, all or substantially all of the value of the Guaranty without the written consent of each Lender, except to the extent such release is permitted pursuant to Section 10.09 (in which case such release may be made by the Administrative Agent acting alone);

(b) unless also signed by the L/C Issuer, no amendment, waiver or consent shall affect the rights or duties of the L/C Issuer under this Agreement or any Issuer Document relating to any Letter of Credit issued or to be issued by it;

(c) unless also signed by the Swing Line Lender, no amendment, waiver or consent shall affect the rights or duties of the Swing Line Lender under this Agreement; and

(d) unless also signed by the Administrative Agent, no amendment, waiver or consent shall affect the rights or duties of the Administrative Agent under this Agreement or any other Loan Document;

provided, however, that notwithstanding anything to the contrary herein, (i) the Fee Letter may be amended, or rights or privileges thereunder waived, in a writing executed only by the parties thereto, (ii) no Defaulting Lender shall have any right to approve or disapprove any amendment, waiver or consent hereunder (any amendment, waiver or consent which by its terms requires the consent of all Lenders or each affected Lender may be effected with the consent of the applicable Lenders other than Defaulting Lenders), except that (A) the Revolving Commitment of such Defaulting Lender may not be increased or extended without the consent of such Lender and (B) any waiver, amendment or modification requiring the consent of all Lenders or each affected Lender that by its terms affects such Defaulting Lender materially and disproportionately adversely relative to other affected Lenders shall require the consent of such Defaulting Lender, (iii) each Lender is entitled to vote as such Lender sees fit on any bankruptcy reorganization plan that affects the Loans, and each Lender acknowledges that the provisions of Section 1126(c) of the Debtor Relief Laws supersedes the unanimous consent provisions set forth herein, (iv) the Required Lenders shall determine whether or not to allow a Loan Party to use cash collateral in the context of a bankruptcy or insolvency proceeding and such determination shall be binding on all of the Lenders and (v) this Agreement may be amended pursuant to Section 11.06(g) without any such approval or consent of the Required Lenders.

(e) Notwithstanding any provision herein to the contrary, this Agreement may be amended with the written consent of the Required Lenders, the Administrative Agent and the Loan Parties (i) to add one or more additional revolving or term loan credit facilities to this Agreement and to permit the extensions of credit and all related obligations and liabilities arising in connection therewith from time to time outstanding to share ratably (or on a basis subordinated to the existing facilities hereunder) in the benefits of this Agreement and the other Loan Documents with the obligations and liabilities from time to time outstanding in respect of the existing facilities hereunder, (ii) in connection with the foregoing, to permit, as deemed appropriate by the Administrative Agent and approved by the Required Lenders, the Lenders providing such additional credit facilities to participate in any required vote or action required to be approved by the Required Lenders or by any other number, percentage or class of Lenders hereunder, (iii) in connection with Section 2.01(b), and (iv) to change, modify or alter Section 9.03 or any other provision hereof relating to the pro rata sharing of payments among the Lenders to the extent necessary to effectuate any of the amendments (or amendments and restatements) enumerated in clause (i), (ii) or (iii) of this clause (e).

(f) Notwithstanding anything to the contrary herein, this Agreement may be amended and restated without the consent of any Lender (but with the consent of the Borrower and the Administrative Agent) if, upon giving effect to such amendment and restatement, such Lender shall no longer be a party to this Agreement (as so amended and restated), the Commitments of such Lender shall have terminated, such Lender shall have no other commitment or other obligation hereunder and shall have been paid in full all principal, interest and other amounts owing to it or accrued for its account under this Agreement.

(g) Notwithstanding any provision herein to the contrary, if the Administrative Agent and the Borrower acting together identify any ambiguity, omission, mistake, typographical error or other defect in any provision of this Agreement or any other Loan Document (including the schedules and exhibits thereto), then the Administrative Agent and the Borrower shall be permitted to amend, modify or supplement such provision to cure such ambiguity, omission,

mistake, typographical error or other defect, and such amendment shall become effective without any further action or consent of any other party to this Agreement.

11.02 Notices; Effectiveness; Electronic Communications.

(a) Notices Generally. Except in the case of notices and other communications expressly permitted to be given by telephone (and except as provided in clause (b) below), all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by facsimile or electronic mail as follows, and all notices and other communications expressly permitted hereunder to be given by telephone shall be made to the applicable telephone number, as follows:

(i) if to any Loan Party, the Administrative Agent, the L/C Issuer or the Swing Line Lender, to the address, facsimile number, electronic mail address or telephone number specified for such Person on Schedule 11.02; and

(ii) if to any other Lender, to the address, facsimile number, electronic mail address or telephone number specified in its Administrative Questionnaire (including, as appropriate, notices delivered solely to the Person designated by a Lender on its Administrative Questionnaire then in effect for the delivery of notices that may contain material non-public information relating to the Borrower).

Notices and other communications sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices and other communications sent by facsimile shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next Business Day for the recipient). Notices and other communications delivered through electronic communications to the extent provided in clause (b) below, shall be effective as provided in such clause (b).

This Agreement was prepared by:

Moore & Van Allen PLLC
100 North Tryon Street
Suite 4700
Charlotte, NC 28202-4003
Attention: Charles Harris
Phone: 704-331-1141
E-mail: charlesharris@mvalaw.com

(b) Electronic Communications. Notices and other communications to the Lenders and the L/C Issuer hereunder may be delivered or furnished by electronic communication (including e-mail and Internet or intranet websites) pursuant to procedures approved by the Administrative Agent, provided that the foregoing shall not apply to notices to any Lender or the L/C Issuer pursuant to Article II if such Lender or the L/C Issuer, as applicable, has notified the Administrative Agent that it is incapable of receiving notices under such Article by electronic communication. The Administrative Agent, the Swing Line Lender, the L/C Issuer or the Borrower may each, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it, provided that approval of such procedures may be limited to particular notices or communications.

Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgement from the

intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement) and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient at its e-mail address as described in the foregoing clause (i) of notification that such notice or communication is available and identifying the website address therefor; provided that, for both clauses (i) and (ii), if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice, email or communication shall be deemed to have been sent at the opening of business on the next Business Day for the recipient.

(c) The Platform. THE PLATFORM IS PROVIDED "AS IS" AND "AS AVAILABLE." THE AGENT PARTIES (AS DEFINED BELOW) DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE BORROWER MATERIALS OR THE ADEQUACY OF THE PLATFORM, AND EXPRESSLY DISCLAIM LIABILITY FOR ERRORS IN OR OMISSIONS FROM THE BORROWER MATERIALS. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY ANY AGENT PARTY IN CONNECTION WITH THE BORROWER MATERIALS OR THE PLATFORM. In no event shall the Administrative Agent or any of its Related Parties (collectively, the "Agent Parties") have any liability to any Loan Party, any Lender, the L/C Issuer or any other Person for losses, claims, damages, liabilities or expenses of any kind (whether in tort, contract or otherwise) arising out of any Loan Party's or the Administrative Agent's transmission of Borrower Materials, notices or any other Information (as such term is defined and used in Section 11.07) through the Internet, except to the extent that such losses, claims, damages, liabilities or expenses are determined by a court of competent jurisdiction by a final and nonappealable judgment to have resulted from the bad faith, gross negligence or willful misconduct of such Agent Party. The Administrative Agent will use commercially reasonable efforts to notify any Person that is provided access to Borrower Materials that such Person is bound by the confidentiality provisions set forth in Section 11.07.

(d) Change of Address, Etc. Each Loan Party, the Administrative Agent, the L/C Issuer and the Swing Line Lender may change its address, facsimile, email address or telephone number for notices and other communications hereunder by notice to the other parties hereto. Each other Lender may change its address, facsimile or telephone number for notices and other communications hereunder by notice to each Loan Party, the Administrative Agent, the L/C Issuer and the Swing Line Lender. In addition, each Lender agrees to notify the Administrative Agent from time to time to ensure that the Administrative Agent has on record (i) an effective address, contact name, telephone number, facsimile number and electronic mail address to which notices and other communications may be sent and (ii) accurate wire instructions for such Lender. Furthermore, each Public Lender agrees to cause at least one individual at or on behalf of such Public Lender to at all times have selected the "Private Side Information" or similar designation on the content declaration screen of the Platform in order to enable such Public Lender or its delegate, in accordance with such Public Lender's compliance procedures and applicable Law, including United States Federal and state securities Laws, to make reference to Borrower Materials that are not made available through the "Public Side Information" portion of the Platform and that may contain material non-public information with respect to the Borrower or its securities for purposes of United States Federal or state securities laws.

(e) Reliance by Administrative Agent, L/C Issuer and Lenders. The Administrative Agent, the L/C Issuer and the Lenders shall be entitled to rely and act upon any notices (including telephonic or electronic Loan Notices, Notices of Loan Prepayment, Letter of Credit Applications

and Swing Line Loan Notices) purportedly given by or on behalf of any Loan Party even if (i) such notices were not made in a manner specified herein, were incomplete or were not preceded or followed by any other form of notice specified herein, or (ii) the terms thereof, as understood by the recipient, varied from any confirmation thereof. The Loan Parties shall indemnify the Administrative Agent, the L/C Issuer, each Lender and the Related Parties of each of them from all reasonable and documented out of pocket costs, reasonable and documented out-of-pocket expenses and liabilities resulting from the reliance by such Person on each notice purportedly given by or on behalf of a Loan Party to the extent required pursuant to Section 11.04(b). All telephonic notices to and other telephonic communications with the Administrative Agent may be recorded by the Administrative Agent, and each of the parties hereto hereby consents to such recording.

11.03 No Waiver; Cumulative Remedies; Enforcement.

No failure by any Lender, the L/C Issuer or the Administrative Agent to exercise, and no delay by any such Person in exercising, any right, remedy, power or privilege hereunder or under any other Loan Document shall operate as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder or under any other Loan Document (including the imposition of the Default Rate) preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights, remedies, powers and privileges herein provided and provided under each other Loan Document are cumulative and not exclusive of any rights, remedies, powers and privileges provided by law.

Notwithstanding anything to the contrary contained herein or in any other Loan Document, the authority to enforce rights and remedies hereunder and under the other Loan Documents against the Loan Parties or any of them shall be vested exclusively in, and all actions and proceedings at law in connection with such enforcement shall be instituted and maintained exclusively by, the Administrative Agent in accordance with Section 9.02 for the benefit of all the Lenders and the L/C Issuer; provided, however, that the foregoing shall not prohibit (a) the Administrative Agent from exercising on its own behalf the rights and remedies that inure to its benefit (solely in its capacity as Administrative Agent) hereunder and under the other Loan Documents, (b) the L/C Issuer or the Swing Line Lender from exercising the rights and remedies that inure to its benefit (solely in its capacity as L/C Issuer or Swing Line Lender, as the case may be) hereunder and under the other Loan Documents, (c) any Lender from exercising setoff rights in accordance with Section 11.08 (subject to the terms of Section 2.13), or (d) any Lender from filing proofs of claim or appearing and filing pleadings on its own behalf during the pendency of a proceeding relative to any Loan Party under any Debtor Relief Law; and provided further, that if at any time there is no Person acting as Administrative Agent hereunder and under the other Loan Documents, then (i) the Required Lenders shall have the rights otherwise ascribed to the Administrative Agent pursuant to Section 9.02 and (ii) in addition to the matters set forth in clauses (b), (c) and (d) of the preceding proviso and subject to Section 2.13, any Lender may, with the consent of the Required Lenders, enforce any rights and remedies available to it and as authorized by the Required Lenders. The provisions of this paragraph are for the sole benefit of the Lenders and the L/C Issuer and shall not afford any right to, or constitute a defense available to, any Loan Party.

11.04 Expenses; Indemnity; Damage Waiver.

(a) Costs and Expenses. The Loan Parties shall pay (i) all reasonable and documented out-of-pocket expenses incurred by the Administrative Agent and its Affiliates (including the reasonable and documented out-of-pocket fees, charges and disbursements of one primary outside counsel (at any given time) for the Administrative Agent) in connection with the syndication of the credit facilities provided for herein, the preparation, negotiation, execution,

delivery and administration of this Agreement and the other Loan Documents or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated), (ii) all reasonable and documented out-of-pocket expenses incurred by the L/C Issuer in connection with the issuance, amendment, renewal or extension of any Letter of Credit or any demand for payment thereunder and (iii) all reasonable and documented out-of-pocket expenses incurred by the Administrative Agent, any Lender or the L/C Issuer (including the reasonable and documented out-of-pocket fees, charges and disbursements of one primary outside counsel and one local counsel in each relevant jurisdiction for the Administrative Agent, any Lender or the L/C Issuer taken as a whole and, in the case of an actual or potential conflict of interest, one additional counsel in each relevant jurisdiction to each group of affected Administrative Agent and/or Lender(s) similarly situated taken as a whole) in connection with the enforcement or protection of its rights (A) in connection with this Agreement and the other Loan Documents, including its rights under this Section, or (B) in connection with the Loans made or Letters of Credit issued hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans or Letters of Credit.

(b) The Loan Parties shall indemnify the Administrative Agent (and any sub-agent thereof), each Lender and the L/C Issuer, and each Related Party of any of the foregoing Persons (each such Person being called an "Indemnitee") against, and hold each Indemnitee harmless from, any and all losses, claims, damages, liabilities and related reasonable and documented out-of-pocket costs and expenses (including the reasonable and documented out-of-pocket fees, charges and disbursements of one primary outside counsel and one local counsel in each relevant jurisdiction for the Indemnitees taken as a whole and, in the case of an actual or potential conflict of interest, one additional counsel in each relevant jurisdiction to each group of affected Indemnitees similarly situated taken as a whole) incurred by any Indemnitee or asserted against any Indemnitee by any Person (including any Loan Party) other than such Indemnitee and its Related Parties arising out of, in connection with, or as a result of (i) the execution or delivery of this Agreement, any other Loan Document or any agreement or instrument contemplated hereby or thereby, the performance by the parties hereto of their respective obligations hereunder or thereunder, the consummation of the transactions contemplated hereby or thereby, or, in the case of the Administrative Agent (and any sub-agent thereof) and its Related Parties only, the administration of this Agreement and the other Loan Documents (including in respect of any matters addressed in Section 3.01), (ii) any Loan or Letter of Credit or the use or proposed use of the proceeds therefrom (including any refusal by the L/C Issuer to honor a demand for payment under a Letter of Credit if the documents presented in connection with such demand do not strictly comply with the terms of such Letter of Credit), (iii) any actual or alleged presence or release of Hazardous Materials on or from any property owned or operated by the Borrower or any Subsidiary, or any Environmental Liability related in any way to the Borrower or any Subsidiary, or (iv) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by any Loan Party, and regardless of whether any Indemnitee is a party thereto; provided that such indemnity shall not, as to any Indemnitee, be available to the extent that such losses, claims, damages, liabilities or related costs and expenses (x) are determined by a court of competent jurisdiction by final and nonappealable judgment to have resulted from the bad faith, gross negligence or willful misconduct of such Indemnitee, (y) result from a claim brought by any Loan Party against an Indemnitee for breach in bad faith of such Indemnitee's obligations hereunder or under any other Loan Document, if such Loan Party has obtained a final and nonappealable judgment in its favor on such claim as determined by a court of competent jurisdiction or (z) result solely from a claim brought by an Indemnitee against another Indemnitee. Without limiting the provisions of Section 3.01(c), this Section 11.04(b) shall not

apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim. No Indemnitee will consent to any settlement of any claim made under this Section 11.04 without the consent of the Borrower (which consent will not be unreasonably withheld, conditioned or delayed).

(c) Reimbursement by Lenders. To the extent that the Loan Parties for any reason fail to indefeasibly pay any amount required under clause (a) or (b) of this Section to be paid by them to the Administrative Agent (or any sub-agent thereof), the L/C Issuer, the Swing Line Lender or any Related Party of any of the foregoing, each Lender severally agrees to pay to the Administrative Agent (or any such sub-agent), the L/C Issuer, the Swing Line Lender or such Related Party, as the case may be, such Lender's pro rata share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought based on each Lender's share of the Total Credit Exposures of all Lenders at such time) of such unpaid amount (including any such unpaid amount in respect of a claim asserted by such Lender), such payment to be made severally among them based on such Lenders' Applicable Percentage (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought), provided, further that, the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent (or any such sub-agent), the L/C Issuer or the Swing Line Lender in its capacity as such, or against any Related Party of any of the foregoing acting for the Administrative Agent (or any such sub-agent), the L/C Issuer or the Swing Line Lender in connection with such capacity. The obligations of the Lenders under this clause (c) are subject to the provisions of Section 2.12(d).

(d) Waiver of Consequential Damages, Etc. To the fullest extent permitted by applicable Law, no Loan Party shall assert, and each Loan Party hereby waives, and acknowledges that no other Person shall have, any claim against any Indemnitee, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement, any other Loan Document or any agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Loan or Letter of Credit or the use of the proceeds thereof. No Indemnitee shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed to such unintended recipients by such Indemnitee through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby other than for direct or actual damages resulting from the gross negligence or willful misconduct of such Indemnitee as determined by a final and nonappealable judgment of a court of competent jurisdiction.

(e) Payments. All amounts due under this Section shall be payable not later than ten (10) Business Days after demand therefor.

(f) Survival. The agreements in this Section and the indemnity provisions of Section 11.02(e) shall survive the resignation of the Administrative Agent, the L/C Issuer and the Swing Line Lender, the replacement of any Lender, the termination of the Revolving Commitments and the repayment, satisfaction or discharge of all the other Obligations.

11.05 Payments Set Aside.

To the extent that any payment by or on behalf of any Loan Party is made to the Administrative Agent, the L/C Issuer or any Lender, or the Administrative Agent, the L/C Issuer or any Lender exercises its right of setoff, and such payment or the proceeds of such setoff or any part thereof is subsequently

invalidated, declared to be fraudulent or preferential, set aside or required (including pursuant to any settlement entered into by the Administrative Agent, the L/C Issuer or such Lender in its discretion) to be repaid to a trustee, receiver or any other party, in connection with any proceeding under any Debtor Relief Law or otherwise, then (a) to the extent of such recovery, the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such setoff had not occurred, and (b) each Lender and the L/C Issuer severally agrees to pay to the Administrative Agent upon demand its applicable share (without duplication) of any amount so recovered from or repaid by the Administrative Agent, plus interest thereon from the date of such demand to the date such payment is made at a rate per annum equal to the Federal Funds Rate from time to time in effect. The obligations of the Lenders and the L/C Issuer under clause (b) of the preceding sentence shall survive the payment in full of the Obligations and the termination of this Agreement.

11.06 Successors and Assigns.

(a) Successors and Assigns Generally. The provisions of this Agreement and the other Loan Documents shall be binding upon and inure to the benefit of the parties hereto and thereto and their respective successors and assigns permitted hereby, except that no Loan Party (except for any Loan Party (other than Borrower) in connection with the release of its Guaranty pursuant to Section 11.01(a)) may assign or otherwise transfer any of its rights or obligations hereunder or thereunder without the prior written consent of the Administrative Agent and each Lender and no Lender may assign or otherwise transfer any of its rights or obligations hereunder except (i) to an assignee in accordance with the provisions of clause (b) of this Section, (ii) by way of participation in accordance with the provisions of clause (d) of this Section or (iii) by way of pledge or assignment of a security interest subject to the restrictions of clause (f) of this Section (and any other attempted assignment or transfer by any party hereto shall be null and void). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants to the extent provided in clause (d) of this Section and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent, the L/C Issuer and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) Assignments by Lenders. Any Lender may at any time assign to one or more assignees all or a portion of its rights and obligations under this Agreement and the other Loan Documents (including all or a portion of its Revolving Commitment and the Loans (including for purposes of this clause (b), participations in L/C Obligations and in Swing Line Loans) at the time owing to it); provided that any such assignment shall be subject to the following conditions:

(i) Minimum Amounts.

(A) in the case of an assignment of the entire remaining amount of the assigning Lender's Revolving Commitment and the related Loans at the time owing to it or contemporaneous assignments to related Approved Funds that equal at least the amount specified in clause (b)(i)(B) of this Section in the aggregate or in the case of an assignment to a Lender, an Affiliate of a Lender or an Approved Fund, no minimum amount need be assigned; and

(B) in any case not described in clause (b)(i)(A) of this Section, the aggregate amount of the Revolving Commitment (which for this purpose includes Loans outstanding thereunder) or, if the applicable Revolving Commitment is not then in effect, the principal outstanding balance of the Loans of the assigning Lender subject to each such assignment, determined as

of the date the Assignment and Assumption with respect to such assignment is delivered to the Administrative Agent or, if "Trade Date" is specified in the Assignment and Assumption, as of the Trade Date, shall not be less than $5,000,000, unless each of the Administrative Agent and, so long as no Event of Default has occurred and is continuing, the Borrower otherwise consents (each such consent not to be unreasonably withheld or delayed).

(ii) Proportionate Amounts. Each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's Loans and Revolving Commitments, and rights and obligations with respect thereto assigned, except that this clause (ii) shall not (A) apply to the Swing Line Lender's rights and obligations in respect of Swing Line Loans or (B) prohibit any Lender from assigning all or a portion of its rights and obligations in respect of its Revolving Commitment (and the related Revolving Loans thereunder) on a non-pro rata basis;

(iii) Required Consents. No consent shall be required for any assignment except to the extent required by clause (b)(i)(B) of this Section and, in addition:

(A) the consent of the Borrower (such consent not to be unreasonably withheld, conditioned or delayed) shall be required unless (1) an Event of Default has occurred and is continuing at the time of such assignment or (2) such assignment is to a Lender, an Affiliate of a Lender or an Approved Fund; provided that the Borrower shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to the Administrative Agent within ten (10) Business Days after having received notice thereof;

(B) the consent of the Administrative Agent (such consent not to be unreasonably withheld, conditioned or delayed) shall be required for assignments in respect of any Revolving Commitment if such assignment is to a Person that is not a Lender, an Affiliate of such Lender or an Approved Fund with respect to such Lender; and

(C) the consent of the L/C Issuer and the Swing Line Lender shall be required for any assignment in respect of Revolving Loans and Revolving Commitments.

(iv) Assignment and Assumption. The parties to each assignment shall execute and deliver to the Administrative Agent an Assignment and Assumption, together with a processing and recordation fee in the amount of $3,500; provided, however, that the Administrative Agent may, in its sole discretion, elect to waive such processing and recordation fee in the case of any assignment. The assignee, if it is not a Lender, shall deliver to the Administrative Agent an Administrative Questionnaire.

(v) No Assignment to Certain Persons. No such assignment shall be made (A) to the Borrower or any of the Borrower's Affiliates or Subsidiaries, (B) to any Defaulting Lender or any of its Subsidiaries, or any Person who, upon becoming a Lender hereunder, would constitute any of the foregoing Persons described in this clause (B), (C) to a natural Person (or a holding company, investment vehicle or trust for, or owned and operated for the primary benefit of a natural Person) or (D) to any Competitor. If the

Borrower approves an assignment to a Competitor, then such assignee will not be considered a "Competitor" solely for purposes of that assignment.

(vi) Certain Additional Payments. In connection with any assignment of rights and obligations of any Defaulting Lender hereunder, no such assignment shall be effective unless and until, in addition to the other conditions thereto set forth herein, the parties to the assignment shall make such additional payments to the Administrative Agent in an aggregate amount sufficient, upon distribution thereof as appropriate (which may be outright payment, purchases by the assignee of participations or subparticipations, or other compensating actions, including funding, with the consent of the Borrower and the Administrative Agent, the applicable pro rata share of Loans previously requested but not funded by the Defaulting Lender, to each of which the applicable assignee and assignor hereby irrevocably consent), to (x) pay and satisfy in full all payment liabilities then owed by such Defaulting Lender to the Administrative Agent, the L/C Issuer or any Lender hereunder (and interest accrued thereon) and (y) acquire (and fund as appropriate) its full pro rata share of all Loans and participations in Letters of Credit and Swing Line Loans in accordance with its Applicable Percentage. Notwithstanding the foregoing, in the event that any assignment of rights and obligations of any Defaulting Lender hereunder shall become effective under applicable Law without compliance with the provisions of this paragraph, then the assignee of such interest shall be deemed to be a Defaulting Lender for all purposes of this Agreement until such compliance occurs.

Subject to acceptance and recording thereof by the Administrative Agent pursuant to clause (c) of this Section, from and after the effective date specified in each Assignment and Assumption, the assignee thereunder shall be a party to this Agreement and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto but shall continue to be entitled to the benefits of Sections 3.01, 3.04, 3.05 and 11.04 with respect to facts and circumstances occurring prior to the effective date of such assignment); provided, that except to the extent otherwise expressly agreed by the affected parties, no assignment by a Defaulting Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender. Upon request, the Borrower (at its expense) shall execute and deliver a Note to the assignee Lender. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this clause shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with clause (d) of this Section.

(c) Register. The Administrative Agent, acting solely for this purpose as an agent of the Borrower (and such agency being solely for tax purposes), shall maintain at the Administrative Agent's Office a copy of each Assignment and Assumption delivered to it (or the equivalent thereof in electronic form) and a register for the recordation of the names and addresses of the Lenders, and the Revolving Commitments of, and principal amounts (and stated interest) of the Loans and L/C Obligations owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Administrative Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the

Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(d) Participations. Any Lender may at any time, without the consent of, or notice to, the Borrower or the Administrative Agent, sell participations to any Person (other than a natural Person (or a holding company, investment vehicle or trust for, or owned and operated for the primary benefit of a natural Person), a Defaulting Lender, a Competitor or the Borrower or any of the Borrower's Affiliates or Subsidiaries) (each, a "Participant") in all or a portion of such Lender's rights and/or obligations under this Agreement (including all or a portion of its Revolving Commitment and/or the Loans (including such Lender's participations in L/C Obligations and/or Swing Line Loans) owing to it); provided that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) the Borrower, the Administrative Agent, the Lenders and the L/C Issuer shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement. If the Borrower approves a participation sold to a Competitor, then such participant will not be considered a Competitor solely for purposes of that participation. For the avoidance of doubt, each Lender shall be responsible for the indemnity under Section 11.04(c) without regard to the existence of any participation.

Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; provided that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, waiver or other modification described in Section 11.01(a) that affects such Participant; provided, further, that any such agreement or instrument shall require the applicable Participant to represent and warrant for the benefit of the Borrower and such Lender that such Participant is not a Competitor. The Borrower agrees that each Participant shall be entitled to the benefits of Sections 3.01, 3.04 and 3.05 to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to clause (b) of this Section (it being understood that the documentation required under Section 3.01(e) shall be delivered to the Lender who sells the participation) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (b) of this Section; provided that such Participant (A) agrees to be subject to the provisions of Sections 3.06 and 11.13 as if it were an assignee under paragraph (b) of this Section and (B) shall not be entitled to receive any greater payment under Sections 3.01 or 3.04, with respect to any participation, than the Lender from whom it acquired the applicable participation would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Change in Law that occurs after the Participant acquired the applicable participation. Each Lender that sells a participation agrees, at the Borrower's request and expense, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Section 3.06 with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 11.08 as though it were a Lender; provided that such Participant agrees to be subject to Section 2.13 as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as an agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "Participant Register"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is

recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(e) Certain Pledges. Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement (including under its Note, if any) to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank; provided that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

(f) Resignation as L/C Issuer or Swing Line Lender after Assignment.

(i) Notwithstanding anything to the contrary contained herein, if at any time Bank of America assigns all of its Revolving Commitment and Revolving Loans pursuant to clause (b) above, Bank of America may, upon thirty (30) days' notice to the Borrower and the Lenders, resign as L/C Issuer. In the event of any such resignation as L/C Issuer, the Borrower shall be entitled to appoint from among the Lenders a successor L/C Issuer hereunder; provided, however, that no failure by the Borrower to appoint any such successor shall affect the resignation of Bank of America as L/C Issuer. If Bank of America resigns as L/C Issuer, it shall retain all the rights, powers, privileges and duties of the L/C Issuer hereunder with respect to all Letters of Credit issued by it and outstanding as of the effective date of its resignation as L/C Issuer and all L/C Obligations with respect thereto (including the right to require the Lenders to make Base Rate Loans or fund risk participations in Unreimbursed Amounts pursuant to Section 2.03(c)). Upon the appointment of a successor L/C Issuer, (1) such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring L/C Issuer, and (2) the successor L/C Issuer shall issue letters of credit in substitution for the Letters of Credit, if any, outstanding at the time of such succession or make other arrangements reasonably satisfactory to Bank of America to effectively assume the obligations of Bank of America with respect to such Letters of Credit.

(ii) Notwithstanding anything to the contrary contained herein, if at any time Bank of America assigns all of its Revolving Commitment and Revolving Loans pursuant to clause (b) above, Bank of America, upon thirty (30) days' notice to the Borrower, resign as Swing Line Lender. In the event of any such resignation as Swing Line Lender, the Borrower shall be entitled to appoint from among the Lenders a successor Swing Line Lender hereunder; provided, however, that no failure by the Borrower to appoint any such successor shall affect the resignation of Bank of America as Swing Line Lender. If Bank of America resigns as Swing Line Lender, it shall retain all the rights of the Swing Line Lender provided for hereunder with respect to Swing Line Loans made by it and outstanding as of the effective date of such resignation, including the right to require the Lenders to make Base Rate Loans or fund risk participations in outstanding Swing Line Loans pursuant to Section 2.04(c). Upon the appointment of a successor Swing Line Lender, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring Swing Line Lender.

(g) In addition, notwithstanding the foregoing, the Borrower may, by written notice to the Administrative Agent from time to time, make one or more offers (each, a "Loan Modification Offer") to all the Lenders to make one or more amendments or modifications to (i) allow the maturity and scheduled amortization of the Loans of the accepting Lenders to be

extended, or to allow the termination dates for any Revolving Commitments to be extended, and (ii) increase the Applicable Rate and/or fees payable with respect to the Loans and Revolving Commitments of the accepting Lenders ("Permitted Amendments") pursuant to procedures reasonably specified by the Administrative Agent and reasonably acceptable to the Borrower. Such notice shall set forth (A) the terms and conditions of the requested Permitted Amendment and (B) the date on which such Permitted Amendment is requested to become effective. The Permitted Amendments shall not become effective unless consented to by the Borrower and those Accepting Lenders (as defined below), as applicable (the "Required Approval"). If the Required Approval is received, (1) such Permitted Amendments shall become effective only with respect to the Loans and/or Revolving Commitments of the Lenders that accept the applicable Loan Modification Offer (such Lenders, the "Accepting Lenders") and, in the case of any Accepting Lender, only with respect to such Lender's Loans and/or Revolving Commitments as to which such Lender's acceptance has been made and (2) the Borrower, each Loan Party and each Accepting Lender shall execute and deliver to the Administrative Agent a loan modification agreement (the "Loan Modification Agreement") and such other documentation as the Administrative Agent shall reasonably specify to evidence the acceptance of the Permitted Amendments and the terms and conditions thereof. The Administrative Agent shall promptly notify each Lender as to the effectiveness of each Loan Modification Agreement. Each of the parties hereto hereby agrees that, upon the effectiveness of any Loan Modification Agreement, this Agreement shall be deemed amended to the extent (but only to the extent) necessary to reflect the existence and terms of the Permitted Amendment evidenced thereby and only with respect to the Loans and Revolving Commitments of the Accepting Lenders as to which such Lenders' acceptance has been made.

(h) Competitors.

(i) No assignment or participation shall be made to any Person that was a Competitor as of the date (the "Trade Date") on which the applicable Lender entered into a binding agreement to sell and assign or participate all or a portion of its rights and obligations under this Agreement to such Person (unless the Borrower has consented to such assignment as otherwise contemplated by this Section 11.06, in which case such Person will not be considered a Competitor for the purpose of such assignment). For the avoidance of doubt, with respect to any assignee or participant that becomes a Competitor after the applicable Trade Date (including as a result of the delivery of a notice pursuant to, and/or the expiration of the notice period referred to in, the definition of "Competitor"), such assignee shall not retroactively be considered a Competitor. Any assignment in violation of this clause (h)(i) shall not be void, but the other provisions of this clause (h) shall apply.

(ii) If any assignment is made to any Competitor without the Borrower's prior consent in violation of clause (i) above, the Borrower may, at its sole expense and effort, upon notice to the applicable Competitor and the Administrative Agent, (A) terminate any Revolving Commitment of such Competitor and repay all obligations of the Borrower owing to such Competitor in connection with such Revolving Commitment and/or (B) require such Competitor to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in this Section 11.06, all of its interest, rights and obligations under this Agreement and related Loan Documents to an Eligible Assignee that shall assume such obligations at the lesser of (x) the principal amount thereof and (y) the amount that such Competitor paid to acquire such interests, rights and obligations, in each case plus accrued interest, accrued fees and all other amounts (other than principal amounts) payable to it hereunder and other the other Loan

Documents; provided that (i) the Borrower shall have paid to the Administrative Agent the assignment fee (if any) specified in Section 11.06(b) and (ii) such assignment does not conflict with applicable Laws.

(iii) Notwithstanding anything to the contrary contained in this Agreement, Competitors (A) will not (x) have the right to receive information, reports or other materials provided to Lenders by the Borrower, the Administrative Agent or any other Lender, (y) attend or participate in meetings attended by the Lenders and the Administrative Agent, or (z) access any electronic site established for the Lenders or confidential communications from counsel to or financial advisors of the Administrative Agent or the Lenders and (B) (x) for purposes of any consent to any amendment, waiver or modification of, or any action under, and for the purpose of any direction to the Administrative Agent or any Lender to undertake any action (or refrain from taking any action) under this Agreement or any other Loan Document, each Competitor will be deemed to have consented in the same proportion as the Lenders that are not Competitors consented to such matter, and (y) for purposes of voting on any plan of reorganization or plan of liquidation pursuant to any Debtor Relief Laws ("Plan of Reorganization"), each Competitor party hereto hereby agrees (1) not to vote on such Plan of Reorganization, (2) if such Competitor does vote on such Plan of Reorganization notwithstanding the restriction in the foregoing clause (1), such vote will be deemed not to be in good faith and shall be "designated" pursuant to Section 1126(e) of the Debtor Relief Laws, and such vote shall not be counted in determining whether the applicable class has accepted or rejected such Plan of Reorganization in accordance with Section 1126(c) of the Debtor Relief Laws and (3) not to contest any request by any party for a determination by the bankruptcy court (or other applicable court of competent jurisdiction) effectuating the foregoing clause (2).

(iv) The Administrative Agent shall have the right, and the Borrower hereby expressly authorizes the Administrative Agent, to (A) post Schedule 11.06 on the Platform, including that portion of the Platform that is designated for "public side" Lenders or (B) provide Schedule 11.06 to each Lender requesting the same.

(v) Notwithstanding anything to the contrary herein, each of the Borrower and each Lender acknowledges and agrees that the Administrative Agent, in its capacity as such, shall not be responsible or have any liability for, or have any duty to ascertain, inquire into, monitor or enforce, compliance with the provisions hereof relating to Competitors. Without limiting the generality of the foregoing, the Administrative Agent, in its capacity as such, shall not have any liability with respect to or arising out of any assignment or participation of Loans or Revolving Commitments, or disclosure of confidential information, to any Competitor (regardless of whether the consent of the Administrative Agent is required thereto), and none of the Borrower, any Lender or their respective Affiliates will bring any claim to such effect.

11.07 Treatment of Certain Information; Confidentiality.

(a) Treatment of Certain Information. Each of the Administrative Agent, the Lenders and the L/C Issuer agrees to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed (i) to its Affiliates, its auditors and its Related Parties (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential), (ii) to the extent required or requested by any regulatory authority purporting to have jurisdiction

over such Person or its Related Parties (including any self-regulatory authority, such as the National Association of Insurance Commissioners), (iii) to the extent required by applicable Laws or regulations or by any subpoena or similar legal process, (iv) to any other party hereto, (v) in connection with the exercise of any remedies hereunder or under any other Loan Document or any action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (vi) subject to an agreement containing provisions substantially the same as those of this Section 11.07, to (A) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights and obligations under this Agreement or (B) any actual or prospective party (or its Related Parties) to any swap, derivative or other transaction under which payments are to be made by reference to the Borrower and its obligations, this Agreement or payments hereunder, (vii) on a confidential basis to (A) any rating agency in connection with rating the Borrower or its Subsidiaries or the credit facilities provided hereunder or (B) the provider of any Platform or other electronic delivery service used by the Administrative Agent, the L/C Issuer and/or the Swing Line Lender to deliver Borrower Materials or notices to the Lenders or (viii) the CUSIP Service Bureau or any similar agency in connection with the application, issuance, publishing and monitoring of CUSIP numbers or other market identifiers with respect to the credit facilities provided hereunder, or (ix) with the consent of the Borrower or to the extent such Information (x) becomes publicly available other than as a result of a breach of this Section 11.07, (xi) becomes available to the Administrative Agent, any Lender, the L/C Issuer or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or (xii) is independently discovered or developed by a party hereto without utilizing any Information received from the Borrower or violating the terms of this Section 11.07. For purposes of this Section 11.07, "Information" means all information received from the Borrower or any Subsidiary relating to the Borrower or any Subsidiary or any of their respective businesses, other than any such information that is available to the Administrative Agent, any Lender or the L/C Issuer on a nonconfidential basis prior to disclosure by the Borrower or any Subsidiary. Any Person required to maintain the confidentiality of Information as provided in this Section 11.07 shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person must accord to its own confidential information by Law.

(b) Non-Public Information. Each of the Administrative Agent, the Lenders and the L/C Issuer acknowledges that (i) the Information may include material non-public information concerning a Loan Party or a Subsidiary, as the case may be, (ii) it has developed compliance procedures regarding the use of material non-public information and (iii) it will handle such material non-public information in accordance with applicable Law, including United States federal and state securities Laws.

(c) Customary Advertising Material. The consent of the Loan Parties shall be required prior to the publication by the Administrative Agent or any Lender of customary advertising material relating to the transactions contemplated hereby using the name, product photographs, logo or trademark of the Loan Parties; provided no consent shall be required for disclosure of the name and industry of the Borrower, the logo of the Loan Parties, the Lenders and the types, amounts, tenor and use of proceeds of the credit facilities contained herein in customary marketing materials of the Administrative Agent. In addition, the Administrative Agent and the Lenders may disclose the existence of this Agreement and information about the types, amounts and use of proceeds of the credit facilities contained in this Agreement to market data collectors and similar service providers to the lending industry and service providers to the Administrative Agent, the Arranger and the Lenders in connection with the administration of this Agreement, the other Loan Documents and the Revolving Commitments.

11.08 Right of Setoff.

If an Event of Default shall have occurred and be continuing, each Lender, the L/C Issuer and each of their respective Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by applicable Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held and other obligations (in whatever currency) at any time owing by such Lender, the L/C Issuer or any such Affiliate to or for the credit or the account of any Loan Party against any and all of the obligations of such Loan Party now or hereafter existing under this Agreement or any other Loan Document to such Lender or the L/C Issuer or their respective Affiliates, irrespective of whether or not such Lender, the L/C Issuer or such Affiliate shall have made any demand under this Agreement or any other Loan Document and although such obligations of such Loan Party may be contingent or unmatured or are owed to a branch, office or Affiliate of such Lender or the L/C Issuer different from the branch, office or Affiliate holding such deposit or obligated on such indebtedness; provided that in the event that any Defaulting Lender shall exercise any such right of setoff, (x) all amounts so set off shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of Section 2.15 and, pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent, the L/C Issuer and the Lenders, and (y) the Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the Obligations owing to such Defaulting Lender as to which it exercised such right of setoff. The rights of each Lender, the L/C Issuer and their respective Affiliates under this Section are in addition to other rights and remedies (including other rights of setoff) that such Lender, the L/C Issuer or their respective Affiliates may have. Each Lender and the L/C Issuer agrees to notify the Borrower and the Administrative Agent promptly after any such setoff and application, provided that the failure to give such notice shall not affect the validity of such setoff and application.

11.09 Interest Rate Limitation.

Notwithstanding anything to the contrary contained in any Loan Document, the interest paid or agreed to be paid under the Loan Documents shall not exceed the maximum rate of non-usurious interest permitted by applicable Law (the "Maximum Rate"). If the Administrative Agent or any Lender shall receive interest in an amount that exceeds the Maximum Rate, the excess interest shall be applied to the principal of the Loans or, if it exceeds such unpaid principal, refunded to the Borrower. In determining whether the interest contracted for, charged, or received by the Administrative Agent or a Lender exceeds the Maximum Rate, such Person may, to the extent permitted by applicable Law, (a) characterize any payment that is not principal as an expense, fee, or premium rather than interest, (b) exclude voluntary prepayments and the effects thereof, and (c) amortize, prorate, allocate, and spread in equal or unequal parts the total amount of interest throughout the contemplated term of the Obligations hereunder.

11.10 Counterparts; Integration; Effectiveness.

This Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement, the other Loan Documents and any separate letter agreements with respect to fees payable to the Administrative Agent or the L/C Issuer, constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Except as provided in Section 5.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof that, when taken together, bear the signatures of each of the other parties hereto. Delivery of an executed

counterpart of a signature page of this Agreement by facsimile or other electronic imaging means (e.g., "pdf" or "tif") shall be effective as delivery of a manually executed counterpart of this Agreement.

11.11 Survival of Representations and Warranties.

All representations and warranties made hereunder and in any other Loan Document or other document delivered pursuant hereto or thereto or in connection herewith or therewith shall survive the execution and delivery hereof and thereof. Such representations and warranties have been or will be relied upon by the Administrative Agent and each Lender, regardless of any investigation made by the Administrative Agent or any Lender or on their behalf and notwithstanding that the Administrative Agent or any Lender may have had notice or knowledge of any Default at the time of any Credit Extension, and shall continue in full force and effect as long as any Loan or any other Obligation hereunder shall remain unpaid or unsatisfied or any Letter of Credit shall remain outstanding.

11.12 Severability.

If any provision of this Agreement or the other Loan Documents is held to be illegal, invalid or unenforceable, (a) the legality, validity and enforceability of the remaining provisions of this Agreement and the other Loan Documents shall not be affected or impaired thereby and (b) the parties shall endeavor in good faith negotiations to replace the illegal, invalid or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the illegal, invalid or unenforceable provisions. The invalidity of a provision in a particular jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. Without limiting the foregoing provisions of this Section 11.12, if and to the extent that the enforceability of any provisions in this Agreement relating to Defaulting Lenders shall be limited by Debtor Relief Laws, as determined in good faith by the Administrative Agent, the L/C Issuer or the Swing Line Lender, as applicable, then such provisions shall be deemed to be in effect only to the extent not so limited.

11.13 Replacement of Lenders.

If the Borrower is entitled to replace a Lender pursuant to the provisions of Section 3.06, or if any Lender is a Defaulting Lender or a Non-Consenting Lender, then the Borrower may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 11.06), all of its interests, rights (other than its existing rights to payments pursuant to Sections 3.01 and 3.04) and obligations under this Agreement and the related Loan Documents to an Eligible Assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment), provided that:

(a) the Borrower shall have paid to the Administrative Agent the assignment fee (if any) specified in Section 11.06(b);

(b) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and L/C Advances, accrued interest thereon, accrued fees and all other amounts payable to it hereunder and under the other Loan Documents (including any amounts under Section 3.05) from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts);

(c) in the case of any such assignment resulting from a claim for compensation under Section 3.04 or payments required to be made pursuant to Section 3.01, such assignment will result in a reduction in such compensation or payments thereafter;

(d) such assignment does not conflict with applicable Laws; and

(e) in the case of an assignment resulting from a Lender becoming a Non-Consenting Lender, the applicable assignee shall have consented to the applicable amendment, waiver or consent.

Notwithstanding anything to the contrary herein, in connection with any such assignment, if such assigning Lender does not execute and deliver to the Administrative Agent a duly executed Assignment and Assumption pursuant to Section 11.06(b) reflecting such assignment within five (5) Business Days of the date on which the applicable assignee executes and delivers such Assignment and Assumption to such assigning Lender, then such assigning Lender shall be deemed to have executed and delivered such Assignment and Assumption without any action on the part of such Lender, whereupon such assignment shall become effective upon payment to such assigning Lender of all amounts owing to such assigning Lender under clause (b) above (which amounts shall be calculated by the Administrative Agent and shall be conclusive absent manifest error).

A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

11.14 Governing Law; Jurisdiction; Etc.

(a) GOVERNING LAW. THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSE OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT (EXCEPT, AS TO ANY OTHER LOAN DOCUMENT, AS EXPRESSLY SET FORTH THEREIN) AND THE TRANSACTIONS CONTEMPLATED HEREBY AND THEREBY SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

(b) SUBMISSION TO JURISDICTION. EACH LOAN PARTY IRREVOCABLY AND UNCONDITIONALLY agrees that it will not commence any action, litigation or proceeding of any kind or description, whether in law or equity, whether in contract or in tort or otherwise, against the Administrative Agent, any Lender, the l/c Issuer, or any Related Party of the foregoing in any way relating to this Agreement or any other Loan Document or the transactions relating hereto or thereto, in any forum other than THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY AND OF THE UNITED STATES DISTRICT COURT OF THE SOUTHERN DISTRICT OF NEW YORK, AND ANY APPELLATE COURT FROM ANY THEREOF, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY SUBMITS TO THE JURISDICTION OF SUCH COURTS AND AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION, LITIGATION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION, LITIGATION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT OR IN ANY OTHER LOAN DOCUMENT SHALL AFFECT ANY RIGHT THAT THE ADMINISTRATIVE AGENT, ANY LENDER OR THE L/C ISSUER MAY OTHERWISE HAVE TO BRING ANY ACTION OR

PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AGAINST ANY LOAN PARTY OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

(c) WAIVER OF VENUE. EACH LOAN PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT IN ANY COURT REFERRED TO IN PARAGRAPH (B) OF THIS SECTION. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(d) SERVICE OF PROCESS. EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 11.02. NOTHING IN THIS AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW.

11.15 Waiver of Jury Trial.

EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

11.16 No Advisory or Fiduciary Responsibility.

In connection with all aspects of each transaction contemplated hereby (including in connection with any amendment, waiver or other modification hereof or of any other Loan Document), each of the Loan Parties acknowledges and agrees, and acknowledges its Affiliates' understanding, that: (i) (A) the arranging and other services regarding this Agreement provided by the Administrative Agent, the Arranger, and the Lenders are arm's-length commercial transactions between the Loan Parties and their respective Affiliates, on the one hand, and the Administrative Agent, the Arranger and the Lenders, on the other hand, (B) each of the Loan Parties has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate, and (C) each of the Loan Parties is capable of evaluating, and understands and accepts, the terms, risks and conditions of the transactions contemplated hereby and by the other Loan Documents; (ii) (A) the Administrative Agent, the Arranger and the Lenders each is and has been acting solely as a principal and, except as expressly agreed in writing by the relevant parties, has not been, is not, and will not be acting as an advisor, agent or fiduciary for the Loan Parties or any of their respective Affiliates, or any other Person and (B) neither the Administrative Agent, the Arranger nor any Lender has any obligation to the Loan Parties or any of their respective Affiliates with respect to the

transactions contemplated hereby except those obligations expressly set forth herein and in the other Loan Documents; and (iii) the Administrative Agent, the Arranger the Lenders and their respective Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Loan Parties and their respective Affiliates, and neither the Administrative Agent, the Arranger nor any Lender has any obligation to disclose any of such interests to the Loan Parties and their respective Affiliates. To the fullest extent permitted by Law, each of the Loan Parties hereby waives and releases any claims that it may have against the Administrative Agent, the Arranger or any Lender with respect to any breach or alleged breach of agency or fiduciary duty in connection with any aspect of any transaction contemplated hereby.

11.17 Electronic Execution; Electronic Records.

(a) The words "delivery," "execute," "execution," "signed," "signature," and words of like import in any Loan Document or any other document executed in connection herewith shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Administrative Agent, or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable Law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act; provided, that notwithstanding anything contained herein to the contrary, the Administrative Agent is under no obligation to agree to accept electronic signatures in any form or in any format unless expressly agreed to by the Administrative Agent pursuant to procedures approved by it; provided, further, without limiting the foregoing, upon the request of the Administrative Agent, any electronic signature shall be promptly followed by such manually executed counterpart. For the avoidance of doubt, the authorization under this paragraph may include, without limitation, use or acceptance by the Administrative Agent and each of the Lenders of a manually signed paper document, amendment, approval, consent, information, notice, certificate, request, statement, disclosure or authorization related to this Agreement (each a "Communication") which has been converted into electronic form (such as scanned into PDF format), or an electronically signed Communication converted into another format, for transmission, delivery and/or retention.

(b) The Borrower hereby acknowledges the receipt of a copy of this Agreement and all other Loan Documents. The Administrative Agent and each Lender may, on behalf of the Borrower, create a microfilm or optical disk or other electronic image of this Agreement and any or all of the other Loan Documents. The Administrative Agent and each Lender may store the electronic image of this Agreement and the other Loan Documents in its electronic form and then destroy the paper original as part of the Administrative Agent's and each Lender's normal business practices, with the electronic image deemed to be an original and of the same legal effect, validity and enforceability as the paper originals.

11.18 Subordination of Intercompany Indebtedness.

Each Loan Party (a "Subordinating Loan Party") agrees that the payment of all obligations and indebtedness, whether principal, interest, fees and other amounts and whether now owing or hereafter arising, owing to such Subordinating Loan Party by any other Loan Party is expressly subordinated to the payment in full in cash of the Obligations. During the continuance of any Event of Default, if the Administrative Agent so requests, any such obligation or indebtedness shall be enforced and performance received by the Subordinating Loan Party as trustee for the holders of the Obligations and the proceeds

thereof shall be paid over to the holders of the Obligations on account of the Obligations, but without reducing or affecting in any manner the liability of the Subordinating Loan Party under this Agreement or any other Loan Document. Without limitation of the foregoing, so long as no Event of Default has occurred and is continuing, the Loan Parties may make and receive payments with respect to any such obligations and indebtedness, provided, that in the event that any Loan Party receives any payment of any such obligations and indebtedness at a time when such payment is prohibited by this Section, such payment shall be held by such Loan Party, in trust for the benefit of, and shall be paid forthwith over and delivered, upon written request, to the Administrative Agent.

11.19 Release of Collateral and Guarantee Obligations; Subordination of Liens.

(a) Upon the reasonable request of the Borrower, the Administrative Agent shall, take such actions as shall be reasonably required, at the Loan Parties' sole expense, to release (i) its security interest in any Collateral upon termination of the Aggregate Revolving Commitments and payment in full of all Obligations (other than (x) contingent indemnification or reimbursement obligations for which no claim has been asserted, (y) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements reasonably satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made and (z) Letters of Credit as to which other arrangements reasonably satisfactory to the Administrative Agent and the L/C Issuer shall have been made or that have been Cash Collateralized in the amount of the Minimum Collateral Amount), or (ii) (a) its security interest in any Collateral transferred, sold or disposed of to persons other than Loan Parties or Subsidiaries in Loan Parties in a transaction permitted under this Agreement or approved by the Required Lenders pursuant to Section 11.01, and (b) any Guaranty hereunder or under any Loan Document of any Person if the ownership interests in such Guarantor are transferred, sold or disposed to persons other than Loan Parties or Subsidiaries of Loan Parties in a transaction permitted under this Agreement, in each case to the extent necessary to permit consummation of such transfer, sale or disposition in accordance with the Loan Documents. Any representation, warranty or covenant contained in any Loan Document relating to any such property so Disposed, transferred, sold or disposed of (other than property Disposed of to the Borrower or any Loan Party) shall no longer be deemed to be repeated once such property is so Disposed, transferred, sold or disposed of.

(b) In connection with any termination or release pursuant to paragraph (a) of this Section 11.19, the Administrative Agent will not be required to take any action unless the Borrower shall have delivered to the Administrative Agent a certificate of a Responsible Officer of the Borrower certifying that the transaction giving rise to such termination or release is permitted by the Credit Agreement and was or is consummated in compliance with the Loan Documents. Any execution and delivery of documents pursuant to this Section 11.19 shall be without recourse to or warranty by the Administrative Agent.

11.20 USA PATRIOT Act Notice.

Each Lender that is subject to the Act (as hereinafter defined) and the Administrative Agent (for itself and not on behalf of any Lender) hereby notifies the Loan Parties that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the "Act"), it is required to obtain, verify and record information that identifies the Loan Parties, which information includes the name and address of the Loan Parties and other information that will allow such Lender or the Administrative Agent, as applicable, to identify the Loan Parties in accordance with the Act. The Loan Parties shall, promptly following a request by the Administrative Agent or any Lender, provide all documentation and other information that the Administrative Agent or such Lender requests in order to

comply with its ongoing obligations under applicable "know your customer" and anti-money laundering rules and regulations, including the Act.

11.21 Acknowledgement and Consent to Bail-In of Affected Financial Institutions.

Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Lender that is an Affected Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the Write-Down and Conversion Powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by: (a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any Lender that is an Affected Financial Institution; and (b) the effects of any Bail-in Action on any such liability, including, if applicable, (i) a reduction in full or in part or cancellation of any such liability; (ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or (iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of the applicable Resolution Authority.

11.22 ERISA Representation.

(a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that at least one of the following is and will be true:

(i) such Lender is not using "plan assets" (within the meaning of Section 3(42) of ERISA or otherwise) of one or more Benefit Plans with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Revolving Commitments, or this agreement,

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84–14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95–60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90–1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91–38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96–23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Revolving Commitments and this Agreement,

(iii) (A) such Lender is an investment fund managed by a "Qualified Professional Asset Manager" (within the meaning of Part VI of PTE 84–14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Letters of Credit, the Revolving Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the

Revolving Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84–14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84–14 are satisfied with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Revolving Commitments and this Agreement, or

(iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless either (1) clause (i) in the immediately preceding clause (a) is true with respect to a Lender or (2) a Lender has provided another representation, warranty and covenant in accordance with clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that the Administrative Agent is not a fiduciary with respect to the assets of such Lender involved in such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Revolving Commitments and this Agreement (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related hereto or thereto).

11.23 Flood Matters.

If at any time owned real property is pledged as collateral hereunder, (A) the Borrower shall provide at least forty-five (45) days' prior written notice to the pledge of such real property as collateral, (B) the Borrower shall provide (1) standard flood hazard determination forms and (2) if any property is located in a special flood hazard area, (x) notices to (and confirmations of receipt by) the Borrower as to the existence of a special flood hazard and, if applicable, the unavailability of flood hazard insurance under the National Flood Insurance Program and (y) evidence of applicable flood insurance, if available, in each case in such form, on such terms and in such amounts as required by The National Flood Insurance Reform Act of 1994, the Federal Flood Disaster Protection Act and rules and regulations promulgated thereunder or as otherwise required by the Administrative Agent or any Lender, and (C) the Administrative Agent shall not enter into, accept or record any mortgage in respect of such real property until the Administrative Agent shall have received written confirmation from each Lender that flood insurance compliance has been completed by such Lender with respect to such real property (such written confirmation not to be unreasonably withheld or delayed). Any increase, extension or renewal of this Agreement shall be subject to flood insurance due diligence and flood insurance compliance reasonably satisfactory to the Administrative Agent and each Lender.

11.24 Acknowledgement Regarding Any Supported QFCs.

To the extent that the Loan Documents provide support, through a guarantee or otherwise, for any Swap Contract or any other agreement or instrument that is a QFC (such support, "QFC Credit Support", and each such QFC, a "Supported QFC"), the parties acknowledge and agree as follows with respect to the resolution power of the Federal Deposit Insurance Corporation under the Federal Deposit Insurance Act and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together with the regulations promulgated thereunder, the "U.S. Special Resolution Regimes") in respect of such Supported QFC and QFC Credit Support (with the provisions below applicable notwithstanding that the Loan Documents and any Supported QFC may in fact be stated to be governed by the laws of the State of New York and/or of the United States or any other state of the United States):

(a) In the event a Covered Entity that is party to a Supported QFC (each, a "Covered Party") becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of such Supported QFC and the benefit of such QFC Credit Support (and any interest and obligation in or under such Supported QFC and such QFC Credit Support, and any rights in property securing such Supported QFC or such QFC Credit Support) from such Covered Party will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if the Supported QFC and such QFC Credit Support (and any such interest, obligation and rights in property) were governed by the laws of the United States or a state of the United States. In the event a Covered Party or a BHC Act Affiliate of a Covered Party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under the Loan Documents that might otherwise apply to such Supported QFC or any QFC Credit Support that may be exercised against such Covered Party are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if the Supported QFC and the Loan Documents were governed by the laws of the United States or a state of the United States. Without limitation of the foregoing, it is understood and agreed that rights and remedies of the parties with respect to a Defaulting Lender shall in no event affect the rights of any Covered Party with respect to a Supported QFC or any QFC Credit Support.

(b) As used in this Section 11.24, the following terms have the following meanings:

"BHC Act Affiliate" of a party means an "affiliate" (as such term is defined under, and interpreted in accordance with, 12 U.S.C. 1841(k)) of such party.

"Default Right" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

"QFC" has the meaning assigned to the term "qualified financial contract" in, and shall be interpreted in accordance with, 12 U.S.C. 5390(c)(8)(D).

[SIGNATURE PAGES FOLLOW]

BORROWER:

CINER WYOMING LLC,
a Delaware limited liability company

By: ______________________________
Name: Oguz Erkan
Title: President & CEO

ADMINISTRATIVE AGENT: BANK OF AMERICA, N.A., as Administrative Agent

By: Christine Trotter
Name: Christine Trotter
Title: Vice President

LENDERS: BANK OF AMERICA, N.A.,
as a Lender, L/C Issuer and Swing Line Lender

By:____________________________
Name: Ryan Maples
Title: Senior Vice President

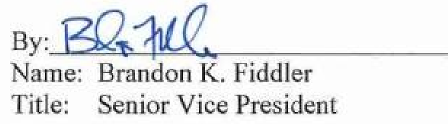
ADMINISTRATIVE AGENT: BANK OF AMERICA, N.A., as Administrative Agent

By:____________________________
Name:
Title:

LENDERS: BANK OF AMERICA, N.A.,
as a Lender, L/C Issuer and Swing Line Lender

By: Ryan Maples
Name: Ryan Maples
Title: Senior Vice President

PNC BANK, NATIONAL ASSOCIATION,
as a Lender

By: 
Name: Brandon K. Fiddler
Title: Senior Vice President

Schedule 2.01
Commitments and Applicable Percentages

Lender	Revolving Commitment	Applicable Percentage
Bank of America, N.A.	$112,500,000.00	50.000000000%
PNC Bank, National Association	$112,500,000.00	50.000000000%
Total	$225,000,000.00	100.000000000%

Schedule 2.03
Existing Letters of Credit

None.

Schedule 6.12
Pension Plan

Ciner Pension Plan – Plan 003

Schedule 6.13
Subsidiaries; Equity Interests; Loan Parties

Ciner Wyoming LLC

Delaware limited liability company
Five Concourse Pkwy., NE, Suite 2500
Atlanta, GA 30328-7108
Tax ID: 22-3133221

Owned by:
  Ciner Resources LP: 51%
  NRP Trona LLC: 49%

Schedule 6.17
IP Rights

(i) All IP Rights registered or pending registration with the United States Copyright Office or the United States Patent and Trademark Office that the Loan Parties own as of the Closing Date.

Ciner Wyoming LLC
(Delaware Limited Liability Company)

U.S. Patents

Issued Patents

OZONE TREATMENT OF ALKALI METAL COMPOUND SOLUTIONS	8361329	01/29/13

(ii) All material licenses under which a Borrower or any Subsidiary has been granted exclusive rights by a third party to IP Rights registered with the United States Copyright Office or the United States Patent and Trademark Office as of the Closing Date (excluding licenses for off-the-shelf software).

Trademark License Agreement dated October 23, 2015, among Park Holding A.S., Ciner Enterprises Inc., Ciner Resources Corporation (formerly known as OCI Chemical Corporation), Ciner Wyoming Holding Co. (formerly known as OCI Wyoming Holding Co.), Ciner Resource Partners LLC (formerly known as OCI Resource Partners LLC), Ciner Resources LP (formerly known as OCI Resources LP), and Ciner Wyoming LLC (formerly known as OCI Wyoming LLC). The Trademark License Agreement governs the use of "Ciner" as part of the names used by Ciner Wyoming LLC and the other related parties thereto, and as a trademark and service mark for products and services.

Schedule 6.19-1
Locations of Real Property

Loan Party	Property Address	Lease / Ownership
Ciner Wyoming LLC	254 County Road 4-6 Green River, WY 82935	Owned

Schedule 6.19-2
Chief Executive Office, Taxpayer Identification Number,
Organizational Identification Number

Loan Party	Chief Executive Office	U.S. Tax Payer Identification Number	Organizational Identification Number
Ciner Wyoming LLC	Five Concourse Pkwy., NE, Suite 2500 Atlanta, GA 30328-7108	22-3133221	2280876

Schedule 6.19-3
Changes in Legal Name, State of Formation and Structure

A. Description of Legal Name Change during the 5 Years preceding the Closing Date for any Loan Party

None.

B. Change in State of Formation during the 5 Years preceding the Closing Date for any Loan Party

None.

C. Party to a Merger, Consolidation or Other Change in Structure during the 5 Years preceding the Closing Date for any Loan Party

None.

Schedule 8.01
Liens Existing on the Closing Date

None.

Schedule 8.02
Investments Existing on the Closing Date

None.

