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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, 2023

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 001-39277

MP MATERIALS CORP.

(Exact name of registrant as specified in its charter)

Delaware	**84-4465489**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1700 S. Pavilion Center Drive, Suite 800
Las Vegas, Nevada 89135
(Address of principal executive offices and zip code)

(702) 844-6111
(Registrant's telephone number, including area code)

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 Stock, par value of $0.0001 per share	MP	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 pursuant to Rule 405 of Regulation S-T (§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. ☑

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

As of June 30, 2023, the aggregate market value of the voting common stock held by non-affiliates of the registrant was approximately $3.6 billion. Such aggregate market value was computed by reference to the closing price of the common stock as reported on the New York Stock Exchange on June 30, 2023. As of February 20, 2024, the number of shares of the registrant's common stock outstanding was 178,077,678.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive 2024 proxy statement, anticipated to be filed with the Securities and Exchange Commission within 120 days after the end of the registrant's fiscal year, are incorporated by reference into Part III of this Form 10-K.

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References herein to the "Company," "MP Materials," "we," "our," and "us," refer to MP Materials Corp. and its subsidiaries.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements included in this Annual Report on Form 10-K for the year ended December 31, 2023 (this "Annual Report"), that are not historical facts are forward-looking statements under Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements may be identified by the use of the words such as "estimate," "plan," "shall," "may," "project," "forecast," "intend," "expect," "anticipate," "believe," "seek," "target," or similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding estimates and forecasts of other financial and performance metrics and projections of market opportunity. These statements are based on various assumptions, whether or not identified in this Annual Report, and on the current expectations of our management and are not predictions of actual performance. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on by any investor as, a guarantee, an assurance, a prediction or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions. Many actual events and circumstances are beyond our control.

These forward-looking statements are subject to a number of risks and uncertainties, including:

- fluctuations and uncertainties related to demand for and pricing of rare earth products;
- uncertainties regarding the growth of existing and emerging uses for rare earth products and ability to compete with substitutions for such products;
- the intense competition within the rare earth mining and processing industry;
- uncertainties relating to our commercial arrangements with Shenghe Resources (Singapore) International Trading Pte. Ltd., an affiliate of Shenghe Resources Holding Co., Ltd., a global rare earth company listed on the Shanghai Stock Exchange;
- potential changes in China's political environment and policies;
- unanticipated costs or delays associated with the ramp-up of our Stage II optimization project;
- unanticipated costs or delays associated with our Stage III project;
- risks associated with our intellectual property rights, including uncertainties related to the Company's ability to obtain the intellectual property rights or licenses of intellectual property rights to produce NdFeB magnets and precursor materials;
- uncertainties related to the Company's ability to produce and supply NdFeB magnets and precursor materials;
- the ability to convert current commercial discussions with customers for the sale of rare earth oxide and metal products, NdFeB magnets and other products into contracts;
- potential power shortages and interruptions at the Mountain Pass Rare Earth Mine and Processing Facility;
- increasing costs or limited access to raw materials that may adversely affect our profitability;
- fluctuations in transportation costs or disruptions in transportation services;
- inability to meet individual customer specifications;
- diminished access to water;
- regulatory and business risks associated with the Company's investment in VREX Holdco Pte. Ltd.;
- uncertainty in our estimates of rare earth oxide reserves;
- risks associated with work stoppages;
- a shortage of skilled technicians and engineers;
- loss of key personnel;
- risks associated with the inherent dangers involved in mining activity and manufacturing of magnet materials;
- risks associated with events outside of our control, such as natural disasters, climate change, wars or health epidemics or pandemics;
- risks related to technology systems and security breaches;
- ability to maintain satisfactory labor relations;

- ability to comply with various government regulations that are applicable to our business;
- ability to maintain our governmental licenses, registrations, permits, and approvals with numerous governmental agencies necessary for us to operate our business;
- risks relating to extensive and costly environmental regulatory requirements;
- risks associated with the terms of our convertible notes; and
- those factors discussed within "Part I, Item 1A. Risk Factors" of this Annual Report.

If any of these risks materialize or our assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements.

These and other factors that could cause actual results to differ from those implied by the forward-looking statements in this Annual Report are more fully described within "Part I, Item 1A. Risk Factors." The risks described within "Part I, Item 1A. Risk Factors" of this Annual Report are not exhaustive. Other sections of this Annual Report describe additional factors that could adversely affect our business, financial condition or results of operations. New risk factors emerge from time to time, and it is not possible to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the foregoing cautionary statements. We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

In addition, statements of belief and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us, as applicable, as of the date of this Annual Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and you are cautioned not to unduly rely upon these statements.

PART I

ITEM 1. BUSINESS

Overview

MP Materials Corp., including its subsidiaries (the "Company," "MP Materials," "we," "our," and "us"), is the largest producer of rare earth materials in the Western Hemisphere. The Company, which is headquartered in Las Vegas, Nevada, owns and operates the Mountain Pass Rare Earth Mine and Processing Facility ("Mountain Pass"), the only rare earth mining and processing site of scale in North America, and is constructing a rare earth metal, alloy and magnet manufacturing facility in Fort Worth, Texas (the "Fort Worth Facility"), where the Company anticipates manufacturing neodymium-iron-boron ("NdFeB") permanent magnets and its precursor products.

The Company produces rare earth concentrate products as well as refined rare earth oxides and related products. The rare earth concentrate is principally sold pursuant to the Offtake Agreement (as defined in Note 20, "Related Party Transactions," in the notes to the Consolidated Financial Statements) to Shenghe (as defined in the "Customers" section below), that, in turn, typically sells that product to refiners in China. Following the commissioning of the Company's Stage II optimization project ("Stage II") in the third quarter of 2023, the Company began producing separated rare earth products, including neodymium-praseodymium ("NdPr") oxide, that it began selling to customers globally in the fourth quarter of 2023. Additionally, in April 2022, the Company entered into a long-term agreement with General Motors Company (NYSE: GM) ("GM") to supply U.S.-sourced and manufactured rare earth materials and finished magnets for the electric motors in more than a dozen models based on GM's Ultium Platform. These developments are part of the Company's Stage III downstream expansion strategy ("Stage III").

Certain rare earth elements ("REE") serve as critical inputs for the rare earth magnets inside the electric motors and generators powering carbon-reducing technologies such as hybrid and electric vehicles (referred to collectively as "xEVs") and wind turbines, as well as drones, defense systems, robotics and many other high-growth, advanced technologies. Our integrated operations at Mountain Pass combine low production costs with high environmental standards, thereby restoring American leadership to a critical industry with a strong commitment to sustainability. As electrification drives significant global growth in demand for REE, the Company believes global economic trends, geopolitical realities and sustainability mandates are coalescing to further its opportunity to create stockholder value. Further, the Company believes businesses are increasingly prioritizing diversification and security of their global supply chains to reduce reliance on a single producer or region for critical materials. As the only scaled source in North America for critical rare earths, with a processing footprint designed to operate with best-in-class sustainability and an industry-leading cost structure, the Company believes it is well-positioned to thrive as the global economy electrifies.

The Company's mission is to maximize stockholder returns over the long-term by executing a disciplined business strategy to restore the full rare earth supply chain to the United States of America. The Company believes it will generate positive outcomes for U.S. national security and industry, the U.S. workforce, and the environment.