Schedule 8.03
Indebtedness Existing on the Closing Date

Schedule 11.02
Notices

IF TO LOAN PARTY:

Ciner Wyoming LLC
Address:
Five Concourse Pkwy., NE, Suite 2500
Atlanta, GA 30328-7108
Attn: Marla Nicholson

Fax: 770-375-2322
Telephone: 770-375-2438
E-mail: mnicholson@ciner.us.com
Website: http://www.ciner.us.com/

IF TO THE ADMINISTRATIVE AGENT, L/C ISSUER OR SWING LINE LENDER:

ADMINISTRATIVE AGENT

Bank of America, N.A.
Dedicated Servicing
Gateway Village-900 Building
Mail Code: NC1-026-06-04
900 W Trade St
Charlotte, NC 28255
Attn: Patricia Santos
Phone: 980-387-3794
Email: patricia.santos@bofa.com
Fax Number: 704-625-4200

Other Notices/Deliveries to Administrative Agent:

Christine Trotter
Agency Officer
Bank of America, N.A.
540 W. Madison St.
Chicago, Illinois 60661
Mail Code: IL4-540-22-29
Telephone: 312.828.4172
Fax: 877.207.0702
Email: christine.trotter@bofa.com

L/C Issuer:

Bank of America, N.A.
Trade Operations
Mail Code: PA6-580-02-30

1 Fleet Way
Scranton, PA 18507
Telephone: 570-496-9619
Telecopier: 1-800-755-8740
Email: tradeclientserviceteamus@baml.com

with a copy to (which shall not constitute notice):

Moore & Van Allen PLLC
100 North Tryon Street
Suite 4700
Charlotte, NC 28202-4003
Attention: Charlie Harris
Telephone: 704-331-1141
Email: charlieharris@mvalaw.com

Schedule 11.06
Competitors

1. Genesis Alkali
2. Tata Chemicals Ltd.
3. Solvay Chemicals
4. Searles Valley Minerals
5. ANSAC

And, in each case, any affiliate of any Competitor identified above that is obviously (based solely on the similarity of the legal name of such affiliate to the name of such Competitor) an affiliate of such Competitor

EXHIBIT 2.02

[FORM OF] LOAN NOTICE

Date: ___________, _____

To: Bank of America, N.A., as Administrative Agent

Ladies and Gentlemen:

Reference is made to that certain Credit Agreement, dated as of October 28, 2021 (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement"), among Ciner Wyoming LLC, a Delaware limited liability company (the "Borrower"), the Guarantors identified therein, the Lenders from time to time party thereto and Bank of America, N.A., as Administrative Agent. Capitalized terms used herein and not defined herein shall have the meanings assigned to such terms in the Credit Agreement.

The undersigned hereby requests (select one):

☐ A Borrowing of a Revolving Loan

☐ A conversion or continuation of a Revolving Loan

1. On ____________________________________ (a Business Day).

2. In the amount of $_______________________.

3. Comprised of: ☐ Base Rate Loans

☐ BSBY Rate Loans

4. For BSBY Rate Loans: with an Interest Period of _____ months.

With respect to any Borrowing requested herein, (x) such Borrowing complies with the provisos to the first sentence of Section 2.01(a) of the Credit Agreement and (y) the Borrower hereby represents and warrants that each of the conditions set forth in Section 5.02 of the Credit Agreement have been satisfied on and as of the date of such Borrowing.

CINER WYOMING LLC,
a Delaware limited liability company

By: ____
Name:
Title:

EXHIBIT 2.04

[FORM OF] SWING LINE LOAN NOTICE

Date: ___________, _____

To: Bank of America, N.A., as Swing Line Lender
Bank of America, N.A., as Administrative Agent

Ladies and Gentlemen:

Reference is made to that certain Credit Agreement, dated as of October 28, 2021 (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement"), among Ciner Wyoming LLC, a Delaware limited liability company (the "Borrower"), the Guarantors identified therein, the Lenders from time to time party thereto and Bank of America, N.A., as Administrative Agent. Capitalized terms used herein and not defined herein shall have the meanings assigned to such terms in the Credit Agreement.

The undersigned hereby requests a Swing Line Loan:

1. On _____________________________________ (a Business Day).

2. In the amount of $________________________.

The Swing Line Borrowing requested herein complies with the requirements of the provisos to the first sentence of Section 2.04(a) of the Credit Agreement. The Borrower hereby represents and warrants that each of the conditions set forth in Section 5.02 of the Credit Agreement have been satisfied on and as of the date of such Swing Line Borrowing.

CINER WYOMING LLC,
a Delaware limited liability company

By: ____
Name:
Title:

EXHIBIT 2.05

[FORM OF] NOTICE OF LOAN PREPAYMENT

TO: Bank of America, N.A., as [Administrative Agent][Swingline Lender]

RE: Credit Agreement, dated as of October 28, 2021, by and among Ciner Wyoming LLC, a Delaware limited liability company (the "Borrower"), the Guarantors, the Lenders and Bank of America, N.A., as Administrative Agent, L/C Issuer and Swingline Lender (as amended, modified, extended, restated, replaced, or supplemented from time to time, the "Credit Agreement"; capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Credit Agreement)

DATE: [Date]

The Borrower hereby notifies the Administrative Agent that on ____________[1] pursuant to the terms of Section 2.05 (Prepayments) of the Credit Agreement, the Borrower intends to prepay/repay the following Loans as more specifically set forth below:

☐ Optional prepayment of Revolving Loans in the following amount(s):

☐ BSBY Rate Loans: $____________________[2]
Applicable Interest Period:__________________

☐ Base Rate Loans: $______________[3]

☐ Optional prepayment of Swingline Loans in the following amount:
$____________________[4]

Delivery of an executed counterpart of a signature page of this notice by fax transmission or other electronic mail transmission (e.g. "pdf" or "tif") shall be effective as delivery of a manually executed counterpart of this notice.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

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[1] Specify date of such prepayment.

[2] Any prepayment of BSBY Rate Loans shall be in a principal amount of $500,000 or a whole multiple of $100,000 in excess thereof (or if less, the entire principal amount thereof outstanding).

[3] Any prepayment of Base Rate Loans shall be in a principal amount of $500,000 or a whole multiple of $100,000 in excess thereof (or if less, the entire principal amount thereof outstanding).

[4] Any prepayment of Swingline Loans shall be in a principal amount of $100,000 or a whole multiple of $100,000 in excess thereof (or if less, the entire principal amount thereof outstanding).

CINER WYOMING LLC,
a Delaware limited liability company

By:______________________________
Name:
Title:

EXHIBIT 2.11

[FORM OF] NOTE

[______________________]

FOR VALUE RECEIVED, Ciner Wyoming LLC, a Delaware limited liability company (the "Borrower"), hereby promises to pay to [____________________] or registered assigns (the "Lender"), in accordance with the provisions of the Credit Agreement (as hereinafter defined), the principal amount of each Loan from time to time made by the Lender to the Borrower under that certain Credit Agreement, dated as of October 28, 2021 (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement"), among the Borrower, the Guarantors identified therein, the Lenders from time to time party thereto and Bank of America, N.A., as Administrative Agent. Capitalized terms used herein and not defined herein shall have the meanings assigned to such terms in the Credit Agreement.

The Borrower promises to pay interest on the unpaid principal amount of each Loan from the date of such Loan until such principal amount is paid in full, at such interest rates and at such times as provided in the Credit Agreement. Except as otherwise provided in Section 2.04(f) of the Credit Agreement with respect to Swing Line Loans, all payments of principal and interest shall be made to the Administrative Agent for the account of the Lender in Dollars in immediately available funds at the Administrative Agent's Office. If any amount is not paid in full when due hereunder (after giving effect to any applicable grace periods), upon the request of the Required Lenders, such unpaid amount shall bear interest at a fluctuating interest rate per annum at all times equal to the Default Rate to the fullest extent permitted by applicable Laws. Accrued and unpaid interest on past due amounts (including interest on past due interest) shall be due and payable upon demand.

This Note is one of the Notes referred to in the Credit Agreement, is entitled to the benefits thereof and may be prepaid in whole or in part subject to the terms and conditions provided therein. This Note is also entitled to the benefits of the Guaranty. Upon the occurrence and continuation of one or more of the Events of Default specified in the Credit Agreement, all amounts then remaining unpaid on this Note shall become, or may be declared to be, immediately due and payable all as provided in the Credit Agreement. Loans made by the Lender shall be evidenced by one or more loan accounts or records maintained by the Lender in the ordinary course of business. The Lender may also attach schedules to this Note and endorse thereon the date, amount and maturity of its Loans and payments with respect thereto.

The Borrower, for itself, its successors and assigns, hereby waives diligence, presentment, protest and demand and notice of protest, demand, dishonor and non-payment of this Note.

THIS NOTE AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSE OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS NOTE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

[Signature Page Follows]

IN WITNESS WHEREOF, the Borrower has caused this Note to be duly executed by its duly authorized officer as of the day and year first above written.

CINER WYOMING LLC,
a Delaware limited liability company

By: ____
Name:
Title:

EXHIBIT 3.01-1

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of October 28, 2021 (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement") among Ciner Wyoming LLC, a Delaware limited liability company, the Guarantors identified therein, each lender from time to time party thereto and Bank of America, N.A., as Administrative Agent.

Pursuant to the provisions of Section 3.01(e) of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Internal Revenue Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Internal Revenue Code and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Internal Revenue Code.

The undersigned has furnished the Administrative Agent and the Borrower with a certificate of its non-U.S. Person status on an IRS Form W-8BEN or W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF LENDER]

By: ______________________

Name: ______________________

Title: ______________________

Date: ________ __, 20[ ]

EXHIBIT 3.01-2

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of October 28, 2021 (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement") among Ciner Wyoming LLC, a Delaware limited liability company, the Guarantors identified therein, each lender from time to time party thereto and Bank of America, N.A., as Administrative Agent.

Pursuant to the provisions of Section 3.01(e) of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Internal Revenue Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Internal Revenue Code, and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Internal Revenue Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on an IRS Form W-8BEN or W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF PARTICIPANT]

By: ______________________

Name: ______________________

Title: ______________________

Date: ________ __, 20[ ]

EXHIBIT 3.01-3

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of October 28, 2021 (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement") among Ciner Wyoming LLC, a Delaware limited liability company, the Guarantors identified therein, each lender from time to time party thereto and Bank of America, N.A., as Administrative Agent.

Pursuant to the provisions of Section 3.01(e) of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect such participation, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Internal Revenue Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Internal Revenue Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Internal Revenue Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF PARTICIPANT]

By: ______________________

Name: ________________________

Title: _______________________

Date: ________ __, 20[ ]

EXHIBIT 3.01-4

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Credit Agreement dated as of October 28, 2021 (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement") among Ciner Wyoming LLC, a Delaware limited liability company, the Guarantors identified therein, each lender from time to time party thereto and Bank of America, N.A., as Administrative Agent.

Pursuant to the provisions of Section 3.01(e) of the Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Loan(s) (as well as any Note(s) evidencing such Loan(s)), (iii) with respect to the extension of credit pursuant to this Credit Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Internal Revenue Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Internal Revenue Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Internal Revenue Code.

The undersigned has furnished the Administrative Agent and the Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement.

[NAME OF LENDER]

By: ______________________

Name: ______________________

Title: ______________________

Date: ________ __, 20[ ]

EXHIBIT 7.02

[FORM OF] COMPLIANCE CERTIFICATE[1]

Financial Statement Date: ___________, _____

To: Bank of America, N.A., as Administrative Agent

Ladies and Gentlemen:

Reference is made to that certain Credit Agreement, dated as of October 28, 2021 (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement"), among Ciner Wyoming LLC, a Delaware limited liability company (the "Borrower"), the Guarantors identified therein, the Lenders from time to time party thereto and Bank of America, N.A., as Administrative Agent. Capitalized terms used herein and not defined herein shall have the meanings assigned to such terms in the Credit Agreement.

The undersigned Responsible Officer hereby certifies as of the date hereof that he/she is the [____ ________________________________] of the Borrower (or its general partner), and that, as such, he/she is authorized to execute and deliver this Compliance Certificate (this "Certificate") to the Administrative Agent on the behalf of the Borrower, and that:

[Use following paragraph 1 for fiscal year-end financial statements]

1. The Borrower has delivered the year-end audited financial statements required by Section 7.01(a) of the Credit Agreement for the fiscal year of the Borrower ended as of the above date, together with the report and opinion of an independent certified public accountant required by such section. The consolidating financial statements are fairly stated in all material respects when considered in relation to the consolidated financial statements of the Borrower and its Subsidiaries.

[Use following paragraph 1 for fiscal quarter-end financial statements]

1. The Borrower has delivered the unaudited financial statements required by Section 7.01(b) of the Credit Agreement for the fiscal quarter of the Borrower ended as of the above date. Such financial statements fairly present in all material respects the financial condition, results of operations, shareholders' equity and cash flows of the Borrower and its Subsidiaries in accordance with GAAP as at such date and for such period, subject only to normal year-end audit adjustments and the absence of footnotes. The consolidating financial statements are fairly stated in all material respects when considered in relation to the consolidated financial statements of the Borrower and its Subsidiaries.

2. The undersigned has reviewed and is familiar with the terms of the Credit Agreement and has made, or has caused to be made under his/her supervision, a review of the transactions and condition (financial or otherwise) of the Borrower during the accounting period covered by such financial statements as are necessary and appropriate for purposes of providing this Certificate.

---

[1] In the event of any conflict between this Exhibit and the Credit Agreement, the Credit Agreement shall control.

3. A review of the activities of the Borrower during such fiscal period has been made under the supervision of the undersigned with a view to determining whether during such fiscal period the Borrower performed and observed all its Obligations under the Loan Documents, and

[select one:]

[to the best knowledge of the undersigned, during such fiscal period, no Default has occurred and is continuing.]

--or—

[to the best knowledge of the undersigned, during such fiscal period, the following is a list of each Default or Event of Default that has occurred during such period (or if in a previous period, is continuing during such period) and its nature and status:]

4. The representations and warranties of the Borrower and each other Loan Party contained in Article VI of the Credit Agreement or any other Loan Document, or which are contained in any document furnished at any time under or in connection therewith are true and correct in all material respects (expect to the extent any such representation and warranty shall be true and correct in all respects after giving effect to such materiality qualification) on and as of the date hereof, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they are true and correct in all material respects (except to the extent any such representation and warranty is qualified by materiality, in which case, such representation and warranty shall be true and correct in all respects after giving effect to such materiality qualification) as of such earlier date, and except that for purposes of this Compliance Certificate, the representations and warranties contained in clauses (a) and (b) of Section 6.05 of the Credit Agreement shall be deemed to refer to the most recent statements furnished pursuant to clauses (a) and (b), respectively, of Section 7.01 of the Credit Agreement, including the statements in connection with which this Compliance Certificate is delivered.

5. The financial covenant analyses and information set forth on the Schedules attached hereto are true and accurate on and as of the date of this Certificate.

IN WITNESS WHEREOF, the undersigned has executed this Certificate as of [______________, _________].

CINER WYOMING LLC,
a Delaware limited liability company

By: ____
Name:
Title:

EXHIBIT 7.12

[FORM OF] GUARANTOR JOINDER AGREEMENT

THIS GUARANTOR JOINDER AGREEMENT (the "Agreement") dated as of [_________, ____], is by and between [_________], a [_________] (the "New Subsidiary"), and Bank of America, N.A., in its capacity as Administrative Agent under the Credit Agreement (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement") dated as of October 28, 2021 by and among Ciner Wyoming LLC, a Delaware limited liability company (the "Borrower"), the Guarantors identified therein, the Lenders from time to time party thereto and the Administrative Agent. Capitalized terms used herein and not defined herein shall have the meanings assigned to such terms in the Credit Agreement.

The Loan Parties are required by Section 7.12 of the Credit Agreement to cause the New Subsidiary to become a "Guarantor". Accordingly, the New Subsidiary hereby agrees with the Administrative Agent as follows:

1. The New Subsidiary hereby acknowledges, agrees and confirms that, by its execution of this Agreement, the New Subsidiary will be deemed to be a party to the Credit Agreement and a "Guarantor" for all purposes of the Credit Agreement, and shall have all of the obligations of a Guarantor thereunder as if it had executed the Credit Agreement. The New Subsidiary hereby ratifies, as of the date hereof, and agrees to be bound by, all of the terms, provisions and conditions applicable to the Guarantors contained in the Credit Agreement. Without limiting the generality of the foregoing terms of this paragraph 1, the New Subsidiary hereby jointly and severally together with the other Guarantors, guarantees to the Administrative Agent, each Lender and each other holder of the Obligations, as provided in Article IV of the Credit Agreement, as primary obligor and not as surety, the prompt payment and performance of the Obligations in full when due (whether at stated maturity, as a mandatory prepayment, by acceleration or otherwise) strictly in accordance with the terms thereof.

2. The New Subsidiary hereby represents and warrants to the Administrative Agent that:

(i) Set forth on Schedule 1 is the chief executive office, U.S. tax payer identification number and organizational identification number of the New Subsidiary as of the date hereof.

(ii) The exact legal name and state of organization of the New Subsidiary as of the date hereof is as set forth on the signature pages hereto.

3. The address of the New Subsidiary for purposes of all notices and other communications is the address set forth for the Borrower on Schedule 11.02 to the Credit Agreement.

4. The New Subsidiary hereby waives acceptance by the Administrative Agent and the Lenders of the guaranty by the New Subsidiary under Article IV of the Credit Agreement.

5. This Agreement may be executed in two or more counterparts, each of which shall constitute an original but all of which when taken together shall constitute one contract.

6. This Agreement and any claims, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement shall be governed by, and construed in accordance with, the law of the State of New York.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the New Subsidiary has caused this Guarantor Joinder Agreement to be duly executed by its authorized officers, and the Administrative Agent, for the benefit of the Lenders, has caused the same to be accepted by its authorized officer, as of the day and year first above written.

[NEW SUBSIDIARY]

By: ______________________________
Name:
Title:

Acknowledged and accepted:

BANK OF AMERICA, N.A.,
as Administrative Agent

By: ______________________________
Name:
Title:

EXHIBIT 9.03

[FORM OF]
SECURED PARTY DESIGNATION NOTICE

TO: Bank of America, N.A., as Administrative Agent

RE: Credit Agreement, dated as of October 28, 2021, by and among Ciner Wyoming LLC, a Delaware limited liability company (the "Borrower"), the Guarantors identified therein, the Lenders from time to time party thereto and Bank of America, N.A., as Administrative Agent, L/C Issuer and Swingline Lender (as amended, modified, extended, restated, replaced, or supplemented from time to time, the "Credit Agreement"; capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Credit Agreement)

DATE: [Date]

[Name of Cash Management Bank/Hedge Bank] (the "Secured Party") hereby notifies you, pursuant to the terms of the Credit Agreement, that the Secured Party meets the requirements of a [Cash Management Bank] [Hedge Bank] under the terms of the Credit Agreement and is a [Cash Management Bank] [Hedge Bank] under the Credit Agreement and the other Loan Documents.

Delivery of an executed counterpart of a signature page of this notice by fax transmission or other electronic mail transmission (e.g. "pdf" or "tif") shall be effective as delivery of a manually executed counterpart of this notice.

A duly authorized officer of the undersigned has executed this notice as of the day and year set forth above.

______________________________,

as a [Cash Management Bank] [Hedge Bank]

By:______________________________

Name:____________________________

Title:_____________________________

EXHIBIT 11.06

[FORM OF] ASSIGNMENT AND ASSUMPTION

This Assignment and Assumption (this "Assignment and Assumption") is dated as of the Effective Date set forth below and is entered into by and between [the][each] Assignor identified in item 1 below ([the][each, an] "Assignor") and [the][each] Assignee identified in item 2 below ([the][each, an] "Assignee"). [It is understood and agreed that the rights and obligations of [the Assignors][the Assignees] hereunder are several and not joint.] Capitalized terms used but not defined herein shall have the meanings given to them in the Credit Agreement identified below (as amended, restated, extended, supplemented, increased or otherwise modified in writing from time to time, the "Credit Agreement"), receipt of a copy of which is hereby acknowledged by the Assignee. The Standard Terms and Conditions set forth in Annex 1 attached hereto are hereby agreed to and incorporated herein by reference and made a part of this Assignment and Assumption as if set forth herein in full.

For an agreed consideration, [the][each] Assignor hereby irrevocably sells and assigns to [the Assignee][the respective Assignees], and [the][each] Assignee hereby irrevocably purchases and assumes from [the Assignor][the respective Assignors], subject to and in accordance with the Standard Terms and Conditions and the Credit Agreement, as of the Effective Date inserted by the Administrative Agent as contemplated below (i) all of [the Assignor's][the respective Assignors'] rights and obligations in [its capacity as a Lender][their respective capacities as Lenders] under the Credit Agreement and any other documents or instruments delivered pursuant thereto in the amount[s] and equal to the percentage interest[s] identified below of all the outstanding rights and obligations under the respective facilities identified below (including, without limitation, the Letters of Credit and the Swing Line Loans included in such facilities) and (ii) to the extent permitted to be assigned under applicable law, all claims, suits, causes of action and any other right of [the Assignor (in its capacity as a Lender)][the respective Assignors (in their respective capacities as Lenders)] against any Person, whether known or unknown, arising under or in connection with the Credit Agreement, any other documents or instruments delivered pursuant thereto or the loan transactions governed thereby or in any way based on or related to any of the foregoing, including, but not limited to, contract claims, tort claims, malpractice claims, statutory claims and all other claims at law or in equity related to the rights and obligations sold and assigned pursuant to clause (i) above (the rights and obligations sold and assigned by [the][any] Assignor to [the][any] Assignee pursuant to clauses (i) and (ii) above being referred to herein collectively as [the][an] "Assigned Interest"). Each such sale and assignment is without recourse to [the][any] Assignor and, except as expressly provided in this Assignment and Assumption, without representation or warranty by [the][any] Assignor.

1. Assignor[s]: ______________________________

____
[Assignor [is] [is not] a Defaulting Lender]

2. Assignee[s]: ______________________________

____
[for each Assignee, indicate [Affiliate][Approved Fund] of [identify Lender]]

3. Borrower: Ciner Wyoming LLC, a Delaware limited liability company

4. Administrative Agent: Bank of America, N.A., as the administrative agent under the Credit Agreement

5. Credit Agreement: Credit Agreement, dated as of October 28, 2021, among the Borrower, the Guarantors identified therein, the Lenders from time to time party thereto and Bank of America, N.A., as Administrative Agent

6. Assigned Interest[s]:

Assignor[s]	Assignee[s]	Facility Assigned	Aggregate Amount of Revolving Commitment/Loans for all Lenders[1]	Amount of Revolving Commitment/ Loans Assigned	Percentage Assigned of Revolving Commitment/ Loans[2]	CUSIP Number
		________	$________________	$_________	____________%	
		________	$________________	$_________	____________%	
		________	$________________	$_________	____________%	

[7. Trade Date: ___________________][3]

Effective Date: __________________, 20__ [TO BE INSERTED BY THE ADMINISTRATIVE AGENT AND WHICH SHALL BE THE EFFECTIVE DATE OF RECORDATION OF TRANSFER IN THE REGISTER THEREFOR.]

The terms set forth in this Assignment and Assumption are hereby agreed to:

ASSIGNOR[S]

[NAME OF ASSIGNOR]

By: ______________________________
Name:
Title:

ASSIGNEE[S]

[NAME OF ASSIGNEE]

By: ______________________________
Name:
Title:

---

[1] Amounts in this column and in the column immediately to the right to be adjusted by the counterparties to take into account any payments or prepayments made between the Trade Date and the Effective Date.

[2] Set forth, to at least 9 decimals, as a percentage of the Commitment/Loans of all Lenders thereunder.

[3] To be completed if the Assignor and the Assignee intend that the minimum assignment amount is to be determined as of the Trade Date.

[Consented to and][4] Accepted:

BANK OF AMERICA, N.A., as Administrative Agent

By: ____________________________
Name:
Title:

[Consented to:][5]

[BANK OF AMERICA, N.A., as L/C Issuer and Swing Line Lender]

By: ____________________________
Name:
Title:

[CINER WYOMING LLC, a Delaware limited liability company]

By: ____________________________
Name:
Title:

---

[4] To be added only if the consent of the Administrative Agent is required by the terms of the Credit Agreement.

[5] To be added only if the consent of the Borrower and/or other parties (e.g. Swing Line Lender, L/C Issuer) is required by the terms of the Credit Agreement.

ANNEX 1 TO ASSIGNMENT AND ASSUMPTION

STANDARD TERMS AND CONDITIONS FOR

ASSIGNMENT AND ASSUMPTION

1. Representations and Warranties.

1.1. Assignor. [The][Each] Assignor (a) represents and warrants that (i) it is the legal and beneficial owner of [the][[the relevant] Assigned Interest, (ii) [the][such] Assigned Interest is free and clear of any lien, encumbrance or other adverse claim, (iii) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby and (iv) it is [not] a Defaulting Lender; and (b) assumes no responsibility with respect to (i) any statements, warranties or representations made in or in connection with the Credit Agreement or any other Loan Document, (ii) the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Loan Documents or any collateral thereunder, (iii) the financial condition of the Borrower, any of its Subsidiaries or Affiliates or any other Person obligated in respect of any Loan Document or (iv) the performance or observance by the Borrower, any of its Subsidiaries or Affiliates or any other Person of any of their respective obligations under any Loan Document.

1.2. Assignee. [The][Each] Assignee (a) represents and warrants that (i) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby and to become a Lender under the Credit Agreement, (ii) it meets all the requirements to be an assignee under Section 11.06(b) of the Credit Agreement (subject to such consents, if any, as may be required under Section 11.06(b)(iii) of the Credit Agreement), (iii) from and after the Effective Date, it shall be bound by the provisions of the Credit Agreement as a Lender thereunder and, to the extent of [the][the relevant] Assigned Interest, shall have the obligations of a Lender thereunder, (iv) it is sophisticated with respect to decisions to acquire assets of the type represented by [the][such] Assigned Interest and either it, or the Person exercising discretion in making its decision to acquire [the][such] Assigned Interest, is experienced in acquiring assets of such type, (v) it has received a copy of the Credit Agreement, and has received or has been accorded the opportunity to receive copies of the most recent financial statements delivered pursuant to Section 7.01(a) or (b) thereof, as applicable, and such other documents and information as it deems appropriate to make its own credit analysis and decision to enter into this Assignment and Assumption and to purchase [the][such] Assigned Interest, (vi) it has, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Assignment and Assumption and to purchase [the][such] Assigned Interest, (vii) if it is a Foreign Lender, attached hereto is any documentation required to be delivered by it pursuant to the terms of the Credit Agreement, duly completed and executed by [the][such] Assignee, and (viii) it is not a Competitor or a Defaulting Lender; and (b) agrees that (i) it will, independently and without reliance upon the Administrative Agent, [the][any] Assignor or any other Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Loan Documents, and (ii) it will perform in accordance with their terms all of the obligations which by the terms of the Loan Documents are required to be performed by it as a Lender.

2. Payments. From and after the Effective Date, the Administrative Agent shall make all payments in respect of [the][each] Assigned Interest (including payments of principal, interest, fees and other amounts) to [the][the relevant] Assignor for amounts which have accrued to but excluding the Effective Date and to [the][the relevant] Assignee for amounts which have accrued from and after the Effective Date.

3. General Provisions. This Assignment and Assumption shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and assigns. This Assignment and Assumption may be executed in any number of counterparts, which together shall constitute one instrument. Delivery of an executed counterpart of a signature page of this Assignment and Assumption by fax transmission or other electronic mail transmission (e.g. "pdf" or "tif") shall be effective as delivery of a manually executed counterpart of this Assignment and Assumption. This Assignment and Assumption and any claims, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Assignment and Assumption shall be governed by, and construed in accordance with, the law of the State of New York.

FIRST AMENDMENT TO CREDIT AGREEMENT

THIS FIRST AMENDMENT TO CREDIT AGREEMENT (this "Amendment") dated as of December 17, 2021 is by and among CINER WYOMING LLC, a Delaware limited liability company (the "Borrower"), the Guarantors from time to time party hereto (together with the Borrower, the "Loan Parties"), the Lenders identified on the signature pages hereto and BANK OF AMERICA, N.A., as Administrative Agent.

WITNESSETH

WHEREAS, the Loan Parties entered into that certain Credit Agreement dated as of October 28, 2021, as amended, modified, supplemented, increased and extended from time to time, the "Credit Agreement"), with the Lenders from time to time party thereto and Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer.

WHEREAS, the Loan Parties have requested certain modifications to the Credit Agreement and the Lenders, by action of the Required Lenders, have agreed to the requested modifications on the terms and conditions set forth herein.

NOW, THEREFORE, IN CONSIDERATION of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Defined Terms. Capitalized terms used herein but not otherwise defined herein shall have the meanings provided to such terms in the Credit Agreement.

2. Amendments.

(a) The definition of "Change of Control" in Section 1.01 of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

"Change of Control" means (a) prior to the Sisecam Purchase, an event or series of events by which, except as a result of a Foreclosure Event, the Specified Owners cease at any time to (i) own and control, of record and beneficially, directly or indirectly, at least fifty-one percent (51%) of the Voting Equity Interests in the Borrower or (ii) have the ability to elect a majority of the board of directors, board of managers or equivalent governing body of the Borrower and (b) upon the occurrence of the Sisecam Purchase and thereafter, an event or series of events by which, Sisecam and/or the Specified Owners (individually or collectively), cease(s) at any time to have the ability to elect a majority of the board of directors, board of managers or equivalent governing body of the Borrower; provided that any such cessation solely as a result of a Foreclosure Event shall not constitute a "Change of Control".

(b) In Section 1.01 of the Credit Agreement, the definition of "Foreclosure Event" is amended and restated in its entirety to read as follows

"Foreclosure Event" means, (a) prior to the Sisceam Purcahse, any foreclosure upon, and or involuntary sale or other transfer of direct or indirect ownership in the Borrower that causes the Specified Owners to cease to (i) own and control, of record and beneficially, directly or indirectly at least fifty-one percent (51%) of the Voting Equity Interests in the Borrower or (ii) have the ability to elect a majority of the board of directors, board of managers or equivalent governing body of the Borrower and (b) after the Sisecam Purchase, any foreclosure upon, and or involuntary sale or other

transfer of direct or indirect ownership in the Borrower that causes Sisecam and/or the Specified Owners (individually or collectively) to cease at any time to have the ability to elect a majority of the board of directors, board of managers or equivalent governing body of the Borrower.

(c) The following definitions are hereby added to Section 1.01 of the Credit Agreement in appropriate alphabetical order:

"Sisecam" shall mean Turkiye Sise ve Cam Fabrikalari A.S. and its wholly owned subsidiary, Sisecam Chemicals USA Inc.

"Sisecam Purchase" means the purchase, prior to March 31, 2022, of Voting Equity Interests from the Specified Owners (or one or more Persons owned by them, directly or indirectly) such that after giving effect thereto, Sisecam and the Specified Owners collectively have the ability to elect a majority of the board of directors, board of managers or equivalent governing body of the Borrower.

(d) In Section 8.03(e) of the Credit Agreement, the text "$50,000,000" is replaced with the text "$55,000,000".

3. Conditions Precedent. This Amendment shall become effective as of the date hereof upon receipt by the Administrative Agent of each of the items specifically listed below, all of which shall be in form and content reasonably acceptable to the Administrative Agent:

(a) counterparts of this Amendment signed by or on behalf of each party hereto or written evidence satisfactory to the Administrative Agent (which may include telecopy transmission of such signed signature page) that such party has signed a counterpart of this Amendment and the other Loan Documents to which such party is a party;

(b) receipt by the Administrative Agent and each Lender of all requested information in connection with applicable "know your customer" and anti-money-laundering rules and regulations, including, without limitation, the Patriot Act and, if any Loan Party qualifies as a "legal entity customer" under the Beneficial Ownership Regulation, a Beneficial Ownership Certification in relation to such Loan Party; and

(c) receipt by the Administrative Agent of all fees, expenses and other amounts due and payable on or prior to date hereof, including without limitation, reimbursement or payment of all out-of-pocket expenses of the Administrative Agent and the Arranger (including reasonable fees, charges and disbursements of counsel to the Administrative Agent and the Arranger) required to be reimbursed or paid by the Borrower hereunder, under any other Loan Document and under any agreement with the Administrative Agent or Arranger.

4. Representations and Warranties; No Default. Each Loan Party represents and warrants to the Administrative Agent that:

(a) The representations and warranties of the Loan Parties contained in the Credit Agreement or in any other Loan Document are true and correct on and as of the date hereof, except to the extent that such representations and warranties specifically refer to an earlier date, in which case such representations and warranties are true and correct as of such earlier date.

(b) No event which is, or with notice or lapse of time or both would be, a Default or an Event of Default under the Credit Agreement has occurred and is continuing.

(c) The Sisecam Purchase does not violate the terms, or create a default or conflict under, the Organization Documents of the Borrower, and all material third party consents and approvals, including the approvals of any applicable Governmental Authorities, necessary in connection with the Sisecam Purchase have been obtained or will have been obtained prior to consummation of the Sisecam Purchase, and all applicable waiting periods in connection with the Sisecam Purchase shall have expired without any action being taken by any authority that could restrain, prevent or impose any material adverse condition on the Sisecam Purchase.

5. Amendment is a "Loan Document". This Amendment shall be deemed to be, and is, a Loan Document and all references to a "Loan Document" in the Credit Agreement and the other Loan Documents (including, without limitation, all such references in the representations and warranties in the Credit Agreement and the other Loan Documents) shall be deemed to include this Amendment.

6. Reaffirmation of Obligations. Each Loan Party affirms all of its obligations under the Loan Documents and agrees that this Amendment does not operate to reduce or discharge its obligations under the Loan Documents.

7. No Other Changes. Except as modified hereby, all of the terms and provisions of the Loan Documents shall remain in full force and effect.

8. Counterparts; Delivery. This Amendment may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of this Amendment by facsimile or other electronic imaging means shall be effective as an original.

9. Governing Law. This Amendment shall be deemed to be a contract made under, and for all purposes shall be construed in accordance with, the laws of the State of New York.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed by their duly authorized officers as of the first day and year written above.

BORROWER:

CINER WYOMING LLC,
a Delaware limited liability company

By:______________________________
Name: Oguz Erkan
Title: President

ADMINISTRATIVE AGENT:

BANK OF AMERICA, N.A., as Administrative Agent

By:______________________________
Name: Christine Trotter
Title: Vice President

LENDERS:

BANK OF AMERICA, N.A.,
as a Lender, L/C Issuer and Swing Line Lender

By:______________________________
Name: Ryan Maples
Title: Senior Vice President

PNC BANK, NATIONAL ASSOCIATION,
as a Lender

By:______________________________
Name: Brandon K. Fiddler
Title: Senior Vice President

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed by their duly authorized officers as of the first day and year written above.

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CINER WYOMING LLC,
a Delaware limited liability company

By:____________________________
Name: Oguz Erkan
Title: President

ADMINISTRATIVE AGENT:

BANK OF AMERICA, N.A., as Administrative Agent

By: Christine Trotter
Name: Christine Trotter
Title: Vice President

LENDERS:

BANK OF AMERICA, N.A.,
as a Lender, L/C Issuer and Swing Line Lender

By:____________________________
Name: Ryan Maples
Title: Senior Vice President

PNC BANK, NATIONAL ASSOCIATION,
as a Lender

By:____________________________
Name: Brandon K. Fiddler
Title: Senior Vice President

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed by their duly authorized officers as of the first day and year written above.

BORROWER:

CINER WYOMING LLC,
a Delaware limited liability company

By:__________________________
Name:
Title:

ADMINISTRATIVE AGENT:

BANK OF AMERICA, N.A., as Administrative Agent

By:__________________________
Name:
Title:

LENDERS:

BANK OF AMERICA, N.A.,
as a Lender, L/C Issuer and Swing Line Lender

By: Ryan Maples
Name: Ryan Maples
Title: Senior Vice President

PNC BANK, NATIONAL ASSOCIATION,
as a Lender

By: [signature]
Name: Brandon K. Fiddler
Title: Senior Vice President

This Equipment Security Note No. 002, dated as of December 17, 2021 (this **"Equipment Note"**), is entered into pursuant to and incorporates by this reference all of the terms and provisions of that certain Master Loan and Security Agreement No. 49660-70000 dated as of March 25, 2020 (the "**Master Agreement**"), by and between **Banc of America Leasing & Capital, LLC** ("**Lender**") and Ciner Wyoming LLC ("**Borrower**"). All capitalized terms used herein and not defined herein shall have the respective meanings assigned to such terms in the Master Agreement. If any provision of this Equipment Note conflicts with any provision of the Master Agreement, the provisions contained in this Equipment Note shall prevail. Borrower hereby authorizes Lender to insert the serial numbers and other identification data of the Equipment, dates, and other omitted factual matters or descriptions in this Equipment Note.

The occurrence of an "**Event of Default**," as defined in the Master Agreement, shall entitle Lender to accelerate the maturity of this Equipment Note and to declare the Prepayment Amount to be immediately due and payable, and to proceed at once to exercise each and every one of the remedies provided in the Master Agreement or otherwise available at law or in equity. All of Borrower's Obligations under this Equipment Note are absolute and unconditional, and shall not be subject to any offset or deduction whatsoever. Borrower waives any right to assert, by way of counterclaim or affirmative defense in any action to enforce Borrower's Obligations hereunder, any claim whatsoever against Lender.

1. Equipment Financed; Equipment Location; Grant of Security Interest. Subject to the terms and provisions of the Master Agreement and as provided herein, Lender is providing financing in the principal amount described in Section 2 below to Borrower in connection with the acquisition or financing of the following described Equipment:

Quantity	Description	Serial Number	Cost

See Exhibit A attached hereto and made a part thereof

Location of Equipment. The Equipment will be located or (in the case of over-the-road vehicles) based at the following locations:

Location	Address	City	County	State	ZIP
A	254 County Road 4-6	Green River	Sweetwater	WY	82935

Borrower has agreed and does hereby grant a security interest in and to the Equipment and the Collateral related thereto, whether now owned or hereafter acquired and wherever located, in order to secure the payment and performance of all Obligations owing to Lender, including but not limited to this Equipment Note, all as more particularly provided in the Master Agreement. Lender's agreement to provide the financing contemplated herein shall be subject to the satisfaction of all conditions established by Lender and Lender's prior receipt of all required documentation in form and substance satisfactory to Lender in its sole discretion.

2. Payments. For value received, Borrower promises to pay to the order of Lender, the principal amount of $29,000,000.00, together with interest thereon as provided herein. This Equipment Note shall be payable by Borrower to Lender in sixty consecutive monthly installments of principal and interest (the "**Payments**") commencing on January 17, 2022 (the "**Initial Payment**") and continuing thereafter through and including the Maturity Date (as defined below) (collectively, the "**Equipment Note Term**"). Each Payment shall be in the amount provided below, and due and payable on the same day of the month as the Initial Payment set forth above in each succeeding payment period (each, a "**Payment Date**" and the final such scheduled Payment Date, the "**Maturity Date**") during Equipment Note Term. All interest hereunder shall be calculated on the basis of a year of 360 days comprised of 12 months of 30 days each. The final Payment due and payable on the Maturity Date shall in any event be equal to the entire outstanding and unpaid principal amount of

this Equipment Note, together with all accrued and unpaid interest, charges and other amounts owing hereunder and under the Master Agreement.

(a) **Interest Rate.** Interest shall accrue on the entire principal amount of this Equipment Note outstanding from time to time at a fixed rate of two and 4207/10000 percent (2.4207%) per annum or, if less, the highest rate of interest permitted by applicable law (the "**Interest Rate**"), from the Advance Date set forth below until the principal amount of this Equipment Note is paid in full, and shall be due and payable on each Payment Date.

(b) **Payment Amount.** The principal and interest amount of each Payment shall be $513,659.61.

3. **Prepayment.** Borrower may prepay all (but not less than all) of the outstanding principal balance of this Equipment Note on a scheduled Payment Date occurring after one (1) year from the date hereof upon 30 days prior written notice from Borrower to Lender, provided that any such prepayment shall be made together with (a) all accrued interest and other charges and amounts owing hereunder through the date of prepayment, and (i) two and one half percent (2.5%) of the amount prepaid after the first anniversary hereof, (ii) two percent (2%) of the amount prepaid after the second anniversary hereof, (iii) one and one-quarter percent (1.25%) of the amount prepaid after the third anniversary, (iv) one half percent (0.5%) of the amount prepaid after the fourth anniversary; provided, however, that if any prepayment of this Equipment Note is made following an Event of Default, by reason of acceleration or otherwise, the prepayment charge shall be calculated based upon the full original Equipment Note Term.

4. **Additional Provisions**. Upon the occurrence of full payoff of Equipment Security Note No. 001 dated as of March 25, 2020 under the Master Agreement, Borrower shall simultaneously pay, in full, the outstanding amount of this Equipment Note. Further, Borrower hereby grants to Lender a security interest in all Collateral securing Note 001 to secure Borrower's Obligations under this Equipment Note.

5. **Borrower Acknowledgements.** Upon delivery and acceptance of the Equipment, Borrower shall execute this Equipment Note evidencing the amounts financed by Lender in respect of such Equipment and the Payments of principal and interest hereunder. By its execution and delivery of this Equipment Note, Borrower:

(a) reaffirms all of Borrower's representations, warranties and covenants as set forth in the Master Agreement and represents and warrants that no Default or Event of Default under the Master Agreement exists as of the date hereof;

(b) represents, warrants and agrees that: (i) the Equipment has been delivered and is in an operating condition and performing the operation for which it is intended to the satisfaction of Borrower; (ii) each item of Equipment has been unconditionally accepted by Borrower for all purposes under the Master Agreement and this Equipment Note; and (iii) there has been no material adverse change in the operations, business, properties or condition, financial or otherwise, of Borrower or any Guarantor since December 31, 2020;

(c) authorizes and directs Lender (i) to advance the principal amount of this Equipment Note to reimburse Borrower or pay Vendors all or a portion of the purchase price of Equipment in accordance with Vendors' invoices therefor, receipt and approval of which are hereby reaffirmed by Borrower, and (ii) to enter the date of such advance below Lender's signature as the "Advance Date" for all purposes hereof; and

(d) agrees that Borrower is absolutely and unconditionally obligated to pay Lender all Payments at the times and in the manner set forth herein.

This Note and any other documents or instruments executed by either party in connection herewith (collectively the "Documents"), may be executed and delivered by facsimile signature or other electronic or digital means (including without limitation Adobe's Portable Document Format ("PDF")). Any such signature shall be of the same force and effect as an original signature, it being the express intent of the parties to create a valid and legally enforceable contract between them. The exchange and delivery of the Documents and the related signature pages via facsimile or as an attachment to electronic mail (including in PDF) shall constitute effective execution and delivery by the parties and may be used by the parties for all purposes. Notwithstanding the foregoing, at the request of either party, the parties hereto agree to exchange inked original replacement signature pages as soon thereafter as reasonably practicable.

BANC OF AMERICA LEASING & CAPITAL, LLC

By:

Printed Name: Alison R Hook
Senior Vice President

Title:

Advance Date: December 17, 2021

CINER WYOMING LLC

By:

Printed Name: Oguz Erkan

Title: President

Exhibit A
CINER WYOMING LLC
49860-70000-002

Project Description	Total Project Costs
Switchhouse #4 * - Project: GRV60-2019; **Manufacturer: Bodec Electric** Model: (QT-29-043020_CinerNPI); Bodec PO Conduit Swab 0151-013125; Serial No: N/A	$11,093,371
Big Island Rail Yard proposal - Watco Construction - 21-104-Ciner_WY_Yard_Exp_Bid_comp_20210528; **Manufacturer: Jfc Engineers and Surveyors**, Serial No: N/A, Model: N/A; track work, site work, engineering & project Management, site & rail engineering, permitting and geotech	$2,946,663
Hoist #3 Upgrade* Manufacturer: ABB Inc., Serial No: N/A, Model: N/A, Vibration Sensor, AC Single drives mounted in IP42 cabinets, AXR 450MN6, A - ACS-Controlled Motor, 373 kW, Motor mounting accessories; Manufacturer: BODEC Electric, Mobilization, conduit and wire in place, cut over, Serial No: N/A, Model: N/A; Manufacturer: Seppie Tele-Communications, Labor, travel, Model: N/A, Serial No: N/A	$2,070,000
Shaft Gas Heaters & Ventilation Fan * **Manufacturer:** Miller, Labor, Ventilation Fan & installation w Ductwork, Shaft #2 Heaters, Surface Site Drainage, Engineering & Project Management, DModel: N/A, Serial No: N/A; **Manufacturer: ABB Inc.**, Shaft #4 Construction, Pilot Hole, Collar, Raise Bore, Ventillation Fan Install with Ductwork; Shaft #2 Heaters, Surface Site Drainage; Engineering & Project Mgmt, Dewatering Well & Pump, Project Demolization, Model: N/A, Serial No: N/A; **Manufacturer: BODEC**, 3 Hoist Mag Sensors, Model: N/A, Serial No: N/A; **Manufacturer: Dorsey & Whitney LLP**, Legal Services, Model: N/A, Serial No: N/A	$11,728,475
Mine Crusher Area Dust Mitigation 2021 (new fan, vacuum equipment, stoppings etc.,)- ** **Manufacturer: Gms Mine Repair and Maintenance Inc, Part Nos:** WYBH200, WYBH250, WYCL100, WYCL150, WYUGF100, WYUGF150, **Model: N/A, Serial No: N/A; Manufacturer: JJC FABRICATION & MINE MAINTENANCE,** 16921 - C-4 Regulator with Flame resistant pain on wood - Regulator; 17021 - C8B to Regulator with Flame Resistant paint on wood - dual regulator- pipe &slat, 17021-1-CO#2 Modification to vent tube, Model: N/A, Serial No: N/A	$608,000
TX11 Transformer Replacement - ****Manufacturer: Virginia Transformer Corp** -LIQ 13000/14560/17290/19364/21612/24206 KVA-UNIT A, Model: N/A, **Serial No:** 46013MA007; **Manufacturer: EMS Services**, relay retrofit engineering; **BODEC** Labor, Model: N/A, Serial No: N/A	$600,000
Surface Mobile Equipment (Bobcats, excavators, etc) - ****Manufacturer: BOBCAT OF CASPER**, 2019 BOBCAT V23, TIER 4, Model: N/A, S/N# 84C317054, PALLETFORK, 44 WIDE FLOATING SN#ANWV01441, BOBCAT BUCKET, 93 GENERAL PURPOSE SN#AKJP00838, BOBCAT 96" GRAPPLE BUCKET, SN#B4D200138; **Manufacturer: FIRST CHOICE FORD**, 2020 Ford F250, VIN: 1FDBF2B62LED51001; **Manufacturer: FIRST CHOICE FORD**, 1FDBF2B64LED51002; **Manufacturer: ROCK SPRINGS TOYOTA**, 2020 Toyota, 3TMCZ5AN4LM312253; **Manufacturer: WYOMING MACHINERY COMPANY**, Skid Steer Loader, Serial No: HA601643, model B6S HAMMER, 7000LB Diesel Tier 4, Serial No: AT14G50277	$604,505
	$29,651,014
Reimbursement Total	$29,000,000

Bank of America®

Banc of America Leasing and Capital, LLC

Amendment Number 001 to Equipment Security Note Number 001

This Amendment Number 001, dated as of December 17, 2021, to Equipment Security Note Number 001 dated as of March 25, 2020 ("Note 001"), to Master Loan and Security Agreement No. 49660-70000 dated as of March 25, 2020, as amended (the "MLSA") between Banc of America Leasing & Capital, LLC ("Lender") and Ciner Wyoming LLC ("Borrower").

W I T N E S S E T H :

WHEREAS, Lender and Borrower are parties to Note 001; and

WHEREAS, Lender and Borrower desire to amend Note 001 to add additional provisions thereto.

NOW, THEREFORE, in consideration of the premises and the mutual obligations herein contained, and for the other good and valuable consideration, the receipt whereof is hereby acknowledged, the parties hereto agree to add the following provisions as follows:

1. Upon the occurrence of an early full payoff of Equipment Security Note No. 002 dated as of December 17, 2021, Borrower shall simultaneously pay, in full, the outstanding amount of Note 001.
2. Borrower hereby grants to Lender a security interest in all "Collateral" (as defined in the MLSA) securing Note 002 to secure Borrower's "Obligations" (as defined in the MLSA) under Note 001.

IN WITNESS WHEREOF, the parties hereunto have caused this instrument to be executed by their duly authorized officers as of the day and year first above written.

Banc of America Leasing and Capital, LLC (Lender)	Ciner Wyoming LLC (Borrower)
By: ______________________	By:
Printed Name: ______________________	Printed Name: Oguz Erkan
Title: ______________________	Title: President

Bank of America
Banc of America Leasing & Capital, LLC

Amendment Number 003
To Master Loan and Security Agreement No. 49660-70000

This Amendment Number 003 dated as of October 28, 2021 (this "Amendment"), to Master Loan and Security Agreement No. 49660-70000 dated as of March 25, 2020, as amended (the "Agreement"), between Banc of America Leasing & Capital, LLC ("Lender") and Ciner Wyoming LLC ("Borrower").

WITNESSETH:

WHEREAS, Lender and Borrower are parties to the Agreement; and

WHEREAS, Lender and Borrower desire to amend a certain provision of the Agreement;

NOW, THEREFORE, in consideration of the premises and the mutual obligations hereinafter contained, and for the other good and valuable consideration, the receipt whereof is hereby acknowledged, the parties hereto agree to amend the Agreement as follows:

1. The second paragraph to Section 8 is hereby deleted in its entirety, and replaced with the following:

All covenants of Borrower that are based upon a specified level or ratio relating to assets, liabilities, indebtedness, rentals, net worth, cash flow, earnings, profitability, or any other accounting-based measurement or test, now or hereafter existing (collectively, the "Additional Covenants"), in that certain Credit Agreement dated as of October 28, 2021, by and among Borrower, Bank of America, N.A., et al, or in any replacement credit facility accepted in writing by Lender between Borrower and a United States national banking association or other financial institution (a "Bank Facility"), are hereby incorporated into and made a part of this Agreement (with such adjustments to defined terms as may be necessary to assure consistency) without modification or amendment unless specifically accepted and approved in writing by Lender. Borrower acknowledges and agrees that (i) the Additional Covenants in the form included in the existing Bank Facility shall be deemed to be permanently incorporated into this Agreement, and shall remain in effect for all purposes of this Agreement notwithstanding the cancellation or termination of a Bank Facility due to voluntary prepayment, payment at maturity, default or otherwise, unless a replacement credit facility with Additional Covenants has been accepted in writing by Lender in its sole discretion prior to the effective date of such cancellation or termination of such Bank Facility, and (ii) any waiver of any breach (or anticipated breach) of any Additional Covenant under the Bank Facility (by reason of amendment, forbearance or otherwise) shall not constitute a waiver of the corresponding default (or anticipated default) under this Agreement unless specifically agreed to in writing by Lender. Borrower hereby certifies that Lender has been furnished a true, correct and complete copy of all documentation concerning the existing Bank Facility, and further covenants and agrees to promptly provide Lender: (a) certified copies of true, correct and complete documentation of any other Bank Facility in effect from time to time, and any all proposed amendments and modifications to any Bank Facility; (b) notices of any event of default or other condition of non-compliance issued to Borrower in connection with a Bank Facility; (c) any certificates of compliance and supporting information and reports in the form required pursuant to a Bank Facility as they pertain to the Additional Covenants, and shall continue to provide the same to Lender notwithstanding the cancellation or other termination of such Bank Facility for so long as any Obligations owing to Lender remain outstanding in connection with this Agreement; and (d) prior written notice of the cancellation or termination of a Bank Facility for any reason. Borrower further acknowledges and agrees that any event of default under a Bank Facility shall constitute an Event of Default under this Agreement.

2. Except as amended hereby, the Agreement shall remain in full force and effect and is in all respects hereby ratified and affirmed. Capitalized terms not otherwise defined herein shall have the meanings ascribed them in the Agreement.

IN WITNESS WHEREOF, the parties hereunto have caused this instrument to be executed by their duly authorized officers as of the day and year first above written.

Banc of America Leasing & Capital, LLC (Lender)	**Ciner Wyoming LLC (Borrower)**
By:	By:
Printed Name: Alison R Hook	Printed Name: Oguz Erkan
Title: Senior Vice President	Title: President

July 26, 2021

Eduard Freydel

Re: Confidential Separation Agreement and General Release

Dear Ed:

As you know, we have discussed your separation from Ciner Resources Corporation, a Delaware corporation (the "Company"), effective as of July 27, 2021 (the "Separation Date"). The Company and each of the Company's parents, whether direct or indirect (including Ciner Enterprises Inc., WE Soda Ltd., KEW Soda Ltd. and Akkan Enerji ve Madencilik Anonim Şirketi), the Company's subsidiaries, whether direct or indirect (including Ciner Resource Partners LLC, Ciner Resources LP and Ciner Wyoming LLC), the Company's affiliates and related companies (including Imperial Natural Resources Trona Mining Inc., Mining Minerals and Chemicals Ltd., Imperial Mining Minerals and Chemicals Trading UK Ltd., Mining Mineral Commodity Trading LLC and Park Holding A.S.) and Mr. Turgay Ciner are referred to in this Agreement collectively as the "Company Group." The Company proposes the following separation agreement (the "Agreement"):

1. Consideration. Subject to your compliance with the terms and conditions of this Agreement, including, without limitation, the general release in Section 4 and the restrictive covenants set forth herein, the Company will provide you with the following payments and benefits:

(a) The Company will pay you the gross amount of $490,585.15, which will be subject to applicable withholdings and other deductions the Company is required by law to make from wage payments and will be paid in a lump sum on the Company's next scheduled pay period that is at least five (5) business days after the Effective Date (as defined below).

(b) The Company will pay for 6 months (180 days) of outplacement services through Right Management, provided that such services commence on or before October 1, 2021.

(c) Taxes. You acknowledge that you are solely and entirely responsible for the payment and discharge of your federal, state, and local taxes, in relation to the payments made by the Company under this Agreement and that no member of the Company Group has provided you with tax advice in relation to this Agreement.

The payments and benefits described in Sections 1(a) through 1(c) above encompass and are in lieu of any and all other payments and benefits that may be owed to you except as expressly stated in this Agreement or as otherwise required by law. You understand and agree that you would not be entitled to receive the payments and benefits described above absent your execution of this Agreement and your fulfillment of the promises it contains, including, without limitation, the general release in Section 4 and the restrictive covenants set forth herein.

2. Vacation. The Company and you acknowledge that you have certain amounts of unused vacation days as of the Separation Date, which will be paid to you (less applicable withholdings and other deductions the Company is required by law to make from wage payments) as part of the lump sum payment set forth in Section 1(a) herein.

3. Employee Benefit Plans. To the extent waivable under law, you hereby waive any rights to continue to be covered under, or participate in, the Company's benefit plans; *provided*, that nothing in this Section 3 will affect your rights to purchase health insurance coverage at your cost pursuant to the Consolidated Omnibus Budget Reconciliation Act, as amended ("COBRA"), and *provided*, further, that nothing in this Section 3 will affect your rights to any vested benefits (if any) under the Company's benefit plans, which will be governed by the terms and conditions of the applicable plans.

4. General Release.

(a) In consideration of the benefits provided under this Agreement, you and your heirs, executors, representatives, administrators, agents and assigns irrevocably and unconditionally fully and completely waive, release and discharge each member of the Company Group, and each of their respective current and former officers, directors, equityholders, managers, members, employees, agents, employee benefit plans and fiduciaries, insurers, attorneys, agents, predecessors, successors and assigns (each a "Released Party" and collectively, the "Released Parties"), collectively, separately, and severally, of and from any and all claims, demands, damages, causes of action, debts, liabilities, controversies, judgments, and suits of every kind and nature whatsoever, known or unknown, which you have had, now have, or may have against the Released Parties (or any of them) from the beginning of time through the date you sign this Agreement, with the exception of any claims that cannot legally be waived by private agreement. Subject to the limitations in the immediately preceding sentence, this general release of claims includes:

(i) all claims arising under any federal, state or local statute or ordinance, constitutional provision, public policy or common law, including all claims under Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, the Equal Pay Act, the Civil Rights Act of 1866, the Civil Rights Act of 1871, Executive Order 11246, the Employee Retirement Income Security Act (excluding any claim for accrued, vested benefits under any employee benefit pension plan of the Company in accordance with the terms and conditions of such plan and applicable law), the Consolidated Omnibus Budget Reconciliation Act, the Americans with Disabilities Act, the Vietnam Era Veteran Readjustment Assistance Act, the Rehabilitation Act, the Family and Medical Leave Act of 1993, the Worker Adjustment and Retraining Notification Act, 31 U.S.C. § 3730(h), Genetic Information Nondiscrimination Act ("GINA"), the anti-retaliation provisions of Section 21F of the Securities Exchange Act of 1934, the Fair Labor Standards Act, 29 U.S.C. § 201, *et seq.*, the Equal Pay Act, 29 U.S.C. §201 *et seq.*, the Lilly Ledbetter Fair Pay Act, the Georgia Equal Pay Act, the Georgia Prohibition of Age Discrimination in Employment Act, and the Georgia Equal Employment for People with Disabilities Code, all as amended and includes all rules and regulation issued; all claims arising under laws relating to violation of public policy, retaliation, or interference with legal rights (including, without limitation, retaliation or interference with the right to file or pursue a claim for workers' compensation benefits); and all claims arising under other discrimination or whistleblower laws;

(ii) all claims for compensation of any type whatsoever, including but not limited to claims for wages, bonuses, commissions, incentive compensation, vacation and/or severance;

(iii) all claims arising under tort, contract and/or quasi-contract law, including

but not limited to claims of breach of any express or implied contract, breach of the covenant of good faith and fair dealing, promissory estoppel, tortious interference, personal injury, wrongful or retaliatory discharge, fraud, defamation, slander, libel, invasion of privacy, false imprisonment, negligent or intentional infliction of emotional distress; and

(iv) all claims for monetary or equitable relief, including but not limited to attorneys' fees, back pay, front pay, reinstatement, experts' fees, medical fees or expenses, costs and disbursements.

(b) The general release set forth above includes a release of any claims you may have against any of the Released Parties under the Age Discrimination in Employment Act, as amended (the "ADEA"). You have twenty-one (21) calendar days from the date this Agreement was initially delivered to you to decide whether to sign it (the "Consideration Period"). If you decide to sign this Agreement before the expiration of the Consideration Period, which is solely your choice, you represent that your decision is knowing and voluntary. You further understand and acknowledge that (a) you have carefully read this Agreement in its entirety; (b) you have had an opportunity to consider fully the terms of this Agreement for at least twenty-one (21) calendar days before signing it and that you may use as much of this period as you wish prior to signing it; (c) you have been advised by the Company in writing to consult with an attorney of your choosing in connection with this Agreement; (d) you fully understand the significance of all of the terms and conditions of this Agreement; (e) you have discussed this Agreement with your independent legal counsel, or have had a reasonable opportunity to do so; (f) you have had answered to your satisfaction all questions you have asked with regard to the meaning and significance of each of the provisions of this Agreement; and (g) you assent to all the terms and conditions contained herein. You agree that any discussions regarding the terms and conditions of this Agreement, or any revisions made to this Agreement after it was initially delivered to you were either not material or were requested by you, and do not restart the Consideration Period.

(c) You may revoke this Agreement within seven (7) calendar days after you have signed it. This Agreement will not become effective or enforceable until the eighth (8th) calendar day after you have signed this Agreement without having revoked it (the "Effective Date"). In the event you choose to revoke this Agreement, you must notify the Company in writing addressed to the Company's designated agent for this purpose: Marla Nicholson, Vice President, General Counsel & Secretary, Ciner Resources Corporation, Five Concourse Parkway, Suite 2500, Atlanta, Georgia 30328. Any such revocation must be delivered to the Company at the foregoing address in a manner calculated to ensure receipt prior to 11:59 p.m. on the day prior to the Effective Date.

5. Covenant Not to Sue. Except for an action brought to enforce this Agreement or to challenge the validity of your release of claims under the ADEA, to the fullest extent permitted by law, you agree to refrain from initiating or participating in any proceeding of any kind against any of the Released Parties relating to matters released in this Agreement. If any such proceeding has been initiated by you or on your behalf, you agree to use your best efforts to cause it immediately to be withdrawn and dismissed with prejudice. Nothing in this Agreement prohibits you from filing a charge with or participating in an investigation or proceeding by the United States Equal Employment Opportunity Commission or any other governmental agency. However, you hereby irrevocably and unconditionally waive and relinquish any right to seek or recover any individual relief (including any money damages, reinstatement or other legal or equitable relief) for or on account of any of the claims released in this Agreement through any charge, complaint, lawsuit or other proceeding, whether commenced or maintained by you or by any other Person. For purposes of this Agreement, "Person" means an individual, a company, a corporation, an association, a partnership (whether general or limited), a joint venture, a limited liability company or partnership, an unincorporated trade or business enterprise, a trust, an estate, or a government (national, regional or local) or an agency, instrumentality or official thereof.

6. Representations. You represent and warrant that (a) you have been properly paid for all hours worked and you have received all wages, bonuses, vacation pay and other benefits and compensation due (if any) from the Company; (b) you have returned all Company Group property in your possession or control and you have permanently deleted any Confidential Information (as defined below) stored on any networks, computers or information storage devices that are not owned by any member of the Company Group but within your possession or control; (c) you have suffered no harassment, retaliation, employment discrimination, or work-related injury or illness while employed by the Company; (d) you are not aware of any activity by the Company or any other Released Party that you believe to be unlawful or potentially unlawful; (e) you have filed no claim, charge, suit or other action or proceeding against the Company or any other Released Party; and (f) you have not sold, assigned, transferred, conveyed or otherwise disposed of any of the claims, demands, obligations, or causes of action released in this Agreement.

7. Non-Disclosure of Confidential Information.

(a) You acknowledge that during the course of your employment with the Company, you had access to the Company's Confidential Information. For purposes of this Agreement, "Confidential Information" means all Trade Secrets and information, regardless of form, relating to the businesses of each member of the Company Group (regardless of whether the data or information constitutes a Trade Secret), that was disclosed to you or of which you became aware of as a consequence of your relationship with any member of the Company Group, that has value to any member of the Company Group, and is not generally known to the competitors of any member of the Company Group. "Trade Secrets" shall have the same meaning as provided in O.C.G.A. §§ 10-1-760, et seq. The Company's Confidential Information specifically includes all confidential and proprietary information of each member of the Company Group, and their respective lists of actual or prospective customers, details of customer contracts, current or anticipated customer requirements, pricing policies, price lists, sales, profits, sales margins, market studies, business plans, licensing strategies, advertising campaigns, operational methods, marketing strategies, product development techniques, computer software programs (including object code and source code), research and development, financial information, legal information, compensation data and other non-public personnel information including but not limited to sensitive information regarding employees such as health and social security information, any inventions, innovations, processes, techniques, works of authorship, developments, derivations, contributions, supplements, enhancements, copyrights, patents, trademarks, trade dress, service mark, and any other intellectual property right and modifications as well as any copies, adaptations, documentation, algorithms, notes, or records thereof, including, but not limited to, computer programs, including both source and object versions thereof, and attendant specifications and source code listings, authored, made, developed, or conceived of and reduced to practice by or under the direction of any member of the Company Group, during your employment with the Company and is not generally known to the public.

(b) You shall forthwith and no later than August 10, 2021, deliver to the Company all copies of the Confidential Information and all other property of each member of the Company Group, and not retain any Confidential Information of any member of the Company Group, in your possession or under your control, and you shall delete permanently all Confidential Information you have stored or that is accessible in electronic form.

(c) Except as required by law or in response to a lawfully issued subpoena or court order (in which case you agree to promptly notify the Company in advance in writing of any requested disclosure unless prohibited by law), you agree to hold in confidence all Confidential Information and to not, either directly or indirectly, use or disclose any Confidential Information to any Person without the prior written consent of the Company. Your obligations as set forth in this Section 7 are in addition to and not in lieu of any other obligations you may have to protect Confidential Information (including, but not

limited to, obligations arising under the Company's policies, ethical rules, and applicable law), and such obligations will continue for so long as the information in question continues to constitute Confidential Information.

(d) You shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret: (1) that is made in confidence to a Federal, State, or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, (2) that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal, (3) and if you file a lawsuit for retaliation by an employer for reporting a suspected violation of law, you may disclose the trade secret to your attorney and use the trade secret information in the court proceeding, if you file any document containing the trade secret under seal and do not disclose the trade secret, except pursuant to court order.

8. Confidentiality. To the fullest extent permitted by law, you agree that the existence and the terms of this Agreement are and shall be deemed to be fully confidential. You agree that you will not disclose any of the terms of this Agreement to any Person; except you are free to review and discuss this Agreement with your spouse, your accountant, your attorney, and tax advisor and to notify prospective and subsequent employers of the restrictive covenants provided in this Agreement in accordance with Section 20 hereof, each of whom must be informed by you of the confidentiality provisions of this Agreement. You are responsible for ensuring that all of the individuals to whom you have disclosed or will disclose the existence or terms of this Agreement abide by the confidentiality provisions contained herein.

9. Non-Disparagement. To the fullest extent permitted by law, you and anyone to whom you disclose the existing or any terms of the conditions of this Agreement, or the facts or circumstances of your employment with the Company and/or your separation therefrom, agree not to engage in any conduct that is injurious to the reputation or interests of any member of the Company Group, or any of their respective officers, directors, representatives, employees or agents, including not to make, publish or communicate to any Person or in any public forum (including social media) at any time any defamatory or disparaging remarks, comments, or statements concerning any member of the Company Group, their respective products or any of their respective officers, directors, representatives, employees, or agents. For purposes of this Agreement, the term "disparage" includes without limitation making any comments, written or oral, or statements to the press or other media or social media regarding any member of the Company Group, any director, officer, representative, employee or agent of any member of the Company Group, any Person with whom any member of the Company Group has a business relationship or any other third party which could adversely affect in any manner (a) the conduct of the business of any member of the Company Group or the business reputation of any member of the Company Group, any director, officer, representative, employee or agent thereof, or (b) the personal or professional reputation of any director, officer, representative, employee or agent of any member of the Company Group.

10. Restrictive Covenants.

(a) Non-Solicitation. You agree that for two (2) years after the Separation Date, you will not directly (or by assisting others) solicit, hire away, induce to leave employment with any member of the Company Group, or attempt to do so, any employee of any member of the Company Group with whom you worked in the past year.

(b) You agree not to use any of the Company's Confidential Information to directly or indirectly, engage in any of the activities prohibited by Section 10.

(c) You acknowledge that the compensation, specialized training, and the Confidential Information provided to you during your employment and good and valuable consideration provided as part

of this Agreement, which you hereby acknowledge, gives rise to the Company's interest in you agreeing to the restrictions stated in this Section 10, that they are designed to enforce such consideration and that any limitations as to time, geographic scope and scope of activity to be restrained as defined herein are reasonable and do not impose a greater restraint than is necessary to protect the goodwill or other business interests of the Company Group.

11. Injunctive Relief. You acknowledge that any breach of your obligations under Sections 7 through 10 of this Agreement would cause irreparable harm to the Company Group, the exact amount of which would be difficult to determine, and that the remedies at law for any such breach would be inadequate. Accordingly, you agree that, in addition to any other remedy that may be available to the Company, the Company shall be entitled to specific performance and injunctive relief, without posting bond or other security, to enforce or prevent any violation of such provisions. In any action for injunctive relief, the prevailing party will be entitled to collect reasonable attorneys' fees and other reasonable costs from the non-prevailing party.

12. Cooperation. To the fullest extent permitted by law, you agree to cooperate with the Company and be reasonably available to the Company with respect to continuing and/or future matters related to your employment period with the Company and/or its subsidiaries (including Ciner Resources LP and Ciner Wyoming LLC), including, without limitation, appearing at the Company's request to give truthful testimony without requiring service of a subpoena or other legal process.

13. No Admission of Liability. Each member of the Company Group and their respective directors, officers, representatives, employees and agents expressly deny that they have any liability to you, and this Agreement is not to be construed as an admission of any such liability.

14. Assignment. You may not assign this Agreement or any part hereof, and any purported assignment by you shall be null and void from the initial date of purported assignment. This Agreement shall be assignable by the Company and inure to the benefit of the Company and its successors and assigns.

15. Entire Agreement; Modification. This Agreement constitutes a single integrated contract expressing the entire agreement of the parties, and supersedes and replaces any and all other agreements, written or oral, express or implied, between you and the Company concerning the subject matter of this Agreement; provided, however, that this Agreement will not impact any vested benefits which will be governed by the applicable plans. No provision of this Agreement may be amended, changed, altered, or modified except in writing signed by you and a duly authorized representative of the Company.

16. Severability. Should any provision of this Agreement be declared or determined by any court of competent jurisdiction to be unenforceable, overbroad, or invalid for any reason, the validity of the remaining parts, terms or provisions of this Agreement shall not be affected thereby and the invalid, overbroad or unenforceable part, term or provision shall be reformed by limiting and reducing it to the minimum extent necessary, so as to be enforceable to the extent compatible with the applicable law, and if not possible, shall be deemed not to be a part of this Agreement.

17. Permitted Disclosures. Notwithstanding any other provision of this Agreement, you are not prohibited from reporting possible violations of federal or state law or regulation to any governmental agency or entity, or making other disclosures that are protected under federal or state law or regulation.

18. Governing Law. This Agreement and any claim, counterclaim or dispute of any kind or nature whatsoever arising out of or in any way relating to or arising out of this Agreement, directly or indirectly, shall be deemed to be made in, and in all respects shall be interpreted, construed, and governed by and in accordance with the laws of the State of Georgia, irrespective of its choice or conflict of law rules.

Any action or proceeding be any of the parties to this Agreement to enforce this Agreement shall be brought in any state or federal court located in the state of Georgia, county of Fulton. The parties to this Agreement hereby irrevocably submit to the exclusive jurisdiction of these courts and waive the defense of inconvenient forum to maintenance of any action or proceeding in such venue.

19. Counterparts. This Agreement may be executed in multiple counterparts, each of which will be deemed an original, and all of which together will constitute one document. Delivery of an executed counterpart of this Agreement by facsimile, email in portable document format (".pdf") or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, has the same effect as delivery of an executed original of this Agreement.

20. Notice of Post-Termination Disclosure Obligations. After the Separation Date, you agree to notify any prospective or subsequent employer of any applicable restrictive covenants contained in this Agreement. You agree that the Company is authorized to provide a copy of such restrictive covenants to third parties, including any prospective or subsequent employer of you.

21. Notice. All notices under this Agreement must be given in writing and delivered by email transmission, reputable courier service, or registered or certified mail, at the addresses indicated below (or any other updated address of a party that has been disclosed in writing to the other party). Notice delivered by a reputable courier service, registered or certified mail shall be effective upon receipt by the recipient and notice delivered by email shall be effective upon confirmation of transmission.

If to the Company:

Ciner Resources Corporation
Five Concourse Parkway
Suite 2500
Atlanta, Georgia 30328
Attention: Oguz Erkan, President
Email: oerkan@ciner.us.com

With a copy to:

Ciner Resources Corporation
Five Concourse Parkway
Suite 2500
Atlanta, Georgia 30328
Attention: Marla Nicholson, Vice President, General Counsel and Secretary
Email: mnicholson@ciner.us.com

If to Eduard Freydel:

Email: ______.

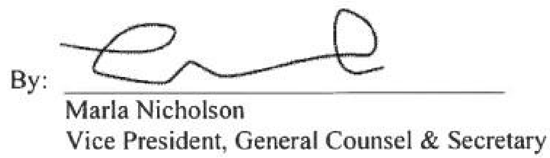
22. Acknowledgement and Full Understanding. You acknowledge and agree that you have fully read, understand and voluntarily enter into this Agreement. You acknowledge and agree that you have had an opportunity to ask questions and consult with an attorney of your choice prior to signing this Agreement. You further acknowledge that your signature below is an agreement to release the Released

Parties from any and all claims that can be released hereunder as a matter of law.

If you wish to accept the Company's offer to enter into this Agreement, please sign and date the enclosed duplicate original of this Agreement and return it to me. This offer, if not accepted, will expire at the close of business on the date that is twenty-one (21) calendar days after the date that you received this Agreement, unless an exception is granted by the Company.

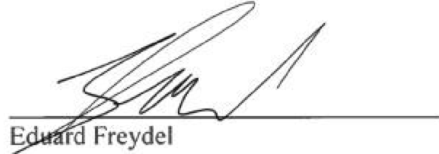
Sincerely,

CINER RESOURCES CORPORATION

By: 

Marla Nicholson
Vice President, General Counsel & Secretary

ACCEPTED AND AGREED:



Eduard Freydel

7/27/21

Date

Exhibit 21.1

SISECAM RESOURCES LP

Subsidiaries

Company	**Jurisdiction of Organization**
Sisecam Resources LP	Delaware

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-191598 on Form S-8 of our reports dated March 14, 2022, relating to the financial statements of Sisecam Resources LP and the effectiveness of Sisecam Resources LP’s internal control over financial reporting, appearing in this Annual Report on Form 10-K for the year ended December 31, 2021.

/s/ Deloitte & Touche LLP

Atlanta, Georgia

March 14, 2022

Exhibit 31.1

Certification Pursuant to Exchange Act Rule 13a-14(a) or Rule 15d-14(a)
As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Oğuz Erkan, certify that:

1. I have reviewed this Annual Report on Form 10-K of Sisecam Resources LP (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting.

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: March 14, 2022

/s/ Oğuz Erkan

Oğuz Erkan
President, Chief Executive Officer and Director on the Board of Directors of Sisecam Resource Partners LLC, the General Partner of Sisecam Resources LP
(Principal Executive Officer)

Exhibit 31.2

Certification Pursuant to Exchange Act Rule 13a-14(a) or Rule 15d-14(a)
As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Ahmet Tohma, certify that:

1. I have reviewed this Annual Report on Form 10-K of Sisecam Resources LP (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 14, 2022

/s/ Ahmet Tohma
Ahmet Tohma
Chief Financial Officer of Sisecam Resource Partners LLC, the General Partner of Sisecam Resources LP
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF OGUZ ERKAN
PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with Sisecam Resources LP’s (the “Partnership”) Annual Report on Form 10-K for the year ended December 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Oğuz Erkan, Chief Executive Officer (Principal Executive Officer) of the Partnership's general partner, do hereby certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Partnership.

Date: March 14, 2022

/s/ Oğuz Erkan

Oğuz Erkan
President, Chief Executive Officer and Director on the Board of Directors of Sisecam Resource Partners LLC, the General Partner of Sisecam Resources LP
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION OF AHMET TOHMA
PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with Sisecam Resources LP's (the "Partnership") Annual Report on Form 10-K for the year ended December 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Ahmet Tohma, Chief Financial Officer (Principal Financial Officer) of the Partnership's general partner, do hereby certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Partnership.

Date: March 14, 2022

/s/ Ahmet Tohma

Ahmet Tohma
Chief Financial Officer of Sisecam Resource Partners LLC, the General Partner of Sisecam Resources LP
(Principal Financial Officer)

Exhibit 95.1

MINE SAFETY DISCLOSURES

Section 1503 of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"), contains reporting requirements regarding coal or other mine safety. We operate a mine in conjunction with our Green River, Wyoming facility, which is subject to regulation by the Mine Safety and Health Administration (“MSHA”) under the Federal Mine Safety and Health Act of 1977 (the “Mine Act”), and is therefore subject to these reporting requirements. Presented in the table below is information regarding certain mining safety and health citations, orders and violations, if any, which MSHA has issued with respect to our operation as required by Dodd-Frank. In evaluating this information, consideration should be given to the fact that citations and orders can be contested and appealed, and in that process, may be reduced in severity, penalty amount or sometimes dismissed (vacated) altogether.

The letters used as column headings in the table below correspond to the explanations provided underneath the table as to the information set forth in each column with respect to the numbers of violations, orders, citations or dollar amounts, as the case may be, during the year ended December 31, 2021 unless otherwise indicated. All section references in the table below refer to provisions of the Mine Act.

(1) For each coal or other mine, of which the issuer or a subsidiary of the issuer is an operator:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)			(H)		
Mine or Operating Name	**Section 104 S&S Citations (#)**	**Section 104(b) Orders (#)**	**Section 104(d) Citations and Orders (#)**	**Section 110(b)(2) Violations (#)**	**Section 107(a) Orders (#)**	**Total Dollar Value of MSHA Assessments Proposed ($)**	**Total Number of Mining Related Fatalities (#)**	**Received Notice of Pattern of Violations Under Section 104(e) (yes/no)**	**Received Notice of Potential to Have Pattern Under Section 104(e) (yes/no)**	**Legal Actions Pending as of Last Day of Period (#)**	**Legal Actions Initiated During Period (#)**	**Legal Actions Resolved During Period (#)**
Sisecam Wyoming LLC	19	—	—	—	—	$43,446	—	no	no	none	—	—

(A) The total number of violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a coal or other mine safety or health hazard under section 104 of the Mine Act for which the operator received a citation from MSHA.

(B) The total number of orders issued under section 104(b) of the Mine Act.

(C) The total number of citations and orders for unwarrantable failure of the mine operator to comply with mandatory health or safety standards under section 104(d) of the Mine Act.

(D) The total number of flagrant violations under section 110(b)(2) of the Mine Act.

(E) The total number of imminent danger orders issued under section 107(a) of the Mine Act.

(F) The total dollar value of proposed assessments from the MSHA under the Mine Act, regardless of whether such proposed assessments are being contested or were dismissed or reduced prior to the date of filing the periodic report.

(G) The total number of mining related fatalities.

(H) Any pending legal action before the Federal Mine Safety and Health Review Commission involving such coal or other mines. With respect to those legal actions:

1. Contests of citations and orders referenced in Subpart B of 29 CFR part 2700: None
2. Contests of proposed penalties referenced in Subpart C of 29 CFR part 2700: None (see referenced in H1)
3. Complaints for compensation referenced in Subpart D of 29 CFR part 2700: None
4. Complaints of discharge, discrimination or interference referenced in Subpart E of 29 CFR part 2700: None
5. Applications for temporary relief referenced in Subpart F of 29 CFR part 2700: None
6. Appeals of judges' decisions or orders to the Federal Mine Safety and Health Review Commission referenced in Subpart H of29 CFR part 2700: None

(2) A list of such coal or other mines, of which the issuer or a subsidiary of the issuer is an operator, that received written notice from MSHA of (A) a pattern of violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of coal or other mine health and safety hazards under section 104(e) of the Mine Act, or (B) the potential to have such a pattern.

NONE

(3) Any pending legal action before the Federal Mine Safety and Health Review Commission involving such coal or other mine.

SEE COLUMN (H) OF SECTION (1) ABOVE

SISECAM WYOMING, LLC

TECHNICAL REPORT SUMMARY

STATEMENT OF RESOURCES AND RESERVES
CURRENT AS OF
DECEMBER 31, 2021

Big Island Mine

Sweetwater County
Wyoming, USA

FINAL-2
(01-22-001)

March 13, 2022

Prepared By:

HOLLBERG PROFESSIONAL GROUP, PC
Consulting Mining Engineers
3615 South Huron, Suite 203
Englewood, Colorado 80110
Phone 303-761-9995
hpg@hollberg.com

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Glossary of Terms and Abbreviations		
Term/Abbreviation	**Description**	**Definition**
BIM	Big Island Mine	Sisecam's Mine Workings
CAPEX	Capital Expenditures	Expenditures that are not charged to production costs but are either depreciated or amortized.
Conventional mining methods	Drill and Blast Mining	Mining drill and blast methods or undercut, drill and blast mining.
CM	Continuous Miner	Mining using continuous mining machines. These can be drum type or rotor type.
Crosscut (X-Cut)	underground passageway	Mined at or near right angles to the mining direction
DECA	Decahydrate Crystal	Sodium Carbonate Decahydrate
EIS	Environmental Impact Statement	A specific study of a project's environmental impacts.
FOB	Free-on-Board	Basis of selling cargo excluding freight and insurance but including loading costs.
GR RMP	Green River Resource Management Plan	Resource plan produced by the BLM for management of the multiple resources on BLM lands in the Green River area.
Gate Entry	Longwall Entry	Access entries specifically configured to support longwall mining.
Headgate	Longwall Entry	Longwall gate entry on fresh air side of longwall face containing main access facilities and conveyors.
IRR	Internal Rate of Return	Annual rate of growth that an investment is expected to generate.
JICOG	Joint Industry Committee on Oil and Gas	Committee created to help resolve lease conflicts in the KSLA between oil and gas producers and sodium mineral producers.
JORC	Joint Ore Reserve Committee	Part of the Australian Institute of Mining and Metallurgy issuing internationally recognized criteria for defining trona resource and reserves.
JV	Joint Venture	A combination of two or more parties that seek the development of a single enterprise or project for profit
KSLA	Known Sodium Lease Area	Area in Southwest Wyoming designated for sodium mineral leasing
K gal	1000 gallons	Raw water measurement
LB	Lower Bed	Trona Bed 24
LW	Longwall	Highly productive method of underground trona mining and a specific type of trona mining equipment.
LOM	Life of Mine Plan	Mining plan for the life of the property.
NPV	Net Present Value	The present value of the expected future cash flows minus the cost.
OPEX	Operating Expenses	Expenses for labor and expendable items used in the mining and processing of minerals.
O&G	Oil and Gas Production	The production of oil and gas from the surface.

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MST	Million Short Tons	Million short tons of material.
MTPY	Million Short Tons per Year	Million short tons of material per year.
Mono	Monohydrate Process	Process to convert trona to soda ash
MMTA	Mechanically Mining Trona Area	Area designated by the BLM in southwest Wyoming that can be mechanically mined.
MM gallons	Million Gallons	Raw water measurement
ROM Trona	Run-of-Mine Trona	Raw trona production from mines prior to trona preparation.
RS RMP	Rock Springs Resource Management Plan	Resource plan produced by the BLM for management of the multiple resources on BLM lands in the Rock Springs, Wyoming District.
RFDS	Reasonably Foreseeable Development Scenario	BLM study to determine a resource's probability of development in the foreseeable future.
SSDA	Special Sodium Drilling Area	Area designated under the 1997 Green River Resource Management Plan to limit O&G drilling
TA	Total Alkalinity	Measure of soda ash level in solution mine water.
TSA	Short Tons of Soda Ash	Measure of production capacity
Tons	Short Tons	All references to "tons" in this report shall refer to "short tons." A short ton is equal to 2000 pounds.
tph	tons per day	Measure of production capacity.
tph	tons per hour	Measure of production capacity.
types	tons per unit shift	Measure of mining productivity.
toy	tons per year	Measure of production capacity.
TRM	Tailings Return to the Mine	Process by which the refinery tailings are thickened and pumped into old mine workings for disposal.
UB	Upper Bed	Trona Bed 25
USGS	United States Geologic Survey	Branch of the US Government charged with mapping and surveying the resources of the US.

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APPROACH

Hollberg Professional Group, PC ("HPG") has conducted an independent technical review of the lands held by Sisecam Wyoming, LLC ("Sisecam Wyoming") referred to as the "Big Island Mine," which is located in the area commonly referred to as the Know Sodium Lease Area (the "KSLA"), near the town of Green River, Sweetwater County, Wyoming. HPG professionals involved in the preparation of this independent technical report ("Report") have visited the mine on multiple occasions and are knowledgeable concerning the Big Island Mine and the KSLA trona deposits. HPG has reviewed technical data, reports, and studies produced by other consulting firms, as well as information provided by Sisecam Wyoming, and others listed in Sections 24.0 and 25.0. This review was conducted on a reasonableness basis, and HPG has noted herein where such provided information engendered questions. Except for the instances in which we have noted questions or made specific comments regarding the nature of the information, HPG has relied upon the information provided by Sisecam as being accurate and suitable for use in this Report. Consent has been given for the distribution of this independent technical review in the form and context in which it appears. HPG has no reason to doubt the authenticity or substance of the information provided.

INDEPENDENCE

HPG and its principals and employees are not and do not intend to be a director, officer, or other direct employee of Sisecam Wyoming and has no material interest in the Big Island Mine or Sisecam Wyoming. The relationship with Sisecam Wyoming is solely one of professional association between client and independent consultant. The review work and this Report are prepared in return for professional fees based upon agreed commercial rates, and the payment of these fees is in no way contingent on the results of this Report.

ELECTRONIC DISCLAIMER

Electronic mail copies of this Report are not official unless authenticated and signed by HPG and are not to be modified in any manner without HPG's express written consent.

UNITS OF MEASUREMENT AND CURRENCY

Measurement units used in this Report are in the English system. The currency is United States (US) dollars unless specifically stated otherwise.

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NOTE REGARDING FORWARD-LOOKING INFORMATION

This Technical Report Summary contains forward-looking statements within the meaning of the U.S. Securities Act of 1933 and the U.S. Securities Exchange Act of 1934, that are intended to be covered by the safe harbor created by such sections. Such forward-looking statements include, without limitation, statements regarding Hollberg Professional Group (HPG) expectation for Sisecam's mine and any related development or expansions, including estimated cashflows, production forecasts, mine plans, revenue, income, costs, taxes, capital, rates of return, mine, material mined and processed, recoveries and grade, future mineralization, future adjustments and sensitivities and other statements that are not historical facts.

Forward-looking statements address activities, events, or developments that HPG expects or anticipates will or may occur in the future and are based on current expectations and assumptions. Although Hollberg Professional Group believes that its expectations are based on reasonable assumptions, it can give no assurance that these expectations will prove correct. Such assumptions, include, but are not limited to: (i) there being no significant change to current geotechnical, trona bed thickness, trona grades, hydrological and other physical conditions; (ii) permitting, development, operations and expansion of operations and projects being consistent with current expectations and mine plans; (iii) political developments in jurisdiction in which Sisecam Wyoming operates being consistent with current expectations; (iv) certain exchange rate assumptions being approximately consistent with current levels; (v) certain price assumptions for soda ash; (vi) prices for key supplies being approximately consistent with current levels; and (vii) other planning assumptions.

Important factors that could cause actual results to differ materially from those in the forward-looking statements include, among others, risks that estimates of mineral reserves and mineral resources are uncertain and the volume and grade of ore actually recovered may vary from our estimates, risks relating to fluctuations in soda ash prices; risks due to the inherently hazardous nature of mining-related activities; risks related to the jurisdictions in which Sisecam operates, uncertainties due to health and safety considerations, including COVID-19, uncertainties related to environmental considerations, including, without limitation, climate change, uncertainties relating to obtaining approvals and permits, including renewals, from governmental regulatory authorities; and uncertainties related to changes in law; as well as those factors discussed in Sisecam Wyoming's filings with the U.S. Securities and Exchange Commission, including Sisecam Wyoming's latest Annual Report on Form 10-K for the period ended December 31, 2021.

This notice is an integral component of the Technical Report Summary (TRS) and should be read in its entirety and must accompany every copy made of the TRS.

HPG has used their experience and industry expertise to produce the estimates in the TRS. Where HPG has made these estimates, they are subject to qualifications and assumptions, and it should also be noted that all estimates contained in the TRS may be prone to fluctuations with time and changing industry circumstances.

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HPG
Hollberg Professional Group PC.
Consulting
Engineers
3615 South Huron S., Suite 203
Englewood, CO USA 80110
303.761.9995
Fax 303.783.3678
hpg@hollberg.com

Kurt F. Hollberg, PE
Hollberg Professional Group, PC

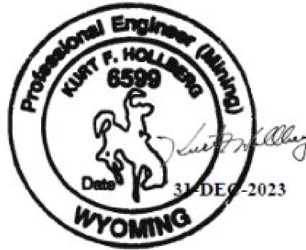
QUALIFIED PERSON

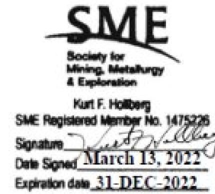
I, Kurt F. Hollberg, certify as the Qualified Person that the attached report titled "Statement of Resources and Reserves as of December 31, 2021– Big Island Mine, Sweetwater County, Wyoming, USA" and dated March 13, 2022 (the "Technical Report Summary") by Hollberg Professional Group PC has been carried out in accordance with the requirements of US Securities and Exchange Commission (SEC Regulation S-K Item 102 and Subpart 1300).

Dated March 13, 2022

Signature of Qualified Person
Electronic Signature

Kurt F. Hollberg, PE
Qualified Person





1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND

Sisecam Wyoming LLC. ("Sisecam Wyoming"), engaged Hollberg Professional Group (HPG) to update HPG's December 2019 Mineral Reserve Estimate on the trona mineral assets of Sisecam Wyoming LLC comprising Sisecam's Green River Property (Big Island Mine & Refinery), Sweetwater County, Wyoming, United States of America ("USA"). Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%. Sisecam Resources LP is the registrant.

1.2 HISTORY

Sisecam Wyoming owns and operates the Big Island Mine complex that consists of an underground trona mine and associated refinery ("Sisecam Wyoming Mine and Refinery"). The Sisecam Wyoming Mine and Refinery lies northwest of the town of Green River in Sweetwater County, Wyoming (Figure 3.1). Mining occurs in two trona seams, Bed 24 and Bed 25, nominally at 850-feet and 900-feet deep, respectively. The Big Island Mine was started in 1962 by the Stauffer Chemical Company and has been in continuous operation since that time. Through Ciner Enterprises Inc., a Ciner Group affiliate and parent of Sisecam Chemicals Resources LLC ("Sisecam Chemicals" formerly known as Ciner Resources Corporation), Ciner Group acquired control of the property in 2015 and sold a controlling interest (60%) of the outstanding units of Sisecam Chemicals to Sisecam Chemicals USA Inc. as of December 21, 2021. Sisecam Chemicals indirectly owns approximately 72% limited partner interest in Sisecam as well as its 2% general partner interest and related incentive distribution rights. Through Ciner Enterprises Inc., Ciner Group continues to hold 40% of the interests in Sisecam Chemicals.

The Sisecam Wyoming refinery purifies trona ore into soda ash (sodium carbonate). Soda ash is an essential raw material in glass making, chemicals, detergents, and other industrial products. Sisecam Wyoming's refining facility is well established and has been converting trona into salable soda ash for over 60 years. Sisecam Wyoming sells the soda ash domestically through Sisecam Resources LP and its affiliates. Product is shipped via truck or rail from loadouts at the Sisecam site and a rail spur to the Union Pacific Railroad mainline along Interstate 80 (I-80).

1.3 MINERAL DEPOSIT AND MINERAL LEASES

The trona deposits of SW Wyoming are the world's largest occurrence of natural soda ash. The deposit was formed from the evaporation of a shallow lake, Lake Gosiute, that covered SW Wyoming and NE Utah 50-60 million years ago (wyomingmining.org, 2020) (Lake Gosiute, Figure 6.1).

Trona is a non-metallic industrial mineral of the compound sodium sesquicarbonate which is a partially hydrated double salt of sodium carbonate (commonly known as soda ash (Na_2CO_3)) and sodium bicarbonate (commonly known as baking soda ($Na_2CO_3.NaHCO_3.2H_2O$)). The US Geological Survey recognizes 25 trona beds of economic importance (at least 1 meter in thickness and 300 km^2 in areal extent) within the Green River Basin. Identified in ascending order, the trona beds are numbered 1 through 25 from the oldest (stratigraphically lowest) to the youngest (stratigraphically highest). Sisecam Wyoming has mineable reserves in the shallowest mechanically minable Trona Beds 24 and 25 (800 to 1,100-feet. deep). Figure 6.2, Figure 6.3, and Figure 6.5 show cross sections of the Green River Basin and Bed 24 25 lithology.

The Bureau of Land Management designates available sodium leasing as the Known Sodium Leasing Area ("KSLA"). The KSLA is where trona thickness exceeds 1-meter, extends for over 300 km^2, and is greater than 80% grade. The known Mechanically Mining Trona Area ("MMTA") is defined where trona exceeds 8-feet thickness, has a grade greater than 85%, contains less than 2% salt (NaCl), and is at a depth no greater than 2,000-feet. Figure 3.2 shows the KSLA and MMTA boundaries along with the major leaseholders.

Sisecam Wyoming holds both private and public mineral leases and license over the Big Island Mine within the KSLA boundary. In addition to the mineral leases and license, Sisecam Wyoming has several other permits with both U.S. Federal and Wyoming state agencies that give it the right to operate the Big Island Mine.

Sisecam Wyoming has approximately 23,612 acres of sodium (Trona) under lease made up of approximately 7,934 Federal acres, 3,079 State acres, and 12,599 private acres. Table 1.1 lists the current sodium leases and the license owned by Sisecam Wyoming and their status. The location of Sisecam's trona leases is illustrated in Figure 3.2 and Figure 3.3.

Table 1.1
Sisecam Wyoming Sodium Mineral Leases and License

Mineral Owner	Section	Township North	Range West	Lease or License #	Acreage[1]	Date Acquired	Date Expires	Royalty Rate[2]
WYOMING	16	21	108	0-42570	640	12-Aug-1977	1-Aug-2029	6.0%
	16	20	109	0-25779	640	15-Sep-1969	1-Sep-2029	6.0%
	36	20	109	0-42571	640	1-Oct-1969	1-Aug-2029	6.0%
	36	21	109	0-25971	640	27-Jun-1977	1-Nov-2029	6.0%
	4	20	109	0-26012	519.24	15-Nov-1969	1-Nov-2029	6.0%
				Wyoming Total	3,079.24			
UNITED STATES (BLM)	18	20	108	W-0111730	619.64	31-Oct-1961	1-Dec-2027	6.0%
	12	20	109		534.84	31-Oct-1961	1-Dec-2027	6.0%
	22	20	109		160	31-Oct-1961	1-Dec-2027	6.0%
	22	20	109		160	31-Oct-1961	1-Dec-2027	6.0%
	24	20	109		542.98	31-Oct-1961	1-Dec-2027	6.0%
	26	20	108		480	31-Oct-1961	1-Dec-2027	6.0%
	10	20	109	W-0111731	640	31-Oct-1961	1-Dec-2027	6.0%
	28	21	108		640	1-Nov-1961	1-Dec-2027	6.0%
	32	21	108		640	31-Oct-1961	1-Dec-2027	6.0%
	14	20	109		640	31-Oct-1961	1-Dec-2027	6.0%
	8	20	109	W-079420	640	31-Oct-1961	1-Dec-2027	6.0%
	28	20	109		640	31-Oct-1961	1-Dec-2027	6.0%
	20	20	109		323	31-Oct-1961	1-Dec-2027	6.0%
	22	20	109		160	31-Oct-1961	1-Dec-2027	6.0%
	18	20	109		157	31-Oct-1961	1-Dec-2027	6.0%
	34	20	109		640	1-Jan-2015	1-Dec-2027	6.0%
	2	20	109	W-101824	316.9	1-Jun-1988	1-Jun-2028	6.0%
				U.S. Total	7,934.36			
PAL	22	20	109		160	16-Aug-1973	16-Aug-1983[3]	5.0%
				PAL Total	160.00			
SWEETWATER ROYALTIES, LLC	31	21	108	TR-702	639.60	18-Jul-1961	18-Jul-2061	8.0%
	33	21	108		640.00	18-Jul-1961	18-Jul-2061	8.0%
	7	20	109		689.54	18-Jul-1961	18-Jul-2061	8.0%
	7	20	108		618.72	18-Jul-1961	18-Jul-2061	8.0%
	19	20	108		620.60	18-Jul-1961	18-Jul-2061	8.0%
	1	20	109		266.29	18-Jul-1961	18-Jul-2061	8.0%
	3	20	109		328.11	18-Jul-1961	18-Jul-2061	8.0%
	5	20	109		519.28	18-Jul-1961	18-Jul-2061	8.0%
	29	21	108		640.00	18-Jul-1961	18-Jul-2061	8.0%
	9	20	109		636.63	18-Jul-1961	18-Jul-2061	8.0%
	11	20	109		643.00	18-Jul-1961	18-Jul-2061	8.0%
	13	20	109		539.92	18-Jul-1961	18-Jul-2061	8.0%
	15	20	109		637.08	18-Jul-1961	18-Jul-2061	8.0%
	17	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
	19	20	109		320.00	18-Jul-1961	18-Jul-2061	8.0%
	21	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
	23	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
	25	20	109		544.36	18-Jul-1961	18-Jul-2061	8.0%
	27	20	109		635.68	18-Jul-1961	18-Jul-2061	8.0%
	33	20	109		320.00	18-Jul-1961	18-Jul-2061	8.0%
	35	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
	29	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
				Sweetwater Royalties Tota	12,438.81			
				TOTAL ACREAGE	23,612.41			

(1) Acreage is approximate (2) United States (BLM) 2% for 10 Years starting January 1, 2021 (3) For as long as monthly

(2) All US BLM Leases have a 2 percent royalty rate for a period of 10 years, as of January 1, 2021, based on Industry-Wide Royalty Reduction Soa Ash and Sodium Bicarbonate issued by the Secretary of the Interior, for all existing and future Federal soda ash or sodium bicarbonate leases.

1.4 MINERAL RESOURCE AND RESERVE ESTIMATE

Using the data provided by Sisecam Wyoming, HPG has completed its review of the Big Island Mine and concludes that the Big Island Mine's remaining leased and licensed Measured and Indicated in-place trona Resources ***exclusive of reserves*** as of December 31, 2021, total 162.3 million short tons (MST), of which 98.9 MST remain in the Lower Bed 24 and 63.4 MST remain in the Upper Bed 25. Measured In-Place Resources are calculated as 74.2 MST and Indicated In-Place Resources calculate as 88.1 MST and Inferred In-Place Resources are calculated at 0.05 MST. Table 1.2 summarizes the estimated In-Place Trona Resource ***exclusive of the mineral reserves.***

The Mineral Resource ***exclusive*** of the mineral reserves is that portion of the ore body that has not been extracted because it was outside what is considered the economic limits, has been left in place to support the mine openings or has been sterilized by previous mining and cost-effective access is not considered practical. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Table 1.2
Estimated In-Place Trona Resources Within Big Island
Exclusive of Reserves
Mining License as of December 31, 2021
Based on $188/TSA

	Measured Resource		Indicated Resource		Measured +Indicated Resour			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	44.8	88.7	54.1	86.9	98.9	87.7	8.5	0.05	90.0
Upper Bed 25	29.4	85.0	34.1	87.3	63.4	86.2	7.5		-
Total	**74.2**	**87.2**	**88.1**	**87.0**	**162.3**	**87.1**	**8.1**	**0.05**	**90.0**

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and an 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.
4) Mineral resources are current as of December 31, 2021, using the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

Based on the current study, the Sisecam Wyoming Big Island remaining leased and licensed Measured and Indicated in-place trona Resources ***inclusive of reserves*** as of December 31, 2021, total 578.9 million short tons (MST), of which 382.5 MST remain in the Lower Bed 24 and 196.4 MST remain in the Upper Bed 25. Measured In-Place Resources are calculated as 291.5 MST and Indicated In-Place Resources calculate as 287.5 MST and Inferred In-Place Resources are calculated at 0.26 MST. Table 1.3 provides the In-Place Trona Resource ***Inclusive of the mineral reserves***.

The Mineral Resource ***inclusive*** of the mineral reserves is that portion of the ore body that is considered either economically viable for mining and can be converted to reserves or of economic interest but considered outside the current economic limits. Figure 11.3 and Figure 11.4 present the remaining in-place trona showing measured, indicated, and inferred resource areas. This is the material considered of economic interest that has the potential to be converted to reserves.

Table 1.3
Estimated In-Place Trona Resources Within Big Island
Inclusive of Reserves
Mining License as of December 31, 2021
Based on $188/ TSA

	Measured Resource		Indicated Resource		Measured +Indicated Resour			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	171.4	88.8	211.1	88.3	382.5	88.5	9.5	0.26	88.8
Upper Bed 25	120.1	87.6	76.4	87.6	196.4	87.6	8.7		-
Total	**291.5**	**88.3**	**287.5**	**88.1**	**578.9**	**88.2**	**9.2**	**0.26**	**88.8**

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and an 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.
4) Mineral resources are current as of December 31, 2021, using the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

Only the contiguous mineral leases were considered for this resource and reserve estimate. Section 16, T21N, R108W was excluded from this estimate because this state lease is isolated from the other contiguous lease blocks. The one-mile isolation makes accessing this for mechanical mining unlikely.

Criteria for this analysis are based upon a 6.0-feet minimum ore thickness and 75% minimum seam grade. This Resource evaluation is based upon 81 exploration drill holes, 44 borings from the mine workings, and several thousand available mine observations and measurements. The in-seam ore horizon includes the T2 to T4 zones and excludes the T1 zone Additionally, this updated report considers the 2020-2021 mine advancement in the northeast and southwest extents of Bed 25.

Because of Sisecam's proximity to the Green River this resource and reserve estimate does not consider solution mining due to its likely subsidence and impact to this major water source. Therefore, HPG is only considering mechanical mining of the deposit using established systems and methods.

The reference point for the mineral resources are reported in-place (insitu) inclusive of impurities and insoluble content. The grade is percent trona, sodium sesquicarbonate ($Na_2CO_3.NaHCO_3.2H_2O$), the double salt of sodium carbonate (soda ash) and sodium bicarbonate (baking soda). A bulk density of 133 pounds per cubic foot (2.13 g/cc), was applied to convert volumes to tonnage. Several published documents list bulk densities of trona between 2.11 and 2.17 g/cc.

Mineral resources are current as of December 31, 2021, using the definitions in SK1300. Mineral resources are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

Mineral resources are not mineral reserves. Mineral reserves are the economically mineable part of a measured or indicated mineral resource based upon application of modifying factors such as costs and revenues associated with the proposed operation and producing the final product in an economic and environmental assessment. Section 11.3 describes these factors. There is no certainty that any mineral resources in this report will ultimately be reclassified as reserves. Please refer to the note regarding forward-looking information at the front of the Report.

1.4.1 Factors That May Affect the Mineral Resource Estimate

Factors that may affect the mineral resource estimate include: changes to long-term soda ash price assumptions; changes in local interpretations of mineralization geometry and continuity of mineralized

zones; changes to geological and grade shape and geological and grade continuity assumptions; changes to the cut-off grades used to constrain the estimates; variations in geotechnical, mining, and processing recovery assumptions; and changes to environmental, permitting and social license assumptions.

1.5 MINERAL RESERVE ESTIMATE

This independent Mineral Resource and Mineral Reserve estimate is completed in accordance with the requirements of the US Securities and Exchange Commission (SEC Regulation S-K Item 102 and Subpart 1300). The Mineral Resource Estimates included in this report have been used in conjunction with current dry mining operations to establish the "Proven" and "Probable" Mineral Reserves. The remaining in-place (insitu) and mineable trona reserves for the Big Island Mine are based on a life-of-mine plan ("LOM") using current mining methods.

No independent feasibility study was prepared in the determination of this reserve estimate. Instead HPG used the plus 60 years of mining and processing history at the Big Island to determine the mining, processing and economic parameters used for this reserve estimate. Based on this information the capital and operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

In determining the reserve parameters and assumptions HPG considered the following circumstances:

- Sisecam's 60-year long history and economics of mining the deposit and producing soda ash;
    - The 170.1 MST of trona ore produced from these two beds;
- The projected long life of the mine and resulting likely change in economics, mining, and processing methods over its projected 40-year mine life;
- Sisecam's current processing facilities capabilities and projected future changes to these facilities.
- The economics associated with Sisecam's current mining equipment and history of "high grading" the thickest portions of the deposit;
- Sisecam's current mining equipment limitations and required future changes to these systems; and
- HPG's knowledge operating and managing other trona and potash mines.

Using current mining and refining technologies, it is our professional opinion that Sisecam Wyoming can realistically expect to economically recover 220.0 MST of trona ore at an average grade of 85.2 percent from these reserves as of the end of December 2021. This is made up of 72.7 MST from Bed 25 and 147.3 MST from Bed 24. Proven recoverable tons are calculated as 97.4 MST, of which 33.4 MST remain in the Upper Bed and 64.0 MST remain in the Lower Bed. Probable recoverable tons are calculated at 122.6 MST of which 39.3 MST remain in the Upper Bed and 83.2 MST remain in the Lower Bed. This is based on Sisecam continuing to mine using its existing mining methods and extraction rates for the remaining life of the currently controlled reserves. Estimated finished soda ash reserves are 119.1 MST. Table 1.4 below and Section 12.2 summarizes these findings.

In determining whether the reserves meet these economic standards, HPG made certain assumptions regarding the remaining life of the Big Island Mine, including, among other things, that:

- The point of reference is run-of-mine (ROM) ore delivered to the processing facilities;
- The cost of products sold per short ton will remain consistent with Sisecam Wyoming's cost of products sold for the five years ended December 31, 2021;
- The weighted average net sales per short ton, $188/ton, will remain consistent with Sisecam Wyoming's average net sales for the five years ended December 31, 2021;
- Sisecam Wyoming's mining costs will remain consistent with 2021 levels with two-seam mining costs 30% higher for the two-seam production;
- Sisecam Wyoming's processing costs will remain consistent with 2021 levels and rise in 10-years to account for lower grade material;
- Sisecam Wyoming will achieve an annual mining rate of approximately 5.0 million short tons of trona in 2024 and beyond;
- Sisecam Wyoming will process soda ash with a 90% rate of recovery, without accounting for the deca rehydration process;
- The ore to ash ratio for the stated trona reserves is 1.835:1.0 (short tons of trona run-of-mine to short tons of soda ash);

- The run-of-mine ore estimate contains dilution from the mining process;
- Sisecam Wyoming will continue to conduct only conventional mining using the room and pillar method and a non-subsidence mine design;
- Sisecam Wyoming will, in approximately 10 years, make necessary modifications to the processing facilities to allow localized mining of 75% ore grade in areas where the floor seam or insoluble disruptions have moved up into the mining horizon causing mining to be halted early due to processing facility limitations;
- Sisecam Wyoming will, within one year, conduct ‘‘two-seam mining,’’ in production panels which means to perform continuous mining in Bed 24 beneath historically mined production panels of Bed 25 with interburden thickness of approximately 35-feet;
- Sisecam Wyoming will, in approximately 20 years, make necessary equipment modifications to operate at a seam height of 7-feet, the current mining limit is 9-feet;
- Sisecam Wyoming has and will continue to have valid leases and license in place with respect to the reserves, and that these leases and license can be renewed for the life of the mine based on their extensive history of renewing leases and license;
- Sisecam Wyoming has and will continue to have the necessary permits to conduct mining operations with respect to the reserves; and
- Sisecam Wyoming will maintain the necessary tailings storage capacity to maintain tailings disposal between the mine and surface placement for the life-of-mine (LOM).

This reserve estimate is based on Sisecam Wyoming’s current basis for mine design that is predicated upon no subsidence. Higher mining extraction rates could be achieved, but are complicated by the overlying Green River Drainage, plant facilities, and gas pipelines, which are sensitive to mine induced subsidence. HPG does not recommend that Sisecam Wyoming alter the current ‘no subsidence’ mine design.

Long-term recovery of the remaining mine trona pillars by secondary extraction methods, including solution mining, is not considered in this reserve estimate but may be available to Sisecam Wyoming in the future. Any secondary recovery will be limited by the non-subsidence zones surrounding the Green River and plant facilities discussed in Section 12.4. Where mining induced subsidence is possible, subsidence mitigation will be required over a large portion of the available mine resource.

Table 1.4
Recoverable Trona Reserves – Big Island Mine and Refinery
Trona Beds 24 and 25 As of December 31, 2021
Within the Contiguous Leases and License
Based on $188/TSA

Bed	Proven (millions) Tons	Average Grade % Trona	Probable (millions) Tons	Average Grade % Trona	Total Reserves (Millions) Tons	Average Grade % Trona
Lower Bed 24	64.0	86.0	83.2	85.8	147.3	85.9
Upper Bed 25	33.4	83.7	39.3	84.1	72.7	83.9
Total	97.4	85.2	122.6	85.2	220.0	85.2

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2021, using the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

1.5.1 Factors That May Affect the Mineral Reserve Estimate

Factors that may affect the mineral reserve estimate include: changes to long-term soda ash price assumptions; changes in local interpretations of mineralization geometry and continuity of mineralized

zones; changes to geological and grade shape and geological and grade continuity assumptions; changes to the cut-off grades used to constrain the estimates; variations in geotechnical, mining, and processing recovery assumptions; and changes to environmental, permitting and social license assumptions.

1.6 MINING METHOD LIFE OF MINE PLAN

The underground mining operation uses continuous miners mining in a modified room and pillar method employing a ‘no surface subsidence’ mine design.

Sisecam like all mining companies, for lack of a better term “high grades” the mineral deposit where possible. Sisecam utilizes large highly productive continuous miners incorporating on-board roof bolters and a large on-board ventilation fan that require a minimum mining height of 9-feet. This has been and will continue to be the mining limit given the extensive reserves above 9-feet. This is an economic choice made by Sisecam to minimize current production costs. At some point in the future, Sisecam will have to make modifications, like other operators in the basin have done, to facilitate mining of the thinner areas and lower grade ore. This reserve estimate forecasts modification of the mining equipment and processing facilities in the future at a point when mining of the thicker trona (>9-feet) has been completed.

To accommodate this reality, HPG has developed a detailed Life-of-Mine (LOM) plan that in HPG’s opinion is a reasonable mining sequence for this deposit over its remaining 40 plus years assuming Sisecam choses to mine as much of the resource as possible. A two-stage mine plan has been developed. The first stage “high-grades” the deposit based upon the current mining equipment and processing plant limitations mining to the 9-foot isopach. This matches the practice employed over the last 20 years and should be viable for another 20 years.

The second stage mining is based upon smaller mining equipment and assumes changes to the dissolver sections of the processing plants. These changes should allow mining to the 7-foot isopach and processing areas of the trona resource where disruptions to the ore body have been and will be encountered as mining progresses towards the edge of the ore body. The 7-foot mining limit was selected based on current economics and practices at similar operations.

This type of two-stage mining is only possible when underground conditions allow access to the bypassed areas long after the first stage of mining was completed. This is true for the Big Island Mine where old mine workings developed 60 years ago are still open, accessible, and currently in use. Where possible the LOM plan accounts for future access to the thinner areas. In areas where future access was determined to be too difficult or costly, the thinner trona resource have been considered sterilized and are not reserves.

Portions of the remaining Bed 24 trona are located under previously mined areas in Bed 25. These areas are where ‘two-seam mining’ is required. Two-seam mining extracts the mineral from both beds. Due to the thin interburden (25 to 40-feet) between Bed 24 and 25 and wide entries mined, mining induced stresses are higher in these areas of two-seam mining, Sisecam Wyoming has conducted significant computer modeling of the rock mechanics and predicted mine entry stability surrounding two-seam mining. Additionally, three test panels and one production panel have been mined in areas where lower extraction conventional mining techniques were employed. These panels were mined successfully and remain accessible and stable many years after mining.

To date, Sisecam Wyoming has not completed Lower Bed two-seam mining of continuous miner panels below existing historic Upper Bed continuous miner panels. For this reason, two-seam mining using continuous miners and existing geometries is considered unverified. To account for this risk, higher mining costs have been used in the economic analysis. Given the work completed, the existing test panels, and the cost structure at Sisecam Wyoming, it is reasonable to conclude that these areas can be economically mined and therefore are considered reserves in this study.

To fully prove the proposed two-seam mining geometry it will be necessary to complete two or three test panels based on the wider continuous miner (CM) entries below the existing Upper Bed CM panels. In 2021 Sisecam extended the main entries in the two-seam area and stubbed in the test panels. Visual examination of the ground conditions in this area were good with little additional stress evident. Sisecam

expects to start the first panel mining in this area in early 2022. Based on this progress it will be four to six years before Sisecam is able to fully demonstrate the viability of two-seam mining with the current mining equipment.

Portions of the LB West mine have been flooded and areas have collapsed limiting access to trona resource west of the existing mine workings. This area is considered a resource but is not part of the LOM plan due to the risks and high costs associated with seismicity, water inflow, less competent roof strata, and soft ore.

1.7 MINERAL PROCESSING AND RECOVERY

The Big Island Mine and Refinery complex is well established having been developed over the plus 60 years of operation. Sisecam utilizes the monohydrate (Mono) process to convert raw trona into soda ash in five (5) processing plants. The plants are well established and have a long production history. Unit 6 is an integrated stand-alone plant constructed in 1998 and Unit 7 is a large calcining dissolver constructed in 2006 to feed liquor to Units 3 through 5. All the plants have had significant upgrades over the years to both improve recovery, energy efficiency, and increase soda ash production.

Sisecam currently has two ore calcining and dissolving units with four soda ash processing plants. The first two processing plants, Unit 1 and Unit 2 built in 1962 used triple effect evaporators were taken out of service after being replaced by the integrated Unit 6 plant. Unit 7 calciner and dissolving unit was constructed to replace the front ends for Units 3, 4 and 5. The dissolver units liquor output is interconnected to the multiple evaporator units to optimize production.

The primary feedstock to these plants is raw mined trona with a minor secondary feed from liquor produced from mining the DECA crystals, sodium carbonate decahydrate, from the evaporation ponds of the tailing disposal areas.

The site infrastructure is established and adequate for the purposes including: four existing surface to ore bed shafts, offices, warehouses, processing plants, product storage, dedicated rail spur with rail yard, tailings facilities, and dedicate utilities including natural gas, electricity, and water.

1.8 ECONOMIC ANALYSIS

Cost effective mining and processing has been conducted since the early 1960’s at Sisecam Wyoming generally under the same mine design assumptions utilized in this reserve estimate. Overall costs are not expected to change significantly in the future; thus, using historical costs for mining the reserves and producing soda ash are considered a reliable basis to forecasting future costs.

With the information provided in previous reviews and this review HPG has been able to examine the last ten years of actual production costs and revenues. This long history shows a stable and predictable cost structure and consistent revenue. The only exception was 2020 and 2021 where costs and revenues were lower due to the worldwide COVID-19 slowdown. Despite this historic business interruption both years were cash positive with 2021 rebounding to near normal levels.

For the basis of determining the economic viability of the reserves stated here and in Section 12.0, HPG has utilized the last five years of financial data provided by Sisecam. Sisecam provided both audited and unaudited financial information including detailed production cost, capital expenditures and revenues. Previous reviews were based upon three years of data but due to the extraordinary impact of COVID-19 a more extensive analysis was conducted. Some consideration was given to dropping 2020 and 2021 from the analysis but was rejected as recent cost data is materially important to this type of analysis and the ultimate outcome of COVID-19 is unknown. The analysis conducted is therefore considered conservative given the inclusion of such an unusual event. Capital and operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

Five years of operational data has been summarized as a cash statement of Net Income which is provided in Table 1.5. Detailed discussions of the cost analysis, capital expenditures, and revenues can be found in Sections 16.0, 18.0, and 19.0.

Table 1.5
Five Years Historical Income
Cash Basis

	2017	2018	2019	2020	2021	Five year Average	Average $ Per Ton Soda Ash
Ore Tons	4,001,325	4,018,329	4,157,009	3,653,830	4,276,837	4,021,466	
Total Volume (Sales)	2,705,400	2,613,200	2,759,100	2,221,900	2,682,203	2,596,361	
Net sales:							
Sales - Affiliates	$ 304.5	$ 253.3	$ 315.8	$ 177.9	$ -	$ 210.3	
Sales - others	192.8	233.4	207.0	214.3	540.1	277.5	
Total net sales	**$ 497.3**	**$ 486.7**	**$ 522.8**	**$ 392.2**	**$ 540.1**	**$ 487.8**	**$ 187.9**
Cost of products sold:							
Cost of products sold	211.0	215.9	221.4	185.6	215.5	209.9	
Freight costs	145.7	139.1	143.6	123.7	213.0	153.0	
Total cost of products sold	356.7	355.0	365.0	309.3	428.5	362.9	139.8
Gross profit ($ millions)	**$ 140.6**	**$ 131.7**	**$ 157.8**	**$ 82.9**	**$ 111.6**	**$ 124.9**	**$ 48.1**
Operating expenses:							
Selling, general and adminis expenses—affiliates	16.9	17.6	18.4	17.5	17.2	17.5	
Selling, general and adminis expenses—others	5.5	6.9	5.4	4.2	6.2	5.6	
Loss on assets, legal settlem net	1.6	(27.5)	-	-	0.2	(5.1)	
Interest Expense	3.1	3.3	5.5	5.5	5.2	4.5	
Total operating expenses	27.1	0.3	29.3	27.2	28.8	22.5	8.7
Net Profit w/SGA ($ millions)	**$ 113.5**	**$ 131.4**	**$ 128.5**	**$ 55.7**	**$ 82.8**	**$ 102.4**	**$ 39.4**
Depreciation, depletion and amortization expense	27.1	28.4	26.9	28.8	31.6	28.6	
Income Before Tax ($ millions)	**$ 86.4**	**$ 103.0**	**$ 101.6**	**$ 26.9**	**$ 51.3**	**$ 73.8**	**$ 28.4**

Note: Numbers have been rounded; totals may not sum due to rounding.

The basis for the economic analysis is the previous five years of actual performance adjusted for expected changes in operating costs and necessary capital expenditures to execute the proposed LOM. Table 1.6 illustrates the expected cash flows for the LOM in ten-year increments. The economic model indicates positive cash flow, a 12.0% internal rate of return (IRR) and a positive net present value (NPV) of $438 million at a 5% discount rate. The full financial model by year is shown in Table 19.1 through Table 19.3. This analysis shows that the operation will provide positive cash operating profits and is therefore considered to be economically viable.

Table 1.6
LOM Projected Cash Flow

	Investment	OPERATING YEARS (Year 1 - 2022)			
	2021	1-10	11-20	21-30	31-44
REVENUE					
Mine Production Trona (000)		48,600.0	50,000.0	50,000.0	65,000.0
Ore to Ash		1.835	1.835	1.835	1.835
Soda Ash Production (000)		27,248.0	27,248.0	27,248.0	35,422.3
Revenue $/ton		$ 187.90	$ 187.90	$ 187.90	$ 187.90
Gross Revenue ($ millions)		**$ 5,120**	**$ 5,120**	**$ 5,120**	**$ 6,656**
Cost of Goods Sold					
Cash Costs Per Ton		**$ 151.86**	**$ 157.00**	**$ 157.50**	**$ 162.00**
Total Cash Costs ($ millions)		**$ 4,138**	**$ 4,278**	**$ 4,291**	**$ 5,738**
CAPEX ($ millions)		$ 300.0	$ 400.0	$ 320.0	$ 436.0
Pre-Tax Operating Profit ($ millions)	**-$ 800.0**	**$ 682**	**$ 442**	**$ 509**	**$ 482**
Profit Margin		13.3%	8.6%	9.9%	7.2%

Note: Numbers have been rounded; totals may not sum due to rounding.

1.9 OBSERVATIONS AND CONCLUSIONS

Approximately 118 MST of the reported recoverable Trona (48%) is dependent upon Sisecam confirming the viability of two-seam mining over the next four to six years. Most of these two-seam reserves (approximately 71.5 MST, 60%) are in areas with thickness over 9-feet.

The November 2021 site visit revealed that since the 2019 report was completed, Sisecam has made significant progress developing the LB North mains and panel entries. Ground conditions were found to be good for the mains entries confirming the current design. Development of the lower extraction main entries does not evaluate the true impacts that will be experienced when conducting two-seam panel mining. Until two or three test panels are successfully completed and analyzed two-seam mining with the current equipment remains unverified. Based on current projections it will be four to six years before Sisecam will verify the viability of two-seam mining. It is possible that two-seam mining may require significant variations from current mining equipment and practices.

Approximately 148 MST of the reported 220 MST recoverable tonnage is greater than 9-feet thick and can be mined and processed with the existing equipment, some localized areas will require ore blending or modification of the processing facilities to handle lower grade ore for several days or several weeks. These areas comprise 39.5 MST of the total reserves. It is anticipated that these plant modifications need to be implemented within 10-15 years.

The practice of "high grading" the deposit and only mining the thicker reserves first risks sterilization of the thinner areas if access is compromised. Recovery of the reserves less than 9-feet will require changes to the mining and utility equipment, will incur higher mining costs, require access rehabilitation costs and is dependent upon the ability to access these areas through old workings or via extensions of old mains entries as shown in the LOM plan developed for this estimate. This material makes up 72 MST of the estimated recoverable tonnage. There is some risk that access to these areas 20 years after mining might not be possible.

The roof failure, water inflow and associated subsidence of the Lower Bed West mine area has intrinsic risks to an evaporite mine below a major waterway that must be continuously monitored and evaluated for any changes. These include increased water flow or changes in water type indicating its source could be surface waters. Risks due to high inflow of water can range from higher mining costs to loss of access.

1.10 RECOMMENDATIONS

HPG supports Sisecam's plan to perform additional exploration drilling to improve data density. Additional exploration drilling would result in a higher percentage of the reserve base classified as proven and should better define the trona grades near the drilling locations. Drilling south of the existing lease boundary would help to identify available future reserves and grades. Additionally, it is recommended that Sisecam undertake Bed to Bed drilling from areas in the Upper Bed that overly future LB two-seam mining. For example, the LB South resource block could be drilled from the UBSW Mains or UB South Butts. Bed to Bed core drilling is significantly less expensive than surface exploration but is limited to two-seam areas.

Sisecam should continue to move forward in a prudent and timely fashion with validation of the two-seam mining to confirm both the geotechnical and economic assumptions.

It is recommended that Sisecam continue to pursue optimization of the refinery facilities to allow efficient processing of the predicted long-term decline in run-of-mine (ROM) trona grades as mining moves to the edges of the ore bodies. A more robust processing facility would allow a more complete recovery of the remaining ore reserves in areas where localized seam rolls and post depositional insoluble infilling has impacted recovery and stopped mining.

It is recommended that Sisecam optimize its ability to blend ore from multiple production areas of the mine to minimize the impact of the lower grade ore from the miners producing from the edge of the deposit or encountering seam rolls. This would also allow improved recovery of the deposit by maintaining a higher average ore grade and minimize sterilization of the thinner or lower grade areas of the deposit.

It is recommended that Sisecam continue close monitoring of the LB West water inflows and associated subsidence. HPG would advise more frequent isotope testing of the inflow as well as additional hydrologic studies including source tracing. HPG would advise more frequent subsidence monitoring and evaluations of the area.

2.0 INTRODUCTION

2.1 BACKGROUND

Sisecam Wyoming LLC. (“Sisecam Wyoming”) engaged Hollberg Professional Group (HPG) to update HPG’s December 2019 Mineral Reserve Estimate on the trona mineral assets of Sisecam Wyoming LLC comprising Sisecam’s Green River Property (Big Island Mine & Refinery), Sweetwater County, Wyoming, United States of America (“USA”). Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%. Sisecam Resources LP is the registrant.

The primary goal is to provide an independent Mineral Resource and Mineral Reserve estimate in accordance with the requirements of the US Securities and Exchange Commission (SEC Regulation S-K Item 102 and Subpart 1300). This resource and reserve estimate of the remaining in-place and mineable trona reserves for the Big Island Mine is based on a life-of-mine plan (“LOM”) using current mining methods.

HPG personnel involved in this project include:

- Kurt F. Hollberg, PE, Project Manager, Mining Specialist, Competent Person.
- Terry Leigh, AIPG, CPG, PG, (Leigh Geological Services, Inc.) Resource Specialist.

This report was authored by Mr. Hollberg and Mr. Leigh.

Mr. Hollberg is a Licensed Professional Engineer in Wyoming, Colorado, Utah, and Nevada as well as being a Registered Professional Member of the Society for Mining, Metallurgy, and Exploration (SME).

Mr. Leigh is an AIPG Certified Professional Geologist and a Licensed Professional Geologist (PG) in Wyoming.

Both Mr. Hollberg and Mr. Leigh are considered ‘qualified persons’ for trona reserve estimation as defined by the JORC, SEC, and NI 43-101 Codes. Mr. Hollberg has over 35 years of experience and Mr. Leigh has over 40 years of experience in the Green River Trona Basin. Section 26.0 contains summary information on the team members.

Neither HPG nor any of its employees and associates employed in the preparation of this report has any beneficial interest in Sisecam Wyoming or in the assets of Sisecam Resources. HPG will be paid a fee for this work in accordance with normal professional consulting practice as a consultant to Sisecam Wyoming. Sisecam Wyoming’s predecessor OCI Wyoming (OCI) employed Mr. Hollberg from 1999 to 2003 and employed Mr. Leigh from 2003 to 2010. Mr. Hollberg left OCI Wyoming in 2002 to engage in consulting work and started HPG. Mr. Leigh retired from OCI Wyoming in 2010.