Rare Earth Industry Overview

When compared to industrial elements found in nature, such as aluminum, copper, and lead, the global annual production of REE is noticeably low. However, REE have become crucial enablers of technologies that are at the core of climate change initiatives worldwide, as well as ubiquitous gadgets, electronics, and robotics that have permeated modern society. REE are used in small, but often necessary, amounts in hundreds of different technologies, materials, and chemicals worldwide for commercial, industrial, social, medical, and environmental applications. In just a period of decades, REE have deeply integrated into the foundation of modern technology and industry, and have proven to be difficult to duplicate or replace.

By economic value, NdPr is the largest segment of the REE market. NdPr is primarily used in NdFeB permanent magnets for EV traction motors, wind power generators, drones, robotics, electronics and a growing list of other applications. The rapid growth of these and other end-use markets is expected to drive substantial demand growth for NdPr and NdFeB magnets in the years ahead.

The REE group includes 17 elements, primarily the 15 lanthanide elements. Lanthanum, cerium, praseodymium, neodymium and promethium are considered "light" REE ("LREE"); samarium, europium and gadolinium are often referred to as "medium" REE; while terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium are considered "heavy" REE ("HREE"). Two additional elements, yttrium and scandium, are often classified as HREE although they are not lanthanides. Depending upon the rare earth-bearing mineral, the mixture of light, medium and heavy REE will differ. The REE in the Mountain Pass ore body are contained primarily within bastnaesite and related minerals in which LREE are most abundant.

The aggregate global market for rare earth oxides ("REO") totaled approximately 209,000 metric tons ("MTs") in 2023 and is expected to grow at a compound annual growth rate ("CAGR") of approximately 6.1% through 2035, according to research by Adamas Intelligence Inc. ("Adamas"). Further, Adamas estimates that the NdPr segment of the REO market, which makes up a significant majority of the market value, is expected to grow at an 8.5% CAGR through 2035 (excluding the impact of swarf recycling), well in excess of the overall REO market. This expected growth will be driven by secular growth in demand for NdPr magnets.

Rare earth materials are used in a diverse array of end markets, including:

- ***Electric Mobility:*** traction motors in passenger xEVs, commercial xEVs, special purpose vehicles, two-wheelers, and other applications;
- ***Renewable Power Generation:*** wind power generators, for on- and offshore applications;
- ***Energy-Efficient Motors, Pumps and Compressors:*** heating, ventilation and air conditioning ("HVAC") systems, elevators, escalators, consumer appliances and other industrial applications;
- ***Industrial and Service Robotics:*** motors, actuators, brakes and sensors used in industrial robots and welders, as well as service robots;
- ***Consumer and Medical Applications:*** smart phones, tablets, laptops, hard disk drives, audio speakers, microphones, cameras, printers, cordless power tools as well as fiber optics, laser crystals, x-ray equipment, prostheses, dental crowns and more;
- ***Critical Defense Systems:*** guidance and control systems, communications, avionics, global positioning systems, radar and sonar, drones, thermal barrier coatings and firearms; and
- ***Catalysts and Phosphors:*** catalysts for vehicle emissions reduction and fuel refining, as well as phosphors for energy-efficient lighting and counterfeit currency detection.

Process

The Company has established a three-stage business plan to enable and scale the full rare earth supply chain. Processing of rare earth materials at Mountain Pass includes five primary process steps: (i) mining and crushing; (ii) milling and flotation; (iii) roasting, leaching and impurity removal; (iv) separation and extraction; and (v) product finishing. Through its upstream operations ("Stage I") (discussed below), which are comprised of the first two of these process steps, the Company produces rare earth concentrate that is marketed to refiners via a distribution arrangement. In 2023, the Company commenced midstream operations ("Stage II"), which consist of the latter three primary process steps to produce separated rare earth products that are marketed directly to end users and indirectly via distributors, with revenue generated primarily from the magnet supply chain. Lastly, the Company is establishing downstream ("Stage III") capabilities at its Fort Worth Facility to convert a portion of the REO produced at Mountain Pass into rare earth magnets and its precursor products to be marketed directly to end users.

Stage I

Following the acquisition of Mountain Pass in July 2017, the Company began implementing Stage I, which was designed to re-establish stable, scaled production of rare earth concentrate leveraging the site's existing processing facility. Stage I includes the mining of primarily bastnaesite ore followed by comminution, which involves crushing and grinding the ore into a milled slurry. Then, the milled bastnaesite slurry is processed by froth flotation, whereby the bastnaesite is carried to the surface while the gangue, or non-desired, elements are suppressed and disposed as tailings.

Since restarting operations from cold-idle status, the Company implemented changes in the milling, flotation and tailings management processes; implemented and continue to advance an improved reagent scheme to improve mineral recovery; and implemented operational best practices. Together, these changes materially increased plant uptime and reliability driving enhanced flotation throughput, REO recovery and production as well as tailings facility reliability and throughput at a lower cost per processed ton. Since the implementation of the Company's Stage I optimization plan and the achievement of commercial production of concentrate, the Company's quarterly REO Production Volume (as defined in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations) has exceeded 8,500 MTs, and the Company has achieved at least 40,000 MTs of annual REO Production Volume since 2021. The Company's Stage I optimization plan enabled it to achieve what the Company believes to be world-class production cost levels for rare earth concentrate.

In November 2023, the Company announced its "Upstream 60K" strategy whereby the Company intends to grow its annual REO Production Volume to approximately 60,000 MTs by expanding upstream capacity via investments in further beneficiation, including the ability to process alternative feedstocks and upgrade lower-grade feedstocks. The Company aims to achieve this initiative within the next four years with modest incremental capital investment.

Stage II

Stage II advanced the Company's operations from the production of rare earth concentrate to the separation of individual REE. The project incorporated upgrades and enhancements to the prior facility process flow intended to reliably produce separated REE at a low cost while minimizing the impact on the environment. More specifically, the Company reintroduced an oxidizing roasting circuit, reoriented portions of the plant process flow, increased product finishing capacity, improved wastewater management, and made other improvements to materials handling and storage.

The roasting step that oxidizes the rare earth concentrate in a rotary kiln is crucial to ensuring cost-competitiveness. One of the unique attributes of bastnaesite ore is the ability to convert the trivalent cerium in the mixed rare earth concentrate to tetravalent cerium that has a low propensity to dissolve, enabling cerium to be removed expediently along with other insoluble gangue elements without selective extraction. Removal of the lower-value cerium early in the Company's separations process allows for a significant reduction in the mass of material to be separated and finished, thus reducing the energy, reagents, and wastewater required to produce the higher-value NdPr. Additionally, roasting facilitates a lower temperature leach that reduces maintenance costs and downtime.

During the third quarter of 2023, the Company began producing separated rare earth products. However, the Company expects that it may take several quarters to achieve its designed throughput of separated products. As the Company increases production of separated products over time, it expects to improve the Company's per-unit costs of NdPr oxide, which represents a majority of the value contained in the Company's concentrate. In addition, in the fourth quarter of 2023, the Company began utilizing a tolling partner in Southeast Asia to process the Company's NdPr oxide into NdPr metal for delivery to the Company's customers globally.