Mr. Hollberg and Mr. Leigh have over 70 years of combined experience in the Green River Trona Basin and its mining operations. They have performed engineering and geological services for Sisecam Wyoming, Genesis Alkali Corporation, Tata Chemicals, and TG Soda Ash Inc. HPG has served as a consultant to Sisecam Wyoming and its predecessor OCI performing mine engineering services since 2003 as well as other trona operators. Mr. Leigh has performed numerous geological services for Sisecam Wyoming and its predecessor OCI including supervision of exploratory drilling, seismic exploration, in-mine geologic mapping, and construction of a geologic model for the Big Island Mine as well as two other Green River Trona Basin operations.

The individuals responsible for this report have extensive experience in the mining industry, in the Green River Trona Basin, and are members in good standing of appropriate professional organizations.

Kurt F. Hollberg, BSc, PE Colorado (PE-36599), Wyoming (PE-6599), Nevada (PE-018102), Utah, (PE 10385339), Registered Professional Member SME # 1475226. Richard Terry Leigh, MSc, AIPG (6708), CPG, Wyoming (PG-53).

No independent feasibility study was prepared in the determination of this reserve estimate. HPG has utilized the 60-year history of the Big Island Mine and Refinery mining trona and processing soda ash

along with the past five years of operational and economic data demonstrating that the operation is economically viable.

2.2 SOURCES OF INFORMATION

This study uses the existing Sisecam Wyoming geologic database, drilling information, recent mine Trona thickness observations, current and historical financial information, and market studies, to estimate the trona resources available to Sisecam Wyoming. Based on this Mineral Resource Estimate and current business economics, a LOM plan was developed to estimate the recoverable trona and finished soda ash reserves which are the basis of this Mineral Reserve Estimate.

Section 24.0 contains a listing of the data files and sources provided by Sisecam Wyoming.

In addition to their historical knowledge of the subject property, both Mr. Hollberg and Mr. Leigh visited property for multiple days in September, October, and November of 2021. The purpose of these visits was to inspect both the surface and underground facilities, collect information for this effort and interview technical personnel working for Sisecam. During the visits HPG interviewed the following Sisecam technical and management personnel:

- Guray Eken (VP, Manufacturing and Operational Excellence);
- John Lewis (Mine Engineering Superintendent);
- Hakki Ketizmen (Mine Planning and Business Development Superintendent);
- Jeramy Spicer (Technical Services Manager);
- Tyler Schiltz (Environmental Superintendent);
- Hilary Huckfeldt (Principal Environmental Engineer);
- Jim Spurrier (Principal Engineer - Surface Production);
- Charley Walters (Surface Production Supervisor);
- Scott Wilkes (CoGen Manager); and
- Shannon Larson (QC QA Laboratory Supervisor)

Sisecam Wyoming’s excellent mine ground conditions allows examination of most areas of the existing mine and old workings. Mr. Leigh and Mr. Hollberg have examined many of these areas for this study. Mr. Leigh spent several days underground taking spot measurement of the Trona thickness in several areas of interest. Section 9.0 contains additional information on these inspections.

Surface tours included examination of the processing facilities (Units 3, 4, 5, 6 and 7), tailings facilities, DECA ponds and processing facility, Cogen plant, and Quality Control Laboratory.

During the interviews it was clear that Sisecam personnel have a good understanding of current mine operations, of the geology and mine planning, chemical processing and environmental obligations and are in good standing with their responsibilities.

3.0 PROPERTY DESCRIPTION

3.1 BIG ISLAND MINE OPERATIONS

The location of Sisecam Wyoming's trona mining and refining operation is shown in Figure 3.1.

Sisecam Wyoming owns and operates the Big Island Mine complex that consists of an underground trona mine and associated refinery ("Sisecam Wyoming Mine and Refinery"). The Sisecam Wyoming Mine and Refinery lies northwest of the town of Green River in Sweetwater County, Wyoming (Figure 3.1). Mining occurs in two trona seams, Bed 24 and Bed 25, nominally at 850-feet and 900-feet deep, respectively. The Big Island Mine was started in 1962 by the Stauffer Chemical Company and has been in continuous operation since that time. Through Ciner Enterprises Inc., a Ciner Group affiliate and parent of Sisecam Chemicals Resources LLC ("Sisecam Chemicals" formerly known as Ciner Resources Corporation), Ciner Group acquired control of the property in 2015 and sold a controlling interest (60%) of the outstanding units of Sisecam Chemicals to Sisecam Chemicals USA Inc. as of December 21, 2021. Sisecam Chemicals indirectly owns approximately 72% limited partner interest in Sisecam as well as its 2% general partner interest and related incentive distribution rights. Through Ciner Enterprises Inc., Ciner Group continues to hold 40% of the interests in Sisecam Chemicals.

The underground mining operation uses continuous miners mining in a modified room and pillar method. As of December 31, 2021, 170.1 MST of trona ore have been mined from these two beds, according to Sisecam Wyoming production records.

The Sisecam Wyoming refinery purifies the trona ore into soda ash (sodium carbonate). Soda ash is an essential raw material in glass making, chemicals, detergents, and other industrial products. Sisecam Wyoming sells the soda ash domestically through Sisecam Resources LP and its affiliates, which act as Sisecam Wyoming's marketing and sales agent for all its domestic sales. Ciner Resources was a member of the American Natural Soda Ash Corporation (ANSAC), which handled the majority of Ciner Wyoming's overseas sales and marketing. ANSAC was set up in 1984 to act as the international sales, marketing, and distribution cooperative for the leading producers of natural soda ash in the United States. ANSAC was established under the Webb-Pomerene Export Act and the Export Trading Company Act, which allows member companies to create a joint export venture. On November 9, 2018, Ciner announced its intention to withdraw from ANSAC effective December 31, 2021, with an option to exit effective December 31, 2020. Ciner exercised its option to withdraw on December 31, 2020, with the full withdrawal completed in 2021. There remain some sales commitments to ANSAC, at substantially lower volumes, through 2022.

In addition to partially owning Sisecam Wyoming, the Ciner Group has two other soda ash operations in Turkey, Eti Soda and Kazan Soda Elektrik Uretim A.S.

On December 21, 2021, Ciner Enterprises Inc. (CEI) completed the previously announced sale of 60% of Ciner Resources Corporation ("CRC") to Sisecam Chemicals USA Inc., a wholly owned subsidiary of Turkiye Sise ve Cam Fabrikalari A.S. ("Sisecam") of Istanbul, Turkey. Sisecam was founded in 1935 and is a global leader in chemicals and glass industries with operations in 14 countries and 22 thousand employees.

> "Şişecam is the only global producer operating in all three key areas of the global glass industry: flat glass, glassware and glass packaging. It ranks among the world's top two producers in glassware, and among the top five global producers in glass packaging and flat glass. Şişecam is also one of top three largest producers of soda and a world leader in chromium chemicals." (Ref: Sisecam Website)

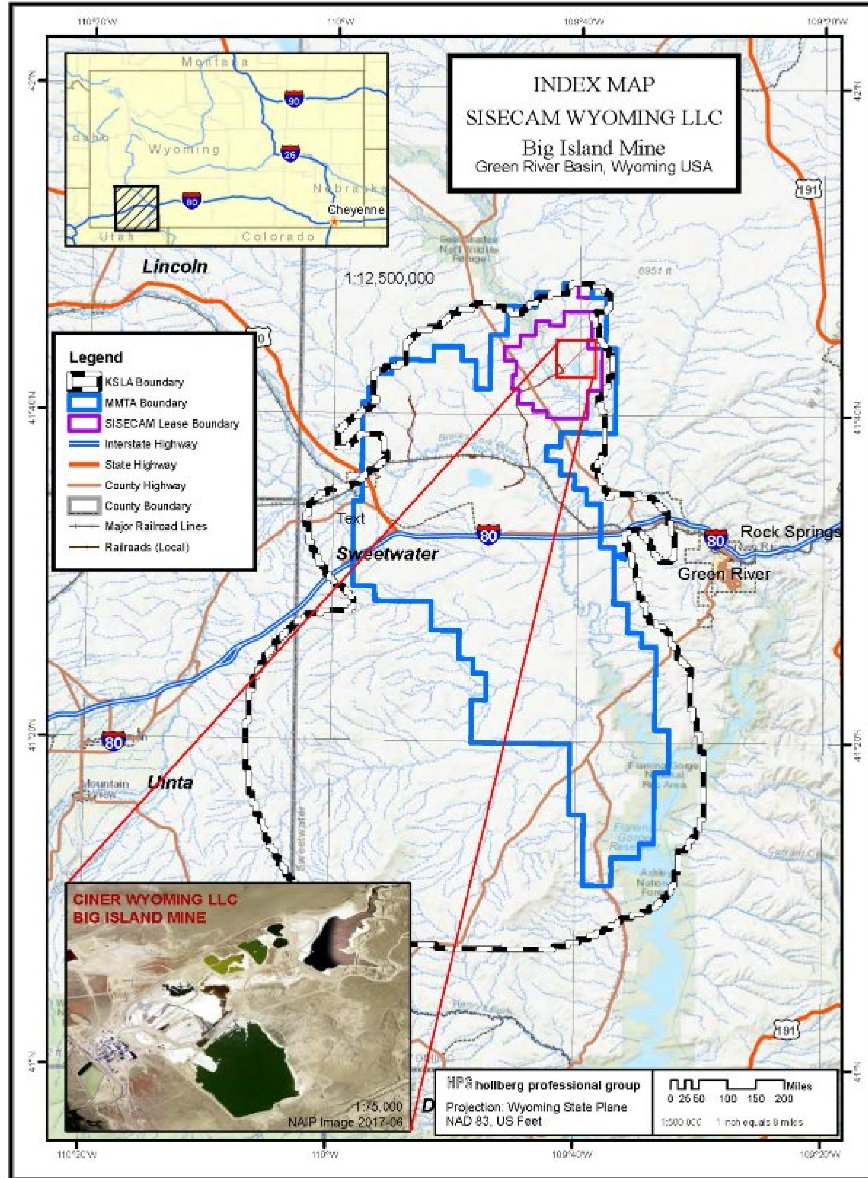


Figure 3.1 Big Island Mine General Location

1.2 OWNERSHIP

1.2.1 Trona Lease Area

Trona is defined by the US government as a “solid leasable mineral,” subject to the Mineral Leasing Act of 1920. Federally owned sodium resources are controlled by the Department of the Interior and managed by the Bureau of Land Management (“BLM”) and limited by Title 30§184(b). The act stipulates 10-year renewable lease periods, subject to annual rental and royalty fees, and demonstrated diligence. The federal government limits sodium leases to 5,120 acres by any one operator in one state but an exception in 30§184(b)(2) allows the Secretary, at his discretion, sodium leases or permits on up to 30,720 acres in any one State. Privately controlled sodium resource acreage is not limited.

The Bureau of Land Management designates available sodium leasing as the Known Sodium Leasing Area (“KSLA”). The KSLA is where trona thickness exceeds 1-meter, extends for over 300 km^2, and is greater than 80% grade. The known Mechanically Mining Trona Area (“MMTA”) is defined where trona exceeds 8-feet thickness, has a grade greater than 85%, contains less than 2% salt (NaCl), and is at a depth no greater than 2,000-feet. Figure 3.2 shows the KSLA and MMTA boundaries along with the major leaseholders.

Other mineral owners in the Green River Basin include the State of Wyoming, along with Sweetwater Royalties and other private mineral owners. Sweetwater Royalties is the second largest mineral owner in the KSLA. Sweetwater Royalties’ current holdings were part of the Pacific Railroad Act of 1864 granting every other section 20 miles on either side of the railroad to the Union Pacific Railroad. Sweetwater Royalties acquired ownership through a spin off from Occidental Petroleum’s recent acquisition of Anadarko Petroleum in 2019. In 2020 Occidental sold the Land Grant to Sweetwater Royalties, LLC who now owns the mineral.

Because the Green River Basin is also an area of extensive oil and gas exploration and production (“O&G”), there is a possibility of conflict between O&G and underground mining. The regional BLM and the Joint Industry Committee on Oil and Gas (“JICOG”) have established an O&G drilling moratorium area along with a Special Sodium Drilling Area (“SSDA”) under the 1997 Green River Resource Management Plan (“GR RMP”) (BLM 2011) within the KSLA that completely restricts O&G drilling. The area was largely defined by the BLM MMTA boundary. The KSLA is in the Kemmerer and Rock Springs Districts of the BLM. The BLM is currently in the process of developing a revision to the GR RMP, to be known as the Rock Springs RMP Revision (“RS RMP”) (BLM 2011). The Rock Springs RMP is planned to replace the 1997 Green River RMP, as necessitated by emerging resource issues and legislative changes. An associated Environmental Impact Statement (EIS) is also being developed along with a Mineral Resources Potential Report, including an updated Reasonably Foreseeable Development Scenario (RFDS), and is intended to forecast leasing and development activities over the next 20 years. The BLM will use the RFDS to help in determining the most appropriate land use planning alternatives to be evaluated in the RS RMP and associated EIS. It is unclear what impact this revision will have on the drilling moratorium in the KSLA leasing area or the KSLA. Several amendments to the existing RMP have been published but the final draft RMP along with its related draft EIS has not been published as of this writing. The BLM continues to report Q4 2018 for the final RMP and Q2 2019 for the Record of Decision but to date no official documents have been published or changes to these dates. Two changes to the current RMP have been published, one on Sage Grouse and the other on Wild Horse Management.

There are three Federal O&G leases dated in the late 1980’s that coincide with the Sisecam Sodium leases as well as a recent, 2020, “Area of Interest” Memorandum of Agreement covering most of the Sisecam Sodium Lease Area that is limited to O&G operations.

In the area between the KSLA and MMTA moratorium areas, existing permitted O&G work is allowed, and new work is approved on a case-by-case basis under specific drilling rules.

Sisecam Wyoming’s leases and license are bounded on the north and east by the KSLA and MMTA boundaries (Figure 3.2). As long as the SSDA O&G moratorium area stays in effect, the current Sisecam Wyoming Federal holdings are protected from concurrent O&G exploration. Sisecam’s privately held

leases are available for drilling under restrictive O&G drilling rules. Sweetwater Royalties reportedly supports the BLM moratorium and has not allowed drilling in the moratorium area.

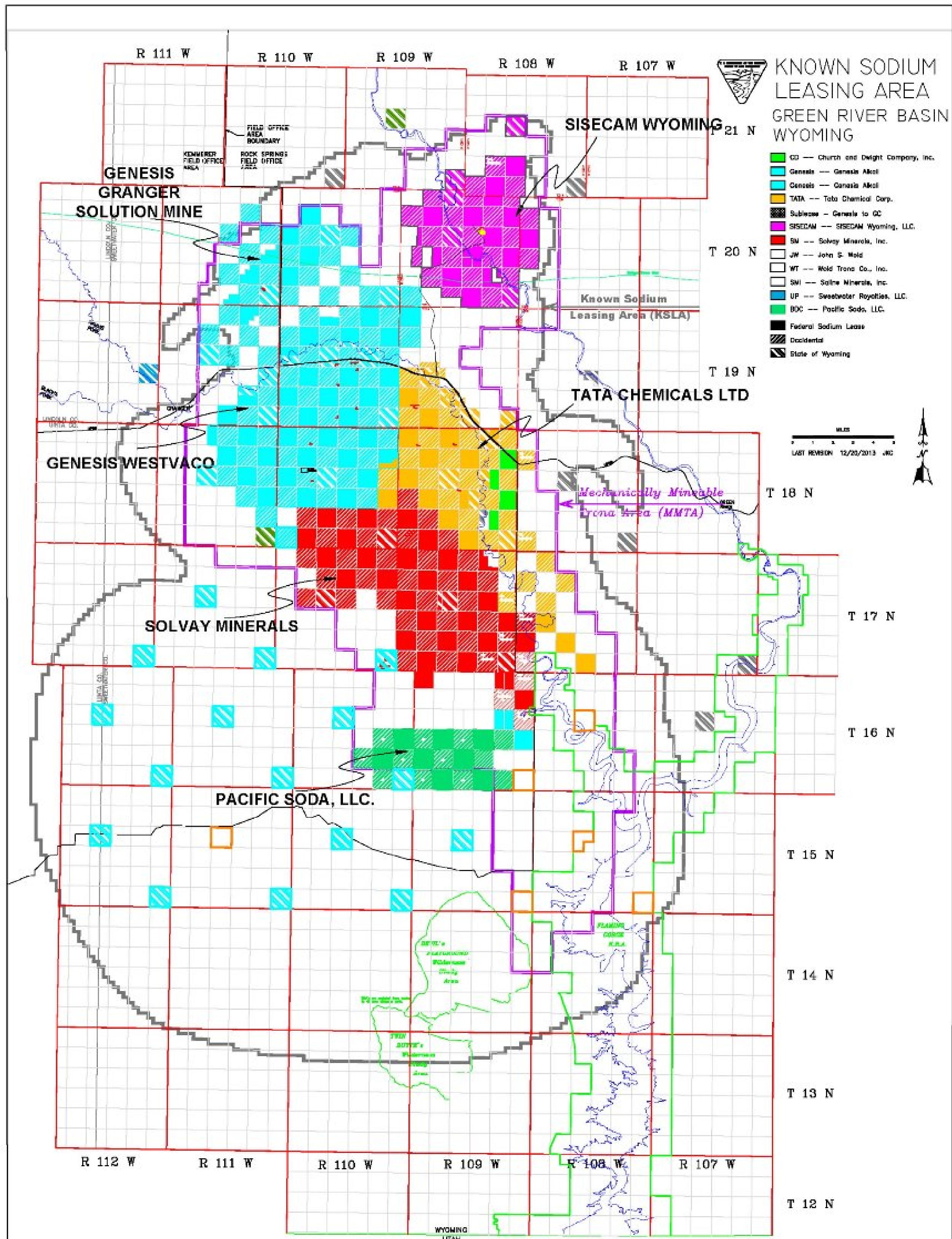
1.2.2 Mineral Leases and License

Sisecam Wyoming holds both private and public mineral leases and license over the Big Island Mine. In addition to the mineral leases and license, Sisecam Wyoming has several other permits with both U.S. federal and Wyoming state agencies that give it the right to mine the Big Island Mine.

Sisecam Wyoming has approximately 23,612 acres of sodium (Trona) under lease made up of approximately 7,934 Federal acres, 3,079 State acres, and 12,599 private acres.

Table 3.1 lists the current sodium leases and the license owned by Sisecam Wyoming and their status.

The location of Sisecam's trona leases are illustrated in Figure 3.2 and Figure 3.3.


KNOWN SODIUM LEASING AREA
GREEN RIVER BASIN WYOMING
SISECAM WYOMING
GENESIS GRANGER SOLUTION MINE
TATA CHEMICALS LTD
GENESIS WESTVACO
SOLVAY MINERALS
PACIFIC SODA, LLC.
Known Sodium Leasing Area (KSLA)
Mechanically Mineable Trona Area (MMTA)
R 111 W
R 110 W
R 109 W
R 108 W
R 107 W
R 112 W
T 21 N
T 20 N
T 19 N
T 18 N
T 17 N
T 16 N
T 15 N
T 14 N
T 13 N
T 12 N
WYOMING
UTAH
ŞIŞECAM WYOMING LLC
KNOWN SODIUM LEASE AREA
GREEN RIVER BASIN, WY
CURRENT SODIUM LEASES
BUREAU OF LAND MANAGEMENT
Scale 1" = 24,000'
0
24000
48000
72000
KSLA BOUNDARY
WYOMING STATE LEASES

(Source US BLM KSLA June-2019– Modified by HPG to include basin lease additions and ownership changes.)

Figure 3.2 KSLA Lease Map

Table 3.1
Sisecam Wyoming Sodium Mineral Leases and License

Mineral Owner	Section	Township North	Range West	Lease or License #	Acreage[1]	Date Acquired	Date Expires	Royalty Rate[2]
WYOMING	16	21	108	0-42570	640	12-Aug-1977	1-Aug-2029	6.0%
	16	20	109	0-25779	640	15-Sep-1969	1-Sep-2029	6.0%
	36	20	109	0-42571	640	1-Oct-1969	1-Aug-2029	6.0%
	36	21	109	0-25971	640	27-Jun-1977	1-Nov-2029	6.0%
	4	20	109	0-26012	519.24	15-Nov-1969	1-Nov-2029	6.0%
				Wyoming Total	3,079.24			
UNITED STATES (BLM)	18	20	108	W-0111730	619.64	31-Oct-1961	1-Dec-2027	6.0%
	12	20	109		534.84	31-Oct-1961	1-Dec-2027	6.0%
	22	20	109		160	31-Oct-1961	1-Dec-2027	6.0%
	22	20	109		160	31-Oct-1961	1-Dec-2027	6.0%
	24	20	109		542.98	31-Oct-1961	1-Dec-2027	6.0%
	26	20	108		480	31-Oct-1961	1-Dec-2027	6.0%
	10	20	109	W-0111731	640	31-Oct-1961	1-Dec-2027	6.0%
	28	21	108		640	1-Nov-1961	1-Dec-2027	6.0%
	32	21	108		640	31-Oct-1961	1-Dec-2027	6.0%
	14	20	109		640	31-Oct-1961	1-Dec-2027	6.0%
	8	20	109	W-079420	640	31-Oct-1961	1-Dec-2027	6.0%
	28	20	109		640	31-Oct-1961	1-Dec-2027	6.0%
	20	20	109		323	31-Oct-1961	1-Dec-2027	6.0%
	22	20	109		160	31-Oct-1961	1-Dec-2027	6.0%
	18	20	109		157	31-Oct-1961	1-Dec-2027	6.0%
	34	20	109		640	1-Jan-2015	1-Dec-2027	6.0%
	2	20	109	W-101824	316.9	1-Jun-1988	1-Jun-2028	6.0%
				U.S. Total	7,934.36			
PAL	22	20	109		160	16-Aug-1973	16-Aug-1983[3]	5.0%
				PAL Total	160.00			
SWEETWATER ROYALTIES, LLC	31	21	108	TR-702	639.60	18-Jul-1961	18-Jul-2061	8.0%
	33	21	108		640.00	18-Jul-1961	18-Jul-2061	8.0%
	7	20	109		689.54	18-Jul-1961	18-Jul-2061	8.0%
	7	20	108		618.72	18-Jul-1961	18-Jul-2061	8.0%
	19	20	108		620.60	18-Jul-1961	18-Jul-2061	8.0%
	1	20	109		266.29	18-Jul-1961	18-Jul-2061	8.0%
	3	20	109		328.11	18-Jul-1961	18-Jul-2061	8.0%
	5	20	109		519.28	18-Jul-1961	18-Jul-2061	8.0%
	29	21	108		640.00	18-Jul-1961	18-Jul-2061	8.0%
	9	20	109		636.63	18-Jul-1961	18-Jul-2061	8.0%
	11	20	109		643.00	18-Jul-1961	18-Jul-2061	8.0%
	13	20	109		539.92	18-Jul-1961	18-Jul-2061	8.0%
	15	20	109		637.08	18-Jul-1961	18-Jul-2061	8.0%
	17	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
	19	20	109		320.00	18-Jul-1961	18-Jul-2061	8.0%
	21	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
	23	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
	25	20	109		544.36	18-Jul-1961	18-Jul-2061	8.0%
	27	20	109		635.68	18-Jul-1961	18-Jul-2061	8.0%
	33	20	109		320.00	18-Jul-1961	18-Jul-2061	8.0%
	35	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
	29	20	109		640.00	18-Jul-1961	18-Jul-2061	8.0%
				Sweetwater Royalties Tot	12,438.81			
				TOTAL ACREAGE	**23,612.41**			

(1) Acreage is approximate (2) United States (BLM) 2% for 10 Years starting January 1, 2021 (3) For as long as monthly

(2) All US BLM Leases have a 2 percent royalty rate for a period of 10 years, as of January 1, 2021, based on Industry-Wide Royalty Reduction Soa Ash and Sodium Bicarbonate issued by the Secretary of the Interior, for all existing and future Federal soda ash or sodium bicarbonate leases.

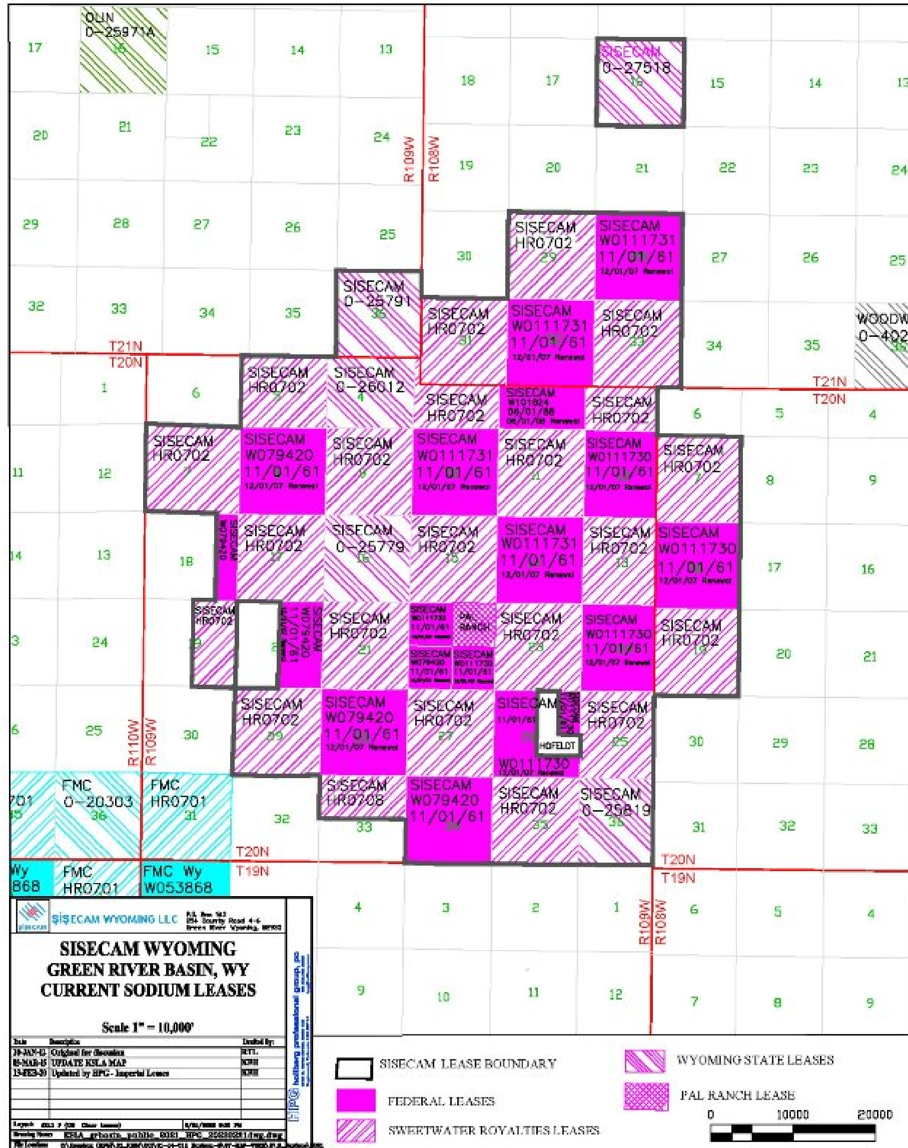


Figure 3.3 Sisecam Wyoming – Sodium Lease Tenure Location Map

For the purposes of this study, it has been assumed that all the relevant mineral leases, license, and permits that are in place, that the terms and conditions of all agreements relative to tenure have been met, that there are no encumbrances to the tenures, and they can be renewed into the future for the life of the operations. HPG has conducted a general review of mineral titles and license documents provided by Sisecam. HPG has not verified title or otherwise confirmed the legal status of any of the leases or the license but has relied upon documents provided by Sisecam Wyoming's representatives regarding the current status of the leases and license shown.

All federal leases are renewable on a 10-year cycle with the terms and royalty rate adjusted at the time of renewal. By Notice of Industry-Wide Royalty Reduction Soda Ash and Sodium Bicarbonate Leases dated February 8, 2021, the Secretary of the Interior authorized an industry-wide royalty reduction from currently set rates by establishing a 2 percent royalty rate for a period of 10 years, as of January 1, 2021, for all existing and future Federal soda ash or sodium bicarbonate leases.

Wyoming state leases are renewable on a 10-year cycle with the terms and royalty rate adjusted at the time of renewal.

On September 20, 2010, Sisecam Wyoming exercised its right to renew the original Union Pacific (Anadarko/Sweetwater Royalties) license for an additional 50-year period. The current Sweetwater Royalties UP-702 license extends to July 18, 2061. There are no provisions in the available documents for extension past this period. On October 12, 2015, Anadarko informed Sisecam's predecessor OCI Wyoming that, per the License Agreement the royalty rate would be raised to 8%. OCI Wyoming and now Sisecam Wyoming disputed that claim, the litigation was settled in favor of Sisecam with the current royalty rate on these leases now 8%.

In 2017, the BLM granted Sisecam's request to renew three Federal Sodium leases for their 10-year extension totaling 7,617 acres (W-0111730, W-0111731, and W-079420). On June 1, 2018, BLM renewed Sisecam's Federal lease No. W-101824 of 316.9 acres also for 10 years.

Sisecam requested renewal of all five Wyoming State leases that expired in 2019. All five of the leases, 0-42570, 0-25779 0-42571, 0-25971, and 0-26012 were granted renewal for 10 years.

Sisecam still has lease rights to the B. Pal property private lease of 160 acres, "for as long as monthly rental payments are made". Sisecam has reported that they continue to make the payments. Both the Upper Bed 25 and Lower Bed 24 areas of the PAL lease have been mined. The Bed 24 area has been used for TRM paste disposal and the Bed 25 Panels are some of the first two-seam mining test panels. Because we are not considering secondary mining and this area has been mined it was not considered for this reserve estimate.

Sisecam Wyoming's predecessor, OCI Wyoming, owned another private sodium lease, the Hoefelt lease. This lease expired in 1997, and no parts of those lands are considered for this reserve estimate. The Bed 25 mining area for the Hoefelt property has been completed. The available Bed 24 trona for the Hoefelt property has been excluded from this analysis but might be available if a lease agreement were to be completed with Hoefelt's heirs. This area contains an estimated 2.48 million recoverable trona tons at an estimated 88.9% trona grade. The lease also stipulated a perpetual easement for the workings contained in this lease.

The Sisecam facilities are located on leased and deeded surface rights on T20N R109W Sections 1, 2, 3, 9, 10, 11, 12, 13, 14, and 15; and T20N R108W Sections 5, 6 and 7. The mineral rights and surface estate for Sections 2, 6, 10, 12, and 14 are Federal leases administered by the BLM. Sections 1, 3, 5, 7, 9, 11, and 15, are private lands and are leased from Rock Spring Grazing Association (RSGA) to Sisecam to sink wells and shafts for sodium related mining activities and related pipelines, power and telephone lines, roadways, wells, and all other associated facilities so long as Sisecam has licenses to mine. The Mineral rights for Sections 1, 3, 5,7 9, 11, and 15 are owned by Sweetwater Royalties LLC.

Figure 3.4 shows the boundaries of the current mining permit and the surface ownership for the subject property. Figure 3.5 shows the boundaries of the current mining permit and mineral ownership for the Big Island Mine.

R109W
R108W
T21N
T20N
T19N
R110W

LEGEND

- PERMIT AREA
- ADJACENT LANDS
- BLM
- CROSSON/MULTIPLE
- HOFELDT
- ROCK SPRINGS GRAZING ASSOC.
- SWEETWATER ROYALTIES
- US FISH AND WILDLIFE
- HOFELDT, JO
- SISECAM WYOMING LLC
- BUREAU OF RECLAMATION
- STATE OF WYOMING

23718

ŞIŞECAM WYOMING LLC
P.O. Box 513
254 County Road 4-6
Green River Wyoming, 82935

DRAWN BY JLP PLANT NO. 180

TITLE IE2a

0	5/18/21	INITIAL ISSUE	JLP	HH
ISS	DATE	MODIFICATIONS	BY	CHECKED

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DATE DRAWN	5/18/21	PLANT	GREEN RIVER
SCALE:	1" = 2500'	PROJ. NO.	
CHECKED BY:	HH	PAGE NO.	
DATE CHECKED	5/18/21	GRV NO.	

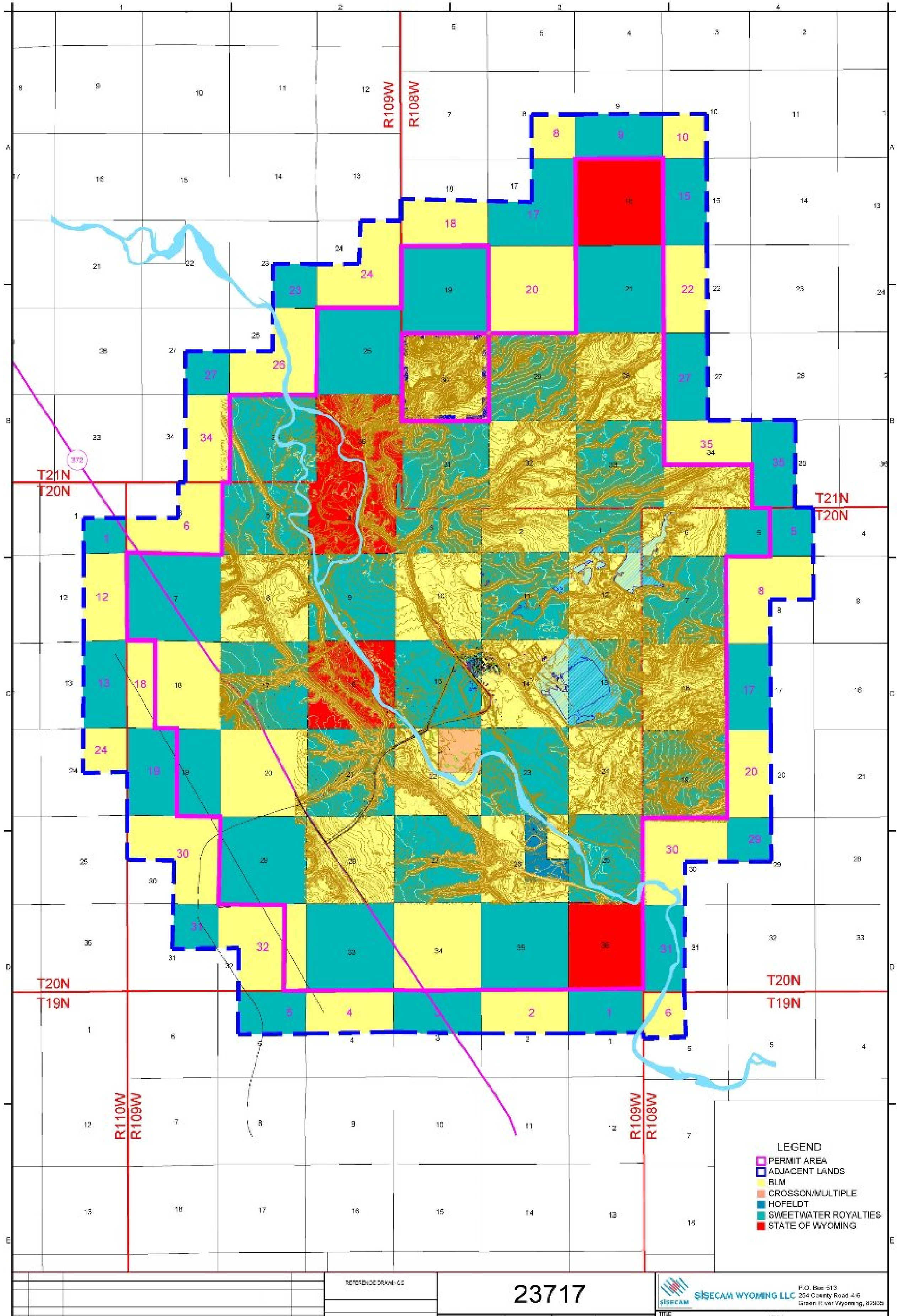
2021 PERMIT BOUNDARY SURFACE OWNERSHIP

D10PP133 0

1 2 3 4

Source: Sisecam Wyoming

Figure 3.4 Surface Ownership


R109W
R108W
T21N
T20N
T19N
R110W
LEGEND
PERMIT AREA
ADJACENT LANDS
BLM
CROSSON/MULTIPLE
HOFELDT
SWEETWATER ROYALTIES
STATE OF WYOMING
23717
SISECAM WYOMING LLC

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DRAWN BY:	JLP	PLANT NO.	130
DATE DRAWN:	5/18/21	PLANT	GREEN RIVER
SCALE:	1" = 2500'	PROJ. NO.	
CHECKED BY:	FH	RACE NO.	
DATE CHECKED:	5/18/21	GRV NO.	

2021 PERMIT BOUNDARY MINERAL OWNERSHIP

D10PP132 — 0

Source: Sisecam Wyoming

Figure 3.5 Mineral Ownership

4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

4.1 ACCESS

Sisecam Wyoming's mine and refinery are located 23 miles northwest of the town of Green River, Wyoming. The operation is accessible from Interstate 80 (I80), a four-lane divided highway, west to Exit 83, La Barge Road, then north on Wyoming Highway 372 (WY372) 12 miles to the OCI road, County Road 4. Both WY372 and County Road 4 are established paved two-lane highways that are maintained by Sweetwater County and the state of Wyoming Department of Transportation (WDOT).

The Sisecam site is serviced by a dedicated railroad spur line off the main East West Union Pacific rail line. Sisecam's spur line connects to the Union Pacific Main line just east of the FMC/Genesis Westvaco Facilities.

In addition to the onsite railyard, Sisecam utilizes a contract railyard along La Barge Road (Highway 372) which is privately owned and maintained by others. There are between one and five track lines at the facility to assist with switching empty and loaded cars and prepping them for shipment offsite. There is an estimated 18,400-feet of track owned by the Big Island Mine and Refinery.

4.2 CLIMATE

The Sisecam facilities are located in the Green River drainage of the upper Colorado River system. Situated in a high intermountain basin bounded by the Wyoming Range to the West, Uinta Mountains to the south and the Wind River Range to the northeast, mean elevation exceeds 6,000-feet. Climate is dry, cold-temperate-boreal and characterized by limited rainfall (less than 8 inches) with long, cold, dry winters and warm-hot, summers with occasional storm producing flash floods. Evaporation exceeds 36 inches resulting in little excess water, limiting the majority of vegetation to the Green River flood plain. Wind generally blows from a southwesterly direction.

4.3 LOCAL RESOURCES

Green River (pop.11,825, 2020 Census), and Rock Springs Wyoming (pop. 23,526) are the two closest towns to Sisecam, 23 miles and 42 miles respectively. Evanston Wyoming (pop. 11,747) is 111 miles to the west and the major metropolitan area of Salt Lake City (pop. 1,185,238) is 194 miles to the West. Green River and Rock Springs are well established communities with histories dating back to the 1800's as stops along the Union Pacific railroad with coal mining. The area has established oil and gas production, coal mining, major power generation, and five established trona mines that have been in business for 40 to 60 years. As a result, the surrounding communities have well developed industrial support capabilities. Both Green River and Rock Springs have developed school systems with a community college located in Rock Springs that has specific programs for training the technical and mechanical workers needed in the area. The community college has close ties to Wyoming University in Laramie, 200 miles to the east.

The population is stable and well diversified and considered the city of "56 nationalities" according to the Rock Springs Chamber of Commerce. The mines and oil and gas industry have higher than average compensation and benefits resulting in a stable community and workforce.

4.4 INFRASTRUCTURE

The Sisecam Facility has been in operation for over 60 years and the infrastructure is more than adequate and well developed for its purposes. The site infrastructure includes among other things:

- Soda Ash Process facilities;
- Electrical generation and transmission facilities;
- Natural gas pipelines and distribution facilities;
- Water supply and pumping station;
- Water pipelines, treatment, and distribution;
- Process waste tailings facilities;
- Sewage waste and runoff treatment facilities;
- Truck and rail loadout;
- Railyard and rail maintenance facilities
- Mine access shafts. ore hoists, and ventilation fans;
- Mine infrastructure, belt haulage, crushing, and mining equipment; and
- Ample buildings for offices, labs, change rooms, warehouses, and maintenance shops.

Section 15.0 contains a more detailed discussion of the site infrastructure.

1.5 PHYSIOGRAPHY

Sisecam is located in the semi-arid high plateau region of southwestern Wyoming at elevations between 6,200 and 6,600-feet above mean sea level (MSL). Only about one percent (1%) of the land is barren, but the short growing season, rugged topography, poor soils, and limited availability of precipitation make vegetation rather sparse in both variety and productivity. Over most of the area, vegetation is homogeneous in appearance consisting of about 90 percent brush and shrubs, chiefly sagebrush, saltbush, with greasewood and winter fat in drainage areas. The area has historically been utilized for livestock grazing, wildlife habitat, and recreational hunting. This area provides limited winter grazing for cattle, sheep, and horses. However, stocking rates are low primarily due to sparse vegetation (Soil Conservation Service [SCS]1988).

The Sisecam property is crossed by the Green River which is a primary tributary to the Colorado River and located in the Upper Green Slate Watershed and designated Class 2AB waterway.

Figure 3.4 illustrates the topography of the Sisecam leases along with the surface ownership.

5.0 HISTORY

During the late 1950's into the early 1960's, Stauffer Chemical Company was the second business to commence permitting for a soda ash facility in the Green River Basin. The area of interest was along the banks of the Green River. The permit area is located on the Big Island Bridge USGS Topographic Quadrangle. The Big Island is a predominate geographic feature in the Green River and is currently part of the Seedskadee Wildlife Refuge. From the initial permitting, the property has been known as the Big Island Mine and Refinery.

The former Stauffer Chemical Company initiated Trona exploration in August 1959. With the completion of 26 exploration drill holes by August 1960, the first reserve estimated was calculated; "A total of at least 360 million tons of better than 90 percent trona in beds 8.5 to 14-feet thick was proved up." (Trona Exploration in the Big Island Area, 1960). The Upper Bed (east of the Green River) contained 170 million tons and the Lower Bed, 190 million tons.

During 1961 minerals leases were obtained from Federal and private landowners, including the Union Pacific Railroad, totaling 33 ¼ Sections.

In 1962 Stauffer Chemical opened the Big Island Mine and Refinery in Green River, Wyoming with the purpose of producing all-natural soda ash from mined trona. Two shafts were sunk, and Refinery Units 1 & 2 constructed to produce dense soda ash. Mining commenced in the Lower Bed 24.

Four supplemental exploration drill holes were completed in 1967 and the acquisition of 2-1/4 Sections from the State of Wyoming and private ownership. Unit 3 was constructed to increase soda ash production.

Exploration activity increased substantially in the late 70's and early 80's more than doubling the database with 36 additional drill holes, now totaling 69 borings. Lease activity increased with addition of 4 ¼ Sections from Wyoming and private mineral ownerships. Then totaling 39 ¾ Sections or 24,736.89 Acres.

Over the next two decades Stauffer expanded production by adding Unit 4 and Unit 5 processing facilities. Production increased from 400,000 tons of soda ash per year to over 950,000 tons per year.

In 1985, the Big Island Mine and Refinery was acquired by Chesebrough Ponds and changed ownership several times over the next few years first to Imperial Chemical Industries in 1986 and a year later, to Rhone-Poulenc. Under Rhone-Poulenc continuous miners were introduced and Units 3 and 4 processing facilities were converted from triple effect crystallizers to mechanical vapor recompression.

Additional leases were acquired in 1988 (W-101824) increasing the area to 43-1/4 Sections or 26,653.79 Acres.

In 1996, Rhone-Poulenc sold its interest in the soda ash business to OCI Company, LTD, later renamed OCI Chemical Corporation.

OCI added Unit 6, a standalone processing facility, in 1998 and decahydrate mining in 2006 to increase the sites production to over 2.5 million tons per year.

In 1997 the Hoefelt private lease totaling 160 acres expired and was not renewed.

Former Union Pacific Lease TR708 was not renewed in June 2008. This acreage was deleted from the resources in the 2010 update with leased acreage now totaling 23,612 (Table 3.1).

Since the exploration program was completed in 1980, additional thickness and quality information was collected in the early 2000's. Twelve additional surface exploration drill holes were completed, now totaling 81 data points. Supplementing this are 10 borings completed in the Lower Bed from the Upper Bed and 34 borings into the Upper Bed from the Lower Bed. A more detailed description of the exploration efforts is described in Section 7.0 and the exploration drilling history is tabulated in Table 7.1.

Since 1999, over 4000 thousands of mine observations have been tabulated verifying the data interpretation. The geological depositional and post depositional features, described below, have been recognized from the mine mapping.

In September of 2013, OCI announced its Initial Public Offering (IPO) on the NYSE under 'OCIR'.

Through Ciner Enterprises Inc., a Ciner Group affiliate and parent of Sisecam Chemicals Resources LLC ("Sisecam Chemicals" formerly known as Ciner Resources Corporation), Ciner Group acquired control of the property in 2015 and sold a controlling interest (60%) of the outstanding units of Sisecam Chemicals to Sisecam Chemicals USA Inc. as of December 21, 2021. Sisecam Chemicals indirectly owns approximately 72% limited partner interest in Sisecam as well as its 2% general partner interest and related incentive distribution rights. Through Ciner Enterprises Inc., Ciner Group continues to hold 40% of the interests in Sisecam Chemicals.

Sisecam is an international company with operations in 14 countries on four continents. 'It ranks among the world's top two producers in glassware, and among the top five global producers in glass packaging and flat glass. Şişecam is also one of top three largest producers of soda and a world leader in chromium chemicals.' (Sisecam Website). Today, Sisecam Resources LP is on the NYSE as 'SIRE'.

With Sisecam as the 'controlling partner' the Big Island Mine and Refinery is now vertically integrated with an end user of their product providing a base load for their plant and strengthening their international sales and logistics.

5.1 PRODUCTION HISTORY

Sisecam Wyoming has a long and consistent production history extending over 60 years. This long history forms the basis for our reporting of the trona reserves and resources. Table 5.1 shows the sites trona and soda ash production for the last six years. The only year of decreased production was 2020 due to the worldwide impact of COVID-19 virus.

Table 5.1
Sisecam Historical Soda Ash Production
By Year

	2016	2017	2018	2019	2020	2021
Trona tons	4,050,396	4,001,325	4,018,329	4,157,009	3,653,830	4,276,837
Deca tons	1,183,038	1,063,396	1,057,814	1,087,002	676,619	1,244,473
Soda Ash tons	2,654,965	2,625,612	2,569,145	2,712,187	2,236,850	2,682,203
Liquor tons	40,348	41,276	44,224	39,865	42,479	38,260
%Recovery w/o liquor	91.49	92.24	92.06	93.18	91.11	88.90

6.0 GEOLOGICAL SETTINGS, MINERALIZATION, AND DEPOSIT

6.1 GEOLOGIC SETTING

The trona deposits of SW Wyoming are the world's largest occurrence of natural soda ash. The deposit was formed from the evaporation of a shallow lake, Lake Gosiute, that covered SW Wyoming and NE Utah 50-60 million years ago (wyomingmining.org, 2020).

6.2 TRONA DEPOSITION

The trona mineral deposits within the Sisecam Wyoming lease area are correlated with the lacustrine sequences of the Eocene Green River Formation. Trona and other associated evaporates occur within the Upper Wilkins Peak Member.

The lacustrine sequences of the Green River Formation were deposited in a series of lakes. Approximately fifty million years ago, Lake Gosiute (Lake Gosiute, Figure 6.1), fluctuated in areal extent in response to climatic and tectonic events. At its smallest size, during restrictive phases, the lake was very saline and contained large quantities of dissolved solids. When evaporation of the water reached critical levels, dissolved solids precipitated to form trona, shortite, halite, and other saline minerals. Trona formed as a chemical precipitate and required a specific range of weight percent of sodium and carbon dioxide in solution, a specific range of temperatures, and a specific range of relative concentrations of other ions (calcium, magnesium, chlorides, sulfates, etc.) within the water column.

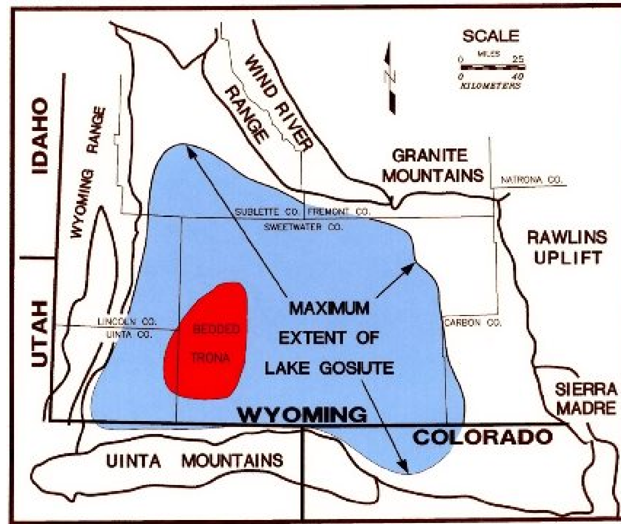


Figure 6.1 Deposition Basin – Lake Gosiute

Sediments eroding from the peripheral mountains created extensive alluvial plains and broad flat pediments. Clastic wedges of the Wasatch and Bridger-Washakie formations intertongue and grade laterally with the lacustrine sequences of the Green River Formation (Figure 6.2).

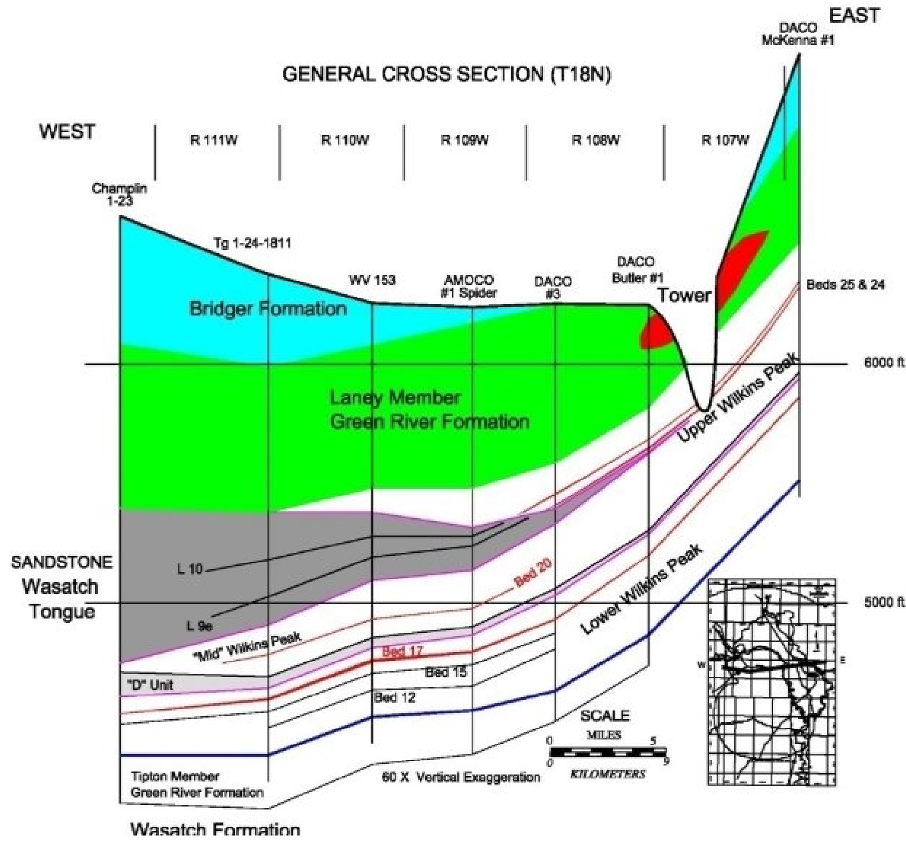


Figure 6.2 Deposition Cross Section

Within the hydrogeographic basin of approximately 77,300 km^2 (48,500 square miles), the greatest expanses of Lake Gosiute and surrounding mudflats occurred during the Tipton and Laney stages. Bradley (1964) estimated the lake expanded to over 24,000 km^2 (15,000 square miles). Total evaporation of Lake Gosiute during the restrictive phases of the Wilkins Peak stage is indicated by the presence of sedimentary structures in the deposit.

6.3 TRONA BEDS OF THE GREEN RIVER BASIN

The US Geological Survey recognizes 25 trona beds of economic importance (at least 1 meter in thickness and 300 km^2 in areal extent) within the Green River Basin. Identified in ascending order, the trona beds are numbered 1 through 25 from the oldest (stratigraphically lowest) to the youngest (stratigraphically highest), as shown in Figure 6.3. Sisecam Wyoming has mineable reserves in the shallowest mechanically minable Trona Beds 24 and 25 (800 to 1,100-feet deep). Currently Genesis

Alkali, Solvay, and Tata are mining Bed 17 occurring at greater depth. Pacific Soda is focused on the lower trona beds, Bed 1 through Bed 4, utilizing solution mining due to the trona depth.

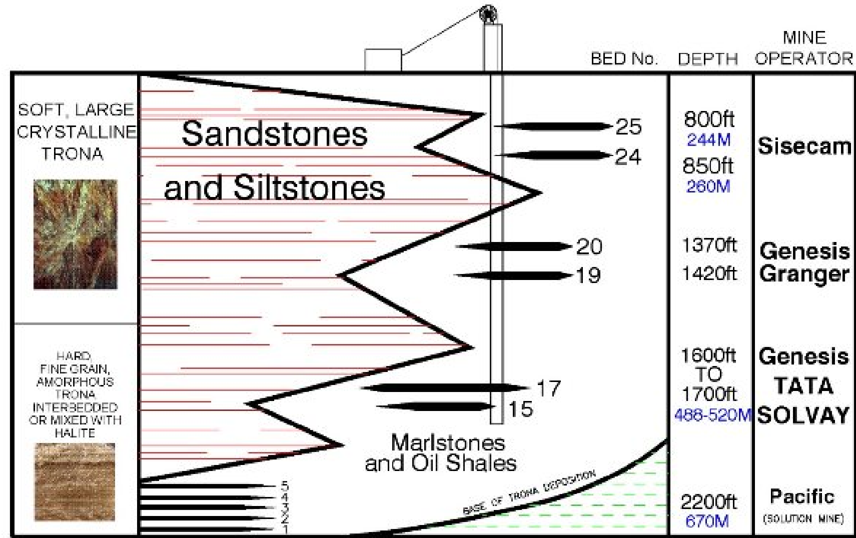


Figure 6.3 Schematic Section Through the Trona Deposits

Trona Bed 1 through 18 of the Lower Wilkins Peak are relatively tabular with a fine grain sugary appearance. Various amounts of halite are present and can become more salt, halite, than trona towards the southwestern portion of the depositional basin. Halite is a significant contaminate in the refining process and reduces recovery and increases production cost. A stable depositional environment is implied by uniformity and minimal variation of the depocenters of Beds 1 through 18.

Trona Beds 19 through 25 are relatively halite free and consist of amber translucent coarse-crystalline blades to coarse granular "sugary" textured masses. Trona Beds 19 through 22 are located in the northwestern corner of the Green River Basin saline depositional basin. Trona Beds 24 and 25, mined by Sisecam Wyoming, are located in the northeastern corner of the Green River Basin.

Figure 6.4 shows the areal extent of the major trona beds in the Green River Basin.

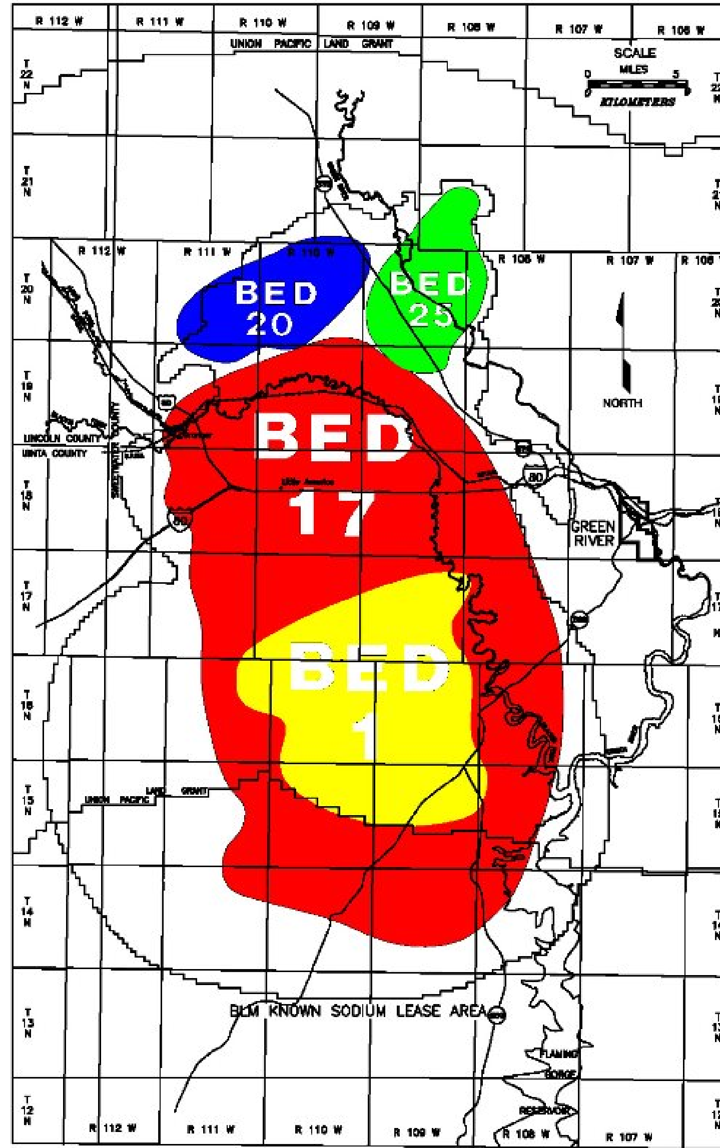


Figure 6.4 Green River Basin Trona Bed Extents

6.1 LOCAL GEOLOGY AND LITHOLOGY

6.4.1 Local Geology

Mineral reserves within the Sisecam Wyoming lease area are confined to Trona Beds 24 and 25. Isotope analysis of a volcanic layer, known as the Big Island Tuff, located between these beds, has dated deposition at approximately 49 million years. Local structural gradient is oriented west/southwest at a grade of approximately 50-feet per mile and was influenced by the structural high of the Rock Springs Uplift to the east. Overburden depths of Beds 24 and 25 increases along the strike of the dip from typically 800-feet to 1,100-feet with increasing surface topography. Figure 6.5 shows a generalized east-west cross section across the Big Island Mine property.

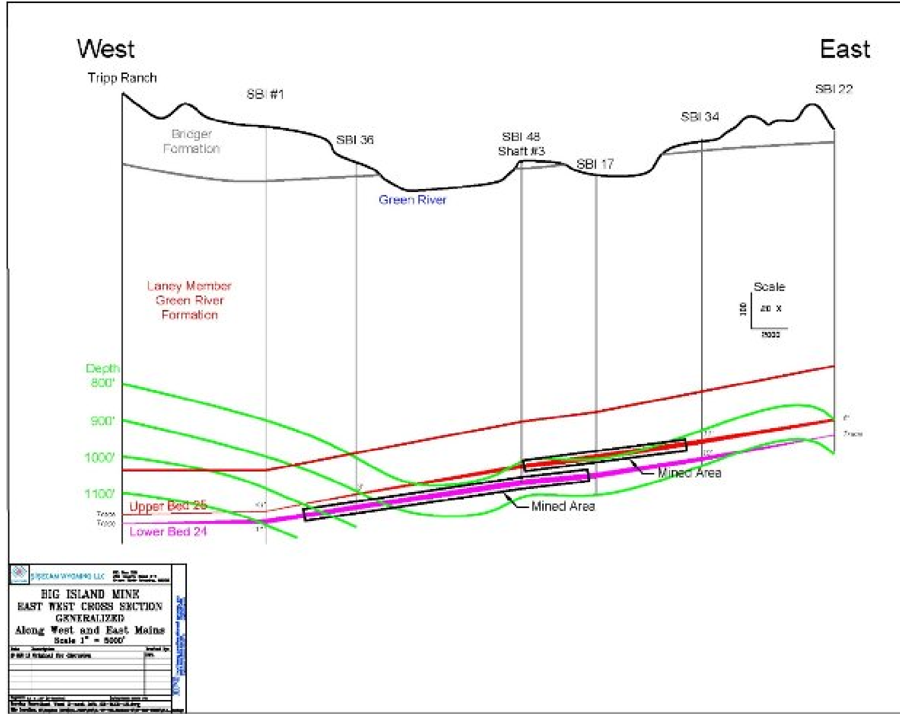


Figure 6.5 Generalized Cross Section – Bed 24 and 25

6.4.2 Trona Bed Lithology

A review of the exploration database and ore characteristics was initiated in 1999, by Korte and others, with greater emphasis on correlating mine observations with available drill core and lithological core descriptions. Mine mapping of trona ore thickness occurred along the perimeter of the mine developments as well as interior portions of the mine where access was available. A database of approximately 500 mine observations was developed. Documentation of this investigation was presented in 2002 with recommendations for continual study from supplemental exploration and mine observations. To date, the mine observations exceed over 4,000 measurements with emphasis on active mine areas. Mine observations in critical areas are on a 100-foot spatial density.

The 1999 investigation identified four distinct lithological horizons (geological facies changes) within each bed that may represent repetitive depositional occurrences. These horizons have been designated Trona 1 through Trona 4, or T1 through T4. The basal unit labeled T1 is composed of very fine grain sugary textured trona forming lenticular pods of varying thickness and is probably post depositional in origin. In the original 1980 database, sometimes the T1 was included, and sometimes it was excluded. T1 unit is not part of the reserve base for this study because it is separated from the mineable horizons by several layers of oil shales and marlstone. Dilution from these non-soluble minerals decreases ore grade to unacceptable levels.

The intermediate T2 through T4 horizons are currently mined by Sisecam Wyoming with the continuous miner fleet. During mining, the T4, and occasionally T2, are omitted. The T2 unit is stratigraphically at the basal contact with the floor shales. T2 is separated from the T3 unit by a thin marker seam of shale. This marker seam assists the miner operator with horizon control. The T4 unit is located at the top of the trona bed and represents the conclusion of deposition. An increase in insoluble materials in the T4 unit can reduce grades in this horizon. The T3 unit is the primary high-grade horizon. Only the T2 through T4 horizons are considered ore in this reserve update. Figure 6.6 illustrates this general lithological section.

The geological depositional and post depositional features, listed above, have been recognized from the mine mapping, and confirmed by several thousand mine observations.

Prior to trona formation, a layer of rich organic marlstone was deposited. This material can be classified as an oil shale but does not have sufficient organics to combust. Initial trona deposition of both beds was precipitated as layers up to 3-feet thick of a finer texture with some organic material giving this layer a darker color, illustrated as T2 Ore Zone on Figure 6.6 lithological section. An interruption of trona deposition is illustrated by the occurrence of a laminated marlstone. The marker seam might represent a brief climate change or a storm event, washing clay material into the lake. Subsequently, the primary trona precipitation followed as illustrated by T3 Ore Zone with purities up to 99%. Closure of trona precipitation is illustrated as T4 Ore Zone and contains greenish-grey marlstone lamination resulting in a decrease in quality. Post-deposition fluid migration from below produced a secondary layer of trona illustrated as T1 Zone. This zone probably was the result of hydrofracturing to floor shales to form lenses of trona varying in thickness from zero to six feet. The T1 unit has a fine sugary grain texture and can contain organics associated with the oil shales. Sisecam Wyoming's mining is focused on a Mineable Ore Zone of T2 through T4 containing an average grade exceeding 89%.

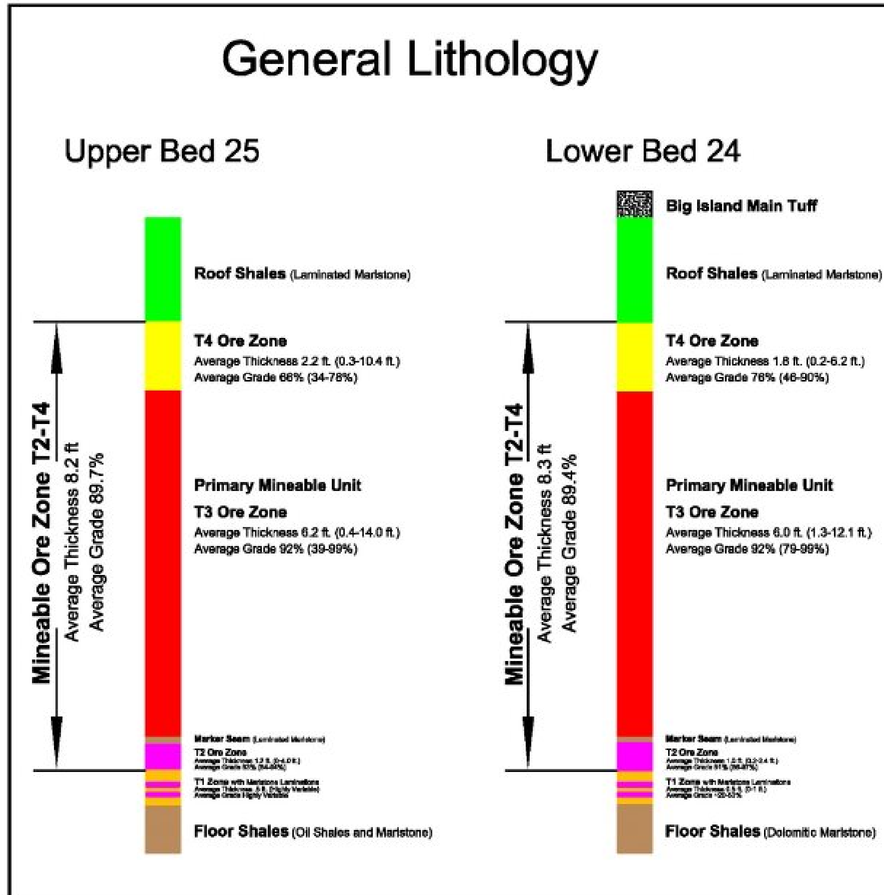


Figure 6.6 Trona Bed 24 & 25 Lithological Section

Interburden between Beds 24 and 25 is composed of laminated dolomitic marlstones with occurrences of volcanic tuff laminations and layers. Within the interburden are zones of organic rich marlstones and numerous occurrences of an associated mineral, shortite (calcium sodium carbonate).

Overburden above Bed 25 is composed of the same material listed above with increasing layers of hard dolomitic cemented detrital silts and fine grain sands. The detrital sediment probably represents storm events.

Other than microscopic material and algal debris within the trona, no fossils have been observed in trona beds.

6.4.3 Sedimentary Structures

Depositional and post-depositional sedimentary structures have been observed in the Sisecam Wyoming Mine and have had some impact on production grades and/or mining. These structures include:

Polygonal, vertically oriented, clay filled features are common, suggesting intense evaporation and desiccation, resulting in the formation of large "mud-cracks" within the deposit. Sisecam Wyoming Bed 25 exhibits these features in greater detail than Bed 24, Figure 6.7.

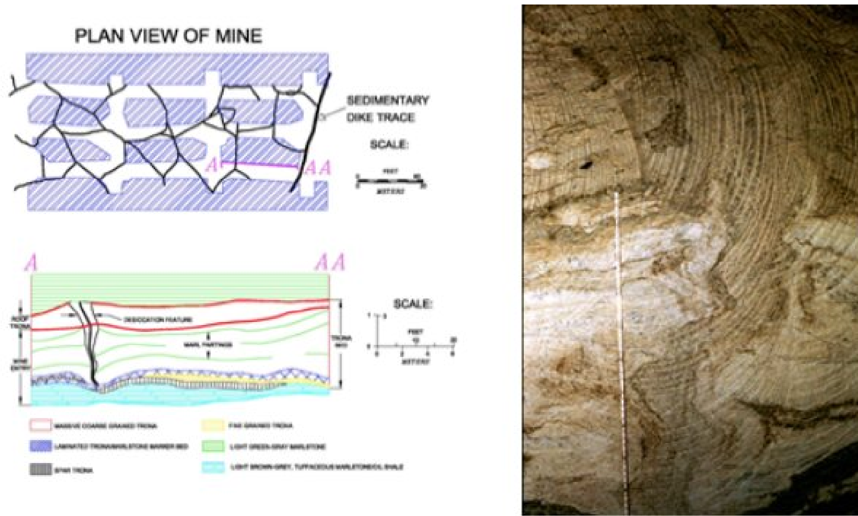


Figure 6.7 Filled Desiccation Crack within Trona Bed

"Blow-outs" occurring in both beds, represent a massive dewatering event from vertical brine movement eroding the trona bed. Results of this movement have been observed to completely obliterate the beds from a 12-foot seam thickness to zero within a 50-foot distance span, Figure 6.8.

Figure 6.8 Blow-out Feature within Trona Bed

Geological faulting, movement, and fracturing have been observed in Bed 25. The occurrence of locally identified “root-beer” seams is associated with this type of disturbance, Figure 6.9.

Figure 6.9 Geologic Faulting within Trona Bed

Post-depositional dissolution from moisture/groundwater has been observed in the Lower Bed 24. Relatively isolated, the trona bed appears to be dissolved from the top after deposition, resulting in thinning of the bed and an increase in insoluble content in the upper portion of the seam, Figure 6.10.

Figure 6.10 Post Depositional Dissolution within the Trona Bed

Post-depositional soft sediment folding and rolling of the ore bodies (observed in both beds), Figure 6.11.

Figure 6.11 Post Depositional Soft Sediment Folding within the Trona Bed

Originally, the trona beds were formed close to sea level but now reside at a mile above sea level. During this transition period, compressional forces squeezed the tabular deposits. Where trona was thick and competent, little impact occurred, but as the ore bodies thin and become less competent, pinching and rolling could occur. Severe seam rolling can result in localized production grade dilution from increased insoluble minerals at the basal contact.

7.0 EXPLORATION

Exploration drilling has been the primary method to delineate trona Beds 24 and 25. The former Stauffer Chemical Company initiated trona exploration in August 1959 and completed 26 exploration drill holes by August 1960. Four supplemental exploration drill holes were completed in 1967 and the acquisition of 2-1/4 Sections from the State of Wyoming and private ownership. Exploration activity increased substantially in the late 1970s and early 1980s more than doubling the database with 39 additional drill holes, bringing the total to 69 borings. Two solution wells were drilling in 1994 bringing the total to 71. The final 10 exploration drill holes were completed from 2000 to 2011. A total of 81 surface to bed drill holes supplemented with 44 bed-to-bed borings comprise the basis of the data set. Enhancing this data set are over 4,000 observations and measurements from the existing mine developments.

In general, the core samplings were collected from each boring and prepared for analysis. Methodology utilized for coring varied through time and have included mud drilling, saturated brine drilling, air-foam drilling, wireline drilling and continuous coring from surface. A limited number of borings were logged with geophysical techniques including gamma, sonic, neutron, caliper, and high-resolution rock mechanics tools.

Only four of the 30 exploration drill cores from the 1959 to 1967 drilling programs have survived. The more recent core from 1975 through 2011 is stored in the mine at a constant climate. Verification of trona thickness and quality has been difficult for the 1975 through 1980 exploration cores due to decomposition and desiccation of the marlstone clays.

No supplemental exploration has been conducted since 2011 and drilling records remain unchanged. Mine observations from Sisecam’s 2020 and 2021 mine advance in the northeastern and southern portions of Bed 25 have been incorporated into this analysis.

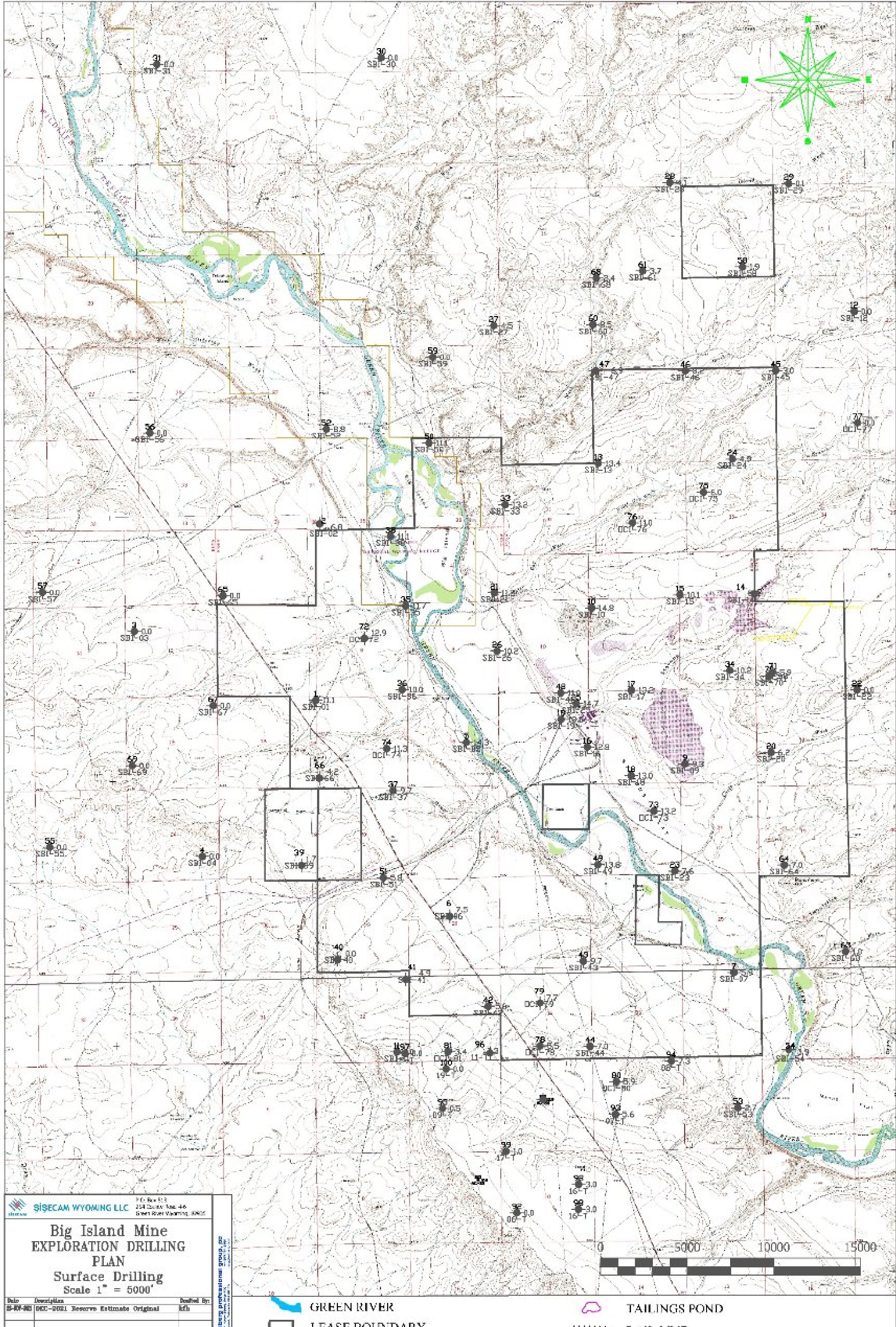
Since 2017 the only mining in Bed 24 was the extensions of the LB East Mains and LB North Mains, Two Seam area. Examination of this area did not indicate any requirement to modify the Bed 24 geologic model.

Table 7.1 shows the history of the exploration drilling on the Big Island Mine, Figure 7.1 and Figure 7.2. illustrates the location of the exploration drilling.

Table 7.1
Big Island Mine Exploration Drilling History

Surface Exploration Drilling						Internal Mine Bed to Bed Drilling		
SBI Hole Number	Date Drilled	Logged By:	SBI Hole Number	Date Drilled	Logged By:	SBIU Hole Number	Date Drilled	Logged By:
1	8/19/1959	LEM	51	/ /1978	CAD, RLP, DJF	SBIU-01	þ Date, 1960's	LEM
2	8/27/1959	LEM	52	9/22/1978	CAD, AMM	SBIU-02	þ Date, 1960's	LEM
3	9/7/1959	LEM	53	5/7/1979	CAD	SBIU-03	þ Date, 1960's	LEM
4	9/17/1959	LEM	54	5/18/1979	CAD	SBIU-03A	þ Date, 1960's	LEM
5	9/25/1959	LEM	55	11/19/1978	CAD	SBIU-04	þ Date, 1960's	LEM
6	10/4/1959	LEM	56	7/ /1979	CAD, CJF	SBIU-05	þ Date, 1960's	LEM
7	10/10/1959	LEM	57	5/6/1979	CAD	SBIU-06	þ Date, 1960's	LEM
8	1959	LEM	58	9/1/1978	CAD, PMM	SBIU-07	þ Date, 1960's	LEM
9	10/25/1959	LEM	59	7/31/1979	CAD, CJF	SBIU-08	þ Date, 1960's	LEM
10	11/2/1959	LEM	60	6/23/1979	CAD, CJF	SBIU-09	þ Date, 1960's	LEM
11	11/12/1959	LEM	61	6/ /1979	CAD, CJF	SBIU-10	þ Date, 1960's	LEM
12	5/28/1960	LEM	62	8/14/1979	CAD, CJF	SBIU-11	þ Date, 1960's	LEM
13	5/30/1960	LEM	63	5/15/1980	CAD	SBIU-12	þ Date, 1960's	LEM
14	6/2/1960	LEM	64	7/31/1980	CAD	SBIU-13	8/7/1970	RLP
15	6/6/1960	LEM	65	6/13/1980	CAD	SBIU-14	12/8/1970	RLP
16	6/10/1960	GLF	66	5/21/1980	CAD	SBIU-15	12/ /1970	RLP
17	6/16/1960	GLF	67	6/26/1980	CAD	SBIU-16	1/17/1974	RLP
18	6/26/1960	GLF	68	8/3/1980	CAD	SBIU-17	1/21/1974	RLP
19	6/26/1960	GLF	69	7/13/1980	CAD	SBIU-18	1/ /1974	RLP
20	7/5/1960	GLF				SBIU-19	2/5/1974	RLP
21	7/4/1960	GLF	Sol. Wells			SBIU-20	2/23/1974	RLP
22	7/8/1960	GLF	70	1994	CAD	SBIU-21	4/30/1974	RLP
23	7/13/1960	GLF	71	1994	CAD	SBIU-22	3/15/1974	RLP
24	7/11/1960	GLF				SBIU-23	5/17/1974	RLP
25	7/22/1960	GLF	OCI			SBIU-24	2/2/1976	RLP, CAD
26	7/17/1960	GLF	72	12/20/2000	RTL	SBIU-25	2/16/1976	RLP, CAD
27	7/28/1967	RLP	73	6/23/2002	RTL	SBIU-26	2/25/1976	RLP, CAD
28	10/13/1967	RLP, CJW	74	6/30/2002	RTL	SBIU-28	5/17/1976	RLP, CAD
29	10/13/1967	RLP, CJW	75	7/10/2002	RTL	SBIU-29	7/ /1976	RLP, CAD
30	10/28/1967	RLP, CJW	76	7/15/2002	RTL	SBIU-30	o Date, 77-79	RLP, CAD
31	9/12/1975	RLP	77	7/24/2002	RTL	SBIU-31	o Date, 77-79	RLP, CAD
32	10/9/1975	RLP	78	8/20/2011	RTL	SBIU-32	o Date, 77-79	RLP, CAD
33	10/27/1975	RLP	79	8/23/2011	RTL	SBIU-33	o Date, 77-79	RLP, CAD
34	7/10/1976	RMS	80	9/9/2011	RTL	SBIU-34	o Date, 77-79	RLP, CAD
35	8/27/1976	RMS	81	9/12/2011	RTL			
36	8/27/1976	RMS				D02-1	11/4/2002	RTL
37	8/14/1976	RMS	Phillips Petroleum			D02-2	11/7/2002	RTL
38	7/26/1976	RMS	06-T	8/30/1965	GKB	D02-3	11/11/2002	RTL
39	9/14/1976	RMS	07-T	9/13/1965	GKB	D02-4	11/14/2002	RTL
40	7/2/1977	DJF	08-T	9/22/1965	GKB	D02-5	11/17/2002	RTL
41	8/5/1977	DJF	09-T	9/30/1965	GKB	D02-6	11/20/2002	RTL
42	10/1/1977	CAD	11-T	10/6/1965	GKB	D02-7	11/21/2002	RTL
43	10/ /77	CAD	12-T	10/11/1965	GKB	D02-8	12/4/2002	RTL
44	9/26/1977	CAD	16-T	11/1/1965	GKB	D02-9	12/4/2002	RTL
45	10/31/1977	CAD	17-T	11/4/1965	GKB	D02-10	12/9/2002	RTL
46	11/15/1977	CAD	19-T	11/8/1965	GKB			
47	11/ /1977	CAD	Allied Chemical					
48	5/28/1978	CAD	AC-34	5/17/1978	BH			
49	10/10/1977	CAD	AC-33	1978	BH			
50	9/7/1978	CAD	AC-36	1978	BH			

LEM: L. E. Mannion
RLP: R. L. Parratt
CJW: C.J. Wendt
RMJ: R. M. Smith
CAD: C. A. Dickerson
BH Ben Hohler
GKB GK Brasher
RTL: R. T. Leigh


ŞİŞECAM WYOMING LLC
Big Island Mine
EXPLORATION DRILLING
PLAN
Surface Drilling
Scale 1" = 5000'
Date
Description
Drafted By:
DEC-2021 Reserve Estimate Original
kfb
GREEN RIVER
TAILINGS POND
0
5000
10000
15000

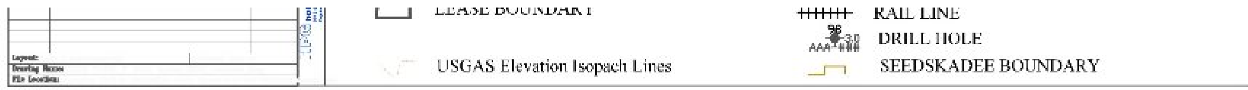
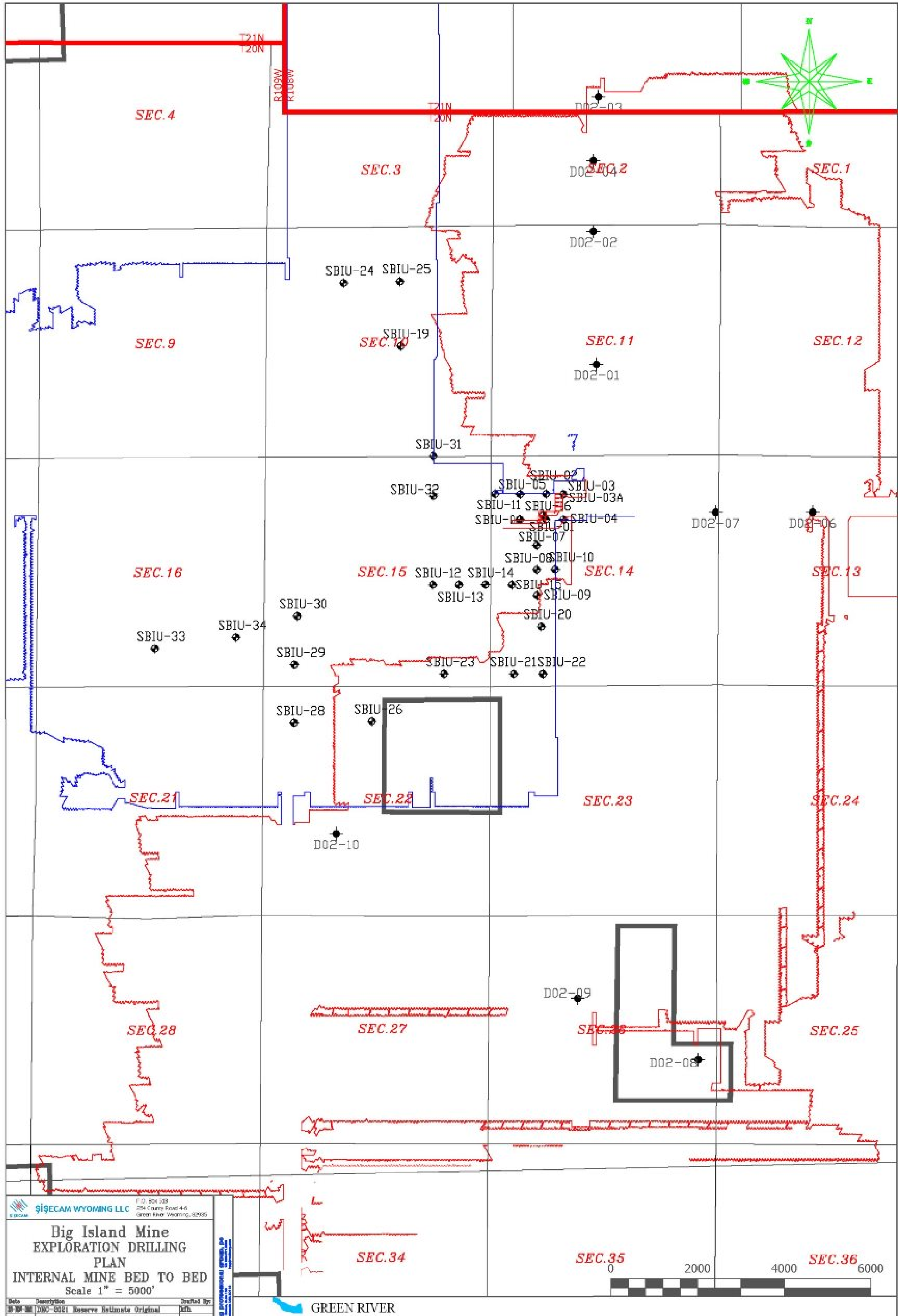


Figure 7.1 Surface Exploration Drilling Locations with Surface Topo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D02-03
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SBIU-31
SBIU-32
SBIU-02
SBIU-05
SBIU-03
SBIU-03A
SBIU-11
SBIU-16
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SBIU-08
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0
2000
4000
6000
GREEN RIVER
ŞIŞECAM WYOMING LLC
Big Island Mine
EXPLORATION DRILLING
PLAN
INTERNAL MINE BED TO BED
Scale 1" = 5000'

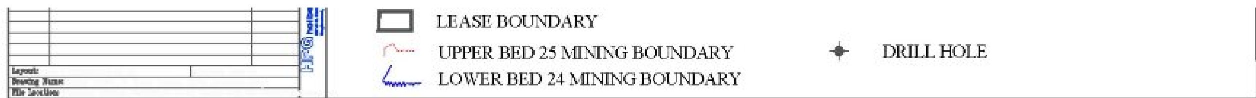


Figure 7.2 Underground Exploration Drilling Locations with Upper and Lower Bed Mining Outlines

8.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY.

For recent exploration drilling the core samples were examined, photographed, and logged in the field then boxed, labeled, and prepared for transportation. Early exploration had minimal documentation on preparation and core logging. More recent exploration campaigns are better documented with photographs of the core prior to boxing.

Standard practice was to split the core samples along the length of the core with half the sample sent to in mine storage. Sample intervals were generally between six and twelve inches in length. The split sample was then analyzed by the Sisecam plant laboratories. The Sisecam Wyoming laboratory has multiple certifications including ISO 9001-2015 and NSF. The lab has multiple well documented quality control and quality assurance processes which were reviewed during the site visit. The more recent samples remain available for further analysis if results are out of the norm.

Earlier core samples were subjected to external and internal analysis. Analytical methodology evolved over time. Initially, samples were reported for sodium carbonate and sodium bicarbonate content with weight percent trona calculated. The exact procedure for the early analysis is unknown. Analysis of more recent core simulates the existing refinery process:

1. Crushing to 3/8 inch or less;
2. Dried in oven;
3. Dissolved with water;
4. Filter insoluble;
5. Prepare filtrate;
6. Titration with acid;
7. Calculate total alkalinity; and
8. Convert to weight percent trona.

Records from the exploration projects are stored in a locked storage location in Sisecam Wyoming's technical office building at the mine site with the core samples stored in the mine where the stable humidity and temperature helps preserve the samples.

9.0 DATA VERIFICATION

9.1 SITE VISITS

In performance of these services and preparation of this study, Mr. Hollberg and Mr. Leigh have made numerous site visits to the Big Island Mine with the most recent visits on the 29th of September 2021, 2nd, 12th, 13th, 14th and 28th of October and 16th of November 2021.

9.1.1 Mine Visit

Mr. Leigh visited the mine on Sept 29th, October 2nd, and 28th examine and workings and take thickness measurements for conformation of drill hole data and to add to the database used for this estimate. During his visits he examined the following areas:

- Upper Bed 25
    - UBE Submain Buttes;
    - UBE P10S;
    - UBE P9S;
    - UBE P7S Start;
    - UBSW P8E End of Panel;
    - UBSW P9E End of Panel;
    - UBSW Buttes;
    - UBSW P11 W End of Panel;
    - UBE P7S Completion; and
    - UBE Submain Completion

On 12-Oct-21 Mr. Hollberg examined the underground with John Lewis, Sisecam's Engineering Superintendent. Areas examined during this visit included:

- Lower Bed 24
    - LBNE Butts #1 North to X-cut 114 N – two-seam mining;
    - LBNE 1W and LBNE 2W Panel Stub out, two-seam mining; and
    - Lower Bed Southwest #2 Butts- X-Cut 60 S – Water inflow pumping station.
- Upper Bed 25 –
    - UB East Mains to X-Cut 121 end of mining east;
    - UBE 7 South Southeast Mains to X-Cut 21– end of mining;
    - UBE- Panel 10 South to X-Cut 31 – end of mining;
    - UBE Panel 7 South first half;
    - UBSW Butts #1 to X-Cut 265 – end of mining;
    - Panel 9 East UBSW LH Mining to X-Cut 41E (CM02);
    - Panel 10 East UBSW RH Mining to X-Cut 29E (CM06); and
    - Panel 11 East UBSW to X-Cut #6W.

The following are some general observations based on these examinations:

<u>LB Two Seam</u>
The Lower Bed two-seam mining area was visited and is of interest because a large part of the remaining reserves are two-seam mining. Since the report in 2019, Sisecam has made a concerted effort to develop the mains so that panel mining can begin. Higher extraction panel mining below the existing upper bed panels is necessary to validate the viability of the two seam mine designs. In the last two years, Sisecam has developed the LB NE Mains to X-Cut 123N and has stubbed in the first two panels to the west. In 2021, Sisecam produced approximately 585,000 tons (13.7% of total ore production). Sisecam expects to

begin mining in Panel 1West in Q1 of 2022 and increase ore production from two seam areas to approximately 880,000 tons (21% of total ore production).

The October 2021 examination of the LB two-seam mine workings indicated favorable ground conditions with plus 14-foot thick trona, little if any floor heave, corner spalling or roof cutters. The panel stub-out entries which are driven on a herringbone pattern also indicated favorable ground conditions. The only indication of increased geotechnical stresses, likely due to the Upper Bed mining, are shallow roof spalling perpendicular to the mining direction. These v-shaped breakouts are near linear, generally less than 2-inches deep and run perpendicular to the mining direction. These small spalls rarely impact overall roof stability unless the remaining roof trona is extremely thin or the spalling is parallel to an associated Natron seam. Similar spalling was also encountered in the Lower Bed West Panels to the south where high concentrations of roof gases were encountered.

The Lower Bed West was visited due to multiple events that occurred impacting access to that area since 2017. Reserve reports prior to 2019 assumed long term access to this area to recover the trona west to the 8-foot trona thickness contour line. Multiple seismic events occurred between 2017 - 2019, likely caused by large roof falls in the adjacent panels to the north and south, producing large methane discharges and water inflow(s) that flooded down dip areas of the LB below the 5,310 MSL elevation. Water inflow subsequently diminished prior to Sisecam needing to take action by pumping water out of the mine. Water inflow has stabilized at around 85 gallons per minute (gpm) which is now pumped from a newly developed pumping station in the Lower Bed Southwest #2 Butts. Earlier examination of the West mains revealed the entries to be caved tight at X-Cut 223W and the area has been blocked off and abandoned with a crib and post breaker line installed. Without extraordinary efforts, access to the outer reserve boundaries in through the LB West Mains is no longer possible. This topic is covered in more detail in Section 13.2.

UB East Mains, UBE Panel 10 South

An area of concern reported in the 2017 and 2019 reserve reports is the thinning ore in the UBE Mains where areas of ore less than eight feet caused by floor rolls and ore disruptions were encountered. Variable ore thickness from 7.7 to 13.3-feet in the eastern extent of the UBE Mains caused Sisecam to stop mining and develop UBE 7 South Mains to the south and then extend the mains to the east (7 South Southeast Mains). Mining was halted at X-cut 21 east due to floor rolls and disruptions in the trona bed.

Since the 2019 Reserve report, the UBE 7 South Southeast Mains were extended past the SBI-20 drill hole at X-cut 17 East. SBI-20 is shown as 15.1-feet of ore at an average grade of 89.4%, but examination of the drill log shows the bottom 11.3-feet to be 97.1% grade and the top 4-feet to be 65.7%. Sisecam reports that cutting of the lower grade top trona has negative impacts upon the processing facilities and must be avoided. Examination of this area confirmed over 11-feet thickness good quality trona with low grade trona in the roof. In the 2019 Reserve estimate, the bed thickness for this drill hole was adjusted to 11.3-feet. The more current examination of this area confirms this change was correct.

Examination of UBE Panel 10 South off these mains showed increasing frequency of the floor shale horizon rolling up into then back down out of the trona bed mining horizon as the entries advanced east and south. With floor rolls initially occurring every 7 or 8 x-cuts and increasing in frequency with floor rolls every 2-3 x-cuts. The processing facilities can process this material but only at reduced rates. Without modifications to the processing facilities, or extensive efforts to blend this ore with higher-quality ore from other mining areas, ore from this area negatively impacts Sisecam's soda ash production. UBE Panel 10 South was stopped at room 31. Figure 9.1 shows one of the floor rolls in this panel.

Figure 9.1 Floor Roll Panel 10 South UBE

Upper Bed 25 East Mining Area
UBE Panel 7 South has been developed approximately two miles south from the Upper Bed 25 East Buttes. At the terminus in Room 114 through Room 104, thin variable ore was encountered with deteriorating quality. Adjacent Panel 6 South UBE was mined an additiona1 1,400-feet south and was terminated with the same deteriorating ore conditions. The examination of the remainder of Panel 7 South exhibited sections with nominal ore conditions and sections with floor rolls and post-depositional disruptions including numerous vertical mud seams. Panel 7 South will require production quality control with blending ore from high quality production areas in other panels. Figure 9.2 shows one of the floor rolls in this area.

Figure 9.2 Floor Roll Panel 7 South UBE

Upper Bed 25 Southwest Mining Area

The UB Southwest mining area has three continuous miner sections working and is currently the primary production area for Sisecam. Over the course of this work and our previous report, all the production panels in this area have been examined to their furthest mining extents.

UBSW Panel 7 East was examined, in a previous review, to its farthest extent Room 180E showing good ore thickness until Room 160 along the northside of the panel. The panel was terminated with thin variable ore and deteriorating quality within the upper 3 to 4-feet of the trona bed.

Examination of UBSW Panel 8 East showed advance east to Room 205E with good ore thickness to Room 190 along the northside of the Panel followed by an abrupt thinning and quality change similar to Panel 7 East. The southside of Panel 8 East exhibited less effects of thinning. Trona bed thickness averaging 11.8-feet with a range of 8.9 to 12.8-feet with improving quality as mining retreated to the west. Sisecam has mined this panel on the south and north to take advantage of reduced Federal Lease Royalty rates. The southern rooms, 1 through 65E, also contained good quality and thickness. The 11-foot thickness and quality found in this area is consistent with drill hole SBI-43 located near Room 65. The 10.6-feet ore thickness at Room 196 also correlates with the 10.71-feet indicated by drill hole SBI-07 which is located 240-feet to the south.

UBSW Panel 9 East had advanced to Room 44E. Ground conditions and ore thickness were excellent with minimal floor rolls and quality issue identified.

UBSW Panel 10 East had advanced to Room 31E at the time of the inspection. Ground conditions and ore thickness were excellent with no floor rolls identified. This panel appeared to possess the best ore quality of the mining sections examined with seam thickness greater than 11ft and minimal floor waste, resulting in an estimated production grade of approximately 92%.

UBSW Panel 11 East had been stubbed in four rooms. Examination of this area shows good ore thickness and stable ground conditions. UBSW Panel 11 East mining is planned to commence in 2023.

USBS Panel 11 West advanced to Room 43 and mining was suspended to take advantage of federal royalty rate reductions. At Room 43, ore thickness and quality remain excellent with average seam thickness approximately 11-feet. At the section neck-off, the 3rd room, contains ore thickness over 14-feet in places with good quality and no observable floor rolls. SBI-42 to the southwest shows 14.3-feet of ore but a grade of 83%. Given the start of Panel 11 West and the UBSW Butts faces, the lower grade of SBI-42 is likely caused by a localized mud seam and is not considered representative of the ore grade in this area.

Mr. Leigh examined UBSW Panel 10 West, in a previous review, to its western extents and confirmed SBI-41's ore thickness of 11-feet and grade of 89%, with thickness ranging from 9.8 to 12.2-feet. This panel was stopped at the property boundary, but the ore thickness and quality could have warranted extension to the west. Sisecam is in the process of acquiring the ¼ section to the west to allow for potential extension of mining of USBS Panel 11 West to the west beyond that of USBS Panel 10 West in 2024 - 2025. Potential recoverable reserves on this ¼ section are estimated at approximately 1Mt, however these potential reserves to the west are not included in this study as they were not currently controlled by Sisecam at the time of this study.

9.1.2 Shafts and Hoisting Facilities

On 12-Oct-2021 Mr. Hollberg toured the mine hoisting facilities with Mr. Lewis. Since 2017 Sisecam has been working to upgrade and modernize its hoisting systems by updating the controls systems, motors, and braking systems. Hoist #3 has been updated with new AC VDF drives and updated control systems. Hoist #2 has been updated with improved DC drives, braking systems and new bull gear. These changes have been designed to allow for improved major component spares and redundancy.

Additionally in 2020 and 2021, Sisecam developed a new ventilation shaft, Shaft #4 with two new ventilation fans which will support the expanding mine and improve mine ventilation. This facility was nearing completion at the time of the visit and was commissioned in November 2021. The new fans and shaft have the capacity to nearly double the airflow into the mine which can support the planned increase in production as well as extension of the mine workings in all directions. During the underground visit the bottom of the shaft was examined and later the fan facilities were examined. The shaft and fan facilities are of excellent design and workmanship, incorporating what is now best practice for mine fan configuration and mechanical design.

Adjacent to the Shaft #4 fan house was a new electrical switch house (Switch House #4). This switch house will replace old and outdated electrical gear for Hoist #3 and TRM as well as supplying Shaft #4 and future expansion in this area. This is an example of Sisecam's commitment to updating and modernizing the Green River facilities and verifies implementation of the capital expenditure plans.

9.1.3 Surface Facilities Site Visit

On 14-Oct-2021 Mr. Hollberg and Mr. Leigh examined the Sisecam surface processing facilities with Charley Walters (Surface Production Supervisor), the tailings facilities with Jim Spurrier (Principal Engineer - Surface Production), the Cogen Plant with Scott Wilkes (CoGen Manager), and the analytical lab with Shannon Larson (QC QA Laboratory Supervisor).

Surface facilities visited include the following:

- Ore storage and reclaimer;
- Units No 3 and No 4 Filters, evaporators/crystallizers, and dryers;
- Unit 5 Filters, evaporators/crystallizers, and dryers;
- Unit 7 calciner, Verta-mill, dissolver, classifier;
- Unit 6 Standalone processing, crushing, calcining, dissolvers, classifier, filtration, evaporation/crystallization, thickeners, and tailings pumps;
- Decahydrate Plant;
- Tailings Facilities, and;
- Analytical and QC Laboratory.

While the age of Sisecam's soda ash processing facilities, 50 to 20 years old, are obviously a challenge, HPG's examination revealed an operation that has been investing the capital necessary to maintain its productive capabilities. During the brief visit multiple areas were observed where significant capital expenditure has been expended to maintain and improve production. Examples include multiple heat exchangers (Unit 4), filters (Unit 4), upgraded calciner and dryer burners (Units 3, 4, & 6), upgraded compressors for the MVR system (Unit 6). While HPG's examination was not a comprehensive analysis of each piece of equipment, Sisecam's long history of consistent soda ash production would not be possible without proper maintenance of processing facilities of this age.

Sisecam's recently commissioned, 2020, Co-Gen facility is a state-of-the-art combined cycle gas turbine that supplies approximately 25 MW of electrical power to the site as well as producing excess steam for the production process and site heating. The gas turbine and heat steam recovery generator are approximately 60-65% efficient and use best available control technology (BACT) for emission control. During the visit, the system was in operation producing approximately 24 MW.

Sisecam's tailing facilities are over 60 years old and are not without their challenges due to poor early construction methods in the 60's, 70's and 80's, and have required Sisecam to do extensive mitigation work and development of a new tailings facility Pond 2. Based upon the voluminous documentation provided the tailing pond system is closely monitored by both Sisecam and Barr Engineering, an outside consultant. HPG's examination revealed that Sisecam has been following the current designed plans, continues to monitor structures and make necessary repairs where needed. Additional information on the Tailing Facilities is available in Section 17.4.

Sisecam's analytical laboratory contains up to date equipment and analytical capabilities. The lab processes both 'in stream' samples (dry trona and liquor) as well as final soda ash product testing. Ms. Larson walked HPG's representatives through a typical soda ash testing procedure, documentation, and

sample retention for the final product. The lab continually sends portions of samples for third party verification of results. The lab is 9001:2015 certified and holds certifications for NSF, 2021 Halal, and Kosher-2021.

Additional information on Sisecam's production facilities can be found in Section 14.0 Processing and Recovery Methods and Section 15.0 Infrastructure.

9.2 GEOLOGIC DATA VERIFICATION

Sisecam Wyoming's available geologic data is well documented and has been vetted over the history of the property. The fact that the property has been in successful operation for over 60 years and has extracted trona from both beds gives confidence in the available geologic information and proposed mining methods.

Data density, or the spatial relationship between drill holes, has become more prevalent in industry classifications. Sisecam Wyoming's drill hole spacing was designed first to establish a resources area. Initially, twenty-seven exploration borings were completed on 1 to 2-mile spacing. Subsequent exploration developed the remaining 54 borings to increase the data density and to assist with mine planning and lease acquisitions. Trona exhibits greater continuity and less spatial variability than coal or metal deposits. There are many examples of evaporite deposits that have been developed on wider drill hole spacing than the recommended standards for other minerals. In comparison, while Sisecam Wyoming's drill hole spacing exceeds these recommendations, the historical record for the Sisecam Wyoming Big Island Mine demonstrates a reasonable correlation between drill hole data and available reserves.

In the above referenced 1999 work (Section 6.4.2), a database was created for each Trona Bed, 24 and 25, located within the Sisecam Wyoming lease area. That database was the basis of this MRE and previous estimates. Sisecam Wyoming provided available drill hole data for all 81 exploration borings including core descriptions, analytical results, available geophysical well logs, and available archived reserve reports. Supplementing this information was documentation of trona thickness observations from the existing mine developments collected over the past 20 years. The 1999 review work expressed concern about the data quality of some of the older core analysis. There was concern that some of the reported analysis did not match the core descriptions indicating mislabeling or perhaps the core boxes broke and not properly sorted. The general analysis is considered correct, but some of the geologist logged the holes from the bottom up and others from the bottom down and as such the orientation of the analysis was questioned. For example, SBI-42, analysis appears to be reverse. Where possible the logs were vetted or corrected where definitive information was available. The best supplemental information is documentation of trona thickness observations from the existing mine developments collected over the past 20 years.

The exploration reports were evaluated for accuracy of trona picks for thickness and quality. The drilling database described has been spot checked multiple times over the long history of HPG's work at Sisecam. Additionally, whenever mine workings intersect or approach these drillings the associated workings have been examined to confirm the drilling data. Description of the examinations undertaken for this effort are offered below. In general, exploration information matched published assessments. The data are considered acceptable for use in mineral resource and mineral reserve estimates and in mine planning.

A comparison of a trona thickness model based on mine observation points and a model derived from the drill hole data shows a reasonable correlation over the mined areas. In Bed 24, the mine observations averaged 11.7-feet thickness compared to 11.4-feet using the drill hole data over the same area. Bed 25 correlation resulted in similar results, with the mine observations model averaging 11.3-feet, while the drill hole data model averaged 10.7-feet. Example: two exploration drill holes were recently encountered, SBI-41, and SBI-43. SBI-41 has a reported trona thickness of 10.97-feet, average mine observations estimate 10.9-feet. SBI-43 has a reported thickness of 11.69-feet, average mine observations estimate of 11.2-feet. Mine observation points are based on the measured ore thickness at each point and not the total mining height providing a direct comparison to the drill hole data set.

In the 2013 and subsequent reports drill hole D02-05 was removed from the data base because of a high percentage of core loss in the area of the LB trona seam. Of two five-foot core runs over 2-feet of core was not recovered. This was likely due to dissolution of the seam but without conformation of actual trona the drill hole was dropped from the database. HPG recommends that additional exploration drilling be done in this area to determine the actual thickness.

In the 2019 report, the minable thickness of two drill holes was modified based on available mine measurements in the vicinity.

- Drill hole SBI-20, now within the Upper Bed East extension of the modified mains, was modified from 15.1 -feet to 11.3-feet. While the full bed thickness quality, 89.4%, meets the 85% cut-off, the mine is limited to the purer bottom 11.3-feet at 97.1% as the impure roof trona negatively impacts processing. This is an older drill hole, so the core is not available for examination. Nearby mine observations indicated an average thickness of 11.2-feet, adding justification to the modification. Planned mining was completed near SBI-20 confirming the 11.3-feet thickness.
- Drill hole SBI-42, near the UBSW Butts extension, was adjusted from 14.3-feet with a grade of 83.9% to 13.87-feet and a grade of 85.0% based on the nearby mining indicating plus 11-feet of ore with good quality in the lower portions of the trona seam. Mining in this area will also be limited to the higher quality trona. Additionally, the current equipment mining height is limited to 13.5-feet. This modification results in the area to the northwest to be classified as resources and reserves.

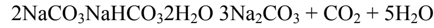
No other changes were made to the geologic data base.

10.0 MINERAL PROCESSING AND TRONA BED THICKNESS, TRONA GRADE, TESTING

10.1 CONVERSION OF TRONA TO SODA ASH

As was previously discussed, trona is a compound of sodium sesquicarbonate with the following formula, $Na_2CO_3.NaHCO_3.2H_2O$. It is the combination of sodium carbonate and sodium bicarbonate. The finished product, soda ash, is sodium carbonate. In very general terms, the conversion of trona into soda ash is the conversion of the sodium bi-carbonate portion of the trona into sodium carbonate and then a purification process to remove the insoluble minerals by dissolution and recrystallization.

There are two primary ways in which sodium carbonate is recovered from the trona ore, the sodium sesquicarbonate process, and the monohydrate process. The main difference between these processes is when the bicarbonate is converted into carbonate. In the sesquicarbonate process, the trona ore is dissolved first and the conversion of the bicarbonate takes place by calcining the purified crystals. The monohydrate process converts the bicarbonate by calcining the dry ore in rotary kilns at temperatures between 150º and 200º C. Sisecam Wyoming uses the monohydrate process. The general formula for this conversion follows:



$$2NaCO_3NaHCO_32H_2O\ 3Na_2CO_3 + CO_2 + 5H_2O$$

By molecular weight:

$$2(226.03) / 3(105.98) = 452.06 / 317.94 = 1.4218$$

After calcining, the ore is dissolved in water to allow the insoluble minerals to be removed prior to recrystallization.

10.2 PROCESSING FACILITIES

Sisecam Wyoming's refining facility is well established and has been converting dry trona into salable soda ash for over 60 years. Over this period, much of the refining facility has been replaced or upgraded with newer facilities and equipment. Sisecam Wyoming currently is operating five soda ash processing units. Unit 6 is a single large integrated plant, combined with a large calcining dissolver, Unit 7, which feeds liquor to crystalizing Unit 3, Unit 4, and Unit 5.

Unit 6 was constructed in 1998 and has its own crushing plant, rotary kiln, dissolvers, crystallizers, and TRM (tailings) pumps. In 2006, OCI Wyoming constructed a large rotary kiln and dissolver, Unit 7, capable of feeding liquor to the older crystallizer Units 3 through 5 use the existing crushers and TRM facilities. In 2009 the Decahydrate plant was built and mining of the decahydrate crystals in the tailings pond was started as a supplementary liquor feed to the soda ash plants.

A more detailed discussion of the processing facilities is available in Section 14.0.

10.3 TESTING AND ANALYSIS

Sisecam has had an onsite laboratory throughout its history that is used to test and analyze plant feeds (trona), intermediate process streams (liquor) as well as the final product to ensure compliance with Sisecam published standards. The testing and analysis procedures and protocols are well established and have been developed and refined over the 60 years of operation. The analytical lab holds multiple certifications including ISO 9002 since 1994 and 9001:2008 since 2010. The lab is regularly audited by the certification agencies as well as customer audits. Additionally, the Sisecam laboratory does regular blind testing with outside laboratories as part of their standard protocol.

Composite samples of the trona ore are generally tested for insoluble minerals, grade (total alkalinity), moisture and organics. Intermediate liquor testing is used to monitor efficiencies and help in the operation

of the plant. Composite sample testing of the final soda ash product is done on every truck or train car shipped. This analysis looks at purity (Sodium Carbonate % and Sodium Oxide %), moisture, density, and any contaminates (sulfate, chloride and insoluble).

11.0 MINERAL RESOURCE ESTIMATES

11.1 INTRODUCTION

HPG has organized the available data and information in order to complete this Mineral Reserve Estimate for December 2021 from a variety of sources including:

- Drill Hole data from 81 surface to bed core holes;
- Drill hole data from 44 bed-to-bed core holes;
- In-mine measurements and observations; and
- Historical reports.

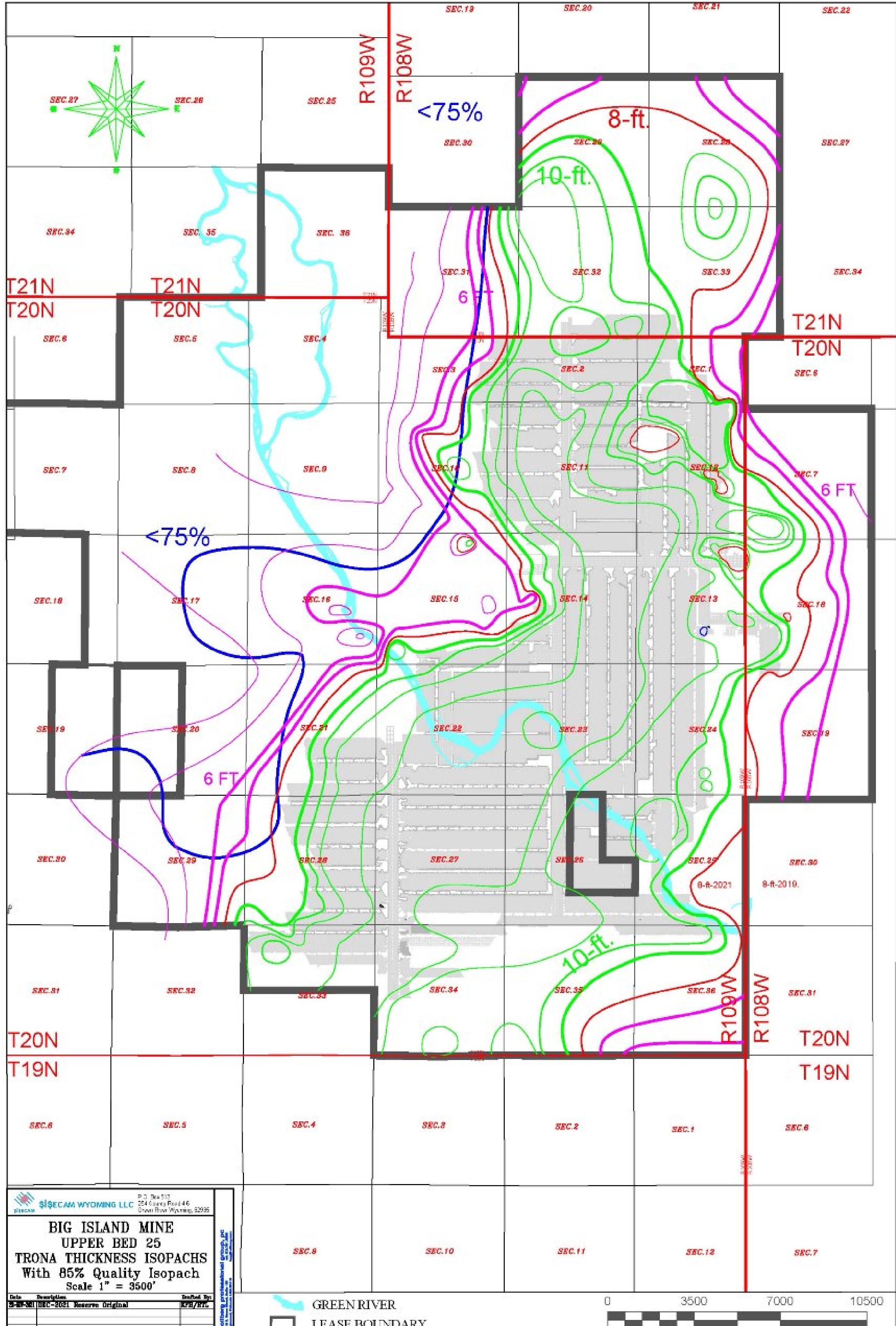
11.2 GEOLOGICAL AND MINERALIZATION MODELING

Carlson's Advance Mining module, StrataCalc, a supplement to Autodesk's AutoCAD, was utilized to create the geological models. Both programs are standard for the mining industry. Gridding with the triangulation module was used to evaluate the Sisecam Wyoming reserve database. The data was modeled using triangulation which provided the best routine for verification.

Carlson's Advance Mining module and StrataCalc, applies the gridding information within a user defined area (reserve area) and computes statistical parameters from the data set. Average thickness and grade values, area of the defined limits, volumes, and tonnages are posted as a spreadsheet output. Gridding density, contouring methods, volumetric computations, and bulk densities were unchanged from the previous study.

A bulk density of 133 pounds per cubic foot (2.13 g/cc), was applied to convert volumes to tonnage. Several published documents list bulk densities of trona between 2.11 and 2.17 g/cc.

Figure 11.1 Upper Bed Isopach and Figure 11.2 Lower Bed 24 Isopachs delineate trona thickness for each bed.


ŞİŞECAM WYOMING LLC
BIG ISLAND MINE
UPPER BED 25
TRONA THICKNESS ISOPACHS
With 85% Quality Isopach
Scale 1" = 3500'
GREEN RIVER
LEASE BOUNDARY
R109W
R108W
T21N
T20N
T19N
<75%
8-ft.
10-ft.
6 FT
8-ft-2021
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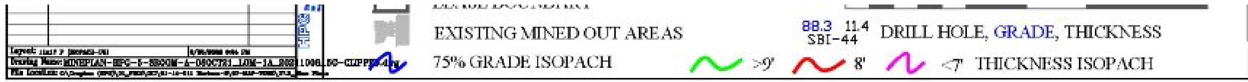
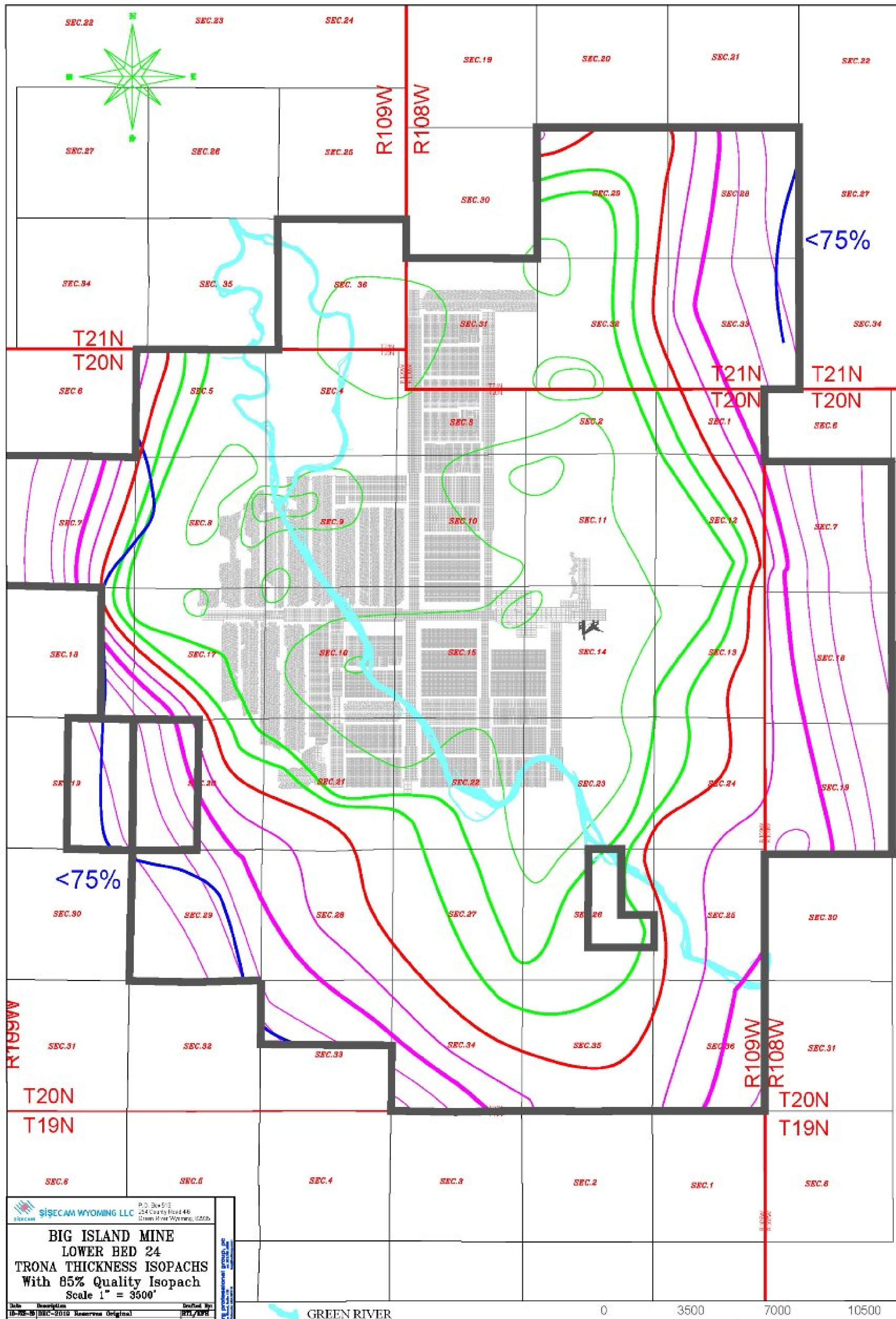


Figure 11.1 Upper Bed 25 Thickness Isopachs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T19N
<75%
ŞIŞECAM WYOMING LLC
BIG ISLAND MINE
LOWER BED 24
TRONA THICKNESS ISOPACHS
With 85% Quality Isopach
Scale 1" = 3500'
GREEN RIVER
0
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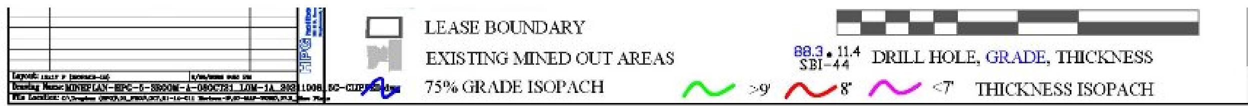


Figure 11.2 Lower Bed 24 Thickness Isopachs

1.3 MINERAL RESOURCE AND RESERVE CLASSIFICATION

The following definitions, which can be found in the Securities and Exchange S-K 1300 rules Subparts 229, 230, 239, and 249, have been used for this resource and reserve estimate.

Mineral resource:

A concentration or occurrence of material of economic interest in or on the Earth's crust in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction. A mineral resource is a reasonable estimate of mineralization, taking into account relevant factors such as cut-off grade, likely mining dimensions, location, or continuity, that, with the assumed and justifiable technical and economic conditions, is likely to, in whole or in part, become economically extractable. It is not merely an inventory of all mineralization drilled or sampled.

Inferred mineral resource:

That part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project and may not be converted to a mineral reserve.

Indicated mineral resource:

That part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply *modifying factors* in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.

Measured mineral resource:

That part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.

Modifying factors:

Are the factors that a qualified person must apply to indicated and measured mineral resources and then evaluate in order to establish the economic viability of mineral reserves. A qualified person must apply and evaluate modifying factors to convert measured and indicated mineral resources to proven and probable mineral reserves. These factors include but are not restricted to mining; processing; trona bed thickness, trona grade, infrastructure; economic; marketing; legal; environmental compliance; plans, negotiations, or agreements with local individuals or groups; and governmental factors. The number, type and specific characteristics of the modifying factors applied will necessarily be a function of and depend upon the mineral, mine, property, or project.

Mineral reserve:

An estimate of tonnage and grade or quality of indicated and measured mineral resources that, in the opinion of the qualified person, can be the basis of an economically viable project. More specifically, it is the economically mineable part of a measured or indicated mineral resource,

which includes diluting materials and allowances for losses that may occur when the material is mined or extracted.

Probable mineral reserve:
The economically mineable part of an indicated and, in some cases, a measured mineral resource.

Proven mineral reserve:
The economically mineable part of a measured mineral resource and can only result from conversion of a measured mineral resource.

1.4 MINERAL RESOURCE ESTIMATE - PARAMETERS AND ASSUMPTIONS

In determining the resource parameters and assumptions for the Sisecam property, HPG considered the following circumstances:
- Sisecam's 60 year long history of successfully mining the deposit;
- Projected 40-year mine life and likely change in economics, mining, and processing methods over the life of the property;
- Mining methods of the other trona producers in the area;
- Mining methods of historically successful mining of similar laminar deposits including coal;
- The extensive database of in-mine measurements and drilling data; and
- HPG's knowledge operating and managing other trona mines in the area.

If both mechanical and solution mining is considered, a cutoff grade and thickness is not essential for trona mining in the Green River Basin. Other trona operations in the green river basin and other trona deposits are successfully using solution mining methods in thin and low grade trona areas. Because of Sisecam's proximity to the Green River this resource and reserve estimate does not consider solution mining due to its likely subsidence and impact to this major water source. Therefore, HPG is only considering mechanical mining of the deposit using established systems and methods.

Based on this knowledge and experience the following parameters were used to estimate the in-place trona resources that are considered to have reasonable prospect of economic extraction:

Parameters
- *Cut off* - Minimum 6-feet thick and >75% trona
- *Measured* - 1,320-ft radius from drilling and 1,320-ft from known workings (1/4 mile);
- *Indicated* - 3,960-ft radius from drilling and 3,960-ft from known workings (3/4 mile);
- *Inferred* - 7,920-ft radius from drilling and 7,920-ft from known workings (1/5 miles); and
- A soda ash price of $188 per ton was used to determine the stated trona resources.

Assumptions
Only trona on contiguous leases was considered resource for mechanical mining. Section 16, T21N, R108W was excluded from this estimate because this state lease is isolated from the other contiguous lease blocks. The one-mile isolation makes accessing this for mechanical mining unlikely.