In February 2022, the Company was awarded a $35.0 million contract by the Department of Defense's Office of Industrial Base Policy, Industrial Base Analysis and Sustainment program, to design and build a facility to process HREE. Successful completion of this project will establish, for the first time in many years, commercial-scale processing and separation of HREE in support of commercial and defense applications in the U.S. The HREE processing and separations facility (the "HREE Facility") will be built at Mountain Pass and will be integrated into the rest of the Company's Stage I and Stage II facilities. The Company is currently advancing the facilitating works, engineering and procurement for the HREE Facility, which is expected to support the separating of HREE contained in the Mountain Pass ore as well as from third-party feedstocks.

Stage III

The Company's mission is to restore the full rare earth magnetics supply chain to the U.S. by pursuing opportunities to integrate further downstream by converting NdPr oxide into permanent magnets and precursor products, as well as advancing magnet recycling capabilities. In February 2022, the Company commenced construction of a rare earth metal, alloy and magnet manufacturing facility in Fort Worth, Texas, completing the building and office space in November 2023. As currently designed, the Company expects the Fort Worth Facility to produce approximately 1,000 MTs of finished rare earth magnets per year, sufficient to power more than 700,000 electric vehicle motors annually. The rare earth magnets and precursor products produced may also support other key markets, including clean energy, electronic and defense technologies. The Fort Worth Facility serves as the business and engineering headquarters for the Company's magnetics division.

The Company's vertical integration into magnet production would establish MP Materials as the first and only fully-integrated source of supply for rare earth magnets in the Western Hemisphere. By offering magnet customers a complete, end-to-end Western supply chain solution, the Company believes vertical integration represents a material incremental value creation opportunity. The Company believes that the ability to capture significant value from magnet production requires a scaled, steady supply of NdPr, which the Company believes it is uniquely positioned to provide in the Western Hemisphere.

Strategy

Offer the Western Hemisphere a trusted, sustainable source of supply for materials and components that enable the development of critical industries.

More than 60 years of operations at Mountain Pass have demonstrated that the Company's ore body is one of the world's largest and highest-grade rare earth resources. The low-volume nature of rare earth mining coupled with the exceptional scale and quality of the ore body results in a resource with significant viability well into the future.

Upon achieving our designed throughput of separated products, the Company believes Mountain Pass will be one of the largest, most advanced and efficient fully-integrated REO processing facilities in the world, and the only such facility located in the Western Hemisphere. The Company aims to provide users of rare earths a domestic alternative that helps avoid the risks

associated with the single point-of-failure that Chinese producers represent. In addition, the U.S. government is actively seeking to end the country's reliance on foreign REE sources, and the Company believes that its constructive relationship with key regulatory agencies and the relative stability of U.S. policies provide it with an advantage relative to non-U.S. REE producers.

The global effort to curb carbon emissions and address climate change often focuses on the impact of the transportation system. The Company believes that its products will play a large role in advancing those efforts. To date, nearly all U.S. states and the District of Columbia have mandated or offer incentives to support deployment of xEVs or alternative fuel vehicles and supporting infrastructure, either through state legislation or private utility incentives within the state, with similar mandates and incentives in other countries globally. Additionally, on August 16, 2022, the U.S. government enacted the Inflation Reduction Act of 2022, which, among other things, provides several tax incentives to promote clean energy adoption, including tax credits on the purchase of xEVs and the production of certain critical minerals such as NdPr oxide. The NdPr oxide that the Company began producing in the third quarter of 2023 at Mountain Pass is essential to the permanent magnet motor technology deployed in a significant majority of current xEVs.

In addition, the Company believes end consumers will demand that the materials used to build these vehicles be extracted sustainably. MP Materials is committed to environmental responsibility. The Company's environmental management plans cover biodiversity impacts, waste and noise management, air and water pollution, water extraction and discharge, as well as natural resource disturbance and toxic chemical usage. The Company believes this commitment to responsible production of REO is a strong competitive advantage.

A confluence of geopolitical and economic factors is causing downstream customers, such as automotive original equipment manufacturers ("OEMs"), to be increasingly focused on supply risk, highlighting the need to develop domestic production of REE and related products. To meet the growth in demand for xEVs, the Company believes automotive OEMs will redesign their supply chains to ensure a ready and stable supply of rare earth products as they transition their facilities to build electric vehicle components. MP Materials aims to capitalize on and accelerate this opportunity by seeking to partner with current and future customers in their efforts to re-position the capital and labor in their supply chain and to meet the growth in electrification.

Leverage the Company's low-cost position to maximize earnings power in all commodity price environments.

The success of the Company's business reflects its ability to manage its costs. The Company's production achievements in Stage I have provided economies of scale to lower production costs per unit of REO produced in concentrate. Furthermore, Stage II was designed to enable the Company to continue to manage its cost structure for separating REE through an optimized facility process flow. This process flow allows the Company to use less energy and raw materials per ton of separated REO. Despite the initial phase of NdPr oxide production leading to elevated per-unit costs, the Company anticipates a decrease in per-unit production costs over time as production volumes expand.

Optimization of logistics is also central to maintaining a low-cost position relative to other global producers. Mountain Pass, located immediately adjacent to Interstate 15 and within a one-hour drive of a major railhead and a four-hour drive of the Ports of Los Angeles and Long Beach, offers transportation advantages that create meaningful cost efficiencies in securing incoming supplies and shipping its final products. The Company believes the self-contained nature of its operations, with mining, milling, separations, and finishing all on one site, creates additional cost advantages and operational risk mitigation. Upon achieving the designed throughput of separated products, the Company's integrated site will incur lower costs of packaging, handling and transportation as compared to competitors who lack co-located processing.

Further the Company's mission and ability to capture the full rare earth value chain through downstream integration into rare earth magnet production.

Beyond re-establishing a supply chain for REE in the Western Hemisphere, the Company expects to recognize compelling longer-term opportunities to further its mission through the capture of additional value by pairing its attractive access to a large domestic rare earth supply with growing demands for downstream magnetic materials. The Company is currently pursuing vertical integration through further downstream processing of REO into finished magnet products and precursor materials, and incorporating process waste and end-of-life magnet recycling. The Company intends to accomplish this through a buy, build and/or joint venture strategy to achieve technical and cost leadership. The Company is developing a greenfield metal, alloy and magnet manufacturing facility in Fort Worth, Texas, with GM as a foundational customer. The Company intends to continue exploring future opportunities to invest in, develop, and/or sponsor new downstream opportunities for REO and rare earth products that contribute to the electrification of the industrial economy.

MP Materials believes its successes to date at Mountain Pass demonstrate a competency in identifying undervalued assets, creating a disciplined, execution-focused strategy, and assembling the management talent to create value. The Company intends

to apply its experience and skill sets across the critical minerals and related value chain, while allocating capital effectively and responsibly, toward opportunities demonstrated to be in the best interest of its stockholders and consistent with its mission.

Human Capital Resources

The people of MP Materials are the Company's most valuable asset in fulfilling the Company's mission. At the core of the Company's success is the relentless pursuit to maintain and nurture an owner-operator culture that instills an entrepreneurial spirit where its employees feel motivated and empowered to deliver results through an unwavering commitment to doing what is right in a safe environment. Throughout 2023, in living up to the owner-operator culture, all employees received a time-vested equity grant at the time of joining the Company. The Company believes equity ownership reinforces the employees' sense of their contribution to the Company's success.