The measured, indicated, and inferred distances are based upon known drilling, in-mine measurements, mining extents and experience with historically successful mine planning based on this information.

The cutoff thickness of six feet is based upon successful mining of similar deposits, to and even below 6-feet in thickness including trona, coal and potash. Additionally, other operations in the trona basin are mining to the 7-foot thickness in areas of their trona resources.

The cutoff grade of greater than 75% trona is based upon successful mining and processing of the lower grade trona Beds 19, 20 and 21 which were considered viable mining prospects by Texas Gulf Soda Ash (TGSA). TGSA operated as a dry mine from 1976 through 2002 mining Bed 20. The TGSA processing facility was designed to handle these lower grade ores and successfully mined and processed these lower grades.

1.5 GRADE ESTIMATION

For the purposes of this study, the minimum grade for the reported in-place resource tonnage is 75%. The Upper Bed 25 drill hole grades analysis range, for thicknesses greater than 6-feet, is 41.21 to 94.18%. All Upper Bed drill hole grades ranged from 38.64% to 98.81%. The Lower Bed 24 drill hole grades analysis range, for thicknesses greater than 6-feet, is 74.74% to 93.77%. All Lower Bed drill hole grades ranged from 74.74% to 94.10%. Based examination of available core and mine observations by previous geologist and others, many of the low-grade drill holes intersected vertical post depositional mud seams and are not considered representative of the overall average grade for the deposit at that particular location. Because of the limited core to definitively confirm this hypothesis, no changes were made to the database other than the three drill holes noted earlier.

Carlson's Advance Mining module, StrataCalc, was used to model the grades for each resource parameter for each trona bed. Lower Bed 24 measured resources compute to have an average grade of 88.8% trona. Lower Bed 24 indicated resources have a computed average grade of 88.3% trona. The Upper Bed 25 computed measured resources grade is 87.6%, while the computed indicated resources grade is 87.6%.

Out-of-seam dilution during production has a significant impact on production grade. Production grade is the quality of the run of mine ("ROM") material sent to the refinery. Production quality is dependent upon the geological consistency of the ore body; the mining equipment used for extraction; and the operators mining skill. Ore body fluctuations are the greatest contributor to quality control issues. In general, with a 10-foot-high entry, 90% seam grade, 6-inches of waste will reduce production grade by 5%. Forecasting seam variability from the existing wide drill hole spacing is not possible. Currently, the best tool to help identify and predict problem areas is consistent mapping of the mine entries as mining advances providing feedback to operators and utilized in the short-term planning processes. When they are encountered, localized geological disturbances of the ore bed negatively impact the ROM grade.

1.6 IN-PLACE MINERAL RESOURCE ESTIMATE

Using the data provided by Sisecam Wyoming, HPG has completed its review of the Big Island Mine and concludes that the Big Island Mine's remaining leased and licensed Measured and Indicated in-place trona Resources ***exclusive of reserves*** as of December 31, 2021, total 162.3 million short tons (MST), of which 98.9 MST remain in the Lower Bed 24 and 63.4 MST remain in the Upper Bed 25. Measured In-Place Resources are calculated as 74.2 MST and Indicated In-Place Resources calculate as 88.1 MST and Inferred In-Place Resources are calculated at 0.05 MST. Table 11.1 summarizes the estimated In-Place Trona Resource ***exclusive of the mineral reserves.***

Based on the current study, the Sisecam Wyoming Big remaining leased and licensed Measured and Indicated in-place trona Resources ***inclusive of reserves*** as of December 31, 2021, total 578.9 million short tons (MST), of which 382.5 MST remain in the Lower Bed 24 and 196.4 MST remain in the Upper Bed 25. Measured In-Place Resources are calculated as 291.5 MST and Indicated In-Place Resources calculate as 287.5 MST and Inferred In-Place Resources are calculated at 0.26 MST. Table 11.2 provides the In-Place Trona Resource ***Inclusive of the mineral reserves***

Criteria for this analysis are based upon a 6.0-feet minimum ore thickness and 75% minimum seam grade. This Resource evaluation is based upon 81 exploration drill holes, 44 borings from the mine workings, and several thousand available mine observations and measurements. Of the 81 surface exploration drill holes, 28 borings are within the Lower Bed 24 Resource area and 21 borings are within the Upper Bed 25 Resource area. Additionally, this updated report considers the 2020 to 2021 mine advancements. The in-seam ore horizon includes the T2 to T4 zones and excludes the T1 zone.

The reference point for the trona resources reporting is insitu inclusive of impurities and insoluble content. The grade is percent trona, sodium sesquicarbonate ($Na_2CO_3.NaHCO_3.2H_2O$), the double salt of sodium carbonate (soda ash) and sodium bicarbonate (baking soda).

Mineral resources are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

Figure 11.3 and Figure 11.4 present the remaining in-place trona showing measured, indicated, and inferred resource areas.

Table 11.1
Estimated In-Place Trona Resources Within Big Island
Exclusive of Reserves
Mining License as of December 31, 2021
Based on $188/ TSA

	Measured Resource		Indicated Resource		Measured + Indicated Resource			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	44.8	88.7	54.1	86.9	98.9	87.7	8.5	0.05	90.0
Upper Bed 25	29.4	85.0	34.1	87.3	63.4	86.2	7.5		-
Total	74.2	87.2	88.1	87.0	162.3	87.1	8.1	0.05	90.0

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and an 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.
4) Mineral resources are current as of December 31, 2021, using the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

The Mineral Resource ***exclusive*** of the mineral reserves is that portion of the ore body that has not been extracted because it was outside what is considered the economic limits, has been left in place to support the mine openings or has been sterilized by previous mining and cost-effective access is not considered practical. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Table 11.2
Estimated In-Place Trona Resources Within Big Island
Inclusive of Reserves
Mining License as of December 31, 2021
Based on $188/ TSA

	Measured Resource		Indicated Resource		Measured + Indicated Resource			Inferred Resource	
Bed	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Tons (Millions)	Average Grade % Trona	Average Thickness (ft)	Tons (Millions)	Average Grade % Trona
Lower Bed 24	171.4	88.8	211.1	88.3	382.5	88.5	9.5	0.26	88.8
Upper Bed 25	120.1	87.6	76.4	87.6	196.4	87.6	8.7		-
Total	291.5	88.3	287.5	88.1	578.9	88.2	9.2	0.26	88.8

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 6-foot minimum thickness and an 75% minimum grade cut-off.
3) The point of reference is in-place (insitu) inclusive of impurities and insoluble content.
4) Mineral resources are current as of December 31, 2021, using the definitions in SK1300.
5) Mineral resources are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

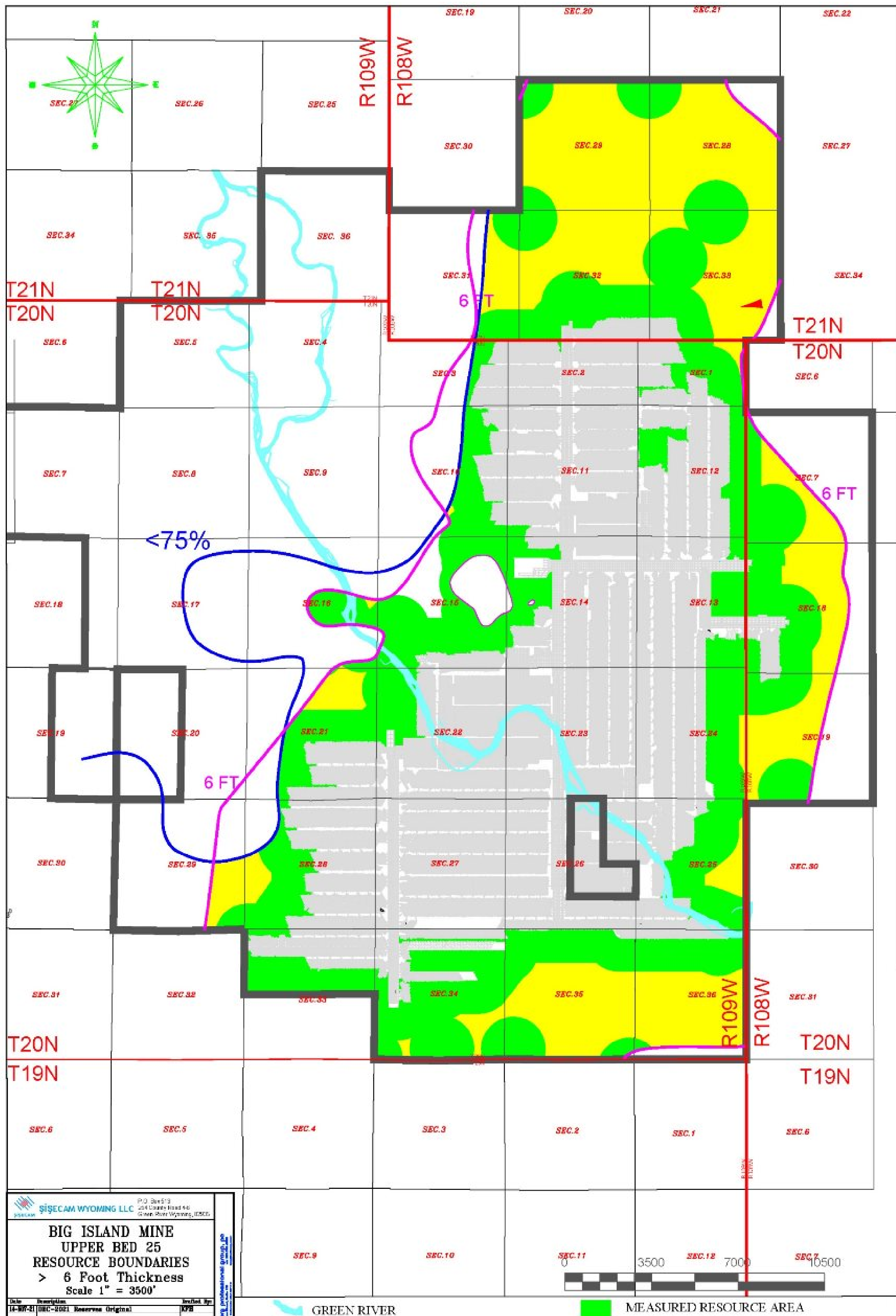
The Mineral Resource ***inclusive*** of the mineral reserves is that portion of the ore body that is considered either economically viable for mining and can be converted to reserves or of economic interest but considered outside the current economic limits.

Mineral resources are not mineral reserves. Mineral reserves are the economically mineable part of a measured or indicated mineral resource based upon application of modifying factors such as costs and revenues associated with the proposed operation and producing the final product in an economic and environmental assessment. Section 11.3 describes these factors. There is no certainty that any mineral resources in this report will ultimately be reclassified as reserves. Please refer to the note regarding forward-looking information at the front of the Report. Section 12.0 describes the estimated recoverable trona reserves.

1.7 UNCERTAINTIES (FACTORS) THAT MAY AFFECT THE MINERAL RESOURCE ESTIMATE

Areas of uncertainty that may materially impact the mineral resource estimates include:

- Changes to long-term soda ash price and exchange rate assumptions;
- Changes in local interpretations of trona seam thickness and grade such as sedimentary structures described in Section 6.4.3;
- Changes to geological and grade shape, and geological and grade continuity assumptions;
- Changes to soda ash recovery assumptions;
- Changes to the forecast dilution and mining recovery assumptions;
- Changes to the cut-off values applied to the estimates;
- Variations in geotechnical (including seismicity), hydrogeological and mining method assumptions; and
- Changes to environmental, permitting, and social license assumptions.


R109W
R108W
T21N
T20N
T19N
6 FT
<75%
ŞİŞECAM WYOMING LLC
BIG ISLAND MINE
UPPER BED 25
RESOURCE BOUNDARIES
> 6 Foot Thickness
Scale 1" = 3500'
GREEN RIVER
MEASURED RESOURCE AREA
0
3500
7000
10500

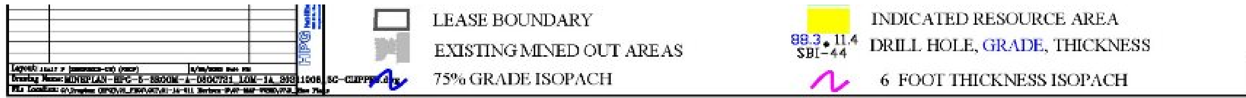
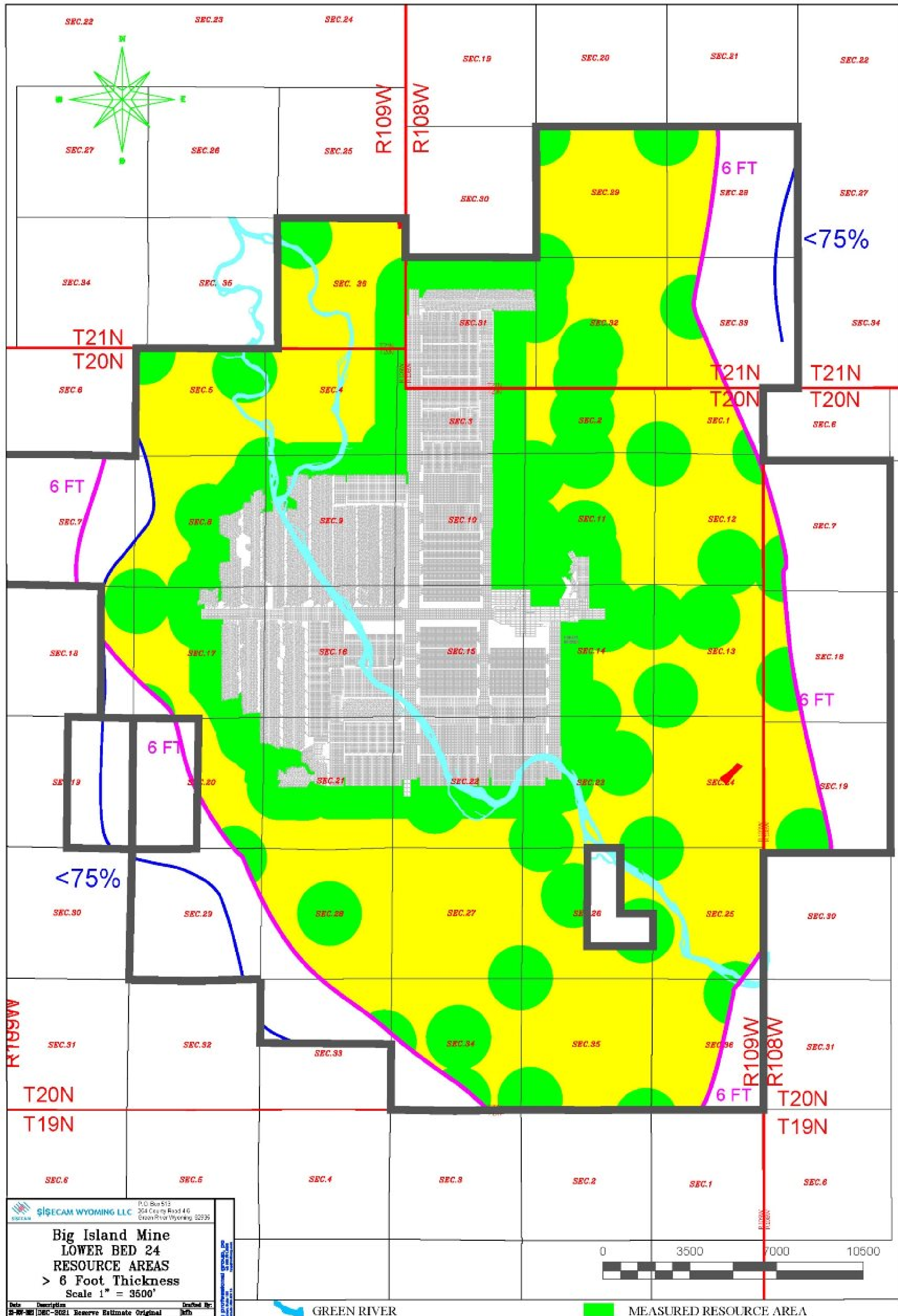


Figure 11.3 Upper Bed 25 Resource Blocks


R109W
R108W
T21N
T20N
T19N
6 FT
<75%
ŞİŞECAM WYOMING LLC
Big Island Mine
LOWER BED 24
RESOURCE AREAS
> 6 Foot Thickness
Scale 1" = 3500'
0
3500
7000
10500
GREEN RIVER
MEASURED RESOURCE AREA

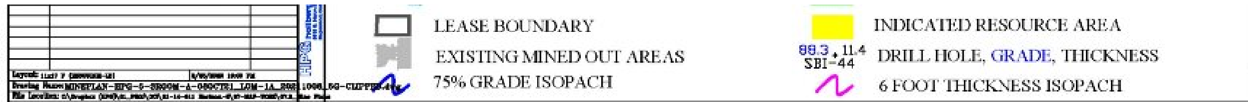


Figure 11.4 Lower Bed 24 Resource Blocks

12.0 MINERAL RESERVE ESTIMATE

No independent feasibility study was prepared in the determination of this reserve estimate. Instead HPG used the plus 60 years of mining and processing history at the Big Island to determine the mining, processing, and economic parameters used for this reserve estimate as described below.

This mineral reserve estimate contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbor created by such sections and other applicable laws. Please refer to the note regarding forward-looking information at the front of the Report. Investors are cautioned that the estimate is based on a high-level mine plan and certain assumptions which may differ from Sisecam Wyoming's long-term outlook or actual financial results, including, but not limited to commodity prices, escalation assumptions and other technical inputs. Please be reminded that significant variation of soda ash prices, costs and other key assumptions may require modifications to mine plans, models, and prospects.

12.1 LIFE OF MINE PLAN

Sisecam like all mining companies, for lack of a better term "high grades" the mineral deposit where possible. Sisecam utilizes large highly productive continuous miners incorporating on-board roof bolters and a large on-board ventilation fan that require a minimum mining height of 9-feet. The required 9-feet mining height of this equipment limits how far mining may be extended to the edge of the ore body. Additionally, Sisecam's processing facilities have limited ability to handle lower grade ore even if it is over a short period of a few hours. This plant limitation impacts what can be mined when disruptions in the ore body are encountered (Section 6.4.3). The lower grade material can be processed with minimal impact to recovery, but it must be processed at a slower rate which impacts total production. Sisecam has chosen to bypass this material and/or stop mining before the overall seam thickness and associated grade severely impacts the plant. Both of these choices are economic, made by Sisecam to minimize production costs. High grading is common and even standard practice for the mining industry. At some point in the future, Sisecam will have to make modifications, like other operators in the trona basin have done, to facilitate mining of these areas. This reserve estimate forecasts modification of the mining equipment and processing facilities in the future at a point when mining of the thicker trona (>9-feet) has been completed.

To account for this reality, HPG has developed a detailed Life-of-Mine (LOM) plan that in HPG's opinion is a reasonable mining sequence for this deposit over its remaining 40 plus years assuming Sisecam choses to mine as much of the resource as possible. A two-stage mine plan has been developed. The first stage "high-grades" the deposit based upon the current mining equipment and processing plant limitations mining to the 9-foot isopach. This matches the practice employed over the last 20 years and should be viable for another 20 years. Based on this plan, thinner areas (less than 9-feet) or areas where disruptions have been encountered are not mined until later in the property life, assuming reasonable access is available at that time. This results in areas of the deposit that require a change in both mining equipment and processing facilities. The capital expense and changes to the operating costs for these changes has been accounted for in the economic analysis and a detailed mine plan has been developed showing potential access and mining of these areas.

The second stage mining is based upon smaller mining equipment and assumes changes to the dissolver sections of the processing plants. These changes should allow mining to the 7-foot isopach and processing areas of the trona resource where disruptions to the ore body have been and will be encountered as mining progresses towards the edge of the ore body. The 7-foot mining limit was selected based on current economics and practices at similar operations.

This type of two-stage mining is only possible when underground conditions allow access to the bypassed areas long after the first stage of mining was completed. This is true for the Big Island Mine where old mine workings developed 60 years ago are still open, accessible, and currently in use. Additionally, Sisecam has a history of accessing resource blocks from old mine workings. The UBSW slopes were developed in 2005 between old mine workings that had been mined in the 1970's. After 50 years of being mined these areas continue to be the primary access to the UB Southwest reserve blocks.

Carlson Software's Advance Mining module 2021™ was used to calculate tonnages and schedule mine development. Carlson's Advance Mining module applies the geologic bed thickness and grade information from the resource model to a user defined mining sequence with user defined equipment specifications.

Figure 12.1 and Figure 12.2 show a LOM plan for both the Upper and Lower Beds using current panel layouts, extraction rates and mining equipment based on the two-stage mining.

While some effort was made to time the future mine plan over its 40-year plus predicted life, as measured from December 2021, this model should only be considered a generalization of the proposed timing and an illustration of how the deposit could be mined. This LOM incorporated the following assumptions:

- Production of 5.0 million ROM short tons per year starting in 2024;
- 9-foot plus material is mined first then the thinner 9-foot to 7-foot ore is mined;
- Mining limit cut-off of 7-feet and 85% minimum trona grade;
- Eastside of mine – Westside of mine production balance was maintained whenever possible. This exercise indicates that additional work is needed for long term planning, as the equal east-west split breaks down in the mine plan. This results from the concentration on mining Upper Bed Ore instead of Lower Bed Ore. East west balance of ore into the crusher area is needed because of infrastructure limitations in the crusher area;
- Access to mining areas outside the 9-foot mining limit are provided by access through old workings, new development, or extensions of future mining panels;
- Out-of-seam dilution of 4-inches;
- Minimum entry mining height of 7-feet;
- Maximum mining height of 13.5-feet; and
- Mirror image two-seam panel layouts were used based on current two-seam mining designs.

To calculate the highest expected ROM feed grade optimally sized equipment was assumed and modeled as follows. Out of seam dilution was estimated at 4-inches of rock due to over mining the top or bottom. Additionally, a minimum entry height of 7-feet was assumed allowing the equipment to cut to the 7-foot thickness isopach. Trona seam thickness varies, and it is predicted that the areas near the 7-foot isopach contain localized trona thickness areas less than 7-feet and even less than 6-feet in places. When seam thickness is less than 7-feet, out-of-seam rock is cut to maintain the 7-foot minimum mining height or entry height. The net out-of-seam dilution is the over/under cut of 4-inches plus any rock cut to maintain an entry height of seven feet.

A maximum equipment mining height of 13.5-feet was assumed which is the current limit of Sisecam's Joy 12HM26 roof bolters. Any trona ore thicker than 13.5-feet is assumed left in place, the historical mining practice using continuous miners at Sisecam. Based on the long history with continuous miners, this study did not consider larger equipment or bench mining to capture the in-place reserves thicker than 13.5-feet.

12.2 MINERAL RESERVE ESTIMATION

In determining the reserve parameters and assumptions HPG considered the following circumstances:

- Sisecam's 60-year long history and economics of mining the deposit and producing soda ash;
  - The 170.1 MST of trona ore produced from these two beds;
- The projected long life of the mine and resulting likely change in economics, mining, and processing methods over its projected 40-year mine life;
- Sisecam's current processing facilities capabilities and projected future changes to these facilities.
- The economics associated with Sisecam's current mining equipment and history of "high grading" the thickest portions of the deposit;
- Sisecam's current mining equipment limitations and required future changes to these systems; and
- HPG's knowledge operating and managing other trona and potash mines.

In determining whether the reserves meet these economic standards, HPG made certain assumptions regarding the remaining life of the Big Island Mine, including, among other things, that:

- The point of reference is run-of-mine ore delivered to the processing facilities;
- The cost of products sold per short ton will remain consistent with Sisecam Wyoming's cost of products sold for the five years ended December 31, 2021;
- The weighted average net sales per short ton, $188/ton, will remain consistent with Sisecam Wyoming's average net sales for the five years ended December 31, 2021;
- Sisecam Wyoming's mining costs will remain consistent with 2021 levels with two-seam mining costs 30% higher for the two-seam production;
- Sisecam Wyoming's processing costs will remain consistent with 2021 levels and rise in 10-years to account for lower grade material;
- Sisecam Wyoming will achieve an annual mining rate of approximately 5.0 million short tons of trona in 2024 and beyond;
- Sisecam Wyoming will process soda ash with a 90% rate of recovery, without accounting for the deca rehydration process;
- The ore to ash ratio for the stated trona reserves is 1.835:1.0 (short tons of trona run-of-mine to short tons of soda ash);
- The run-of-mine ore estimate contains dilution from the mining process;
- Sisecam Wyoming will continue to conduct only conventional mining using the room and pillar method and a non-subsidence mine design;
- Sisecam Wyoming will, in approximately 10 years, make necessary modifications to the processing facilities to allow localized mining of 75% ore grade in areas where the floor seam or insoluble disruptions have moved up into the mining horizon causing mining to be halted early due to processing facility limitations;
- Sisecam Wyoming will, within one year, conduct ''two-seam mining,'' in production panels which means to perform continuous mining in Bed 24 beneath historically mined production panels of Bed 25 with interburden thickness of approximately 35-feet;
- Sisecam Wyoming will, in approximately 20 years, make necessary equipment modifications to operate at a seam height of 7-feet, the current mining limit is 9-feet;
- Sisecam Wyoming has and will continue to have valid leases and license in place with respect to the reserves, and that these leases and license can be renewed for the life of the mine based on their extensive history of renewing leases and license;
- Sisecam Wyoming has and will continue to have the necessary permits to conduct mining operations with respect to the reserves; and
- Sisecam Wyoming will maintain the necessary tailings storage capacity to maintain tailings disposal between the mine and surface placement for the life-of-mine (LOM).

Table 12.1 through Table 12.3 summarizes the estimated recoverable trona from the Big Island Mine based on the LOM. Section 12.2.3 provides additional details and explanation of the information contained in these tables.

Based on this analysis, Sisecam Wyoming can realistically expect to economically recover 220.0 MST of trona ore at an average grade of 85.2 percent from these reserves as of the end of December 2021. This is made up of 72.7 MST from Bed 25 and 147.3 MST from Bed 24. Proven recoverable tons are calculated as 97.4 MST, of which 33.4 MST remain in the Upper Bed and 64.0 MST remain in the Lower Bed. Probable recoverable tons are calculated at 122.6 MST of which 39.3 MST remain in the Upper Bed and 83.2 MST remain in the Lower Bed. This is based on Sisecam continuing to mine using its existing mining methods and extraction rates for the remaining life of the currently controlled reserves. Estimated finished soda ash reserves are 119.1 MST

Mineral reserves are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

12.2.1 Reserve Estimate Reconciliation

HPG has not previously filed a technical report summary on this property.

12.2.2 Reserve Estimate Comments

HPG offers the following additional details concerning these recoverable reserves:

- 148.2 MST of the recoverable reserves average greater than 9.0-feet in thickness while 71.8 MST are less than 9.0-feet thick
- Future mining areas that will require processing plant modifications prior to mining comprise 39.5 MST of the total reserves, which is made up of 7.1 MST in the Upper Bed East Block and 32.4 MST in the Upper Bed North Block. It is anticipated that these plant modifications need to be made within 10-15 years.
- 118.1 MST (48%) of the recoverable reserves are two-seam mining with 71.5 MST in areas with thickness over 9-feet.

12.2.3 Recoverable Trona Table Description

The following descriptions were used in calculating Table 12.1, Table 12.2, and Table 12.3:

Reserve Category and Lease or License –
Reported reserves are broken down into reserve classification, Proven or Probable, and divided by lessor or licensor.

Trona Seam Mined (Short Tons) –
Summarizes the total trona tons mined for each category. Calculated by multiplying the subject area times the estimated bed thickness. The trona seam is made up of pure trona interbedded with other soluble and insoluble minerals.

Out of Seam Rock (Short Tons) –
The out-of-seam rock is a calculation of the tons produced from the inaccuracies of the mining process. The continuous mining machine is not capable of perfectly cutting the trona ore seam. For the purposes of this study 4-inches of out-of-seam, material has been included in the mined material.

Total ROM Mined (Short Tons) –
The total ROM material mined is calculated as follows:

Total ROM Mined = Trona Seam Mined + Out of Seam Rock.

These are the tons that the refinery will process and are the reported recoverable reserves at a given ROM grade.

Average In-Seam Grade (% Trona) –
The average in-seam grade summarizes the average trona grade for the seam over the reported category based upon the geologic model.

Total Trona (Short Tons) –
Total Trona reports the short tons of pure trona for the given category and is calculated as follows:

Total Trona = Trona Seam Mined x Average In-Seam Grade

This is the tonnage of trona ore available for processing into soda ash.

Total Rock (In-seam + Out-of-Seam) (Short Tons) –
Total Rock, in-seam plus out-of-seam reports the total insoluble material in the ROM ore for the given category and is calculated as follows:

Total Rock Tons = Out of Seam Rock Tons + Insoluble Tons within the mined bed

or

Total Rock Tons = Out of Seam Rock Tons + (Trona Seam Mined Tons – Total Trona Mined Tons)

Total ROM Mined (Short Tons) –
This column is a back check to ensure the calculations are accurate and equals:

Total ROM Mined = Total Trona + Total Rock.

Average ROM Final Grade (% Trona) –

Average ROM final grade estimates the final grade, in percent trona, of the material sent to the refinery and is calculated as follows:

Average ROM Final Grade = 1 – (Total Rock / Total ROM Mined /100)

Total Soda Ash Tons (90% Recovery) –

Total Soda Ash Tons reports the estimated soda ash that can be produced over the reported category and is calculated as follows:

*Total Soda Ash Tons = Total Trona Tons / 1.4218 * 0.90.*

The conversion factor for trona to soda ash of 1.4218 is explained in Section 10.1.

Table 12.1
Estimated Recoverable Trona Reserves for Bed 24 & 25
By Category and Mineral Owner
as of December 31, 2021
Based on $188/TSA

RESERVE CATEGORY AND LEASE	TRONA SEAM MINE (Mt)	OUT OF SEAM ROCK (Mt)	TOTAL RO MINED (Mt)	AVERAGE IN-SEAM GRADE (% TRONA	TOTAL TRONA (Mt)	TOTAL RO (In-sear out-of-seam (Mt)	TOTAL RO Mined (Mt)	AVERAGE ROM FINAL GRADE (% TRONA	TOTAL SODA ASH (Mt) (90% RECOVERY
PROVEN (BED 24 & 25)									
Private Leases	47.1	1.5	48.6	88.2	41.6	7.0	48.6	85.3	26.4
US Leases	39.6	1.3	40.9	87.8	34.8	6.1	40.9	84.9	22.0
State Leases	7.7	0.2	7.9	89.5	6.9	1.0	7.9	86.8	4.4
PROVEN Total	94.3	3.1	97.4	88.1	83.3	14.1	97.4	85.2	52.7
PROBABLE (BED 24 & 25)									
Private Leases	57.3	2.1	59.4	88.4	50.8	8.6	59.4	85.2	32.2
US Leases	43.0	1.5	44.5	88.1	38.0	6.5	44.5	85.0	24.0
State Leases	18.1	0.6	18.6	89.0	16.1	2.5	18.6	86.1	10.2
PROBABLE Total	118.3	4.2	122.6	88.3	104.9	17.7	122.6	85.2	66.4
Grand Total	212.7	7.3	220.0	88.2	188.2	31.8	220.0	85.2	119.1

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2021, using the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

Table 12.2
Estimated Recoverable Trona Reserves for Bed 24 Only
By Category and Mineral Owner
as of December 31, 2021
Based on $188/TSA

RESERVE CATEGORY AND LEASE	TRONA SEAM MINE (Mt)	OUT OF SEAM ROCK (Mt)	TOTAL RO MINED (Mt)	AVERAGE IN-SEAM GRADE (% TRONA	TOTAL TRONA (Mt)	TOTAL RO (In-sear out-of-seam (Mt)	TOTAL RO Mined (Mt)	AVERAGE ROM FINAL GRADE (% TRONA	TOTAL SODA ASH (Mt) (90% RECOVERY
PROVEN (BED 24)									
Private Leases	31.3	1.0	32.3	88.8	27.8	4.4	32.3	86.0	17.6
US Leases	24.8	0.8	25.6	88.6	22.0	3.7	25.6	85.7	13.9
State Leases	6.0	0.2	6.2	89.4	5.4	0.8	6.2	86.9	3.4
PROVEN Total	62.1	1.9	64.0	88.8	55.2	8.9	64.0	86.0	34.9
PROBABLE (BED 24)									
Private Leases	38.4	1.4	39.8	88.9	34.1	5.7	39.8	85.7	21.6
US Leases	25.9	0.9	26.9	88.8	23.0	3.8	26.9	85.7	14.6
State Leases	16.1	0.5	16.6	89.0	14.3	2.2	16.6	86.3	9.1
PROBABLE Total	80.4	2.8	83.2	88.9	71.5	11.8	83.2	85.8	45.2
Grand Total	142.5	4.8	147.3	88.8	126.6	20.6	147.3	85.9	80.2

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2021, using the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

Table 12.3
Estimated Recoverable Trona Reserves for Bed 25 Only
By Category and Mineral Owner
as of December 31, 2021
Based on $188/TSA

RESERVE CATEGORY AND LEASE	TRONA SEAM MINE (Mt)	OUT OF SEAM ROCI (Mt)	TOTAL RO MINED (Mt)	AVERAGE IN-SEAM GRADE (% TRONA	TOTAL TRONA (Mt)	TOTAL RO (In-sear out-of-seam (Mt)	TOTAL RO Mined (Mt)	AVERAGE ROM FINAL GRADE (% TRONA	TOTAL SODA ASH (Mt) (90% RECOVERY
PROVEN (BED 25)									
Private Leases	15.8	0.6	16.3	87.0	13.8	2.6	16.3	83.9	8.7
US Leases	14.8	0.5	15.3	86.3	12.8	2.5	15.3	83.4	8.1
State Leases	1.7	0.1	1.8	89.6	1.5	0.2	1.8	86.3	1.0
PROVEN Total	32.2	1.1	33.4	86.7	28.1	5.3	33.4	83.7	17.8
PROBABLE (BED 25)									
Private Leases	18.9	0.7	19.6	87.6	16.7	2.9	19.6	84.4	10.6
US Leases	17.0	0.6	17.6	86.7	15.0	2.7	17.6	83.7	9.5
State Leases	2.0	0.1	2.1	88.9	1.8	0.3	2.1	85.2	1.1
PROBABLE Total	38.0	1.4	39.3	87.3	33.4	5.9	39.3	84.1	21.1
Grand Total	70.2	2.5	72.7	87.0	61.5	11.2	72.7	83.9	39.0

1) Numbers have been rounded; totals may not sum due to rounding.
2) Based on a 7-foot minimum thickness and an 85% minimum grade cut-off.
3) The point of reference is run-of-mine (ROM) ore delivered to the processing facilities including mining losses and dilution.
4) Mineral reserves are current as of December 31, 2021, using the definitions in SK1300.
5) Mineral reserves are reported on a 100% ownership basis. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

ŞİŞECAM WYOMING LLC
Big Island Mine
UPPER BED 25
LIFE OF MINE PLAN
DECEMBER 2021
Scale 1" = 3000'
Date Description Drafted By:
DEC-2021 Reserves Original

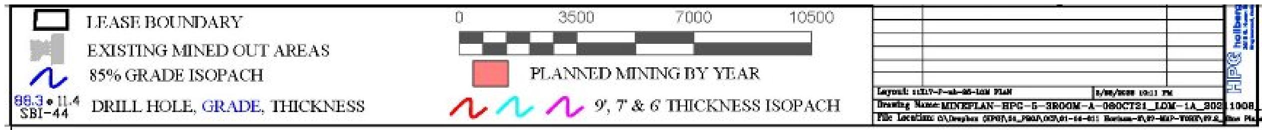
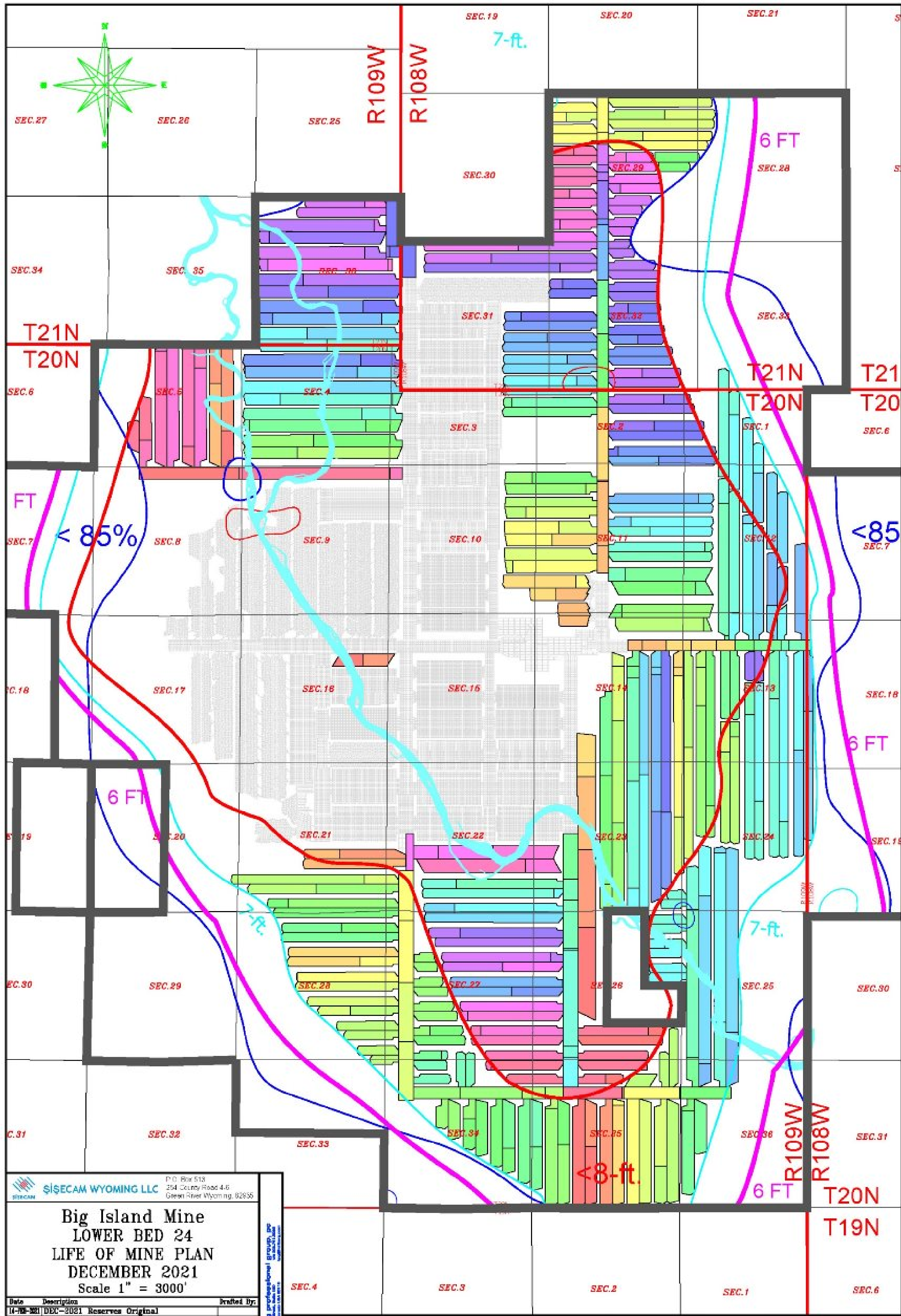


Figure 12.1 Upper Bed 25 Life of Mine Plan


R109W
R108W
T21N
T20N
T19N
SEC.19
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SEC.35
SEC.36
SEC.4
SEC.2
7-ft.
6 FT
< 85%
<8-ft.
ŞİŞECAM WYOMING LLC
P.O. Box 513
254 County Road 4-6
Green River Wyoming 82935
Big Island Mine
LOWER BED 24
LIFE OF MINE PLAN
DECEMBER 2021
Scale 1" = 3000'
Date
Description
Drafted By:
DEC-2021 Reserves Original

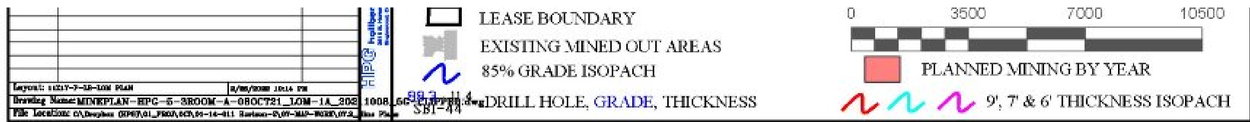


Figure 12.2 Lower Bed 24 Life of Mine Plan

1.3 UNCERTAINTIES (FACTORS) THAT MAY AFFECT THE MINERAL RESERVE ESTIMATE

Areas of uncertainty that may materially impact the mineral reserve estimates include:

- Changes to long-term soda ash price and exchange rate assumptions;
- Changes in local interpretations of trona seam thickness and grade such as sedimentary structures described in Section 6.4.3;
- Changes to geological and grade shape, and geological and grade continuity assumptions;
- Changes to soda ash recovery assumptions;
- Changes to the forecast dilution and mining recovery assumptions;
- Changes to the cut-off values applied to the estimates;
- Variations in geotechnical (including seismicity), hydrogeological and mining method assumptions; and
- Changes to environmental, permitting, and social license assumptions.

1.4 SECONDARY RECOVERY AND HIGH EXTRACTION MINING

Due to non-subsidence limitations, this reserve estimate does not include any trona resources that could be recovered by solution mining or secondary recovery. Sisecam Wyoming has limited ability to implement high extraction mining or secondary solution mining due to the Green River crossing the property.

1.4.1 Non-Subsidence Areas

Non-subsidence areas for the Big Island Mine include but are not limited to, the Green River, Sisecam Wyoming Refining Facility, tailings complex, railroad spurs, gas pipelines, highways, and surface access for return or injection systems.

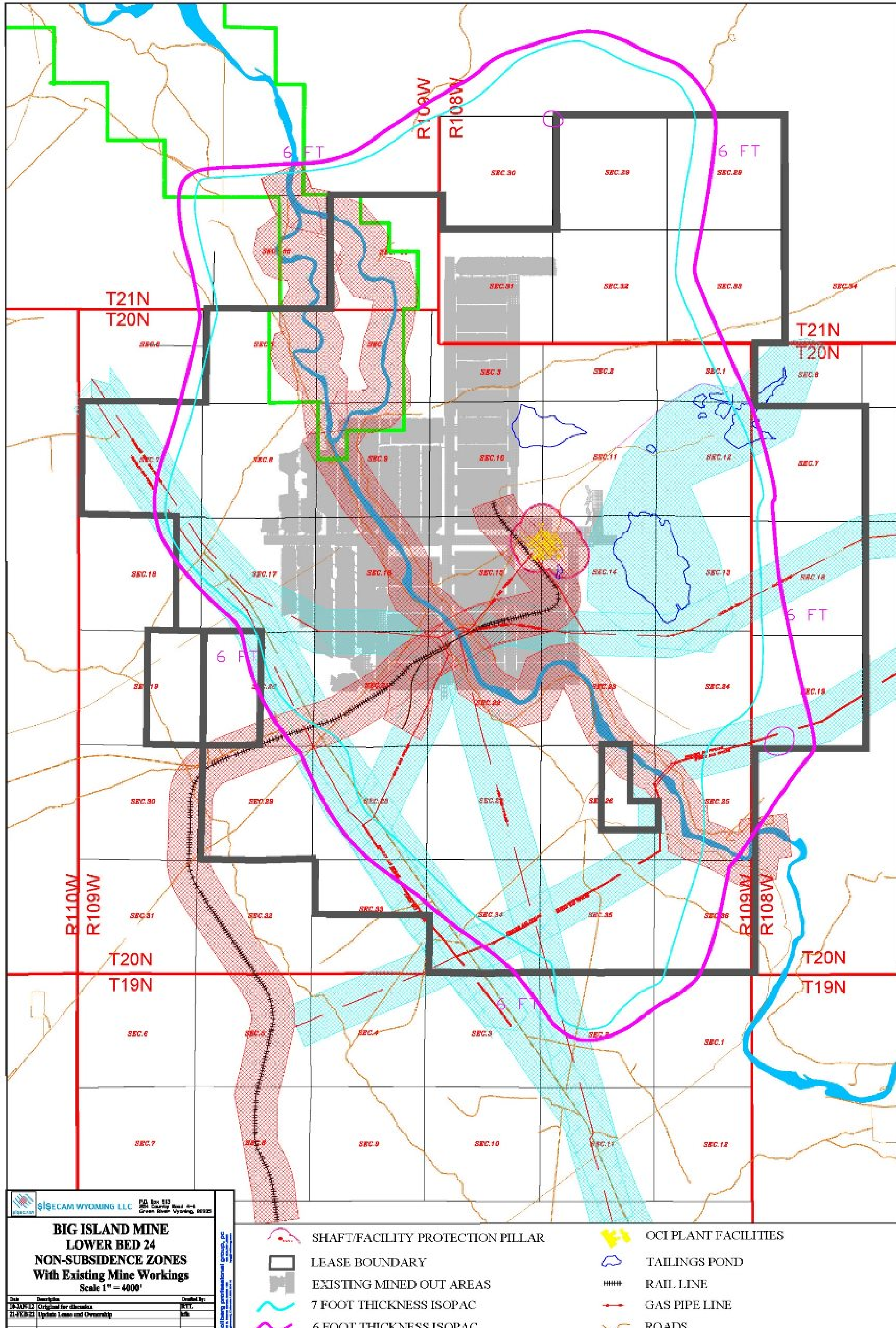
While subsidence of rivers, roads, rail, and pipelines has been successfully done in the Trona Basin, the degree of subsidence and the features subsided dictate what mitigation efforts are necessary.

Due to its low drainage gradient and the proximity of Seedskadee National Wildlife Area, the Green River flood plain should be considered a non-subsidence area. Unfortunately, LB West seismic activity in combination with water inflow has resulted in subsidence next to a small section of the Green River. The DEQ and LQD have been made aware of this situation and they have not voiced any concerns at this time. Sisecam is in the process of notifying other relevant regulatory agencies and interested parties. The area is being monitored closely for any surface changes or impact to the underground mine. Further information on this topic is available in Section 13.2.1.

The Sisecam Wyoming Refining Facility, along with the mine shafts, are also considered non-subsidence areas. The other overlying features, roads, rails, and pipelines can be subsided if the proper mitigating work is complete. These areas are indicated on the maps by the blue ‘subsidence mitigation required’ hatching.

High extraction mining or solution recovery of mine pillars results in subsidence at the surface by increasing the seam extraction ratio. Subsidence is typically estimated by a “cone of influence or draw” between 45 to 50 degrees upward from the impacted area the mine. At Sisecam Wyoming, this equates to an area at the surface of two-times the depth plus the area of the mine where high extraction mining is conducted. For example, a mine panel that is 1,000-feet wide at a depth of 1,000-feet has the potential of subsiding a width of 3,000-feet at the surface.

Sisecam has no plans to change its non-subsidence mining plans. Figure 12.3 and Figure 12.4 illustrate the complexity of the non-subsidence zones over the Big Island Mine.


R109W
R108W
6 FT
SEC.30
SEC.29
SEC.28
SEC.31
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SEC.34
T21N
T20N
SEC.6
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R110W
R109W
T19N
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SEC.1
SEC.10
SEC.12
ŞİŞECAM WYOMING LLC
BIG ISLAND MINE
LOWER BED 24
NON-SUBSIDENCE ZONES
With Existing Mine Workings
Scale 1" = 4000'
SHAFT/FACILITY PROTECTION PILLAR
LEASE BOUNDARY
EXISTING MINED OUT AREAS
7 FOOT THICKNESS ISOPAC
6 FOOT THICKNESS ISOPAC
OCI PLANT FACILITIES
TAILINGS POND
RAIL LINE
GAS PIPE LINE
ROADS

Figure 12.3 Non-Subsidence Areas – Lower Bed 24

.

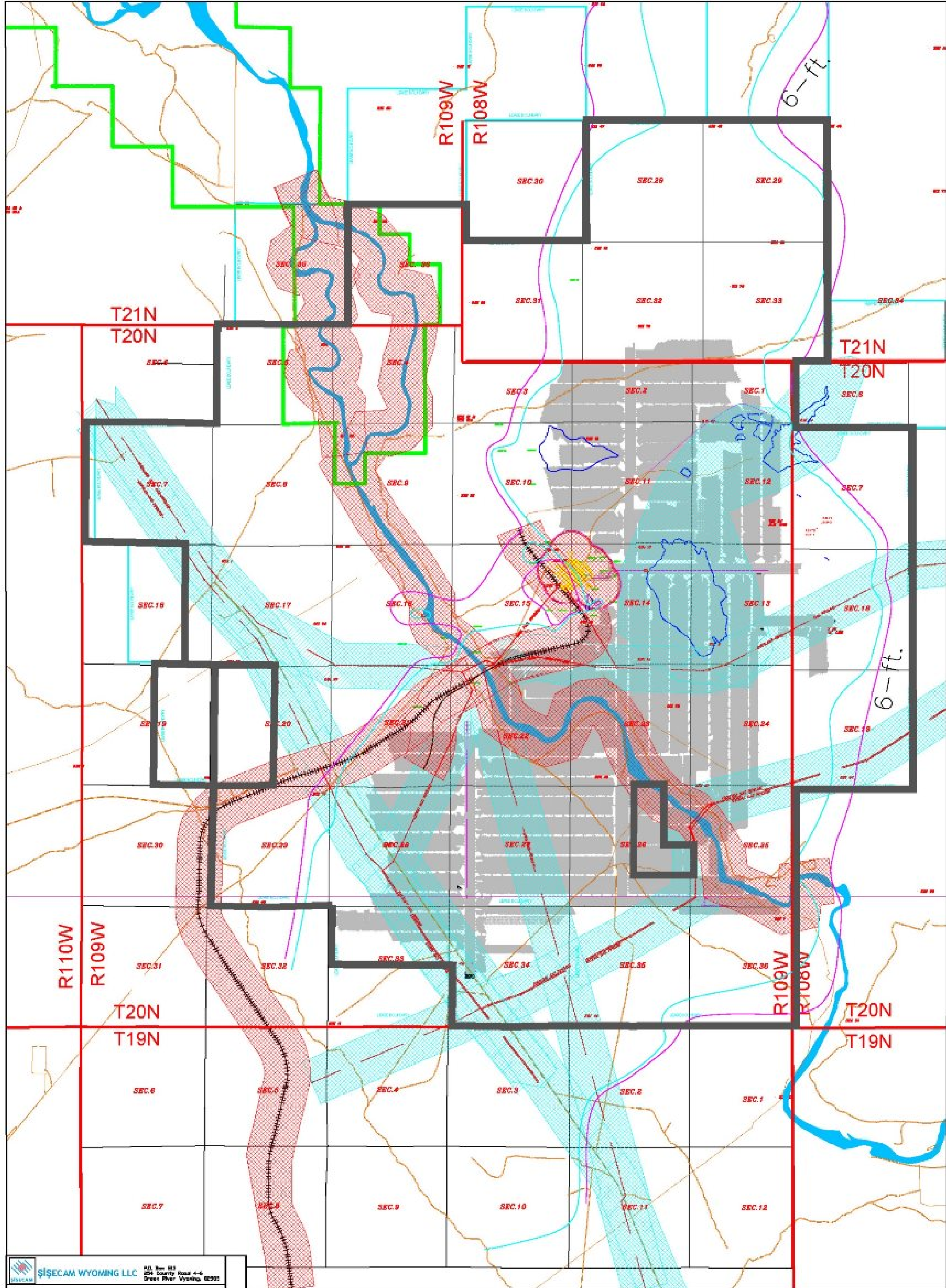

ŞİŞECAM WYOMING LLC
BIG ISLAND MINE
UPPER BED 25
NON-SUBSIDENCE ZONES
With Existing Mine Workings
Scale 1" = 4000'
SHAFT/FACILITY PROTECTION PILLAR
LEASE BOUNDARY
EXISTING MINED OUT AREAS
7 FOOT THICKNESS ISOPAC
OCI PLANT FACILITIES
TAILINGS POND
RAIL LINE
GAS PIPE LINE
T21N
T20N
T19N
R110W
R109W
R108W
6-ft.

Figure 12.4 Non-Subsidence Areas – Upper Bed 25

Note: Reserve areas and mine workings not updated.

13.0 MINING METHOD

Mining extraction at the Big Island Mine is designed to avoid any surface subsidence due to its proximity to the Green River and multiple natural gas pipelines (see Section 12.4.1 Non-Subsidence Areas).

Conventional mining equipment (drill and blast) was used at the Big Island Mine until the mid-1980's, when continuous miners fully replaced that method of ore production. A total of 59.2 MST was recovered conventionally at a 42% to 45% areal extraction rate. Undercutters were used to 'top-cut' the trona seam prior to drilling and blasting. This equipment limited the mining height and tended to leave one to two feet of roof trona, resulting in a volumetric extraction of 35% to 40%. Including barrier pillars between panels, historic conventional extraction averaged in the low 30% range.

The change to continuous miner (CM) panel layouts increased entry widths from 22-feet to 30-feet, and areal extraction increased to an average of 56% with some CM panel extraction rates as high as 68%. Volumetric extraction also increased, as the continuous miners could mine up to 13.5-feet high. It is common for the continuous miners to mine the full seam height leaving little, if any, top or bottom trona. Given full seam height extraction, and with barrier pillars, the historic continuous miner volumetric extraction ranges between 45% and 55%.

The current CM fleet is made up of seven Joy 12HM26 drum miners with integral roof bolting and ventilation fans. These are highly productive machines due to their ability to mine and roof bolt simultaneously. The height of the roof bolters and fan limit the current minimum mining height to 9-feet. When thinner seam areas are encountered, floor or roof rock must be mined for clearance. This out-of-seam material adversely affects the refining process. To maintain feed grade, the current minimum mining limit is 9-feet. For this study, future mining of seam areas below 9-feet is assumed to utilize smaller continuous miners.

13.1 TWO SEAM MINING

Portions of the remaining Bed 24 trona are located under previously mined areas in Bed 25. These areas are where 'two-seam mining' is required. Two-seam mining extracts the mineral from both beds. Due to the thin interburden (25 to 40-feet) between Bed 24 and 25 and wide entries mined, mining induced stresses are higher in these areas of two-seam mining, Sisecam Wyoming has conducted significant computer modeling of the rock mechanics and predicted mine entry stability surrounding two-seam mining. Additionally, three test panels and one production panel have been mined in areas where lower extraction conventional mining techniques were employed. These panels were mined successfully and remain accessible and stable many years after mining.

Since 2017 Sisecam has completed an extensive study of the interburden between Beds 24 and 25 to characterize the extent and magnitude of the trapped gases that have impacted LB two-seam mining. In the last year Sisecam has made a concerted effort to develop Mains Entries and Panel neck-offs so that additional test mining can be completed to better prove the proposed two-seam mining geometries. In 2021 Sisecam extracted a total of 585,871 tons from this area, 13.7% of all production. Sisecam expects to start the first panel mining in this area in early 2022. This mining experience will be necessary to fully understand the impact and mitigations for these gases and confirm the proposed two-seam mining methods. Based on this progress it will be four to six years before Sisecam is able to fully demonstrate the viability of two-seam mining with the current mining equipment.

For the purposes of this study, it has been assumed that future two-seam mining will use current CM mining methods and panel geometries with the upper bed mined prior to the lower bed being mined. Due to interaction of the mining stresses created by mining both beds, additional roof support (roof bolts) throughout the two-seam mining area of Bed 24 will be required. Sisecam recently completed a study of the inter-seam gas pressures between Beds 24 and 25. This study concluded that the gas pressures are higher than previously assumed, will require closer spaced de-gas drill holes during mining, and might require narrower entries. The de-gas drill holes primarily impact productivity. Narrower entries will

impact the LB extraction and the recoverable reserves. Given that two-seam mining, in the context of this report is unverified, and the lack of a defined mining layout different than what has been proposed, no changes have been made to the two-seam area extraction. If a change to the proposed layout is made, recoverable reserves estimates must be revised to reflect those changes.

To date, Sisecam Wyoming has not completed two-seam mining with continuous miner panels below existing historic Upper Bed continuous miner panels. For this reason, two-seam mining using continuous miners and existing geometries is considered unverified. To account for this risk, higher mining costs have been used in the economic analysis and the affect is discussed in Section 19.0. Given the work completed, the existing test panels, and the cost structure at Sisecam Wyoming, it is reasonable to conclude that these areas can be economically mined and therefore are considered reserves in this study.

Approximately 118 MST of Bed 24 recoverable reserves are located in projected two-seam mining areas. Test mining of two-seam panel mining is projected to start the first quarter of 2022. The earlier that two-seam mining at the Big Island Mine can be technically and economically demonstrated, the earlier a long-term mine plan can be developed with confidence. It is possible that two-seam mining may require significant variations from current mining equipment and practices. This is dependent upon many factors that impact the long-term mine planning process.

13.2 RESERVE ACCESS

The Big Island Mine is regulated by the Mine Safety and Health Administration (“MSHA”) as a metal and non-metal mine. For the purposes of this analysis, it is assumed that MSHA will continue to allow Sisecam Wyoming to mine for the LOM under the metal and non-metal rules.

Four existing surface to ore bed shafts are used to access the trona reserves of Beds 24 and 25. All four shafts terminate below Bed 24, are fully concrete lined, and none have stations in Bed 25. Shaft #1 and Shaft #2 are the original shafts and were installed in 1961. Shaft #1 contains a service hoist for man and material access, is 16-feet in diameter and is used as an intake airway. Shaft #2 is 20-feet in diameter, has a concrete divider wall, and one-half is used as an intake airway while the other half contains a production hoist with 10-ton skips. Shaft #2 has newly installed direct fire natural gas heaters for the intake air. Shaft #3 was constructed in 1981, is 20-feet in diameter, and has a divider wall with half the shaft used as in intake airway heated by steam. The other half contains a production hoist with 10-tons skips. Hoisting capacity is approximately 1,000 tons per hour with the existing systems. The recently completed, 20-foot diameter, Shaft #4 is the main return airway with two 12-ft diameter ventilation fans. The other three shafts provide intake air. Shaft #4 does not have a conveyance but does have a repair deck that can be lifted by a crane.

For the purpose of this estimate, HPG has assumed Sisecam Wyoming will maintain the shafts and hoists for the LOM.

Sisecam is currently in the process of permitting/constructing a new production shaft, Shaft #5, to access the trona reserves of Beds 24 and 25. The production shaft will be installed with plans to increase mine production to feed the proposed Unit 8 Processing Facility. The locations of the new and proposed shafts and necessary barrier pillars have been considered for this estimate.

The deposit is accessed from the shafts through existing and new mine entries. Ore transport from the mining face is by belt conveyors to the hoists at the shaft locations. For the purposes of this study, HPG assumed Sisecam Wyoming will continue to advance and maintain all infrastructure needed to access the ore for the LOM.

The Big Island mine is considered a gassy mine because it produces methane gas. The mine is currently ventilated by two newly installed Spendrup 12-ft diameter ventilation fans. Only one fan is needed for operations with the second a full operational spare. Ventilation is approximately 725,000 cubic feet per minute (CFM) of air. Each fan can be upgraded from 1,500 hp to 3,000 hp which would allow airflow to

be increased to 1,300,000 CFM which is considered more than adequate for the long-term needs of the mine.

In general, long-term mine roof conditions are excellent. Most of the old workings can still be accessed. Panels mined in the 1960s are still accessible.

13.2.1 Inaccessible Areas

Areas that cannot be accessed are the TRM panels and the LB West Mains and Panel areas.

TRM panels are not accessible, they have been filled with the paste tailings from the refining process and are in the center of the deposit near the shafts.

The LB West Mains area west of X-Cut 223W are inaccessible due to roof falls across the mains that occurred in 2019. This area was mined in late 1990s and early 2000s with the last panel mined in 2005. During mining the panels to the north and south of the LB Mains encountered multiple roof falls and required secondary roof support. Roof falls in these panels have continued and recently increased in magnitude. On July 1st and 2nd 2016, two seismic events of magnitude 3.4 and 3.2 occurred with an epicenter in the vicinity of the Granger solution mine approximately 9-miles to the West of the Big Island Mine (BIM). Concurrent with these events the BIM experienced an air blast along the West Mains past X-Cut 152W blowing down 26 stoppings along with an increase in methane emissions. The USGS did not record any seismic activity in the vicinity of the BIM at this time. The likely cause of the air blast was roof falls in the panels adjacent to these mains. The location of these falls is not known due to lack of access in these old panels. Examination of the mains during this time indicated that they were stable. Additional roof falls likely occurred in these panels as indicated by methane spikes in November 2016, December 2016, June 2017, and February 2018. None of these methane spikes were associated with damage to any ventilation structures.

In February 2017, the area was examined. Ground conditions along the West Mains were considered to be deteriorating, but stable and no water was observed. In early 2018 examinations of the West Mains discovered ponding water covering most of the Lower Bed West workings below the 5310 MSL elevation. Figure 13.1 shows the extent of the flooded area. Chemical analysis of the water indicated that the source was not the Tailing Return to the mine water. Further analysis using radio isotopes indicated the age of the water as pre-nuclear age or fossil water older than 1952. The hydrologist concluded that the source is likely a sandstone unit 50 to 75-feet above Bed 25 that is a known low permeability aquifer and not directly the result of leakage from the Green River.

On February 22, 2019, the USGS recorded multiple seismic events with the epicenters in the mining panels north and south of the LB West mains west of X-Cut 219W. These events resulted in additional damage to ventilation structures in the area as well as a significant spike in methane emissions high enough to warrant shutting down the mine for six days until methane outgassing decreased to safe levels. Standing supports were placed in the LB West Mains at X-Cut 221W to create a break line if the mains became unstable. Monitoring of the area continued, and the water continued to subside. On April 5, 2019, the LB West Mains west of X-Cut 223W fell and caved tight between the floor and roof across the entire set of main entries.