Ensuring the Company attracts, develops and retains top talent across all functions with diverse experiences, backgrounds and perspectives is critical to the Company's success. An employee retention rate of 95% or higher, which was achieved in every calendar quarter during 2023, continues to demonstrate the Company's priorities of ensuring its team is healthy, incentivized, proud to work for MP Materials, and believes in the Company's mission.

Employees

Since relaunching production at Mountain Pass in July 2017, the Company has increased its full-time equivalent ("FTE") employee base from eight contractors in 2017 to 681 employees as of December 31, 2023, of which approximately 81% were field-based employees. This represents a 40% increase of FTE employees in 2023, on top of a 33% increase in 2022. None of the Company's employees are subject to any collective bargaining agreements. The Company is committed to creating employment opportunities for U.S. workers, and with the completion of the initial commissioning of Stage II, the Company has added approximately 200 employees over the past two years. In addition, the Company has hired 32 employees at its Fort Worth Facility in 2023 and plans for at least 100 additional full-time employees as part of Stage III.

Health, Safety and Well-Being

The health, safety, and well-being of the Company's employees, suppliers and communities are a priority, with "Safety" being one of the Company's six core values, along with "Empowerment," "Entrepreneurship," "Integrity," "Results," and "Unwavering" effort. MP Materials is committed to maintaining a strong safety culture and continuing to emphasize the importance of its employees' role in identifying, mitigating and communicating safety risks. To ensure the ongoing safety of employees and any contractors working on-site, the Company has a clear set of health and safety guidelines in place and routinely conducts general as well as equipment- and process-specific safety training. The Company believes that the achievement of superior safety performance is both an important short-term and long-term strategic imperative in managing its operations.

All newly-hired employees at Mountain Pass complete a minimum of 24 hours of Federal Mine Safety and Health Administration ("MSHA") training during the onboarding process and must, at a minimum, complete annual refresher training. Following their initial training, depending on their job classification, new employees complete targeted online and supervised field training specific to their roles and responsibilities. For example, operations and maintenance workers go through specific Lock Out/Tag Out/Try Out training, confined-space work and rescue, forklift classroom, and in-the-field training. In total, during 2023, the Company's employees completed over 22,000 hours of new hire and/or annual refresher training and 1,600 hours of emergency medical response training, including first aid and CPR.

The Company utilizes a formalized digital data reporting system to track all incidents reportable to the California Occupational Health and Safety Administration and MSHA. The Company tracks lost time injuries, recordable injuries, recordable injury rates, and near-miss reports. MP Materials strongly encourages the reporting of near-miss incidents so that it can mitigate hazards or change procedures to improve workforce safety in advance of any actual incident. As of December 31, 2023, the Company had completed over 1,300 days without a lost-time injury.

Diversity, Inclusion and Meritocracy

MP Materials believes that a diverse, inclusive and meritocratic workforce and Board of Directors produces better overall decision-making for employees, which benefits the organization. In addition to hiring employees with requisite skills, the Company has taken steps and will continue to strive to assemble a diverse and inclusive workforce. As of December 31, 2023, based on employees' self-reporting, veterans and women represented 4% and 17%, respectively, of the Company's workforce and 21% of managerial or supervisory positions were occupied by women. As of December 31, 2023, women represented 28%

of the Company's Board of Directors. Additionally, as of December 31, 2023, 49% of the Company's workforce was composed of underrepresented minorities.

Employee Engagement and Development

Employee engagement efforts are critical in ensuring all employees feel heard, respected and valued, and that applicable actions are taken when feedback is received. In the fourth quarter of 2023, the Company achieved professional certification for its engagement efforts, and will continue its focus on providing opportunities for employees to interact with executive management through events such as virtual town hall sessions, family days and routine stand-up briefings.

Methodical execution is key to ensuring Company goals are achieved and exceeded. To ensure the Company's employees receive the feedback they need to grow and thrive in their careers, MP Materials continually reviews and updates its performance-management processes. The Company ensures that new hires receive the feedback and support they need by scheduling periodic performance evaluations three to six months after their introductory periods. Managers hold reviews with all employees no less than annually to give them an opportunity to discuss work performance. This performance management process, rooted in the values of the organization, sets the foundation for applicable goal setting, individual development plans and career pathways going forward.

MP Materials is dedicated to the continual training and development of its employees, especially of those in field operations, to ensure the Company develops future managers and leaders from within its organization. The training starts on an employee's first day with on-boarding procedures that focus on safety, responsibility, ethical conduct and inclusive teamwork. In addition, the Company has partnered with educational institutions, governmental authorities and strategic outside organizations to further enhance and improve access to the talent required to advance the Company's mission. The Company also has an electrical and instrumentation apprenticeship program that pays for employees to attend trade school to increase their opportunity for future advancement.

Sustainability and Natural Resources

The Company's business provides a key input to carbon-reducing technologies critical for the transition to a low-carbon economy. Further, MP Materials is solving for the foreign-controlled overconcentration of the rare earth supply while helping to enable a more sustainable future. Sustainability at MP Materials means much more than maintaining environmentally conscious operations; it means caring for the health, safety, and well-being of our employees; encouraging a spirit of joint ownership, entrepreneurship, and continuous growth; supporting the communities that surround us; and operating with integrity. The Company recognizes that it has a responsibility to operate as efficiently as possible to reduce emissions.

The Company believes Mountain Pass is the world's cleanest and most environmentally sustainable rare earth production facility. Producing rare earth materials requires significant energy and resources and can lead to environmental challenges if not carefully managed. MP Materials understands that our natural resources, such as water, are precious and limited. As such, the Company is committed to limiting resource consumption, increasing efficiency, and achieving as light of an environmental footprint as possible. The Company does this, in part, by investing in water recycling, reducing reagent usage, implementing energy reduction initiatives, and utilizing a dry stack tailings process.

The Company believes it is unique among scaled rare earth producers in its use of a dry tailings process that allows recycling of the water used in the milling and flotation circuit and eliminates the need for high-risk wet tailings ponds and traditional impoundment dams. The Company's tailings and concentrate dewatering methods provide a closed-loop water resource for its beneficiation process satisfying approximately 95% of those processes' water needs at Mountain Pass. The Company also has a variety of initiatives underway at Mountain Pass to limit freshwater withdrawal and maximize recycling. In addition, the Company remains focused on ensuring the most efficient use of energy to minimize hydrocarbon consumption and greenhouse gas ("GHG") emissions.

The materials that the Company produces are essential to the supply chains for many technologies that help decarbonize the global economy, improve productivity in the workforce, and better the lives of many. Without MP Materials' conscientiously-mined materials, not only will the future of low-carbon technologies depend on more highly polluting traditional production methods, but the advanced research and development related to these vital applications and their manufacturing will continue to follow that supply overseas. MP Materials is restoring the resource independence of the U.S.— removing the single point-of-failure in the supply chain for these products and ensuring that American industry can determine its own future in the automotive, robotics, aerospace, renewable energy, and information technologies industries.

Customers

Currently, the Company sells the vast majority of its rare earth concentrate to Shenghe Resources (Singapore) International Trading Pte. Ltd. ("Shenghe") under the terms of the Offtake Agreement, which became effective in March 2022. Shenghe is an indirect majority-owned subsidiary of Shenghe Resources Holding Co., Ltd., a leading global rare earth company listed on the Shanghai Stock Exchange. Under the Offtake Agreement, Shenghe is contractually obligated to purchase the Company's rare earth concentrate product meeting certain minimum specifications as the exclusive distributor in China on a "take-or-pay" basis (such that they are obliged to pay for product even if they are unable or unwilling to take delivery), with certain exceptions for the Company's direct sales globally. Shenghe then sells the rare earth concentrate it acquires to customers in China for processing into refined products. In addition, at the discretion of the Company, Shenghe may be required to purchase on a "take-or-pay" basis certain non-concentrate rare earth products, although the Company may sell all non-concentrate rare earth products in its sole discretion to customers or end users in any jurisdiction. The Company also regularly enters into short- and long-term sales contracts with other customers for the sale of its rare earth concentrate.

In January 2024, the Company entered into a new offtake agreement with Shenghe (the "New Offtake Agreement"), that replaced and extended the Offtake Agreement. The initial term of the New Offtake Agreement is two years, with the option for the Company to extend the term for an additional one-year period. The terms of the New Offtake Agreement are substantially the same as those of the Offtake Agreement with the exception of the addition of NdPr metal into the definition of non-concentrate rare earth products.

In February 2023, the Company entered into a distributorship agreement (the "Distribution Agreement") with Sumitomo Corporation of Americas ("Sumitomo"), under which Sumitomo serves as the exclusive distributor of the NdPr oxide and NdPr metal produced by the Company to Japanese customers. The initial term of the Distribution Agreement extends through the end of 2025 with options to renew annually. The Company intends to enter into other short- and long-term sales contracts with existing and new customers for separated rare earth products.

In April 2022, as discussed above, the Company entered into a long-term agreement with GM to supply magnets and related products manufactured at the Fort Worth Facility. The Company is also pursuing sales opportunities to other customers for its future magnet products.

Suppliers

The Company uses certain proprietary chemical reagents in its flotation process, which it currently purchases from third-party suppliers. The hydrometallurgy, separations, and product finishing processes are reliant upon certain commodity reagents. These chemicals are subject to pricing volatility, supply availability and other restrictions and guidelines. In the event of a supply disruption or any other restriction, the Company believes that alternative reagents could be sourced for certain processes.

Patents, Trademarks and Licenses

The Company relies on a combination of trade secret protection, nondisclosure and licensing agreements, patents and trademarks to establish and protect its proprietary intellectual property rights. The Company utilizes trade secret protection and nondisclosure agreements to protect its proprietary rare earth technology.

Competition

The rare earth mining and processing markets are capital intensive and highly competitive. With continued state-sponsored consolidation, there remain two major rare earth groups in China. These groups and their affiliates control (and/or allocate to unaffiliated third parties) substantially all of China's quota for concentrate production and rare earth refining. Outside of China, there are few other producers operating at scale, with processing capabilities located in Australia and Malaysia.

Environmental and Regulatory Matters

The Company is subject to numerous federal, state and local environmental laws, certifications, regulations, permits, and other legal requirements applicable to the mining and mineral processing industry, including, without limitation, those pertaining to employee health and safety, air quality standards and emissions, water usage, wastewater and stormwater discharges, GHG emissions, hazardous and radioactive and other waste management, storage and handling of naturally occurring radioactive material, plant and wildlife protection, remediation of contamination, land use, reclamation and restoration of properties, procurement of certain materials used in the Company's operations, groundwater quality and the use of explosives. Environmental laws and regulation continue to evolve which may require the Company to meet stricter standards and give rise to greater enforcement, result in increased fines and penalties for non-compliance, and result in a heightened

degree of responsibility for companies and their officers, directors and employees. Future laws, regulations, permits or legal requirements, as well as the interpretation or enforcement of existing requirements, may require substantial increases in capital or operating costs to achieve and maintain compliance or otherwise delay, limit or prohibit operations, or other restrictions upon the Company's current or future operations, or result in the imposition of fines and penalties for failure to comply.

Complying with these regulations is complicated and requires significant attention and resources. The Company expects to continue to incur significant sums for ongoing operating environmental expenditures, including salaries, and the costs for monitoring, compliance, remediation, reporting, pollution control equipment and permitting.

Information About Our Executive Officers

The persons serving as executive officers of MP Materials and their positions with the Company are as follows:

Name	Age	Position
James H. Litinsky	46	Chairman of the Board and Chief Executive Officer
Michael Rosenthal	45	Chief Operating Officer
Ryan Corbett	34	Chief Financial Officer
Elliot Hoops	49	General Counsel and Secretary

James H. Litinsky. Mr. Litinsky is the Founder, Chairman and Chief Executive Officer of MP Materials. Mr. Litinsky is also the Founder, Chief Executive Officer and Chief Investment Officer of JHL Capital Group LLC ("JHL"), an alternative investment management firm. Before founding JHL in 2006, he was a member of the Drawbridge Special Opportunities Fund at Fortress Investment Group. Prior to Fortress, he was a Director of Finance at Omnicom Group, and he worked as a merchant banker at Allen & Company. Mr. Litinsky received a B.A. in Economics from Yale University, cum laude, and a J.D./M.B.A. from the Northwestern University School of Law and the Kellogg School of Management. He was admitted to the Illinois Bar. Mr. Litinsky also serves as a member of the Boards of the Shirley Ryan AbilityLab and the Museum of Contemporary Art Chicago.

Michael Rosenthal. Mr. Rosenthal is a Founder and the Chief Operating Officer of MP Materials. He has managed the Mountain Pass operation since the Company acquired the site in 2017. Before MP Materials, he was a Partner at QVT Financial ("QVT"), an investment management firm. At QVT, Mr. Rosenthal concentrated on investments in the global automotive sector and in China. Prior to joining QVT, he worked as a senior high yield credit analyst for Shenkman Capital Management. Mr. Rosenthal graduated from Duke University with an A.B. degree in Economics and Comparative Area Studies.

Ryan Corbett. Mr. Corbett joined MP Materials as its Chief Financial Officer in 2019. Prior to joining MP Materials, he was a Managing Director at JHL, where he focused on JHL's investment in MP Materials. Before JHL, Mr. Corbett was a member of alternative asset managers Brahman Capital Corp. and King Street Capital Management LP, both based in New York, where he focused on special situations investments across the capital structure. Mr. Corbett began his career in investment banking and corporate finance at Morgan Stanley & Co. after graduating magna cum laude from the Wharton School of the University of Pennsylvania with a concentration in Finance.

Elliot Hoops. Mr. Hoops joined MP Materials as its General Counsel and Secretary in May 2021. Prior to joining MP Materials, he was Vice President and Deputy General Counsel at Penn National Gaming, Inc. (now known as PENN Entertainment, Inc. ("PENN")), a regional gaming company, from January 2019 to May 2021, where he was responsible for a variety of legal matters, including commercial transactions, financings, corporate governance, securities law and gaming regulatory compliance. Prior to joining PENN, he was Vice President and Legal Counsel at Pinnacle Entertainment, Inc. ("Pinnacle"), a regional gaming company (which was acquired by PENN), from June 2007 to October 2018. Prior to Pinnacle, he was an associate at Holland and Knight LLP and an attorney advisor with the U.S. Securities and Exchange Commission (the "SEC"). Mr. Hoops received his B.A. in English from the University of Michigan, J.D. from the University of Miami, and LL.M. in Securities and Financial Regulation from Georgetown University Law Center.