Ground conditions in this area were considered problematic so Sisecam has established a new long-term pumping station located in the Lower Bed Southwest #2 Butts-X-Cut 60 S. Water from the area is pumped into the adjacent TRM sumps and then pumped out of the mine. Current pumping capacity at this location is approximately 200 gpm with the current long term average flow of approximately 85 gpm and 55 million gallons have been pumped since October of 2020.

Access to remaining LB West reserves west of the existing workings using the LB West Mains is now not possible without extraordinary effort. This reserve area could be accessed from the LB North Butts by driving mains to the west as shown in the proposed LOM plan accessing the LB Northwest reserve block. Panels could be developed from this new set of mains to the south to access these reserves. There are several risks associated with this area:

- These new panels would be down dip, lower in elevation, than the flooded areas. Mining down dip from flooded workings increases risk;
- The ore in this area has a modulus of elasticity that is half other areas of the BIM. Mining conditions similar to historic panels are likely and will require additional roof support; and
- The historic mined area continues to have roof falls as evidenced by 2019 seismic activity.

HPG does not consider this area to be minable and has removed it from the recoverable trona estimate due to the risks associated with seismicity, water inflow and soft ore. Removal of this area decreased recoverable trona by approximately 10.2 MST.

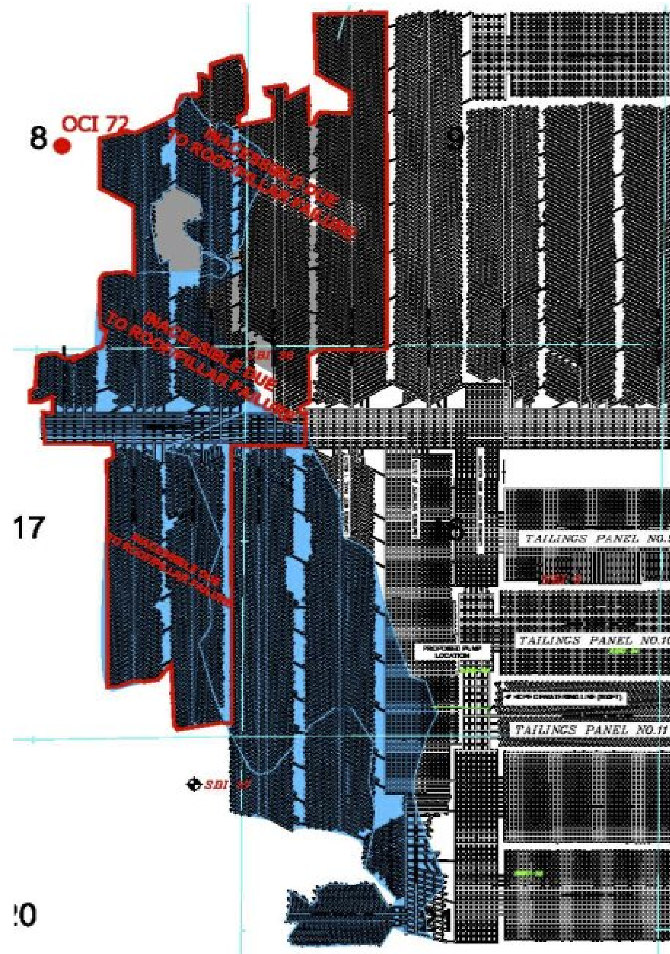


Figure 13.1 Lower Bed 24 Flooded Area

Source: 20220125 Subsidence Potential of Lower Bed West Section at Big Island Mine - RMC Final with Appendix.pdf (after Straub, 2021)

13.2.2 Mining Limit

The assumed 7-foot mining limit and 85% grade limit were selected based on the mining limit that has been successfully employed by the other basin trona mines.

Given the current minimum mining height limit of 9-feet and a reserve limit of 7-feet, there are areas outside the existing mining that are considered reserves but have not been mined based on these limits. In areas where the existing mining limit of 9-feet did not reach to the 7-foot isopach, it has been assumed that future access to these reserves would be through old workings or from newly driven development entries (see Life of Mine Plan Figure 12.1, Figure 12.2 and Section 12.1). For this study, these reserve remnants have been evaluated based on size and access to decide future extraction. Where the remnant was deemed too small or access too expensive, the remnant was excluded from the reserve estimate. As future mining continues, with the current large mining equipment, some loss of portions of the edge of the ore bodies will occur, especially when long production panels are developed. The length of recent production panels, greater than 10,000-feet long, likely precludes rehabilitation in the future to access reserves between the 9-foot and 7-foot isopachs. This estimate assumes that access to the UB Southeast Reserve block will be bypassed in this way, Figure 12.1. For the purposes of this study, these areas were considered on a case-by-case basis assuming Sisecam's typical mining methods and current cost structure.

A two-stage mine plan has been developed. The first stage "high-grades" the deposit based upon the current mining equipment and processing plant limitations mining to the 9-foot isopach. The second stage mining is based upon smaller mining equipment and assumes changes to the dissolver sections of the processing plants. The second stage mines the material between the 9-foot and 7-foot isopachs.

The mining limit, ore thickness and grade, is an economic one. Mining thinner material will be less productive and costlier. Mining costs of reserves between 9-feet and 7-feet thick could increase by 50% to 75%, making the economics of these reserves sensitive to variations in soda ash price. Approximately 148.2 MST of the recoverable reserves average greater than 9.0-feet in thickness while 71.8 MST are less than 9.0-feet thick.

14.0 PROCESSING AND RECOVERY METHODS

14.1 INTRODUCTION

Sisecam utilizes the monohydrate process to convert raw trona into soda ash in five (5) processing plants. The plants are well established and have a long production history which is illustrated in Table 14.1 below. Unit 6 is an integrated stand-alone plant constructed in 1998 and Unit 7 is a large calcining dissolver constructed in 2006 to feed liquor to Units 3 through 5. All the plants have had significant upgrades over the years to both improve recovery, energy efficiency, and increase soda ash production.

The primary feedstock to these plants is raw mined trona with a minor secondary feed from liquor produced from mining the DECA crystals, sodium carbonate decahydrate, from the evaporation ponds of the tailing disposal areas. The DECA crystals are mined using tracked backhoes, dewatered, and dissolved into liquor for feed into the dissolver circuit.

For operational flexibility and to improve efficiencies there are multiple lines, ties, between the plants to optimize the liquor produced by the dissolver sections. Excess liquor from Unit 6 can be shared with Units 3 through 5 and similarly excess liquor from Unit 7 can be shared with Unit 6.

14.2 MONOHYDRATE PROCESS

Figure 14.2 is a simplified process flow diagram of the monohydrate (Mono) process operated at Sisecam. The Mono process starts with screening and crushing the trona feed to minus 3/8" which is then calcined in a gas fired rotary kiln at approximately 150-200 degrees Celsius converting the raw trona into crude soda ash and insoluble material (shale and marlstones). The conversion of trona (sodium sesquicarbonate) to sodium carbonate improves the dissolution in water so that the insoluble material can be removed by gravity separation using spiral classifiers and counter current thickeners. The overflow liquor from the thickeners is put through multiple stages of filtration to remove insoluble material.

The sodium carbonate is recrystallized from the filtered liquor in forced circulation evaporators heated by mechanical vapor recompression (MVRs). The crystalized dense soda ash is dewatered using pusher centrifuges and dried in gas fired rotary driers, screened, and sent to storage for shipping by truck or rail.

The underflow from the classifiers and thickeners is sent to the TRM paste plant where it is ground and dewatered using deep cone thickeners and pumped as a paste via positive displacement pumps underground into the old mine workings or on the surface into the tailings pond system.

14.3 SODA ASH PROCESSING FACILITIES

Sisecam currently has two ore calcining and dissolving units with four soda ash processing plants. The first two processing plants, Unit 1 and Unit 2 built in 1962 used triple effect evaporators were taken out of service after being replaced by the integrated Unit 6 plant. Unit 7 calciner and dissolving unit was constructed to replace the front ends for Units 3, 4, and 5. The dissolver units liquor output is interconnected to the multiple evaporator units. Figure 14.1 illustrates the relationships between the units and Figure 14.2 shows a simplified process flow diagram from the mine to the product silos.

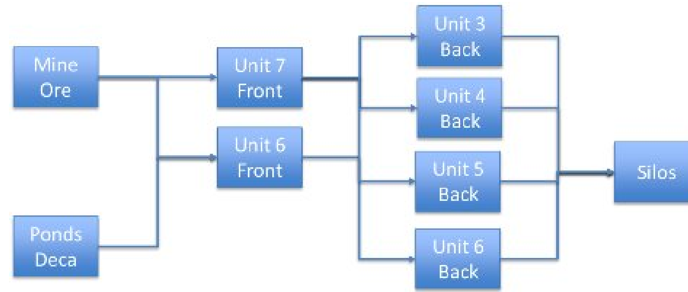


Figure 14.1 Sisecam Processing Facilities

As discussed earlier the Big Island Refinery has a consistent and long production history that is shown in Table **14.1** below.

Table 14.1
Sisecam Historical Production

	Short Tons	
	Trona Ore	**Soda Ash**
2011	3,676,000	2,308,300
2012	3,865,400	2,455,500
2013	3,921,500	2,492,200
2014	3,869,500	2,548,300
2015	4,040,300	2,655,400
2016	4,050,400	2,735,700
2017	4,001,325	2,705,400
2018	4,018,329	2,613,200
2019	4,157,009	2,759,100
2020	3,653,830	2,221,900
2021	4,276,837	2,682,203

The details of the existing processing facilities are described in more detail below.

14.3.1 Ore Crushers

Mined ore is crushed in two separate areas. The first is a crusher and screening building upgraded in 1980 that supplies crushed ore to Unit 7 that is then fed to Units 3 through 5. This area has two closed loop crushers. The second is a dedicated single closed loop crusher that was built with Unit 6 and only supplies ore to that unit.

14.3.2 Unit 7

Unit 7 was constructed in 2006 as an alternative energy project to update the dissolver sections of Units 3 through 5. Unit 7 consists of a large rotary calciner, Verti-mill grinder, and classifiers that supply liquor to Units 3 through 5. Originally the rotary calciner could be dual fired by coal or natural gas. The coal

burner had low NOx emissions and was BACT at the time of construction. The unit was converted to only natural gas firing in November of 2010 due to economics and ability to increase production on gas.

14.3.3 Unit 3 and 4

Units 3 and 4 were constructed in 1967 and 1972, respectively. Both originally used triple effect evaporators with steam from gas fired boilers in the powerhouse and had their own dedicated calciners and dissolvers. In the 1980's Rhone-Poulenc converted the evaporators to MVRs. Unit 3 has two MVRs for the three evaporator bodies. Unit 4 uses two MVRs in series to drive the first two evaporator bodies (System 1) and two smaller MVR's to drive the third evaporator body (System 2). In 2006 Unit 7 replaced the calciners and dissolver sections. Unit 3 has the ability to produce 450 KTPY of soda ash and Unit 4 can produce 750 KTPY.

14.3.4 Unit 5

Rhone-Poulenc expanded soda ash production between 1977 and 1980 adding an additional mine production Shaft #3, upgrading the crushing facilities, automating the surface ore stockpile, and constructing the fifth soda ash plant. Unit 5 has one large evaporator body with two heat exchangers driven by one large MVR compressor. Unit 5 is capable of producing 500 KTPY. Unit 5's calciner and dissolver sections were replaced by Unit 7 in 2006.

14.3.5 Unit 6

OCI Chemical expanded soda production in 1998 with the construction of Unit 6 a standalone integrated plant with crushing, calcining, dissolving, filtering, crystalizing, thickeners, and tailings pumps. Current annual production from Unit 6 is about 1,000,000 TPY. Unit 6 consists of two large MVR evaporator bodies with two heat exchanges for each.

Unit 6 Tailing TRM is made up a dedicated rod mill crusher, deep cone thickener, high pressure positive displacement pumps and a dedicated borehole to the mine where a pipeline transports the paste to the underground TRM storage panels.

14.3.6 Tailings Return to the Mine Plant

The TRM Plant was constructed concurrently with the Unit 6 expansion. Commissioned in 1995, TRM processes the tailings from Units 3 through 5 and produces a thickened paste that is pumped into the old mine workings or to the surface tailings pond facility, where it is dewatered for permanent storage. Originally TRM had its own rod mill grinder and wet screens to produce paste. The Unit 7 Verti-mill has replaced that grinder and TRM now only consists of the deep cone thickener, high-pressure positive displacement pumps, a borehole into the mine and high-pressure piping to the underground storage panels or to the surface tailings pond facility. More information on tailings disposal is available in Section 17.4.

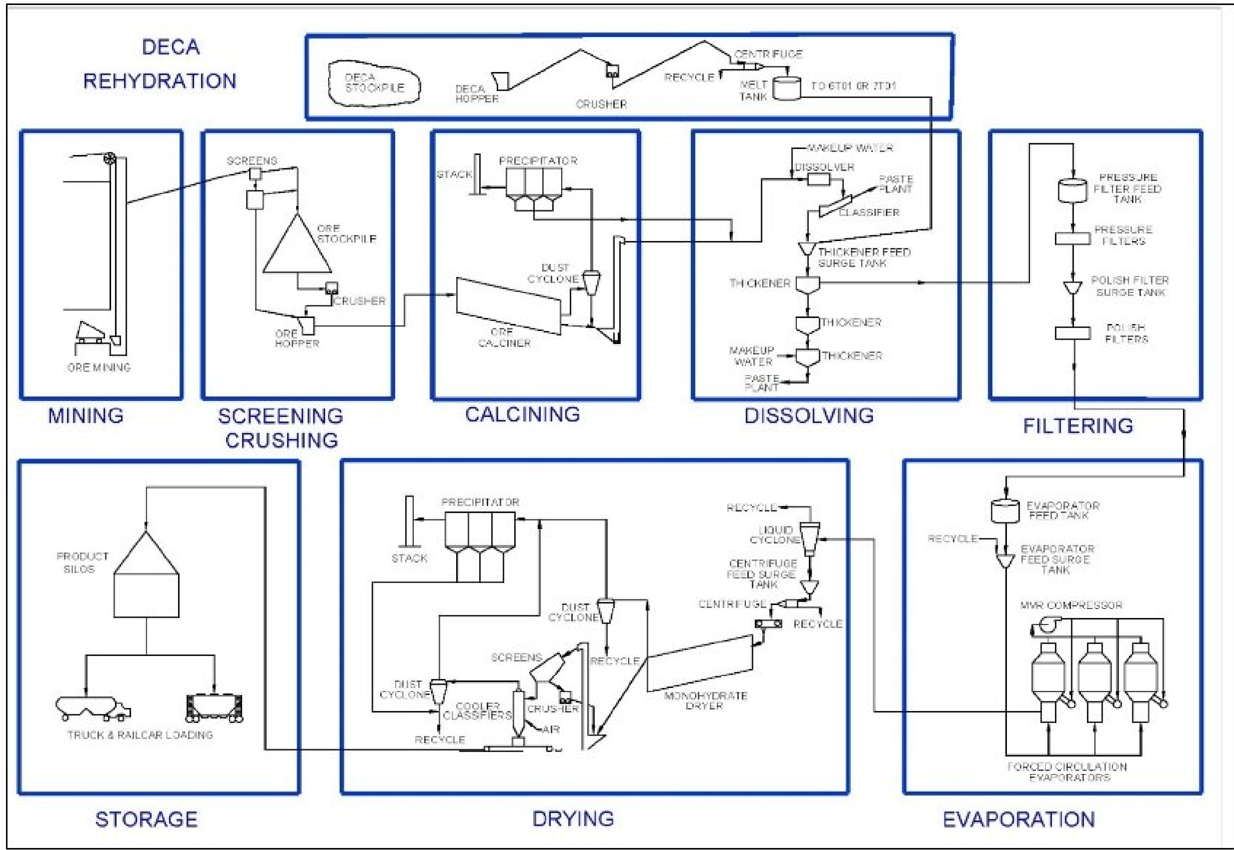


Figure 14.2 Sisecam Wyoming Simplified Process Flow Diagram

1.4 DECA MINING AND PROCESSING

DECA mining was started in 2009 by harvesting the DECA crystals from the evaporative areas of the tailings ponds. DECA precipitates during the fall and winter when temperatures drop. DECA crystallization is an exclusionary process that results in a relatively pure sodium carbonate crystal leaving behind impurities of bicarbonates, chlorides, and sulfides. During the long 50-year history of Sisecam's tailings disposal facilities using Pond 1 and Pond 4 for evaporation, many feet of DECA was deposited. To harvest the DECA Sisecam has utilized Ponds 1, 3, and 4 for evaporation and water storage. Water is pumped between the ponds allowing selected areas to be dewatered to harvest the DECA crystals. DECA mining occurs in the late winter when the pond area is relatively frozen allowing mining with conventional tracked backhoes and rough terrain haul trucks. The DECA is dewatered and hauled to a 1.8-million-ton stockpile next to the DECA processing plant. DECA is stockpiled during the winter and fed into the plant from the stockpile throughout the year. The DECA processing uses a pick breaker feeder to feed a heated and agitated melt tank. The resulting liquor is feed back into the process in the dissolver sections at the thickeners. Approximately 1.2 MTPY of DECA is harvested producing approximately 300-400 KTPY soda ash.

Based on the remaining amount of DECA in the ponds and future anticipated DECA precipitation, the DECA mining is anticipated to end in late September of 2024. To maintain the current soda ash production rates this feed stock will need to be replaced by trona or another sodium source.

1.5 EXPANSION PLANS

Sisecam Wyoming has announced several plans to expand the facilities production capabilities. The largest is construction of an additional processing plant (Unit 8) and an additional production shaft (Shaft #5). Unit 8 is planned to be an integrated plant, similar to Unit 6, with crushing, calcining, dissolving, filtration, evaporation and drying. Shaft #5 will be serviced by two hoists: one for mine production and the other for men and materials. Sisecam has received regulatory approval for construction of Unit 8, including the Air Quality (New Source Review Construction Permit), Land Quality Permit, Bureau of Land Management On-Lease Action Approval, and Industrial Siting Permit. Due to business uncertainties including COVID-19, the Unit 8 capital expansion is shown outside the 5-year capital budget. Because the operation is considered profitable as-is and given the uncertainties, these expansions were not considered for the economic analysis for this reserve estimate.

15.0 INFRASTRUCTURE

15.1 INTRODUCTION

Sisecam Wyoming's mine and refinery are located 23 miles northwest of the town of Green River, Wyoming. Sisecam Wyoming accessible from Interstate 80 west from Green River then north on La Barge Road, Wyoming Highway 37, to the OCI road, 254 County Road 4.

The Sisecam site is serviced by a dedicated railroad spur line off the main East West Union Pacific rail line. The dedicated railroad spur line connects to the Union Pacific Main line just east of the Genesis Westvaco facilities.

The site infrastructure has been developed over the plus 60 years of operation, is established and is adequate for the purposes of producing soda ash. While the infrastructure is showing its age, Sisecam has demonstrated the willingness to update those areas as necessary. Examples of this are the ongoing update of the electrical mechanical control centers (MCC's), the addition of Shaft #4 with new ventilation fans, the electrical updates of the shaft hoisting systems, the new office change house building, as well as many improvements to the processing facilities.

The Sisecam site road access and rail access can be seen in Figure 15.1. An aerial view of the site indicating major infrastructure is shown in Figure 15.2.

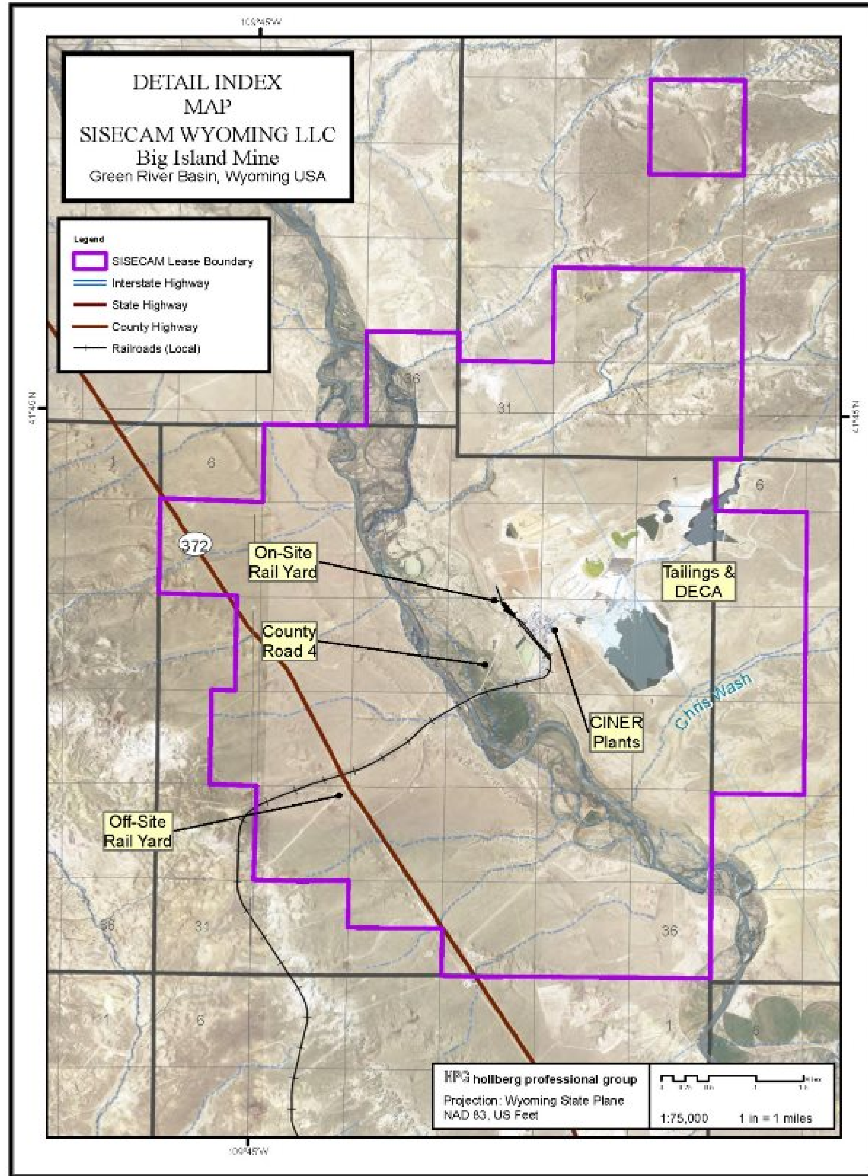


Figure 15.1 Sisecam Site Access and Rail Infrastructure

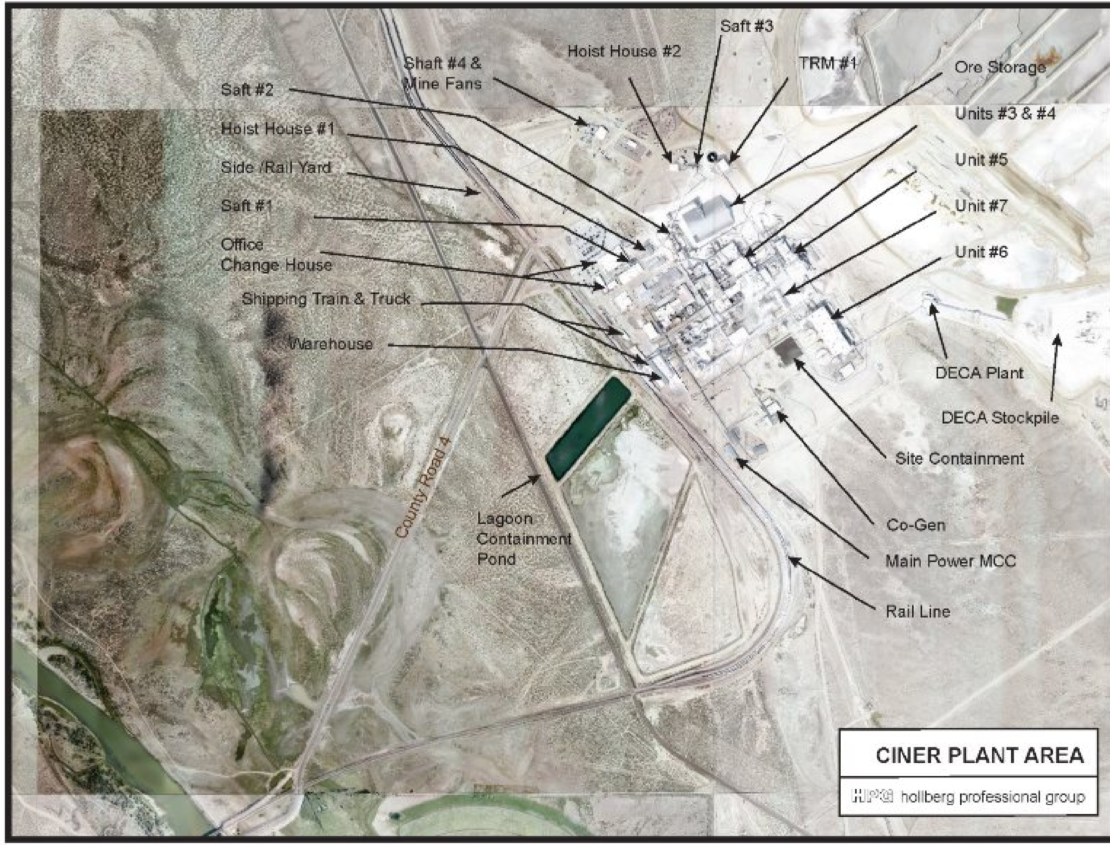


Figure 15.2 Sisecam Site Infrastructure Aerial View

1.2 OFFICES, WAREHOUSES

Sisecam has sufficient office and warehouse facilities. There are multiple buildings for offices, change houses, laboratories, control rooms, maintenance shops, safety offices, machine shops and warehouses. Where necessary, for large equipment and motor spares, Sisecam uses vendors offsite warehouses. In 2020 Sisecam completed the construction of a new office and change house facility to eventually replace the 1960's building.

In the mine there are underground offices, underground shops, and an underground warehouse all dedicated to the mine operations.

1.3 MINE

Sisecam is currently operating six trona mining sections, with each made up of a Joy 12HM26 drum miner, two Joy shuttle cars and a feeder breaker. The mine maintains spare production equipment including a spare CM used for utility or to allow major rebuilds, two spare shuttle cars and a spare feeder breaker. Ore is transported from the working faces by 42" belt conveyors which discharge to 48" mainline conveyors. The mine has over 10 miles of conveyor structure and belting installed and has ample spares.

Underground trona ore storage is limited to approximately 700 tons of capacity between the mine and the hoisting systems. This limited surge capacity does impact overall hoisting efficiencies and production capabilities.

Mine ore is crushed underground in the UG Crushing Facilities which includes two McManaman dual roll crushers.

The mine has four surface to ore bed shafts used for access and ventilation. Shafts #1 and #2 were developed in 1961 with a common hoist house containing the mechanical hoists. Shaft #3 was constructed in 1981 as a production and ventilation shaft. Shaft #3 has a dedicated hoist house (Hoist House #2) and double drum hoist. Shaft #4 was completed in 2021, as a dedicated ventilation shaft. The shafts are inspected weekly and are repaired as required.

Shaft #1 is 16-feet in diameter and serves as the man and material shaft. Shaft #1 is serviced by a 1970's Vulcan Iron Works Hoist that has been upgraded over the years with updated braking systems and electrics but is nearing its mechanical life and will likely need replacement within 5-years. Shaft #1 is an intake air shaft with steam heaters.

Shaft #2 is 20-feet in diameter and used as a ventilation and production shaft. With the addition of Shaft #4, Shaft #2 has been converted from the main exhaust ventilation shaft to an intake and production. The shaft is now heated by direct fire natural gas burners. Shaft #2 is serviced by a 1961 Nordberg double drum hoist with dual 500 HP DC motors driven by ABB converters. Over the years this hoist has been upgraded with new braking systems, new ring gear and pinions, and control systems. The hoist has 10-ton balanced production skips with the capability of lifting 500 tons per hour of ROM trona.

The #3 Shaft was constructed in 1981 as a ventilation and production shaft. It is 20-feet in diameter and heated by steam heaters. The shaft is serviced by a 1961 Nordberg double drum hoist with recently installed dual 500 HP AC VFD motors driven by ABB controls. Over the years this hoist has been upgraded with new braking systems, motors, and controls. The hoist has 10-ton balanced production skips with the capability of lifting 500 tons per hour of ROM trona.

Shaft #4 is 20 feet in diameter with two parallel 12-foot diameter Spendrup fans driven by 1,500 hp direct drive motors that can be upgraded in the future to 3,000 hp. Only one fan is required to ventilate the mine with the second being a spare. Each fan has a peak capacity of 1,300,000 CFM (cubic feet per minute) of air but are currently being operated at 725,000 CFM which is all the mine currently requires. The additional capacity allows for future production increases.

1.4 STORAGE

Sisecam has a 100,000-ton covered and automated trona ore stockpile that is used for ore storage between the mine and processing facilities. This system is filled with ROM or screened trona via a belt conveyor tripper and reclaimed by a Thyssenkrupp drag reclaimer. The stockpile has a working storage capacity of less than 40,000 tons which is not adequate to separate mine production from the processing feed. This does impact overall hoisting efficiencies and production capabilities.

As stated earlier there is a 1.8-million-ton DECA stockpile between the Pond #1 stacking area and the Pond #1 evaporation pond.

Finished soda ash is stored in seven vertical storage silos totaling 27,300 tons, which is considered adequate for the current production rates.

1.5 PRODUCT SHIPPING & LOADING

Finished dense soda ash is shipped in bulk by rail and truck with a smaller portion bagged and shipped by truck. There are dedicated rail and truck loadouts with scales and a warehouse with bagging lines and storage for supper sacks or 50-pound bags. Union Pacific is now requiring more of Sisecam's soda ash cars to be shipped via unit trains constructed in the site railyard or at the Big Island rail yard.

Union Pacific is the rail service, but cars can be transferred to other carriers when necessary. There is a small portion of product that is transported by tandem pneumatic trucks from Sisecam to Bonneville, Wyoming where the produce is transloaded from truck to the BNSF Railway.

Sisecam has a dedicated rail car fleet. Sisecam does not own any rail cars but leases approximately 2300 cars. Sisecam plans to add approximately 20 cars to its rail fleet in 2022.

1.5.1 Rail Yards

To accommodate assembly of unit trains Sisecam utilizes a contract railyard along the La Barge Road (Highway 372) which is privately owned and maintained by others. There are up to five track lines at the facility to assist with switching empty and loaded cars and prepping them for shipment offsite. There is an estimated 18,400-feet of track owned by the Big Island Mine and Refinery

1.6 TAILINGS FACILITIES

Process tailings disposal, made up of shales, mudstones, and process purge, is split between underground mine workings and surface. Underground disposal is placed as thickened slurry into old lower bed mined out panels. Surface disposal is placed as thickened slurry into a series of tailings ponds that have been maintained over the life of the facility. For the past few years, Unit 6 tailings have been pumped underground and Units 3 through 5 have been pumped to the surface tailings storage. This is about a one-third to two-third split with the majority of the tailings being place on the surface in the tailings basin.

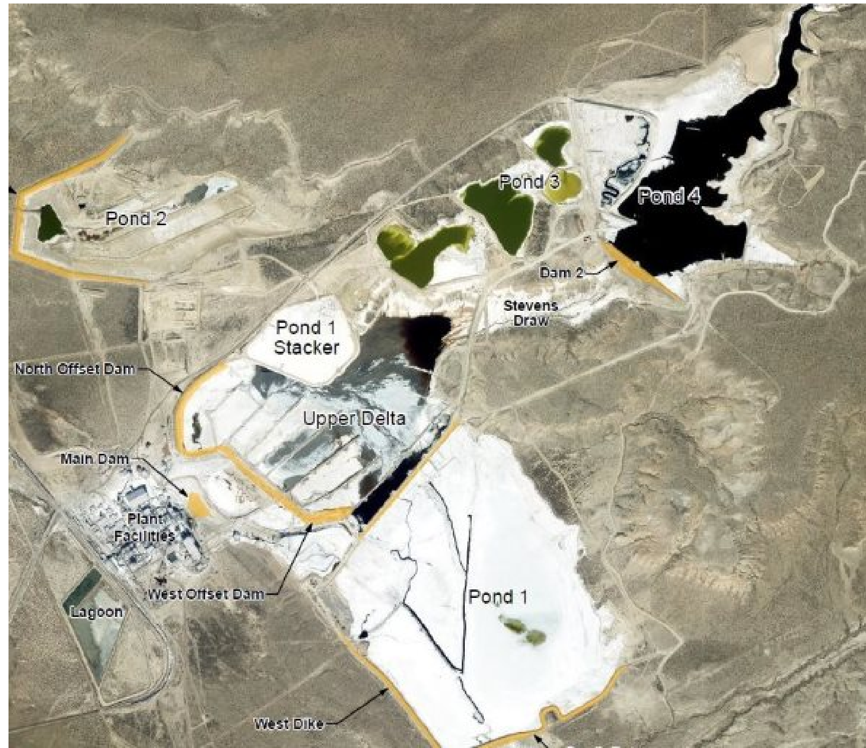
The Sisecam surface tailings facilities are shown in Figure 15.3. The tailings basin facilities have multiple dams and internal dikes. A dam safety review is done annually by a third-party engineering firm. For the purposes of this review HPG has examined three years of the annual Dam Safety Reports completed by Barr Engineering. Barr Engineering has been doing the design work at these reviews at Sisecam for over 30 years. Barr has recommended an updated dam break analysis to determine downstream impacts of a dam failure. This work is reported to be in progress.

Surface tailings disposal is currently placed in the Pond 1 Stacker and Upper Delta area where it is allowed to dewater into the Pond 1 evaporation DECA recovery area. Ponds 3 and 4 are used for evaporation and water management to allow for DECA mining.

The recently completed Pond 2, which is a lined tailings pond, was constructed in 2014-2015 has had minimal use to date. Capital plans call for the geomembrane liner to be expanded in 2022 and tailings disposal to begin in the lined portions of Pond 2. Pond 2 has a predicted life of over 20-years based on mine disposal of 30-40%.

Based on the current surface tailings basin life of over 20 years and available alternative disposal areas and methods, this study assumes that Sisecam Wyoming will maintain adequate tailings disposal storage for the life of the reserves.

Additional information on the surface tailings facilities is available in Section 17.4



Source: Sisecam-2020_Dam-Safety-Report_20210224.pdf (Barr Engineering)
Figure 15.3 Aerial View Tailings Facilities

1.7 UTILITIES

The energy sources and utilities for the Sisecam site include natural gas, electricity, steam, and raw water. Natural gas is used for steam generation, electrical generation, and process heating. Electricity is purchased from Rocky Mountain Power (RMP) and generated with a Co-Gen gas turbine and a backpressure steam turbine. Steam is produced from gas fired boilers and the Co-Gen plant. Water is pumped from the Green River, which crosses the lease area.

1.7.1 Electrical

The site electrical demand is approximately 60-62 megawatts (MW). The primary electrical source is provided by RMP via the RMP Raven Substation located on La Barge Road. The substation is fed by two 230 kV independent high voltage lines that are switched to two independent 34.5 kV power lines to the Sisecam site main MCC. This MCC has an additional 34.5 kV independent feed line.

Sisecam also has in-house co-generation. The oldest is a 12.0 MW backpressure steam turbine driven by either the three conventional gas boilers (H03, H04 & H05) or excess steam from the Co-Gen Plant. The second electrical generation source is a recently commissioned combined cycle gas turbine. The Co-Gen facility produces up to 25 MW of electricity and steam for generation and process use.

1.7.2 Natural Gas

Natural gas is supplied to Sisecam by Midstream-Ottco through a supply line with a capacity of approximately 50,000MMBTU/day to the slug catcher with current required usage around half of available supply. From the slug catcher there are two natural gas pipelines. One pipeline feeds the processing plants and powerhouse and the second pipeline services the Co-Gen Plant. The capacity of the original pipeline was sized for when the processing plants were triple effect steam evaporators. Conversion to electrically driven MVR's has reduced the process plant demand, resulting in the main natural gas pipeline being oversized for the current facility. The Co-Gen line was designed for multiple processing units and has capacity for the Co-Gen plant, as well as an additional similarly sized unit.

1.7.3 Steam

Steam is produced by three natural gas heated boilers and the newly constructed Co-Gen gas turbine. The original powerhouse has been in service since 1961 but has had multiple upgrades over the years and is still a viable powerhouse for the foreseeable future. The Co-Gen plant uses a heat recovery steam generator (HRSG) heated by the gas turbine to produce steam that drives the associated backpressure turbine and generator for the combined cycle. The boilers produce 600-pound steam that is lowered via let down stations or backpressure generators to either 150-pound or 35-pound steam for boiler superheaters, processing, and heating.

1.7.4 Water

Raw water for the site is pumped from the Green River filtered for use in the process or treated to potable water standards for internal and sanitary use. Sisecam has adjudicated water rights equal to 7.756 MM (7756K) gallons per day (12.0 cfs) under State Engineer's Office of Wyoming Permit No. P22075D. These rights are more than adequate for the site needs. The average water withdrawal between 2018 and 2021 averaged 67.52 MM gallons per month or 2,220 MM gallons per day.

Process water, tailings decant water and steam condensate water are recycled to minimize water usage.

Water for domestic and sanitary use is processed using carbon/sand filters, mixed media pressure filters, and chlorinated to the same standards as municipal water systems. The water is sampled and tested according to municipal water standards regulated by the Environmental Protection Agency. Sisecam has had deviations to these standards of a total organic carbon running annual average (RAA) ratio below 1.00 during the periods from October 2019 through September 2020, and January 2020 through December 2020, and April 2020 through March 2021. Sisecam received a notice of violation and an administrative order on August 6, 2021, from the EPA. Sisecam made modification and repairs to the systems and reported on August 23, 2021, that the systems were in compliance and that test showed a steady increase in the TOC ratio through the second quarter of 2021. There have not been any deviations since.

16.0 MARKET STUDIES

As stated earlier, the economic viability of these reserves is based upon the long profitable history of the Big Island Mine and Refinery producing and selling soda ash. Sisecam has an extensive history of consistent sales with an established customer base, logistics and marketing. Sisecam has multiple contracts for soda ash sales both short and long term.

HPG concludes that this history along with the five years of historical sales provided is a reliable basis for the assumption that the future weighted average net sales per short ton will remain consistent with Sisecam Wyoming's average net sales for the five years ended December 31, 2021.

As part of this evaluation HPG reviewed confidential marketing studies provided by Sisecam. These studies indicate a steady rising price over the next 10-years. Price fluctuations are forecast based on expected additional new production and/or shutdowns of synthetic plants, but the overall trend is a steady increase in price. For the purposes of this estimate a constant soda ash price of $188/ton was assumed.

HPG offers the following remarks that support the above conclusions:

- As a basic industrial mineral, soda ash demand has historically increased 2-3% per year. The rapid increase in industrialization in emerging economies of China, India, Thailand, and Indonesia are expected to continue to drive this demand for the foreseeable future;
- Green River's naturally produced soda ash has a historic cost advantage over synthetically produced soda ash as illustrated by the long history of the Green River Basin production being exported successfully throughout the world to countries with local synthetic soda ash production (i.e., China, Mid-East, and Europe);
- The high cost and environmentally undesirable synthetic soda ash plants will continue be under pressure by the naturally produced ash and will continue to shut down over time;
- Sisecam's international ties through its holding company We Soda are part of a global conglomerate that controls over 7.5 million tons of soda ash production from Turkey and the US reflecting a strong market presence; and
- Sisecam's new majority owner, Sisecam, is an end user. As one of the largest glass producers in the world Sisecam is creating a vertically controlled supply chain from raw soda ash to finished glass.

17.0 ENVIRONMENTAL STUDIES, PERMITTING, AND PLANS, NEGOTIATIONS OR AGREEMENTS WITH LOCAL INDIVIDUALS OR GROUPS

17.1 ENVIRONMENTAL STUDIES

Sisecam Wyoming operates a facility located approximately 23 miles north of the City of Green River in Sweetwater County. The facility includes the processing and refinement of Trona ore into Soda Ash, an underground mine (Big Island Mine), ore hoist, mine fans, surface tailings disposal ponds, evaporation ponds, sewer ponds, site containment ponds, and administration and supporting structures.

Access to Sisecam Wyoming is by County Highway 6 from Wyoming Highway 372 and County Highway 4. Union Pacific Railroad provides a rail spur to transport product. Adjoining this spur is a rail holding yard adjacent to WY 372.

Sisecam has maintained current permitting requirements. The most recent Environmental Analysis studies include:

- Tailings Pond 2 rehabilitation and expansion;
- Refinery Unit 8 proposed construction;
- Refinery Cogen and pipeline for electrical energy production; and
- Trona lease expansion for Section 34, Township 20 North, Range 109 West.

17.2 CLIMATE

The Sisecam Wyoming facilities are located in the Green River drainage of the upper Colorado River system. Situated in a high intermountain basin bounded by the Wyoming Range to the West, Uinta Mountains to the south and the Wind River Range to the northeast, mean elevation exceeds 6,000-feet. Climate is dry, cold-temperate-boreal and characterized by limited rainfall (less than 8 inches) with long, cold, dry winters and warm-hot, summers with occasional storm producing flash floods. Evaporation exceeds 36 inches resulting in little excess water, limiting the majority of vegetation to the Green River flood plain. Wind generally blows from a southwesterly direction.

17.2.1 Temperature and Precipitation

Climate is classified as semi-arid with little rainfall. The average annual precipitation measured at the monitoring station located in Farson, Wyoming, near this facility is 7.83 inches. Data from 1991 through 2020 show precipitation peaks during May through July, with the heaviest snow months occurring in November into March. The region has relatively cool temperatures. The average annual temperature at the facility is 37.8 degrees F, with average extremes ranging from -4F to 82F. On the average, the hottest day occurs in July and August, the coldest in January and February, and the frost-free season lasts approximately 3 to 4 months.

17.2.2 Winds

The Green River basin is subject to strong and gusty winds. During the winter months, strong winds are often accompanied by snow, which produces blizzard conditions and drifting snow.

The frequency and strength of windy conditions greatly affects dispersion and transport of pollutants in the region. Winds from the west and southwest account for 37 percent of the total winds in the area. Prevailing westerly winds are fairly consistent throughout the year. Low humidity and constant wind, accelerates evaporation. Evaporation at times is five times greater than precipitation.

17.3 HYDROLOGY

17.3.1 Surface Water

The Green River, a tributary of the Colorado River, flows through the Sisecam Wyoming lease area and is located immediately west of the facilities. Dry peripheral gullies and washes flow through the lease are into the Green River. The intermitted flow regime is mainly the result of snowmelt or high intensity short duration storm events in the summer and are Class 4 surface waters because of hydrologic or natural water quality conditions do not have the potential to support fish (WDEQ 1997). The Green River is under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and the State Engineer's Office of Wyoming.

Surface water monitoring, Green River, is performed in accordance with the approved monitoring plan. Sisecam is a non-discharge facility.

17.3.2 Groundwater

Regional groundwater is characterized by shallow and deep resources. An alluvial zone composed of unconsolidated sand and gravel range in depths to 50-feet is associated with the Green River flood plain. Immediately below the alluvium are consolidated sediments of the Bridger Formation and the Laney Member of the Green River Formation. There is a veneer of weathered rock to depths of 60-feet which act as groundwater flow paths. The consolidated Bridger and Laney contain perched sandstone lenses at various depths that yield limited flows.

In primary source of groundwater at the Sisecam Wyoming facility is seepage from the exiting tailings storage complex. Evaporation concentrates the pond brines resulting in elevated specific conductance found in the groundwater in the surficial fractured bedrock and alluvium beneath the facility. At the present, three groundwater containment pump-back systems (System 1 & 2, System 3, and System 4) intercept groundwater migrating from the tailings complex towards the Green River. Engineering data indicated the pump-back systems also promotes tailings dam safety by lowering fluid levels and therefore reduces uplift pressures on the structures.

Supplementing the groundwater capture through the pump-back system, a continuous grout wall exists on the downstream side of Pond 1 in the West Dike and South Dam. This grout wall was constructed by drilling into the unconsolidated bedrock to depth below weathering. Purpose was twofold: groundwater containment and dam safety.

A Groundwater and Surface Water Monitoring Plan is in effect under the Land Quality Permit. Fluid levels, specific conductance, and general chemistry are measured semi-annually at wells across the site to monitor the extent and migration of seepage from the tailings complex. Quarterly monitoring is performed at critical locations, specifically around Pond 2. Mass flux of total dissolved solids are estimated from measured specific conductance values and water elevations using a site-specific relationship that has been developed over decades of monitoring.

17.4 WASTE AND TAILINGS DISPOSAL

Process tailings disposal is split between underground mine workings and on the surface. Underground disposal is placed as thickened slurry into old lower bed mined out panels. Surface disposal is placed as thickened slurry into a series of tailings ponds that have been maintained over the life of the facility. Sisecam Wyoming recently completed construction of an additional tailings disposal area, Pond 2, which has a predicted life of over 20 years with approximately 30-40% of the tailings disposed of in the underground mine. This study assumes that Sisecam Wyoming will maintain adequate tailings disposal storage for the life of the reserves.

17.4.1 Surface Tailings and Evaporative Impoundments

The Sisecam Wyoming facility has four surface evaporation tailings ponds that are located primarily within prehistoric playa lakes. Except for Pond 2, which has a lined membrane, the remaining ponds seep into the underlining rock formations. Seepage controls are in place and discussed. Figure 17.1 shows the Sisecam tailings impoundments and evaporative ponds.

Historical (pre-1995) mine tailings produced through the refining process of trona were deposited initially into an unlined paleo playa lake identified as Pond 1. Playa at Pond 2 was briefly utilized for tailings disposal and abandoned shortly after initial startup. Pond 4 was established in the drainage into Pond 1 for fluid management. Tailings solids management was engineered as a series of stacker dams within the Pond 4 drainage and identified as Pond 3.

Current tailings management is comprehensive. Pond 1 is split into two portions with the installation of a cross-delta dike, the Upper Delta and DECA recovery areas (Figure 17.2). The Upper Delta is the primary disposal area for tailings through a series of containment cells. Because the tailings are distributed as a heavy slurry, brines, and fluids flow down gradient into the lower DECA recovery area of Pond 1. Fluid level in this area is manage by pumping excess to Pond 4. Pond 2 was rebuilt with a liner for future tailing disposal. Pond 3 area is utilized to enhance evaporation.

17.4.2 Mine Tailings Deposal

A portion of the tailings produced during the refinement of trona ore is disposed through a series of pipelines into the abandoned area of the underground mine. The process is identified as TRM (Tailings Return to Mine) unit permitted under UIC (Underground Injection Control) permit and regulations. Based on current deposition rates, the currently available LB panels can accept tailings for another 10-15 years.

17.4.3 Refuge

Sisecam Wyoming maintains a permitted landfill for refuge and trash within their Land Quality Permit.

17.5 VEGETATION

In general, five major vegetation communities have been identified in the lease area: Upland Sagebrush, Rocky Breaks, Saline Flats, Sagebrush Riparian, and River Floodplains. The high semi-arid climate of the area is dominated by upland drought-resistant plants: sagebrush, rabbitbrush, saltbush, small forbes and other limited plants. Confined area of the Green River flood plain contains cottonwoods, willows, shrubs, and grasses which require more moisture.

The Sisecam Wyoming lease area is dominated by upland drought-resistant plants except for the confined area of the Green River flood plain, where more moisture-requiring plants grow.

Source: Barr- Ciner-2020_Dam-Safety-Report_20210224-signed.pdf

Figure 17.1 Sisecam Tailings Impoundments and Evaporative Ponds

Source: Barr Engineering, 50191095_Upper_Delta_2015_Tailings_Plan_Final.pdf

Figure 17.2 Sisecam Tailings Pond #1

17.6 WILDLIFE

Wildlife species found in the Sisecam lease area are closely associated with available vegetation and habitat.
Big game (moose, deer, and elk) is frequently found along the Green River, while the uplands contain herds of pronghorn antelope.

Greater sage-grouse mate and nest near the Sisecam lease area and are considered a threatened species. The birds are most often seen from late spring to late fall, especially in the early mornings or late evenings. Sisecam lease area is not within the core sage-grouse management area, nor does it have any defined lek areas within the lease.

Raptors including Golden Eagle, Bald Eagle, Osprey, Turkey Vulture, Prairie Falcon, Hawk, and owl inhabit the area. Lessor birds include dove, woodpecker, crow, raven, magpie, swallow, wren, thrush, starling, warbler, lark, finch, and hummingbird.

Waterfowl include, goose, swan, duck, teal, loon, pelican, heron, Sandhill crane, and gull.

Sisecam Wyoming maintains permits to capture waterfowl that land on the tailings evaporation ponds during migration with US Fish and Wildlife Services and Wyoming Game and Fish Department. The alkaline waters of the ponds reduce the oils in the waterfowl plumage and precipitate salts out in the feathers causing hypothermia and the birds to be too heavy to fly off on their own. The ponds are monitored daily in the fall and any captured birds are cleaned and supported until they can be released on the Green River. Activity is reported annually to the regulatory authorities.

Game fish including trout, salmon, catfish, and bass have been noted in the Green River. Other species of fish, reptiles, amphibians, and insects are common. Table 17.1 lists other mammals in the area.

Table 17.1
Other Mammal Species

Mountain Lion	Red squirrel	Boreal vole
Bobcat	Ground squirrel	Mountain vole
Coyote	House mouse	Sagebrush vole
Badger	Pocket mouse	Beaver
White-tail jackrabbit	Deer mouse	Foxes
Cottontail rabbit	Pack rat	River otter
White-tail prairie dog	Kangaroo rat	Bats
Porcupine	Woodrat	Shrews

17.7 PERMITTING AND ENVIRONMENTAL REPORTING

Sisecam Wyoming permitting, and environmental reporting appear to be current. The primary permit agencies include, Federal and Wyoming State Departments and are listed in below in Table 17.2 below.

Areas where Sisecam has incurred issues with environmental compliance include process emissions, fugitive dust, tailings, pond seepage, site containment, and drinking water TOC. The drinking water TOC problem and site containment overflow were primarily operational in nature and appear to be solved.

Process emissions will continue to be challenged by ever tightening regulations. This will require periodic upgrades of both the natural gas burners as well as the pollution control equipment, precipitators, and baghouses.

Based upon the reports and documentation provided by Sisecam, the tailings pond and associated seepage continues to be controlled and managed successfully. Sisecam has a long history of controlling this issue and through the daily monitoring and annual third-party reviews has shown the necessary efforts to identify issues and manage them into the future. The third-party review recommendations are reportedly being acted upon.

Fugitive dust is the area that needs further effort as observed by the site visit, reporting of periodic excursion of high particulate and recent violations covered below.

Table 17.2
Sisecam Wyoming Operating Permits

Agency	Division	Type of Permit/License/Authorization	Permit/Authorization/License Number
State of Wyoming	-	Sodium Leases	25779, 25971, 26012, 42570, 42571
US Bureau of Land Management	-	Unit 8 Construction Authorization	DOI-BLM-WY-D040-2020-0088-EA
US Bureau of Land Management	-	Upper and Lower Refinery Rail Authorization	Under Sodium Lease WYW0111731
US Bureau of Land Management	-	Fringe Lease T20N R109W Section 32 E1/2 E1/2	In Progress
US Bureau of Land Management	-	WYW125182 Relinquishment and Conversion to On Lease Action	In Progress (will be under Sodium Lease WYW0111731)
US Bureau of Land Management	-	Alternate Powerline and Switch House 3 Authorization	In Progress (will be under Sodium Lease WYW0111731)
US Bureau of Land Management	-	Right-of-ways	WYW-0136237, WYW-042032, WY-090825, WY-096236
US Bureau of Land Management	-	Sodium Leases	WYW079420, WYW101824, WYW0111730, WYW0111731
US Department of Transportation	-	Hazardous Materials Certificate of Registration	052821550054DF
US Environmental Protection Agency	Air	Green House Gas (e-GGRT)	GRGRP ID 528326
US Environmental Protection Agency	Drinking Water	Public Water System	WY5600634
US Environmental Protection Agency	TSCA	EPA Registry ID for the Toxic Substances Control Act Reporting (TSCA106041)	110007900129
US Environmental Protection Agency	Waste	Very Small Quantity Generator	WYD083919621
US Fish and Wildlife Service	Migratory Birds	Rehabilitation Permit	MB700227-0
US Nuclear Regulatory Commission	-	License	49-11578-01
Wyoming Department of Environmental Quality	Air Quality Division	Title V Operating Permit	P0024380
Wyoming Department of Environmental Quality	Air Quality Division	PSD Construction Permit for Unit 8	P0027495
Wyoming Department of Environmental Quality	Air Quality Division	Asbestos Annual Notification	2021070
Wyoming Department of Environmental Quality	Industrial Siting Division	ISD Unit 8 Authorization	OAH Docket No. 20-086-020 and Docket No. DEQ/ISC 19-07
Wyoming Department of Environmental Quality	Land Quality Division	Permit to Mine	257 PT
Wyoming Department of Environmental Quality	Land Quality Division	Drilling Notification	DN 086
Wyoming Department of Environmental Quality	Water Quality Division	WYPDES General Mineral Mining Except Fuels Stormwater	WYR320025
Wyoming Department of Environmental Quality	Water Quality Division	WYPDES General Large Construction Activities Stormwater	WYR104976
Wyoming Department of Environmental Quality	Water Quality Division	Underground Injection Control Class 5B1	5B1-98-1 (Facility WYS037-043)
Wyoming Game and Fish Department	-	Chapter 33 Permit	1090
Wyoming Game and Fish Department	-	Chapter 10 Permit	412
Wyoming State Engineer's Office	Groundwater	Industrial/Pollution Control Groundwater Wells	P205330.0W, P205326.0W, P89290.0W, P89291.0W, P89292.0W, P119443.0W, P118542.0W, P205327.0W, P107218.0W, P107219.0W, P107219.0W, P107216.0W, P107217.0W, P107221.0W, P205329.0W, P205328.0W, P210412.0W, P210413.0W, P212356.0W, P212375.0W
Wyoming State Engineer's Office	Reservoirs	Sewage, Tailings, and Evaporation Ponds	P10445.0R, P14035.0R, P14373.0R, P7809.0R, P8586.0R, P8587.0R, P8588.0R, P8589.0R, P8590.0R, P9835.0R, P9835R-2
Wyoming State Engineer's Office	Water Rights	12.0 CFS from the Green River	P22075.0D

1.1.1 Air Quality Permit

Criteria pollutant concentrations are measured by the State of Wyoming Department of Environmental Quality Air Quality Division and are subject to the Clean Air Act and Wyoming Air Quality Standards and Regulation.

The Sisecam Wyoming refinery is located above the underground mining operation. This plant is operated in accordance with the provisions of W.S. 35-11-203 through W.S. 35-11-212 and Chapter 6, Section 3 of the Wyoming Air Quality Standards and Regulations. Air Quality Operating Permit (Permit No. P0024380) requires monitoring for a variety of air quality pollutants including particulate matter.

Particulate matter is the primary pollutant from the surface processing, ore storage, DECA and tailings activities and is an area where Sisecam has exceeded standards. Sisecam has an active violation notice received in December of 2021, from Air Quality concerning PM10 monitoring, the No. 2 Crusher Area and Ore Stockpile building. Sisecam is working to correct these issues and has meetings set up with Air Quality in March 2022 to discuss possible required remedies or withdrawal of the violation. Dust control and particulate matter is an area of focus for the operation, but will require significant effort.

Current air quality total estimated emissions are located on Table 17.3.

Table 17.3
Sisecam Total Facility Estimated Emissions

POLLUTANT	EMISSIONS (TPY)
CRITERIA POLLUTANT EMISSIONS	
Particulate Matter	1,026
PM10 Particulate Matter	908
PM2.5 Particulate Matter	538
Sulfur Dioxide (SO2)	7
Nitrogen Oxides (NOX)	729
Carbon Monoxide (CO)	5,060
Volatile Organic Compounds (VOCs)	259
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS	181
GREENHOUSE GAS EMISSIONS (CO2e)	1,553,077
OTHER REGULATED POLLUTANTS	
Ammonia (NH3)	22

Source: Emission estimates are from the operating permit application and Ch 6, Sec 2 permits P0024224 and P0021348 (Corrected), and represent the authorized equipment configuration. For informational purposes only. These emissions are not to be assumed as permit limits.

US EPA Agency Identification No. for Sisecam Wyoming is GRGRP 528326.

Greenhouse gasses (GHGs) have been raised as a concern due to the greenhouse effect. The greenhouse effect is a theory that certain gases in the atmosphere impede the release of radiation from the earth, trapping heat in the atmosphere like glass in a greenhouse. Major GHGs currently include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (NO_2). Currently, the WDEQ-AQD does not have regulations regarding GHG emissions, although these emissions are regulated indirectly by various other regulations.

In October 2009, the US EPA issued the final mandatory reporting rule for major sources of GHG emissions. The rule requires the reporting selected GHG emissions, including CO_2, CH_4, NO_2, and some

halogenated compounds. USEPA/GHGP reported at the Sisecam Wyoming facility for 2020, 813,131 total metric tons of GHSs, representing approximately 50% of the other soda ash produces annual GHG production. Table 17.4 is the 2020 printout of the Sisecam Wyoming GHG inventory for 2020. Table **17.5** shows Sisecam's historical total greenhouse gas emissions totals by year.

Table 17.4
2020 Sisecam Total Greenhouse Gas Emissions

Data Year 2020
Ciner Wyoming LLC

254 County Rd 4-6
GREEN RIVER, WY, 82935

Rock Spri
Leaflet

Latitude: 41° 43.03' N
Longitude: 109° 41.51' W

GHGRP Id: 1005621
FRS Id: 110040970893
NAICS Code: 212391

View reported data
Download reported data (XML)

Facility Information | Facility Emissions by Year

Item	Value
Total Facility Emissions in metric tons CO_2 equivalent (mt CO_2e) (AR4 GWPs, excluding Biogenic CO_2)	813,131
Emissions by Gas in mt CO_2e (AR4 GWPs)	
Carbon Dioxide (CO_2)	812,596
Methane (CH_4)	244
Nitrous Oxide (N_2O)	291
Emissions by Source/Process in mt CO_2e (AR4 GWPs, excluding Biogenic CO_2)	
Stationary Combustion	518,227
Soda Ash Manufacturing	294,904
Information on Stationary Combustion	
Types of Fuels Used	Natural Gas
Measurement Methods Used	Mass Balance
Number of equipment groupings	8
Information on Soda Ash Manufacturing	
Number of manufacturing lines used to produce soda ash not monitored by CEMS	2

Source: USEPA/GHGP Facility Details, https://ghgdata.epa.gov/ghgp/service/facilityDetail/2012

Table 17.5
Sisecam Total Greenhouse Gas Emissions
by year 2011-2020

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
677.7	**705.0**	**692.6**	**703.4**	**741.4**	**767.6**	**752.2**	**732.6**	**800.0**	**813.1**

Note: 2011-2012 Type of Fuel was Coal and Natural Gas, 2013-2020 Natural Gas Source: Sisecam

1.1.2 Land Quality Permit

Wyoming Department of Environmental Quality Land Quality Division issued Large Mining Permit No. 257. Sisecam annually reports topics including changes in permittee information, quantity of ore mined, mine planning, acres disturbed, new construction, environmental areas, monitoring activities, exploration report, and reclamation report and performance bond estimate.

Supplemental to this document, US Bureau of Land Management on a five-year basis receives and similar report with more detail on mining activities. The 5-year BLM report is a stipulation of the mineral lease.

1.1.3 Underground Injection Permits

Wyoming Department of Environmental Quality Water Quality Division issues UIC Permit Facility WYS037-043. Reported annual under the 5B1-98-1 General Permit. Sisecam Wyoming tailings has two disposal streams. The primary disposal method is the surface tailings pond. Secondary disposal is tailings injected into abandoned areas of the underground mine. This permit requires annual reporting of a summary of tailings material injected into the mine.

1.1.4 Storm Water Discharge Permit

Wyoming Department of Environmental Quality Water Quality Division authorizes storm water discharge under permit No. WYR320025. This general permit was issued in 2018 and is reviewed on a five-year basis. In June 2020, a major storm event occurred causing erosion and discharge of process water onto previously reclaimed lands. No water was discharged to the Green River. The spill was reported immediately after the event to Wyoming Department of Environmental Quality Land Quality Division as well as the BLM. After inspection by the LQD office, recommendations were made and completed.

1.1.5 Drinking Water System

US EPA is the lead agency for drinking water standards. Sisecam Wyoming is public water system number WY5600634 and is a non-transient non community public water system.

1.1.6 Sewage Permit

Wyoming State Engineers Office issued P10445.0R in 1996. No modifications have been identified.

1.8 SITE MONITORING

Sisecam Wyoming is generally in compliance with all known environmental permits that require monitoring. Critical monitoring for air quality, groundwater containment, drinking water, and other land quality issues are monitored either continuously or on a scheduled routine basis. Federal agencies including US EPA, Bureau of Land Management, Bureau of Reclamation, US Fish and Wildlife, NRC, and State divisions, Department of Environment Quality, Wyoming Game and Fish, State Engineers Office, and Sweetwater County are involved.

1.9 CLOSURE PLANS AND ESTIMATES

1.9.1 Reclamation Plan

The 1975 Reclamation Plan focus on three general categories:

- Lands with buildings and structures;
  - All surface buildings and structures to be removed. Foundations removed and used to fill mine openings;
- Roads, travel ways, railroads, etc.;
  - All roadbeds, travel ways, railroad beds and other like developments to be scarified and seeded with perennial grasses and in accordance with regulatory requirements; and
- Tailings ponds and waste areas;
  - Tailings to be left in place as dry lakes. Berms and dams to remain in place. Diversion ditched to be constructed around the tailings facilities. Surface of the "dry lakes" to be stabilized with a "standard asphaltic" material to eliminate windblown contamination. Fencing to be erected and maintained for wildlife protection.