Available Information

The Company's website is located at www.mpmaterials.com. Annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, proxy and information statements, earnings releases, and financial statements are made available free of charge on the investor relations section of the Company's website as soon as reasonably practicable after the Company electronically files such materials with, or furnishes such materials to, the SEC. The Company's Code of Business Conduct and Ethics is also available on the investor relations section of its website. The information contained on its website, or accessible from its website, is not incorporated into, and should not be considered part

of, this Form 10-K or any other documents the Company files with, or furnishes to, the SEC. The SEC maintains an internet site (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Annual reports, quarterly reports, current reports, amendments to those reports, proxy and information statements, earnings releases, financial statements and the Company's various corporate governance documents, including its Code of Business Conduct and Ethics, are also available free of charge upon written request.

Investors and others should note that the Company may announce material financial information to its investors using its investor relations website (https://investors.mpmaterials.com/overview), SEC filings, press releases, public conference calls and webcasts. The Company uses these channels as well as social media to communicate with its stockholders and the public about the Company, its services and other issues. It is possible that the information the Company posts on social media could be deemed to be material information. Therefore, the Company encourages investors, the media, and others interested in MP Materials to review the information the Company posts on the social media channels listed on its investor relations website.

Other

The Company was incorporated on January 24, 2020, as a Delaware corporation under the name "Fortress Value Acquisition Corp." ("FVAC") and formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with one or more businesses. On November 17, 2020, the Company consummated the transactions contemplated by the Agreement and Plan of Merger, dated as of July 15, 2020, as amended on August 26, 2020 (the "Merger Agreement"), by and among FVAC, certain direct wholly-owned subsidiaries of FVAC, MP Mine Operations LLC, a Delaware limited liability company ("MPMO"), which owns the Mountain Pass mine and processing facilities, and Secure Natural Resources LLC, a Delaware limited liability company ("SNR"), which holds the mineral rights to the Mountain Pass mine and surrounding areas as well as intellectual property rights related to the processing and development of rare earth minerals. Pursuant to the Merger Agreement, among other things, MPMO and SNR each became wholly-owned subsidiaries of FVAC (the "Business Combination"), which was in turn renamed "MP Materials Corp."

ITEM 1A. RISK FACTORS

Investing in our securities involves a high degree of risk. Investors should carefully consider the risks described below and all of the other information we file with the SEC before deciding to invest in our common stock. If any of the events or developments described below occur, our business, prospects, financial condition, or results of operations could be materially or adversely affected. As a result, the market price of our common stock could decline, and investors could lose all or part of their investment. The risks and uncertainties described below are not the only risks and uncertainties that we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. The risks discussed below also include forward-looking statements, and our actual results may differ substantially from those discussed in these forward-looking statements. See "Cautionary Note Regarding Forward-Looking Statements" above.

Risk Factor Summary

Our business is subject to a number of risks and uncertainties, including those highlighted immediately following this summary. Some of these risks are:

- We may be adversely affected by fluctuations in demand for, and prices of, REE and magnet materials.
- The success of our business will depend, in part, on the growth of existing and emerging uses for rare earth products.
- An increase in the global supply of rare earth products, dumping, predatory pricing and other tactics designed to inhibit our further downstream integration by our competitors may materially adversely affect our profitability.
- We operate in a highly competitive industry.
- Our ability to generate revenue will be diminished if we are unable to compete with substitutions for our rare earth materials.
- We currently rely on Shenghe to purchase the vast majority of our rare earth concentrate product on a "take-or-pay" basis and sell that product to end users in China; we cannot assure you that they will continue to honor their contractual obligations to purchase and sell our products, or that they will make optimum efforts to market and sell our products.

- Changes in China's political environment and policies, including changes in export policy or the interpretation of China's export policy and policy on rare earths production or the import of rare earth feedstock, may adversely affect our financial condition and results of operations.
- The production of rare earth products is a capital-intensive business that requires the commitment of substantial resources; if we do not have sufficient resources to provide for such production, it could have a material adverse effect on our financial condition or results of operations.
- Our continued growth depends on our ability to reach anticipated production rates for the separation of REE as part of the Stage II project at Mountain Pass, our only rare earth mining and processing facility.
- The production of magnet materials in Stage III is dependent upon our ability to complete the buildout of our Fort Worth Facility; an unanticipated delay in the completion of Stage III could have a material adverse effect on our ability to produce magnets.
- If we infringe, or are accused of infringing, the intellectual property rights of third parties, it may increase our costs or prevent us from being able to commercialize new products.
- We may not be able to adequately protect our intellectual property rights. If we fail to adequately enforce or defend our intellectual property rights, our business may be harmed.
- If we are unable to perform the obligations under our long-term supply agreement with GM, this could have a material adverse effect on our financial position and results of operations.
- We may not be able to convert current commercial discussions with customers for the sale of REO products into contracts, which may have a material adverse effect on our financial position and results of operations.
- We may not successfully establish or maintain collaborative, joint venture and licensing arrangements, which could adversely affect our ability to vertically integrate into further downstream processing of our REO.
- Outbreaks, epidemics or pandemics could have an adverse effect on our business.
- We are subject to a number of operational risks of our business, including power outages or shortages at the Mountain Pass facility; increasing costs or limited access to raw materials; disruptions in transportation or other services; inability to process REO that meet individual customer specifications; access to water; uncertainty in our estimates of REO reserves; labor matters/labor relations; cybersecurity breaches; and/or environmental, social and governance ("ESG") matters.
- We are subject to regulatory and business risks associated with our investment in VREX Holdco Pte. Ltd. ("VREX Holdco").
- The conditional conversion feature of our Convertible Notes (as defined in Note 10, "Debt Obligations" in the notes to the Consolidated Financial Statements), if triggered, may adversely affect our financial condition and operating results.
- Conversion of our Convertible Notes may dilute the ownership interest of our stockholders or may otherwise depress the price of our common stock.
- Certain provisions in the indenture governing the Convertible Notes may delay or prevent an otherwise beneficial takeover attempt of us.
- Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our debt.

Risks Relating to our Business and Industry

We may be adversely affected by fluctuations in demand for, and prices of, REE and magnet materials.

Because our revenue is, and will be for the foreseeable future, from the sale of rare earth products, changes in demand for, and the market price of, and taxes and other tariffs and fees imposed upon REE and magnet materials could significantly affect our profitability. Our financial results may be significantly adversely affected by declines in the prices of REE and magnet materials. For example, as a result of the decrease in the market price of NdPr oxide in 2023, our Realized Price per REO MT (as defined in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations) decreased from $11,974 for the year ended December 31, 2022, to $6,854 for the year ended December 31, 2023, which negatively impacted our results of operations and cash flows.

REE and magnet material prices may fluctuate and are affected by numerous factors beyond our control such as interest rates, exchange rates, taxes, inflation or deflation, fluctuation in the relative value of the U.S. dollar against foreign currencies

on the world market, shipping and other transportation and logistics costs, global and regional supply and demand for rare earth minerals and products, potential industry trends, such as competitor consolidation or other integration methodologies, and the political and economic conditions of countries that produce and procure REE and magnet materials. Furthermore, supply side factors have a significant influence on price volatility for REE and magnet materials. Supply of REE and magnet materials is dominated by Chinese producers. The Chinese Central Government regulates production via quotas and environmental standards, and, to a lesser extent, regulation of imports, and has and may continue to change such production quotas, environmental standards, and import regulations. Over the past few years, there has been significant restructuring of the Chinese market in line with Chinese Central Government policy; however, periods of over-supply or speculative trading of REE and magnet materials can lead to significant fluctuations in the market price of such products.

A prolonged or significant economic contraction in the U.S., China, or worldwide could put downward pressure on market prices of REE and magnet materials. Protracted periods of low prices for REE and magnet materials could significantly reduce revenues and the availability of required development funds in the future. This could cause substantial reductions to, or a suspension of, REO production operations, impair asset values and reduce our proven and probable rare earth ore reserves.

Demand for our products may be impacted by demand for downstream products incorporating rare earths, including hybrid and electric vehicles, wind turbines, robotics, medical equipment, military equipment and other high-growth, advanced motion technologies, as well as demand in the general automotive and electronics industries. Lack of growth in these markets may adversely affect the demand for our products.

In contrast, extended periods of high commodity prices may create economic dislocations that may be destabilizing to REE and magnet material supply and demand and ultimately to the broader markets. Periods of high REE market prices generally are beneficial to our financial performance. However, strong REE prices also create economic pressure to identify or create alternate technologies that ultimately could depress long-term demand for rare earth minerals and products, and at the same time may incentivize development of competing mining properties.

The success of our business will depend, in part, on the growth of existing and emerging uses for rare earth products.

Our strategy is to produce REE and magnet products that are used in critical existing and emerging technologies, such as hybrid and electric vehicles, wind turbines, robotics, medical equipment, military equipment and other high-growth, advanced motion technologies. The success of our business depends on the continued growth of these end markets and the successful commercialization of rare earth products, including NdPr, in such markets. If the market for these critical existing and emerging technologies does not grow as we expect, grows more slowly than we expect, or if the demand for our products in these markets decreases, then our business, prospects, financial condition and operating results could be harmed. In addition, the market for these technologies, particularly in the automotive industry, tends to be cyclical, which exposes us to increased volatility, and it is uncertain as to how such macroeconomic factors will impact our business. Any unexpected costs or delays in the manufacturing of separated REE products or rare earth magnets, or less than expected demand for the critical existing and emerging technologies that use rare earth products, could have a material adverse effect on our financial condition or results of operations.

An increase in the global supply of rare earth products, dumping, predatory pricing and other tactics designed to inhibit our further downstream integration by our competitors may materially adversely affect our profitability.

The pricing and demand for rare earth products is affected by a number of factors beyond our control, including the global macroeconomic environment and the global supply and demand for REO products. China accounts for the significant majority of global separated REO production and also dominates the manufacture of metals and NdFeB magnets from rare earths, capabilities that are not currently present in the U.S. Over the past few years, there has been significant restructuring of the Chinese rare earth production industry, further centralizing control over production by state-owned enterprises. Chinese competitors may engage in predatory pricing or other behaviors designed to inhibit our further downstream integration. Any increase in the amount of rare earth products exported from other nations and increased competition may result in price reductions, reduced margins or loss of potential market share, any of which could materially adversely affect our profitability. As a result of these factors, we may not be able to compete effectively against current and future competitors.

We operate in a highly competitive industry.

The rare earth mining and processing and magnet manufacturing industry is capital intensive with competitive market dynamics. Production of REE and magnet products is dominated by our Chinese competitors. These competitors may have greater financial resources, as well as other strategic advantages to operate, maintain, improve and possibly expand their facilities. Additionally, our Chinese competitors have historically been able to produce at relatively low costs due to domestic economic and regulatory factors, including less stringent environmental and governmental regulations and lower labor and

benefit costs. If we are not able to achieve consistent product quality at our anticipated costs of production, then any strategic advantages that our competitors may have over us, including, without limitation, lower labor, compliance and production costs, could have a material adverse effect on our business.

Industry consolidation may result in increased competition, which could result in a reduction in revenue.

Some of our competitors have made, or may make, acquisitions or enter into partnerships or other strategic relationships to achieve competitive advantages. In addition, new entrants not currently considered competitors may enter our market through acquisitions, partnerships or strategic relationships. We expect these trends to continue as demand for rare earth materials increases. Industry consolidation may result in competitors with more compelling product offerings or greater pricing flexibility than we have, or business practices that make it more difficult for us to compete effectively, including on the basis of price, sales, technology or supply. For example, in December 2021, China merged three state entities to establish the China Rare Earth Group Co. Ltd ("China Rare Earth Group"), that will account for more than half of China's heavy rare earths supplies. China Rare Earth Group will have enhanced pricing power of key rare earths, such as dysprosium and terbium, which will likely bring changes to the global rare earth supply chain. These competitive pressures could have a material adverse effect on our business.

Our ability to generate revenue will be diminished if we are unable to compete with substitutions for our rare earth materials.

Technology changes rapidly in the industries and end markets that utilize our materials. If these industries introduce new technologies or products that no longer require the rare earth materials or NdFeB magnets we produce or may produce in the future, or suitable substitutes become available, this could result in a decline in demand for our rare earth materials or NdFeB magnets. If the demand for our rare earth materials or NdFeB magnets decreases, it will have a material adverse effect on our business and the results of our operations.

We currently rely on Shenghe to purchase the vast majority of our rare earth concentrate product on a "take-or-pay" basis and sell that product to end users in China; we cannot assure you that they will continue to honor their contractual obligations to purchase and sell our products, or that they will make optimum efforts to market and sell our products.

We currently sell the vast majority of our rare earth concentrate to Shenghe, which typically sells that product to refiners in China. Demand for rare earth concentrate is currently constrained to a relatively limited number of refiners, a significant majority of which are based in China. While Shenghe is obligated under the Offtake Agreement to purchase all of the rare earth concentrate product meeting certain minimum specifications on a "take-or-pay" basis (such that they are obliged to pay for product even if they are unable or unwilling to take delivery), we cannot guarantee that Shenghe will continue to purchase all of the products that it is contractually bound to purchase or that they will purchase products that do not meet these specifications. In January 2024, the Company entered into the New Offtake Agreement that replaced and extended the Offtake Agreement. The initial term of the New Offtake Agreement is two years, with the option for the Company to extend the term for an additional one-year period. The terms of the New Offtake Agreement are substantially the same as those of the Offtake Agreement with the exception of the addition of NdPr metal into the definition of non-concentrate rare earth products.

Further, Shenghe sells the rare earth concentrate it acquires under the Offtake Agreement to customers in China who separate and extract the individual rare earth elements. We do not control the amount and timing of resources that Shenghe will dedicate to their sales efforts. Therefore, any decline or delay in Shenghe's sales efforts could reduce sales prices or sales volumes, which could have an adverse impact on our results of operations.