Reclamation plan was intended to return lands to their original usage, grazing, and wildlife habitat, as much as possible. Return affective lands to a condition compatible with the surrounding lands.

1.9.2 Reclamation Bond

1975 reclamation cost estimate was $351,000.

1979 WYDEQ/LQD issued a permit to develop an acceptable reclamation for the tailings disposal areas.

1987 WYDEQ/LQD issued a revised permit with a more comprehensive and detailed reclamation plan. Twenty tasks were identified and included post-closure reclamation cost.

2020 WYDEQ/LDQ approved permit 257 with a revised reclamation bond of $36,211,000. The 1987 revision served as a template for the over 50 permit revision requests. The 2021 revision with the construction of Unit 8 will increase the reclamation bond to an estimated $46,132,000 after construction is completed.

1.10 SOCIAL OR COMMUNITY IMPACTS

The social and community impacts of the Sisecam Wyoming operations are a net positive to the area as shown by the Industrial Siting Council approval for the Unit 8 Expansion Project. The trona operations are one of the largest employers in the area and contribute significantly to the tax base. This is a long and established relationship developed over decades.

18.0 CAPITAL AND OPERATING COSTS

Cost effective mining and processing has been conducted for over 60 years at Sisecam Wyoming generally under the same mine design assumptions utilized in this reserve estimate. Overall costs are not expected to change significantly in the future; thus, using historical costs for mining the reserves and producing soda ash are considered a reliable basis to forecast future costs. Capital and operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

With the information provided in previous reviews and this review HPG has been able to examine the last ten years of actual production costs and revenues. This long history shows a stable and predictable cost structure and consistent revenue. The only exception was 2020 and 2021 where costs and revenues were lower due to the worldwide COVID-19 slowdown. Despite this historic business interruption both years were cash positive with 2021 rebounding to near normal levels.

18.1 OPERATING COSTS

For the basis of determining the economic viability of the reserves stated in Section 12.0, HPG has utilized the last five years of financial data provided by Sisecam. Sisecam provided both audited and unaudited financial information including detailed production cost, capital expenditures and revenues. Previous reviews were based upon three years of data but due to the extraordinary impact of COVID a more extensive analysis was conducted. Some consideration was given to dropping 2020 and 2021 from the analysis but was rejected as recent cost data is materially important to this type of analysis and the ultimate outcome of COVID is unknown. The analysis conducted is therefore considered conservative given the inclusion of such an unusual event.

Five years of operational data has been summarized as a cash statement of Net Income which is provided in Table 18.1.

18.2 COSTS DISCUSSION

Several observations are offered concerning Table 18.1:

- Production and sales volume has been steady with the exception of 2020;
- Revenues costs and net income has been steady with the exception of 2020;
- Energy, labor, and royalties are the largest contributors to cost;
- Royalty payments have decreased dramatically with the reduction in Federal Royalty from 6% to 2% and Sisecam's focus on mining federal leases;
    - There is a limit to the duration for which Sisecam can continue to shift mining to federal leases, therefore for this study the five-year average has been used; and
- Mining costs represent approximately 18% of overall soda ash production cost.

Table 18.1
Sisecam Five Year Historical Net Cashflow

US$ in '000	2017		2018		2019		2020		2021		Average of Last 5 Years	
INCOME STATEMENT	TOTAL	$/ST	TOTAL	$/ST	TOTAL	$/ST	TOTAL	$/ST	TOTAL	$/ST	TOTAL	$/ST
Ore Tons	4,001,325		4,018,329		4,157,009		3,653,830		4,276,837		4,021,466	
Total Volume (Sales)	2,705,400		2,613,200		2,759,100		2,221,900		2,682,203		2,596,361	
REVENUE												
Gross Revenues	497,340	183.83	486,759	186.27	522,844	189.50	392,231	176.53	540,139	201.38	487,863	187.90
Net Revenues	497,340	183.83	486,759	186.27	522,844	189.50	392,231	176.53	540,139	201.38	487,863	187.90
COST												
Total Cash Costs ($000)	356,692	131.84	355,044	135.87	365,018	132.30	309,261	139.19	428,531	159.77	362,909	139.78
Gross Profit ($000)	140,648	51.99	131,715	50.40	157,826	57.20	82,970	37.34	111,608	41.61	124,954	48.13
Total SGA & Int	27,100	10.02	300	0.11	29,300	10.62	27,200	12.24	28,756	10.72	22,531	8.68
Net Profit w/SGA & Int	113,548	42.56	131,415	39.77	128,526	46.58	55,770	25.10	82,852	30.95	102,422	39.45
Profit Margin		23.15%		21.35%		24.58%		14.22%		15.37%		20.99%

Note: Numbers have been rounded; totals may not sum due to rounding.

1.3 CAPITAL COSTS

Since the 2019 reserve estimate, Sisecam has continued to invest in the Big Island property to improve production and reduce costs. Major expenditures include the Co-Generation facility to allow in-house generation of power for the soda ash processing plants and construction of a new ventilation shaft, upgraded mine ventilation fans and shaft heaters. Past business economics have supported these large capital expenditures, which are part of the normal business operation. Capital cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

Sisecam provided HPG with a five-year capital plan which was reviewed along with capital plans from the 2019 review. Based on this information, Sisecam continues to demonstrate a consistent history of investing in both sustaining capital as well as larger expansion and large capital replacement investments. Based upon past performance and current economics this study assumes similar capital expenditures will be made so that the production facilities will be viable for the LOM with the mine producing 5.0 MST of trona ore per year.

The following assumptions and parameters were used for this study:

- Because the operation is currently profitable as configured and is predicted to be profitable into the future, the Unit 8 and Shaft 5 expansion projects are not necessary for profitability and are therefore not considered in this analysis due to the uncertainty surrounding their implementation;
- It is assumed that the sustaining capital of approximately $30 million per year continues as a conservative estimate;
- The capital necessary to convert to low seam mining equipment is assumed to occur during the normal equipment replacement cycle for the mining production equipment which is part of sustaining capital;
    - An additional capital expenditure for lower equipment of $20 million has been assumed when the thicker reserves are nearly mined out in approximately 20 years; and
- The capital necessary to upgrade the dissolver ends of Unit 7 and Unit 6 is estimated at $100 million and is predicted to occur in ten years.

19.0 ECONOMIC ANALYSIS

1.1 METHODOLOGY USED

As previously noted, HPG considers the plus 60-year history of profitably operating the mine and processing units to be a reasonable basis for forecasting future costs and revenues. Based upon the Big Island's average costs and revenues for the past five years, a cash flow forecast was generated to estimate economic viability. Capital and operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of ±25% and a contingency range not exceeding 15%.

The financial model that supports the mineral reserve declaration is a standalone model that calculates annual cashflows based on scheduled ore production, assumed processing recoveries, soda ash sale prices, projected operating and capital costs.

Because the entity is a Master Limited Partnership and taxes are paid by the "partners", no taxes were included in the economic analysis. The financial analysis is based on a before-tax discount rate of 5%. All costs and prices are in un-escalated "real" dollars. The currency used to document the cashflow is US$.

1.1 FINANCIAL MODEL PARAMETERS

Several core assumptions have been employed in constructing this model. First, the analysis is on a cash cost basis with the assumption that viable economics implies positive cash flow. This is a higher standard than other common economic measures such as earnings before interest, taxes, depreciation, and amortization (EBITA). In general, if an operation has positive cash flow its EBITA is more positive. Because of the conservatism built into this cash flow assumption, a minimum 5% rate of return is assumed for viability. Secondly, where possible, a conservative approach to both costs and revenues was applied. A good example of this conservative approach is the inclusion of data from 2020 and 2021 which were a historic anomaly. Exclusion of these years would improve the financial forecast significantly.

The economic analysis is reported on a 100% project ownership basis. The economic analysis assumes constant prices with no inflationary adjustments. Sisecam Wyoming is owned by Sisecam Resources LP ("Sisecam") 51% and by NRP Trona LLC ("NRP") 49%.

This financial analysis includes the following assumptions:
- Constant soda ash production of 2.725 MTPY;
- Constant dry ore soda ash conversion of 1.835 ore to ash;
- Increased mine production from 4.2 MTPY to 5.0 MTPY with constant cost per ton ore.
  - Incremental tonnage is generally less expensive;
- Increased mining costs for two-seam mining and low seam mining;
  - Two-seam mining costs 30% higher with two-seam tonnage at 25% of production until 2029 when two-seam tonnage rises to 50% of production
  - Thin seam mining costs 24% higher in year 2051 when the +9-foot ore has been depleted;
- DECA mining reduced to 25% in 2024 and beyond with a rise in processing costs due to production from mechanically mined trona ore;
- Plant configuration remains unchanged until upgrades for lower grade ore implement in 10 years;
- Operating costs are based on five years actual costs seen during operations and are projected through the LOM plan; and
- Constant soda ash price of $188/ton based on the last five years revenue data.

Capital Expenditure Assumptions:
- Capital costs are based on actual costs seen during operations and are projected through the LOM plan with adjustments for estimated future changes including:
  - Sustaining capital of $30 million per year for LOM;
  - Plant upgrade in 2032 to mitigate slugs of low-grade ore due to floor rolls; and
  - Mining equipment changes to allow mining below 9-feet;

Table 19.1, Table 19.2, and Table 19.3 illustrate the expected cash flows for the LOM based upon the above assumptions. The model indicates a 12.0% internal rate of return (IRR) and a positive net present value (NPV) of $438 million at a 5% discount rate.

Table 19.1
Sisecam LOM Cashflow Analysis

SISECAM Wyoming LLC
Big Island Mine
Dec-21
Cash Flow Forcast with MFG Cost

	Investment 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
REVENUE															
Mine Production Trona (000)		4,300.0	4,300.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0
Ore to Ash		1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835
Soda Ash Production (000)		2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8
Revenue $/ton		$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90
Gross Revenue ($ millions) Net of Sales and Freight		**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**
Cost of Goods Sold															
Cash Costs Per Ton		**$ 150.44**	**$ 150.44**	**$ 150.44**	**$ 150.44**	**$ 150.44**	**$ 150.44**	**$ 154.00**	**$ 154.00**	**$ 154.00**	**$ 154.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**
Total Cash Costs ($ millions)		**$ 409.9**	**$ 409.9**	**$ 409.9**	**$ 409.9**	**$ 409.9**	**$ 409.9**	**$ 419.6**	**$ 419.6**	**$ 419.6**	**$ 419.6**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**
CAPEX ($ millions)		$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 130.0	$ 30.0	$ 30.0	$ 30.0
Invenstment/Pre-Tax Operating Profit ($ millions)	**-$ 500.0**	**$ 72.1**	**$ 72.1**	**$ 72.1**	**$ 72.1**	**$ 72.1**	**$ 72.1**	**$ 62.4**	**$ 62.4**	**$ 62.4**	**$ 62.4**	**-$ 45.8**	**$ 54.2**	**$ 54.2**	**$ 54.2**
NPV	**$ 437.9 NPV %**		**5%**							Upgrade Disolver Front Ends		**$ 100.0**			
IRR	**12.0%**										CAPEX				

Table 19.2
Sisecam LOM Cashflow Analysis
(Cont.).

SISECAM Wyoming LLC
Big Island Mine
Dec-21
Cash Flow Forcast with MFG Cost

	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
REVENUE															
Mine Production Trona (000)	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0
Ore to Ash	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835
Soda Ash Production (000)	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8
Revenue $/ton	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90
Gross Revenue ($ millions) Net of Sales and Freight	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**
Cost of Goods Sold															
Cash Costs Per Ton	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**	**$ 157.00**
Total Cash Costs ($ millions)	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**	**$ 427.8**
CAPEX ($ millions)	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 50.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0
Invenstment/Pre-Tax Operating Profit ($ millions)	**$ 54.2**	**$ 54.2**	**$ 54.2**	**$ 54.2**	**$ 54.2**	**$ 54.2**	**$ 34.2**	**$ 54.2**	**$ 54.2**	**$ 54.2**	**$ 54.2**	**$ 54.2**	**$ 54.2**	**$ 54.2**	**$ 54.2**
NPV						New Minining Equipment	**$ 20.0**								
IRR						CAPEX									

Table 19.3
Sisecam LOM Cashflow Analysis
(Cont.)

SISECAM Wyoming LLC
Big Island Mine
Dec-21
Cash Flow Forcast with MFG Cost

	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	TOTALS
REVENUE																
Mine Production Trona (000)	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	0.0	213,600.0
Ore to Ash	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835	1.835
Soda Ash Production (000)	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	2,724.8	0.0	117,166.2
Revenue $/ton	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	$ 187.90	
Gross Revenue ($ millions) Net of Sales and Freight	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 512.0**	**$ 0.0**	**$ 22,015.8**
Cost of Goods Sold																
Cash Costs Per Ton	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ 162.00**	**$ -**	
Total Cash Costs ($ millions)	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 441.4**	**$ 0.0**	**$ 18,445.4**
CAPEX ($ millions)	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 30.0	$ 46.0	$ 1,456.0
Invenstment/Pre-Tax Operating Profit ($ millions)	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**$ 40.6**	**-$ 46.0**	**$ 2,160.4**
NPV														Mine Closure	**$ 46.0**	
IRR														CAPEX		

Table 19.1, Table 19.2, and Table 19.3 contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbor created by such sections and other applicable laws. Please refer to the note regarding forward-looking information at the front of the Report. The cashflow is only intended to demonstrate the financial viability of the Project. Investors are cautioned that the above is based on a high-level mine plan and certain assumptions which may differ from Sisecam Wyoming's long-term outlook or actual financial results, including, but not limited to commodity prices, escalation assumptions and other technical inputs. For example, Table 19.1, Table 19.2, and Table 19.3 use the price assumptions stated in the table, including a soda ash commodity price assumption of US$188.00/ton. Please be reminded that significant variation of soda ash prices, costs and other key assumptions may require modifications to mine plans, models, and prospects.

1.2 ECONOMIC ANALYSIS SENSITIVITY ANALYSIS

To assess the viability of the Sisecam operation the sensitivity of the operation to changes in soda prices, and operating cost assumptions was tested using a range of 20% above and below the base case values.

Due to the high percentage of fixed costs the economics for large mines and processing facilities the operation is most sensitive to net revenue (soda ash price) and sales volume, followed by variable operating costs, then fixed costs and lastly mining costs.

The sensitivity analysis is shown in Figure 19.1 which illustrates the sensitivity of the 5% NPV to soda ash sales price, fixed costs, variable processing costs and two seam mining cost. Soda Ash displays typical sensitivity of a commodity to pricing which reinforces the importance of being one of the lowest cost producers.

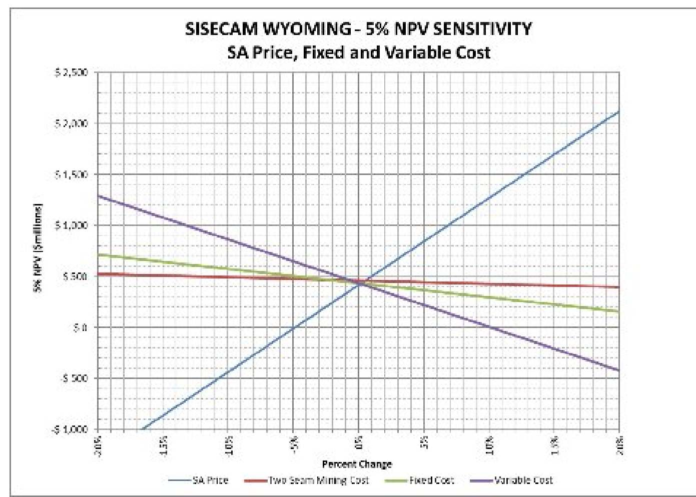


Figure 19.1 5% NPV Sensitivity to Revenue and Production Costs

The second sensitivity graph varies the mining cost for the two-seam areas due to the uncertainty in this area. The model assumes 50% of trona production will be mined from the two-seam area based 48% of the remaining reserves being two seam mining. Figure 19.2 illustrates the change in expected NPV as mining costs increase or decrease. Mining costs in this figure are a 50-50 blend of higher two-seam costs

and the current costs which are assumed to be stable. For the base case the operation remains NPV positive over a wide range of increased mining costs.

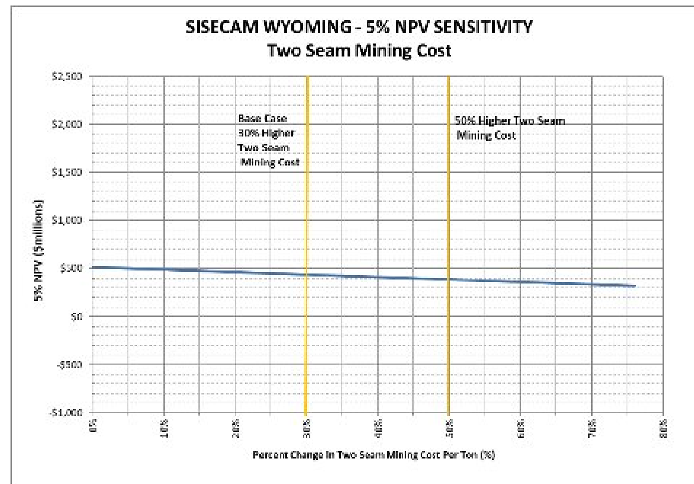


Figure 19.2 5% NPV Sensitivity to Two Seam Mining Cost

1.3 ECONOMIC ANALYSIS DISCUSSION

Future mining and refining costs are predicted to increase due to thinning seam thickness and two-seam mining, but the overall impact on costs is not shown to be material with proper mine development sequencing and equipment replacement planning. Mining costs average approximately 18% of the overall production cost for soda ash. If future two-seam mining costs increase by 30%, overall profitability is decreased by approximately 9% based on the model assumptions.

HPG considers the operation economic even at this increased cost. Based on this analysis the stated reserves are considered economically extractable.

Sisecam Wyoming faces the following risks to increased costs:

- Two-seam mining will require additional ground support and/or will require a wholly different mining method. The final details are unknown until test mining of the proposed geometry is complete;
- Recent two-seam mining tests indicate that certain areas contain high concentrations of methane in the immediate lower bed roof strata and may require degassing prior to mining which might increase mining costs or require decreased extraction in these areas;
- Two-seam mining's production costs will be higher due to the increased ground support and decreased productivity. An allowance has been included in the cost analysis;
- TRM tailings disposal could impede access to some of the less than 10-foot reserves if the panels are filled prior to mining the thin material;
- Ore bed variability and degradation near the margins of the deposit could cause ore grades to decrease to an unacceptable level. The margins of the ore body have been penetrated in several areas, and while the ore grade was lower, mining costs were not significantly higher. The current model does show ore grades to deteriorate due to a rise of in-seam impurities at the edges of the deposit, which will require some additional processing costs or changes to the processing facilities. Proper short-term planning can determine the best combination of grade and processing costs when mining is near the ore body margins. Continuous miner units can be scheduled to

blend some of the ore variability and reduce the impact on the refinery. For the purposes of this analysis the dissolver end of the processing plants is upgraded to handle this ore and processing costs increased to reflect the lower ore grade; and

- External economic drivers are beyond the scope of this study. They include, but are not limited to, labor issues and disputes, increases in royalty rates, change in the supply and demand structure for soda ash, and regulatory and environmental law changes.

20.0 ADJACENT PROPERTIES

The Green River Basin is home to five mining operations, Genesis Westvaco, Genesis Granger, Tata Chemicals, Solvay Chemicals, and Sisecam Wyoming, the subject of this report. Figure 3.2 shows the location of these operations along with their sodium leases.

1.1 GENESIS WESTVACO

Genesis Westvaco was the first trona mine in the basin. The trona bed was discovered in 1938 by oil and gas drilling. Westvaco Chemicals Corporation sunk the first shaft in the basin near there in 1947 to mine Bed 17. The Westvaco operation lies nine miles to the southwest of Sisecam and owns sodium leases adjacent to Sisecam's. In 1948 Food Machinery Corporation (FMC) purchased Westvaco and operated the property continuously until it was sold to Tronox in April of 2015 and then to the current owner Genesis in September of 2017. Since the start, there have been eight shafts developed into Bed 17. Genesis produces dense soda ash from three soda ash plants based on dry trona. Two plants use the Mono process and the third is based on the Sesqui process producing light soda ash. Additionally, Westvaco is solution mining the old mine workings and processing the resultant liquor in the fourth liquid feed plant based on a decahydrate crystallizer. Genesis also produces bicarbonate and caustic soda. Annual soda ash production exceeds 4.0 MTPY. The operation reported 898 employees and trona production of 3,768,938 in 2020.

1.2 GENESIS GRANGER

The Granger mine and processing plant was constructed in 1976 by TexasGulf (TG). The TG mine and refinery is located eleven miles to the west of Sisecam. There are three shafts from the surface to trona Beds 19 and 20. The operation dry mined Bed 20 between 1976 and 2002 then converted to a solution mine in 2005. Elf Aquitaine purchased TexasGulf in 1985 and named the operation TG Soda Ash. The underground mine and processing facility had production capacity of over 1.2 MPTY. In 1999 the operation was purchased by FMC (now Genesis) and the plant mothballed in 2002. In 2005 the operation was restarted using solution liquor from the now flooded mine. Using liquid feed, the plants soda ash capacity was reduced to approximately 400,000 TPY. Genesis is currently in the process of constructing a decahydrate crystallizer front end to the plant which will return the production back to the original nameplate of over 1.2 MTPY.

1.3 TATA CHEMICAL PARTNERS

In 1968 Allied Chemical and General Chemical started a mine in Bed 17 just to the east of the Westvaco Mine. Tata Chemicals purchased the property in 1989. The Tata operation lies 9.5 miles to the southwest of Sisecam. Tata has a production capacity of over 2.5 MTPY produced from dry mined trona and using the mono process in three processing units. The operation reported 508 employees and produced 4,070,944 tons of trona in 2020.

1.4 SOLVAY CHEMICALS

In 1979, Tenneco minerals started the Solvay mine just south of Genesis and Tata also mining Bed 17. The Solvay operation lies fifteen miles to the southwest of Sisecam. In 1992, the Belgium company, Solvay Chemicals purchased the process. Solvay produces soda ash primarily by dry mining, but also does some limited solution mining of old workings. The operation reported 508 employees and production of 4,070,944 tons of mined trona in 2020. Soda ash production capacity is over 2.5 MTPY.

21.0 OTHER RELEVANT DATA AND INFORMATION

1.1 WEST END ROOF COLLAPSE AND WATER INFLOW

Sisecam provided several recent studies by a hydrologist and geotechnical engineer concerning the Lower Bed West roof collapse and water inflow described in Section 13.2.1. There is a large area of surface subsidence adjacent to the Green River above the LB West underground fall area that is increasing in size as shown in Figure 21.1. The subsidence is likely caused by the roof collapse and failure of the mine pillars in that area. Both reports indicate that the water flow is not from surface waters but from subsurface aquifers based on isotope analysis. Both consultants conclude that due to the depth and multiple aquitards above the mine the probability of a hydraulic connection between the Green River and the mine workings is very low.

The water inflow to the mine ranges from 40 to 140 gpm with the average, since October 2020, around 85 gpm. The water inflow is fresh water which will, over time, dissolve the mine support pillars which are trona. Removal of the support pillars will continue to subside the area. The analysis concludes that at current inflow rates dissolution of all the trona will take 150 years resulting in a very gradual trough-type subsidence basin that is not expected to impact the watershed drainage area. At the current rate of 2 inches of subsidence per year it will take 50 years to reach the expected 8 feet of subsidence. Any large change in flow over an extended period would alter these predictions. Over time the subsidence will impact some of the surface features and infrastructure requiring relatively simple mitigation measures that are well understood.

The likely cause of the seismic event in this area is a large roof fall and pillar failures. Roof falls in the Big Island mine are infrequent but a map of the historic roof falls shows a large cluster of falls in the LB West area. The modulus of elasticity in this area is half of other areas of the mine and likely contributing to the extent of the falls.

The rest of the Big Island Mine with similar geometries remain open, in good condition and have not experienced the large number of roof falls experienced in this area. Other than to increase the size of the barrier pillars there are no plans to modify the mining geometries in other areas of the mine.

As part of the above-mentioned studies extensive subsidence monitoring has been installed over the area, the area is examined regularly, the inflow water is measured, and the water is isotope tested yearly.

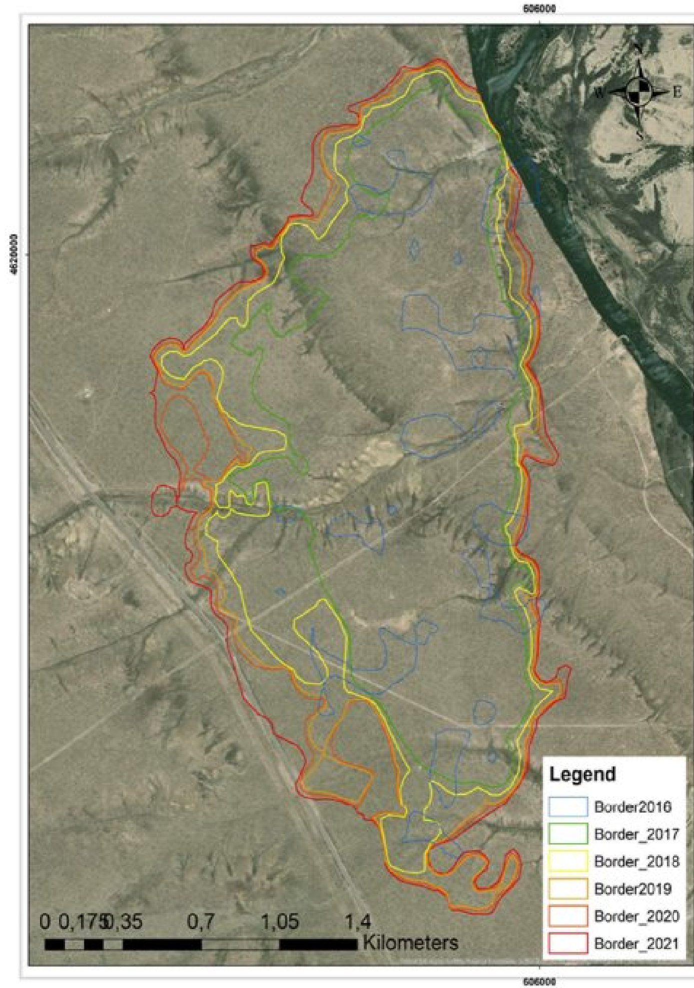


Figure 2. Subsidence Progression from Year 2016 to Year 2021 (After Cavur, 2021)

Source: Sisecam - Subsidence Report to LQD 8.18.21.pdf
Figure 21.1 West End Subsidence Progression

22.0 INTERPRETATION AND CONCLUSIONS

Approximately 118 MST of the reported recoverable Trona (48%) is dependent upon Sisecam confirming the viability of two-seam mining in the next four years. Most of these tons (approximately 71.5 MST, 60%) are in areas with thickness over 9-feet.

The November 2021 site visit revealed that since the 2019 report was completed, Sisecam has made significant progress developing the LB North mains and panel entries. Ground conditions were found to be good for the mains entries confirming the current design. Development of the lower extraction main entries does not evaluate the true impacts that will be experienced when conducting two-seam panel mining. Until two or three test panels are successfully completed and analyzed two-seam mining with the current equipment remains unverified. Based on current projections it will be four to six years before Sisecam will verify the viability of two-seam mining. It is possible that two-seam mining may require significant variations from current mining equipment and practices.

Approximately 148 MST of the reported recoverable tonnage is above 9-feet thick and can be mined and processed with the existing equipment, but areas will require ore blending or modification of the processing facilities to handle lower grade ore for short periods. These areas comprise 39.5 MST of the total reserves. It is anticipated that these plant modifications need to be made within 10-15 years.

The practice of “high grading” the deposit and only mining the thicker material first risks sterilization of the thinner areas if access is lost. Recovery of the reserves less than 9-feet will require changes to the mining and utility equipment, will incur higher mining costs, require access rehabilitation costs and is dependent upon the ability to access these areas through old workings or via extensions of old mains entries as shown in the LOM plan developed for this estimate. As future mining continues, with the current large mining equipment, some loss of portions of the edge of the ore bodies will occur, especially when long production panels are developed. This material makes up 72 MST of the estimated recoverable tonnage. There is some risk that access to these areas 20 years after mining might not be possible.

The roof failure, water inflow and associated subsidence of the Lower Bed West mine area has intrinsic risks to an evaporite mine below a major waterway that must be continuously monitored and evaluated for any changes. These include increased water flow or changes in water type indicating its source could be surface waters. Risks due to high inflow of water can range from higher mining costs to loss of access.

23.0 RECOMMENDATIONS

HPG supports Sisecam’s plan to perform additional exploration drilling to improve data density. Additional exploration drilling would result in a higher percentage of the reserve base classified as proven and should better define the trona grades near the drilling locations. Drilling south of the existing lease boundary would help to identify available future reserves and grades. Additionally, it is recommended that Sisecam undertake Bed to Bed drilling from areas in the Upper Bed that overly future LB two-seam mining. For example, the LB South resource block could be drilled from the UBSW Mains or UB South Butts. Bed to Bed core drilling is significantly less expensive than surface exploration but is limited to two-seam areas.

Sisecam should continue to move forward as rapidly as possible with validation of the two-seam mining to confirm both the geotechnical and economic assumptions.

It is recommended that Sisecam continue to pursue optimization of the refinery facilities to allow efficient processing of the predicted long-term decline in run-of-mine (ROM) trona grades as mining moves to the edges of the ore bodies. A more robust processing facility would allow a more complete recovery of the remaining ore reserves in areas where localized seam rolls and post depositional insoluble infilling has impacted recovery and stopped mining.

It is recommended that Sisecam optimize its ability to blend ore from multiple production areas of the mine to minimize the impact of the lower grade ore from the miners producing from the edge of the deposit or encountering seam rolls. This would also allow improved recovery of the deposit by maintaining a higher average ore grade and minimize sterilization of the thinner or lower grade areas of the deposit.

It is recommended that Sisecam continue close monitoring of the west end water inflows and associated subsidence. HPG would advise more frequent isotope testing of the inflow as well as additional hydrologic studies including source tracing. HPG would advise more frequent subsidence monitoring and evaluations of the area.

24.0 REFERENCES

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24.1 SCANNED FILES LISTING

File/Folder Name	Size
Jefferson_17-DEC-62_Densities_Trona_and_Rock.pdf	323,741
Lee_5-AUG-88_Trona_Reserves_Memo_with_Tables.pdf	2,858,739
Mannion_01-AUG-61__Wyoming Eploration-1960 Progress Report.pdf	3,689,977
Mannion_09-MAY-61_Ore Reserve Calculations.pdf	4,503,326
Mannion_12-MAY-61_Ore_Reserve_Calculations_and_Tables.pdf	7,667,741
Mannion_26-OCT-73_Planning_and_Supplemental_Drilling_Program.pdf	4,825,097
Parratt_17-JUL-73_GR_Trona_Reserves_Trona_District Land Holdings.pdf	1,665,154
Parratt_24-MAR-11_1976_Trona_Development_Drilling.pdf	5,068,341
Wendt_19-DEC-67_Test_Drilling_North_1967_Drilling Program.pdf	3,499,956

1.2 SISECAM WYOMING DATA SOURCES

Flag	Date	Report/Information Title	Author	Comment	Size
cert	10/10/2021	2021-Halal-Certificate.pdf	Halal		210 KB
cert	10/10/2021	CERT-Ciner-NSF-Certificate-2016.pdf	NSG		379 KB
cert	10/10/2021	ISO-9001-2015-FM-30272.pdf	ISO		602 KB
cert	10/10/2021	Kosher-2021.pdf	Kosher		110 KB
ENV	10/8/2021	10823R P1.pdf	State of Wyoming		3.87 MB
ENV	10/8/2021	14035R P1 Upper Delta.pdf	State of Wyoming		3.67 MB
ENV	10/8/2021	14373R P2.pdf	State of Wyoming		602 KB
Env	10/11/2021	17122 Boiler Tuning Report.pdf	Monitoring Solutions		3.38 MB
Env	10/11/2021	17122 Calciner Dryer Report Rev2.pdf	Monitoring Solutions		19.6 MB
Env	10/11/2021	17122 DC-38 Report (Final).pdf	Monitoring Solutions		1.47 MB
Env	10/11/2021	17122 RATA Report (Final).pdf	Monitoring Solutions		3.47 MB
Env	10/11/2021	17122 Train 4 Scrubber Report (Final) - Initial Perf Test 130 tph.pdf	Monitoring Solutions		4.74 MB
Env	10/11/2021	19-0950D - Green River 4SC-12A, DC-31 PM CPM PM10 PM2.5 Report.pdf	Aliance Source Testing		4.48 MB
Env	10/11/2021	19-1054D - Green River 3ES-12 5ES-12 DC-4 DC-8AB DC-9 PM CPM PM10 PM2.5.pdf	Aliance Source Testing		4.89 MB
Env	10/11/2021	19-1055D Green River 6ES-10 Report.pdf	Aliance Source Testing		3.87 MB
Env	10/11/2021	19-1055D Green River Boiler 4 & 5 RATAs_F.pdf	Aliance Source Testing		2.82 MB
Env	10/11/2021	19-1710D Green River 7ES-10 Compliance Report.pdf	Aliance Source Testing		4.25 MB
Env	2/4/2021	1975 Permit.pdf	WYDEQ		167 MB
Env	2/4/2021	1979 amendment approval.pdf	WYDEQ		41.9 KB
Env	2/4/2021	1987 Drainage Basin Analysis.pdf	WYDEQ		34.9 MB
Env	10/8/2021	1997 BLM EA ROD FONSI Unit6.pdf	WYDEQ		2.62 MB
Env	10/19/2021	2006_OCI Planning Report.pdf	WYDEQ		31.3 MB
Env	10/8/2021	2010 usfws permit.pdf	WYDEQ		133 KB
Env	10/15/2021	2010_Tailings Management Initiatives Report.pdf	WYDEQ		12.3 MB
Env	10/15/2021	2012_4a-2 Surface Disposal_new.pptx	WYDEQ		57.7 MB
Env	10/15/2021	2012_Strategy Minutes Memorandum_v3.pdf	WYDEQ		273 KB
Env	10/15/2021	2015_08_31_Upper_Delta_storage_memo_v2.pdf	WYDEQ		115 KB
Env	10/8/2021	2017 03 27 WAQD Approval Permit No. P0021348.pdf	Ciner Wyoming		4.86 MB
Env	10/8/2021	2017 2018 2019 2020 Bond Cost Comparison.xlsx	Ciner Wyoming		51.7 KB
Env	10/11/2021	2018 Compliance Certification rev 2.pdf	Ciner		72.9 KB
Env	10/11/2021	2018 WQD TRM Submittal FINAL.pdf	Ciner		186 KB
Env	10/11/2021	2018_Annual_Report_FINAL_Combined.pdf	Ciner		61.4 MB
Env	10/11/2021	2018_EmissionsReport_1840.pdf	Ciner		337 KB
Env	10/11/2021	2019 Compliance Certification Signed.pdf	Ciner		253 KB
Env	10/11/2021	2019_Annual_Report_Combined_Submittal.pdf	Ciner		73.5 MB
Env	10/11/2021	2019_EmissionsReport_2175_02282020.pdf	Ciner		340 KB
Env	10/11/2021	2020 Combined Report.pdf	Ciner		106 MB
Env	10/11/2021	2020 Compliance Certification Final Signed.pdf	Ciner		258 KB
Env	10/11/2021	2020_FINAL_EmissionsReport_Submitted_2794.pdf	Ciner		319 KB
Env	10/15/2021	2020-2021_DN_Annual_Report_Final_with_Attachments.pdf	Ciner Varrious		1.03 MB
Env	10/11/2021	2020-Final-LCGP-with-Signature.pdf	WYDEQ		1.43 MB

Flag	Date	Report/Information Title	Author	Comment	Size
Env	10/11/2021	2021 Notification to ISD re Switch House 3.pdf	WYDEQ		76.1 KB
Env	10/8/2021	3-3-119 P0024380 com.pdf	WYDEQ		131 KB
Env	10/11/2021	3-3-119 P0024380 fin (1).pdf	WYDEQ		21.7 MB
Env	10/8/2021	3-3-119 P0024380 Final.pdf	WYDEQ		21.7 MB
Env	10/8/2021	3-3-119 P0024380 SoB.pdf	WYDEQ		69.1 KB
Env	10/11/2021	4.11.2020 Cogen initial performance test VER087.pdf	Monitoring Solutions		6.61 MB
Env	10/11/2021	4.11.2020 STACK EMISSIONS RATA TEST RESULTS Solar Titan 250 HRSG.pdf	Monitoring Solutions		404 KB
Env	10/11/2021	4SC-12A, 6ES-10, 7ES-10, Boiler 4, and 5 Nov. Dec. 2018 Stack Tests.pdf	Barr Engineering		3.83 MB
Env	10/15/2021	50191042_Upper_Delta_2013_Tailings_Plan_v3.pdf	Barr Engineering		5.66 MB
Env	10/15/2021	50191057_Upper_Delta_Tailings_Plan_Final.pdf	Barr Engineering		11.1 MB
Env	10/15/2021	50191095_Upper_Delta_2015_Tailings_Plan_Final.pdf	Barr Engineering		22.8 MB
Env	10/8/2021	7581R P4.pdf	State of Wyoming		3.43 MB
Env	10/8/2021	7809R P1.pdf	State of Wyoming		3.72 MB
Env	10/11/2021	8.10.20 Ciner Dust Collector Emissions Report DC-22, 37, 92, 93, 94 and 98.pdf	Monitoring Solutions		9.38 MB
Env	10/8/2021	8585R cancelation P2.pdf	State of Wyoming		3.28 MB
Env	10/8/2021	8586 P3.PDF	State of Wyoming		3.58 MB
Env	10/8/2021	8587 P3 A.PDF	State of Wyoming		3.17 MB
Env	10/8/2021	8588 P3 B.PDF	State of Wyoming		3.16 MB
Env	10/8/2021	8589 P3 C.PDF	State of Wyoming		3.12 MB
Env	10/8/2021	8590 P3 D.PDF	State of Wyoming		3.16 MB
Env	10/11/2021	9.2.20 Ciner DC-92 Emissions Report Final Retest.pdf	Monitoring Solutions		1.85 MB
Env	2/4/2021	A. General Description of Mining Operation.docx	Ciner		4.24 MB
Env	10/8/2021	Active 2021 Dam Permits.pdf	State of Wyoming		231 KB
Env	10/8/2021	Active 2021 Well Permits.pdf	State of Wyoming		345 KB
Env	2/4/2021	Approximate Areas Where No Topsoil Was Stripped 1.20.2020.pdf	Ciner		10.7 MB
Env	10/11/2021	Authorization Letter P0026007 - Mine Vent Waiver 7-15-2019.pdf	Ciner		739 KB
Env	2/4/2021	B. Drilling within Permit Boundary.docx	Ciner		31.7 KB
Env	10/8/2021	BLM EA.pdf	Barr Engineering		7.96 MB
Env	10/11/2021	Bond Increase Acceptance Permit No. PT0257 3.8.21 .pdf	WYDEQ		115 KB
Env	2/4/2021	C. Mining Method and Schedule.docx	Ciner		1.55 MB
Env	10/11/2021	Ciner 2019 Annual Report.pdf	Ciner		37.6 KB
Env	10/11/2021	Ciner 2020 UIC Annual Report.pdf	Ciner		168 KB
Env	10/11/2021	Ciner Unit 8 Expansion - DEQ-ISC 19-07 - ISC Permit - signed.pdf	WYDEQ		1.68 MB
Env	10/11/2021	Ciner Wyoming LLC, ENG007-HET002, CSH002, CSH003 CSH006, May 2021 Sta	Barr Engineering		7.83 MB
Env	10/11/2021	Ciner_2018_Dam_Safety_Report_FINAL-signed.pdf	Barr Engineering		235 MB
Env	10/11/2021	Ciner_2019_Dam_Safety_Report_20200217-signed.pdf	Barr Engineering		298 MB
Env	10/11/2021	Ciner-2020_Dam-Safety-Report_20210224-signed.pdf	Barr Engineering		152 MB
Env	10/6/2021	Cogen_proposed_207503.pdf	WYDEQ		864 KB
Env	2/4/2021	D. Mining Hydrology.docx	Ciner		1.73 MB
Env	10/6/2021	Deca Permit2723.pdf	WYDEQ		250 KB

Flag	Date	Report/Information Title	Author	Comment	Size
Env	2/4/2021	E. Tailings Management.docx	Ciner		2.78 MB
Env	2/4/2021	F. Waste Management.docx	Ciner		31.9 KB
Env	10/6/2021	FacProfileDoc_F000637.pdf	Ciner		576 KB
Env	10/11/2021	Final_MMGP_2018-Signed.pdf	WYDEQ		1.47 MB
Env	2/4/2021	G. Natural Resource Protection and Monitoring Programs.docx	Ciner		37.5 KB
Env	10/11/2021	GeneralMineralMiningAuthorization.pdf	WYDEQ		82 KB
Env	10/8/2021	Generator replacement - PermitP0024224 Aug 30, 2018.pdf	Ciner		3.52 MB
Env	10/6/2021	home.permits (1).xls	Ciner		2.63 KB
Env	10/6/2021	home.permits.xls	Ciner		17 KB
Env	2/4/2021	Lease Mine Plan Map for Wildlife Stipulations 1.20.2020.pdf	Ciner		9.02 MB
Env	10/11/2021	P0027495 per_signed.pdf	WYDEQ		2.80 MB
ENV	10/8/2021	P65459.0W.pdf	State of Wyoming		948 KB
ENV	10/8/2021	P65460.0W.pdf	State of Wyoming		915 KB
ENV	10/8/2021	P65461.0W.pdf	State of Wyoming		917 KB
ENV	10/8/2021	P65462.0W.pdf	State of Wyoming		917 KB
ENV	10/8/2021	P65463.0W.pdf	State of Wyoming		917 KB
ENV	10/8/2021	P65464.0W.pdf	State of Wyoming		911 KB
ENV	10/8/2021	P67839.0W.pdf	State of Wyoming		862 KB
ENV	10/8/2021	P67840.0W.pdf	State of Wyoming		859 KB
ENV	10/8/2021	P67841.0W.pdf	State of Wyoming		860 KB
ENV	10/8/2021	P9835R P4.pdf	State of Wyoming		3.25 MB
Env	10/8/2021	Permit Number MB700227-0 Ciner Wyoming LL_Federal Fish Wildlife Permit Mig	USFWS		13.2 KB
Env	10/6/2021	Permit_Cogen_215527.pdf	WYDEQ		3.47 MB
Env	2/4/2021	Pond 1 4 Stevens Draw Diversion Ditch.pdf	Ciner		24.4 MB
Env	10/8/2021	Pond 2 BLM Approval Letter.pdf	US Dept. Interior		688 KB
Env	10/6/2021	Prmit Adju_Reasoning148493.pdf	WYDEQ		171 KB
Env	10/6/2021	Production Increase_128312.pdf	WYDEQ		7.17 MB
Env	10/11/2021	SDWA-08-2021-0036 Administrative Order.pdf	USEPA		370 KB
Env	10/11/2021	SDWA-08-2021-0036 Cover Letter.pdf	USEPA		380 KB
Env	10/8/2021	Sewer Pond Permit.pdf	State of Wyoming		1.37 MB
Env	10/6/2021	SimiAnualCompliance374528.pdf	Ciner		337 KB
Env	10/11/2021	SWDA-08-2021-0036 Response to Administrative Order redacted CBI.pdf	Ciner		2.21 MB
Env	10/6/2021	Title V_May 2020_333891.pdf	WYDEQ		21.7 MB
Env	2/4/2021	TRM Boreholes.pdf	Ciner		1.41 MB
Env	10/6/2021	Unit 8 Cover Letter_378085.pdf	Ciner		21.7 MB
Env	10/6/2021	Unit 8 Mofeling_378083.pdf	Ciner		152 KB
Env	10/6/2021	Unit 8 Process Flow_378084.pdf	Ciner		1.22 MB
Env	10/15/2021	UPPER DELTA 7-8-21 NO CONTOURS.pdf	Ciner		51.3 MB
Env	10/15/2021	Upper Delta Elevation Change_March 19 to July 8 2021.pdf	Ciner		1.32 MB
Env	10/8/2021	VoiceMessage from USFWS.wav	USFSWS		491 KB

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Env	10/11/2021	WY5600634_Ciner_TOCA_NON TT 1QTR21_2021.04.27 (009).pdf	USEPA		187 KB
Env	10/11/2021	WY5600634_Ciner_TOCA_NOV TT_2020.08.18.pdf	USEPA		197 KB
Env	10/11/2021	WY5600634_Ciner_TOCA_NOV_TT_2021.03.15.pdf	USEPA		196 KB
Env	10/11/2021	WYR104976-LOA(renewal)-111220-AR (002).pdf	USEPA		708 KB
Finacial	1/24/2022	DEC 17 MINE RESULTS.pdf	Ciner		52.8 KB
Finacial	1/24/2022	DEC 18 MINE RESULTS.pdf	Ciner		59.7 KB
Finacial	1/24/2022	Dec-20 Results.xlsx	Ciner		242 KB
Finacial	1/24/2022	Dec-21 Electricity.pdf	Ciner		2.06 MB
Finacial	1/24/2022	Dec-21 Natural Gas.pdf	Ciner		631 KB
Finacial	1/24/2022	Mine Costs - Dec-19.xlsx	Ciner		43.4 KB
Finacial	1/24/2022	Mine Costs - Dec-20.xlsx	Ciner		42 KB
Finacial	1/24/2022	Mine Costs - Dec-21.xlsx	Ciner		44.7 KB
Finacial	12/5/2021	RE_ November numbers.pdf	Ciner		12.6 MB
Finacial	12/5/2021	Re_ Updated Mining_december numbers.pdf	Ciner		263 KB
Finance	10/21/2021	2020 Capital Projects- Budget.xlsx	Ciner		26 KB
Finance	10/21/2021	2021 Capital Projects- Budget.xlsx	Ciner		18.4 KB
Finance	10/12/2021	Aug-21 Results.xlsx	Ciner		36.5 KB
Finance	10/14/2021	Capital Budget and Five Year - Revised 9.1.21.xlsx	Ciner		319 KB
Finance	11/19/2021	Ciner pricing Dec 17 2020 2010254.xlsx	Ciner		13.4 KB
Finance	10/12/2021	Ciner Wyoming LLC 2019 Issued Financial Statements.pdf	Deloitte		390 KB
Finance	10/12/2021	Ciner Wyoming LLC Audit Report 2016 with Deloitte Manually signed Opinion.pdf	Deloitte		604 KB
Finance	10/12/2021	Ciner Wyoming LLC_Audit Report 2017 Final Filed.pdf	Deloitte		774 KB
Finance	10/12/2021	Ciner Wyoming LLC_Audit Report 2018 Final wDeloitte Opinion.pdf	Deloitte		2.33 MB
Finance	10/12/2021	Ciner Wyoming_Audit Report 2020.pdf	Deloitte		380 KB
Finance	10/28/2021	CIP20 Green River DEC20.xlsx	Deloitte		1.17 MB
Finance	10/28/2021	CIP21 Green River SEPT21.xlsx	Deloitte		1.20 MB
Finance	10/12/2021	Consolidated Audited Financials Link.docx	Deloitte		14.7 KB
Finance	10/12/2021	Dec - 18 Financial results.xlsx	Ciner		97.6 KB
Finance	10/12/2021	DEC-17 PERFORMANCE- JAN 11 18.xlsx	Ciner		67.6 KB
Finance	10/12/2021	Dec-2020 Financial Results.xlsx	Ciner		167 KB
Finance	10/30/2021	DECA RF.xlsx	Ciner		149 KB
Finance	10/28/2021	Financial Budget 2022 - V6.pptx	Ciner		711 KB
Finance	10/30/2021	MOB Capex Summary 2022.pptx	Ciner		1.10 MB
Finance	10/30/2021	Net Price . September 2021 v4.xlsx	Ciner		1.51 MB
Finance	10/30/2021	Sep-21 Results.xlsx	Ciner		942 KB
Finance	11/19/2021	U8 Cost.msg	Ciner		104 KB
Finance	11/19/2021	WesTech_Firm_2010128_Rev4_2020OCT20.pdf	WesTech		3.85 MB
Finance	10/12/2021	WY Dec 2019 results - NRP.xlsx	Ciner		51 KB
Geology	10/8/2021	AC-34 Core Log.pdf	Ciner		1.40 MB
Geology	10/8/2021	AC-34 Trona Assays.pdf	Ciner		98.6 KB

Flag	Date	Report/Information Title	Author	Comment	Size
lease	10/9/2021	3.21.1_4.7.1.9_WYO Lease 25779 2019.pdf	State of Wyoming		3.28 MB
lease	10/9/2021	3.21.1_4.7.1.9_WYO Lease2019.pdf	State of Wyoming		3.28 MB
lease	10/9/2021	3.21.10_4.7.1.4_US W-101824 Renewal June 2018.pdf	US Dept. Interior		4.60 MB
lease	10/9/2021	3.21.11_4.7.1.5_US WYW0111730 Sod Lse.pdf	US Dept. Interior		2.54 MB
lease	10/9/2021	3.21.12_4.7.1.6_US WYW0111731 Sod Lse.pdf	US Dept. Interior		2.31 MB
lease	10/9/2021	3.21.13_4.7.1.7_US WYW079420 Sod Lse.pdf	US Dept. Interior		2.57 MB
Env	10/13/2021	Ciner Big Island LQD Permit 2-4-2021.zip	Varrious		3.82 GB
lease	10/9/2021	3.21.14_4.7.1.8_US WYW101824 Sodium Lease.pdf	US Dept. Interior		4.23 MB
lease	10/9/2021	3.21.2_4.7.1.10_WYO Lease 25971 2.7.2020.pdf	State of Wyoming		5.26 MB
lease	10/9/2021	3.21.3_4.7.1.11_WYO Lease 26012. 2.7.2020pdf.pdf	State of Wyoming		5.13 MB
lease	10/9/2021	3.21.4_4.7.1.12_WYO Lease 42570 - 2019.pdf	State of Wyoming		3.21 MB
lease	10/9/2021	3.21.5_4.7.1.13_WYO Lease 42571- 2019.pdf	State of Wyoming		3.27 MB
lease	10/9/2021	3.21.6_4.7.1.14_Associated Mineral Salts Mining Lease.pdf	State of Wyoming		5.35 MB
lease	10/9/2021	3.21.7_4.7.1.1_Hofeldt Lease.pdf	Ciner		483 KB
lease	10/9/2021	3.21.8_4.7.1.2_Modified Sodium Lease.pdf	Ciner		762 KB
lease	10/9/2021	3.21.9_4.7.1.3_PAL Lease.pdf	Ciner		733 KB
lease	10/11/2021	Ciner Wyoming Surface Authorization Memo-v4.pdf	Dorsey		962 KB
lease	10/11/2021	Ciner Wyoming Title Opinion with Attachments-v2.pdf	Dorsey		364 KB
lease	10/8/2021	CR CC97.130 Certificate of Record.pdf	Ciner		116 KB
lease	10/21/2021	D10PP132.dwg	Ciner	Permit Boundary	1.98 MB
lease	10/21/2021	D10PP133.dwg	Ciner	Permit Boundary	1.99 MB
lease	1/21/2022	detail_MAP_2021-12_opt.pdf	Ciner		484 KB
lease	10/15/2021	E2a D10PP133 Updated June 2021.pdf	Ciner	Permit Boundary	7.95 MB
lease	10/15/2021	E2b D10PP132 Updated June 2021.pdf	Ciner	Permit Boundary	7.85 MB
lease	10/15/2021	LEASE AREAS IMAGE-Model.pdf	Ciner		199 MB
lease	10/15/2021	Lease History 2021.xlsx	Ciner		63.3 KB
lease	10/8/2021	OCI Water Rights Adjudication Permit No. 22075.pdf	State of Wyoming		224 KB
lease	1/21/2022	Plant_Area_Image_opt.pdf	Ciner		1.15 MB
Market	11/5/2021	2022 World Analysis - Soda Ash - Base Case Assumptions - Q3 2021.pdf	IHS Markit		374 KB
Market	11/5/2021	2022 World Analysis - Soda Ash - Fall 2021 Sensitivities.pdf	IHS Markit		339 KB
Market	11/5/2021	2022 World Analysis - Soda Ash - Price Assessment Methodology.pdf	IHS Markit		687 KB
Market	11/5/2021	Ciner Top 10 Customers.docx	Ciner		26.4 KB
Market	10/30/2021	Railcar Leases.docx	Ciner		24 KB
Mine	10/15/2021	2018 5YR Mine Plan BLM Approval 7-2-18.pdf	Ciner		63 KB
Mine	1/20/2022	20211220 Subsidence Potential of LowerBed West Section at Big Island Mine -	Richland Mining Consulting		11.6 MB
Mine	1/26/2022	20220125 Subsidence Potential of LowerBed West Section at Big Island Mine -	Richland Mining Consulting	Water Inflow	11.6 MB
Mine	10/15/2021	BLM_Mine_Plan_Revised_2018.pdf	Ciner		63.1 MB
Mine	10/8/2021	Board Mtg 2022 5 Year Mine Plan Fed Royal Red-- 8-1-21 Mod.dwg	Ciner		26.7 MB
Mine	11/1/2021	Board Mtg 2022 5 Year Mine Plan Fed Royal Red-- 8-1-21 No Xref.dwg	Ciner		27.1 MB
Mine	10/15/2021	Ciner_-_Big_Island_No._3_Shaft_Replacement_-_trn_20200831_101945_T004_-_Sh	Cementation		4.14 MB

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Mine	10/15/2021	LOWER BED AS-BUILT WIDTH HEIGHT.pdf	Ciner		170 KB
Mine	11/29/2021	Lowerbed Mine Map.dwg	Ciner		10 MB
Mine	10/9/2021	Methane February 2021.pdf	Ciner		210 KB
Mine	10/9/2021	Methane March 2021.pdf	Ciner		37 KB
Mine	2/24/2012	OCI 72 and 74 Location Map Model (1).pdf	Ciner		152 KB
Mine	10/30/2021	Sisecam - Agapito Report - Reserves.docx	Agapito		1.82 MB
Mine	10/15/2021	SOURCE OF MINE WATER WYOMING CINER LLC _ Final Report May 10 2021.docx	Serdar BAYARI	Water Inflow	8.20 MB
Mine	1/24/2022	UBE Panel 7.jpg	Ciner		3.39 MB
Mine	11/29/2021	Upperbed Mine Map.dwg	Ciner		5.82 MB
Production	1/24/2022	3-yr Steam.xlsx	Ciner		157 KB
Production	11/5/2021	3-yr Water Consumption.xlsx	Ciner		13.9 KB
Production	10/12/2021	5 Year Production Data.xlsx	Ciner		9.08 KB
Production	1/10/2022	A00DI000.dwg	Ciner		234 KB
Production	1/24/2022	Ciner Wyoming Unit Production Thru 2021.pptx	Ciner		3.22 MB
Production	10/15/2021	Daily Energy Report 2016.12.31 After Adjustments.xlsx	Ciner		532 KB
Production	10/15/2021	Daily Energy Report 2017.12.31-After Adjustments.xlsx	Ciner		602 KB
Production	10/15/2021	Daily Energy Report 2018.12.31 After Adjustments.xlsx	Ciner		712 KB
Production	10/15/2021	Daily Energy Report 2019.12.31-After Adjustments.xlsx	Ciner		711 KB
Production	10/15/2021	Daily Energy Report 2020.12.31-After Adjustments.xlsx	Ciner		709 KB
Production	10/28/2021	Daily Energy Report 2021.09.30-After Adjustments.xlsx	Ciner		702 KB
Production	10/15/2021	Deca Recovery Summary 2019-2021.xlsx	Ciner		11.7 KB
Production	11/2/2021	Gas Consumption & Available Peak Supply.xlsx	Ciner		19.7 KB
Production	10/23/2021	PLANT FLOW1.pdf	Ciner		116 KB
Production	1/26/2022	Plant Recovery 12-21.pdf	Ciner		515 KB
Production	10/22/2021	Process Flow 1.pptx	Ciner		1.09 MB
Production	10/12/2021	Producable Deca Schedule.pdf	Ciner		403 KB
Production	1/4/2022	Production December 2021_Email_20220104.pdf	Ciner		262 KB
Production	1/24/2022	RE_ Air Quality violation.pdf	Ciner		105 KB
Production	1/24/2022	Three Year Gas Consumption - Updated.xlsx	Ciner		22.1 KB
Production	11/19/2021	Unit 8 ore grade.doc	Ciner		702 KB
Production	11/5/2021	Unit Elec SECf.xlsx	Ciner		20.7 KB
Safety	10/26/2021	CITATIONS.docx	Ciner		12.8 KB
Safety	10/26/2021	Incident 2019, 2020, 2021.docx	Ciner		13.1 KB
Water	10/8/2021	Displacement Analysis_Ciner_Wyoming_07.03.2021_V1.1.pdf	Dr. Mahmut Cavur		5.34 MB
Water	11/21/2021	Subsidence Effects Assessment.pptx	Richland Mining Consulting		8.69 MB
Water	10/11/2021	Subsidence Report to LQD 8.18.21.pdf	Ciner		19.8 MB

25.0 RELIANCE ON INFORMATION PROVIDED BY THE REGISTRANT

HPG has reviewed technical data, reports, and studies produced by other consulting firms, as well as information provided by Sisecam Wyoming, and others listed in Sections 24.0 and 25.0. This review was conducted on a reasonableness basis, and HPG has noted herein where such provided information engendered questions. Except for the instances in which we have noted questions or made specific comments regarding the nature of the information, HPG has relied upon the information provided by Sisecam as being accurate and suitable for use in this Report. Sisecam's staff of professional engineers are considered experts in their field and as such HPG has no reason to doubt the authenticity or substance of the information provided.

HPG has conducted a general review of mineral titles and license documents provided by Sisecam. HPG has not verified title or otherwise confirmed the legal status of any of the leases or the license but has relied upon documents and information provided by Sisecam Wyoming's representatives regarding the current status of the leases and license shown. HPG's reliance on such information and representations applies to Section 3.2 and the relevant portions of Section 1.0.

HPG has relied on Sisecam representations and documentation regarding environmental permitting and compliance. HPG's reliance on such information and representations applies to Section 17.0 and the relevant portions of Section 1.0.

HPG has relied on Sisecam representations and documentation from Barr Engineering concerning surface tailings placement and impoundment structures. HPG's reliance on such information and representations applies to Section 17.0 and the relevant portions of Section 1.0.

HPG has relied on Sisecam representations concerning any outstanding active adverse legal or liability issues including statutory and regulatory interpretations. HPG's reliance on such information and representations applies to Section 3.2, 17.0 and the relevant portions of Section 1.0.

HPG has relied on Sisecam representations and information concerning manufacturing costs and revenues. HPG's reliance on such information and representations applies to Section 11.0, 18.0, 19.0 and the relevant portions of Section 1.0.

HPG has relied on Sisecam representations concerning marketing information and soda ash pricing trends. HPG's reliance on such information and representations applies to Section 11.0, 17.0, 18.0, 19.0 and the relevant portions of Section 1.0.

HPG has relied on Sisecam representations and information concerning governmental factors relating to taxation, royalties, monitoring requirements and frequency, bonding requirements, violations, and fines. HPG's reliance on such information and representations applies to Section 9.0, 11.0, 12.0, 18.0, 19.0 and the relevant portions of Section 1.0.

HPG has relied upon a report by Richland Mining Consulting LLC concerning the subsidence and water inflow over the western edge of the mine. HPG's reliance on this information and representations applies to Sections 9.0, 12.0, 21.0, and relevant portions of Section 1.0.

HPG has relied upon a report by C. Serdar BAYARI Ph. D hydrogeologist concerning the subsidence and water inflow over the western edge of the mine. HPG's reliance on this information and representations applies to Sections 9.0, 12.0, 21.0, and relevant portions of Section 1. 0..

26.0 PROJECT TEAM CVS

Mr. Kurt Hollberg has over 35 years of experience in the mining industry including 17 years in operations management and technical services. He has an in-depth understanding and experience with operational and capital budgeting and procurement. His experience encompasses green field feasibility studies through mine rehabilitation and re-opening. He is experienced in project management and construction. His international experience includes work in Colombia, Africa, Spain, and the Middle East doing feasibility studies on coal, potash, and phosphate properties and as the lender's technical advisors for world-class phosphate and aluminum projects. He has served as the technical advisor to the adjuster on numerous large mine insurance claims. He has advised and audited underground and surface safety and health programs for the DOE. He has extensive geotechnical experience related to mining and is well versed in mining systems and mine infrastructure design including solution mining. He is familiar with statistical testing techniques for process improvement. Using statistical techniques, he helped increased continuous miner productivity by 20% with minimal capital expenditure. Mr. Hollberg holds a B.A. degree in Economics from Colorado College and a BS in Mining Engineering with a minor in Civil Engineering from the Colorado School of Mines. He is a registered Professional Engineer in Colorado, Wyoming, Utah, and Nevada.

Mr. Richard Terry Leigh has over 40 years of experience in the mining industry, including management and technical services. He has extensive experience in mineral exploration and mineral estimation. He is knowledgeable in the use of computers for mineral estimation and geostatistics. Mr. Leigh has spent the past 30 years working in the Green River Basin Trona mines as a geologist and hydrologist and in environmental services, technical services, and mine management. Mr. Leigh has been highly active in the professional certification of geologists. He has served on the Wyoming Board of Professional Geologists, Wyoming Geological Survey Board, ASBOG, National Association of States Boards of Geology, and as a member of the Council of Examiners for PG certification. Mr. Leigh has published numerous papers on Wyoming geology and trona deposition. He has published several papers on tailing disposal and ground water remediation. Mr. Leigh holds a BS degree and MS degree in earth sciences from the State University of New York. Mr. Leigh is an AIPG Certified Professional Geologist and a Licensed Professional Geologist (PG) in Wyoming.