Changes in China's political environment and policies, including changes in export policy or the interpretation of China's export policy and policy on rare earths production or the import of rare earth feedstock, may adversely affect our financial condition and results of operations.

Because the vast majority of our rare earth concentrate product is currently sold to Shenghe under our Offtake Agreement for further processing by third-party customers in China, the possibility of adverse changes in trade or political relations with China, political instability in China, increases in labor or shipping costs, subsidies to related industries, the occurrence of prolonged adverse weather conditions or a natural disaster such as an earthquake or typhoon, or an outbreak of a global pandemic disease could severely interfere with the sale and/or shipment of our products and would have a material adverse effect on our operations.

Our sales may be adversely affected by the current and future political environment in China and the policies of the China Central Government. China's government has exercised and continues to exercise substantial control over many sectors of the Chinese economy through regulation and state ownership. Our ability to sell products to customers in China or obtain materials from suppliers in China may be adversely affected by changes in Chinese laws and regulations, including those relating to

taxation, import and export tariffs and regulations, raw materials, environmental regulations, land use rights, property and other matters. The U.S. Government has instituted substantial changes to foreign trade policy with China and has assessed punitive tariffs on many categories of Chinese goods. China has retaliated with increased tariffs on U.S. goods. Any further changes in U.S. trade policy could trigger retaliatory actions by affected countries, including China, resulting in trade wars. Any changes in U.S. and China relations, including through changes in policies by the Chinese government, could adversely affect our financial condition and results of operations, including changes in laws, regulations or the interpretation thereof, confiscatory taxation, governmental royalties, restrictions on currency conversion, imports or sources of supplies, or the expropriation or nationalization of private enterprises.

In addition, there may be circumstances where we may have to incur premium freight charges to expedite the delivery of our products to customers to overcome non-tariff restrictions or due to evolving rules or delays at the ports that we typically utilize. If we incur a significant amount of freight charges, our gross profit will be negatively affected if we are unable to pass on those charges to customers. In addition, we may be adversely affected by the need to ship to alternative ports. This could lead to potential delays in the transportation of our goods, which may occur for any reason or as they are affected by domestic or international laws and regulations, taxation, import and export tariffs, environmental regulations, customs and other relevant factors.

The production of rare earth products is a capital-intensive business that requires the commitment of substantial resources; if we do not have sufficient resources to provide for such production, it could have a material adverse effect on our financial condition or results of operations.

Our ability to reach anticipated production rates as part of our Stage II project at Mountain Pass, the completion of our Stage III project, as well as the execution of other capital projects such as the HREE Facility, all require the commitment of substantial resources and capital expenditures. Our estimated expenses may increase for a variety of factors, including as a result of inflationary pressures in the U.S. The progress, the amounts and timing of expenditures and the success of these projects will depend in part on the following: (a) the ability of the Stage II facilities to separate REO as designed and engineered; (b) our ability to timely produce metal at the metal processing plant and related facilities in Vietnam under our tolling agreement with VREX Holdco (the "Tolling Agreement"); (c) our ability to timely procure new equipment and materials, certain of which may involve long lead-times, or to repair existing equipment; (d) the ability of service providers or vendors to meet contractually-negotiated delivery or completion deadlines or meet performance specifications or guarantees; (e) maintaining, and procuring, as required, applicable federal, state and local permits; (f) the incorporation of project change orders, due to engineering, process, health and safety, or other considerations; (g) negotiating contracts for equipment, earthwork, construction, equipment installation, labor and completing infrastructure and construction work following commissioning; (h) impact of planned and unplanned shut-downs and delays in our production; (i) impact of stoppages or delays on construction projects; (j) disputes with contractors or other third parties; (k) negotiating sales and offtake contracts for our planned production; (l) the execution of any joint venture agreements or similar arrangements with strategic partners; and (m) other factors, many of which are beyond our control.

Most of these activities require significant lead times and must be advanced concurrently. Unanticipated costs or delays could have a material adverse effect on our financial condition or results of operations and could require us to seek additional capital, which may not be available on commercially acceptable terms or at all.

Our continued growth depends on our ability to reach anticipated production rates for the separation of REE as part of the Stage II project at Mountain Pass, our only rare earth mining and processing facility.

Our only rare earth mining and processing facility at this time is Mountain Pass. Our continued growth is based on reaching anticipated production rates for the separation of REE in accordance with our expected timeframe. The deterioration or destruction of any part of Mountain Pass, or a failure of any necessary equipment to operate as designed, may significantly hinder our ability to reach or maintain anticipated production rates within the expected timeframe or at all. If we are unsuccessful in reaching and maintaining expected production rates for REO at Mountain Pass, including by failing to reach anticipated throughput, recoveries, uptimes, yields, product quality, or any combination thereof, within expected timeframes or at all, we may not be able to reach our full revenue potential or achieve our anticipated cost structure.

The production of magnet materials in Stage III is dependent upon our ability to complete the buildout of our Fort Worth Facility; an unanticipated delay in the completion of Stage III could have a material adverse effect on our ability to produce magnets.

In February 2022, we commenced construction of our initial rare earth metal, alloy and magnet manufacturing facility in Fort Worth, Texas, in support of our Stage III initiatives. The building portion of the Fort Worth Facility was completed in 2023. However, the Fort Worth Facility requires substantial capital for equipment purchases, installation, and commissioning,

and there may be unanticipated costs or delays associated with these activities. In addition, our ability to reach our full revenue potential will be dependent on our ability to finish the buildout of our Fort Worth Facility and commence the production of magnet materials. Our proposed timeline for producing magnet materials is based on certain estimates and assumptions we have made about our business over the next few years, including reaching anticipated production rates for the separation of REE and the ability to obtain equipment on a timely basis from third party vendors. If any of these estimates or assumptions prove to be wrong, it may significantly hinder our ability to complete the Fort Worth Facility within the expected time frame or at all. If we are unsuccessful in being able to commence production at our Fort Worth Facility, within the expected time frame or at all, we will not be able to take advantage of our downstream value creation opportunity and thus we may not be able to reach our full revenue potential.

If we infringe, or are accused of infringing, the intellectual property rights of third parties, it may increase our costs or prevent us from being able to commercialize new products.

There is a risk that we may infringe, or may be accused of infringing, the proprietary rights of third parties under patents and pending patent applications belonging to third parties that may exist in the U.S. and elsewhere in the world that relate to our rare earth products and processes, including our planned future production of magnet materials in Stage III. Because the patent application process can take several years to complete, there may be currently pending applications that may later result in issued patents that cover our products and processes. In addition, our products and processes may infringe existing patents.

Defending ourselves against third-party claims would be costly and time consuming and would divert management's attention from our business, which could lead to delays in our Stage III downstream expansion. If third parties are successful in their claims, we might have to pay substantial damages or take other actions that are adverse to our business. As a result of intellectual property infringement claims, or to avoid potential claims, we might:

- be prohibited from, or delayed in, selling rare earth products, including magnet materials, or licensing some of our products or using some of our processes unless the patent holder licenses the patent to us, which it is not required to do;
- be required to pay substantial royalties or grant a cross license to our patents to another patent holder; or
- be required to redesign a product or process so it does not infringe a third party's patent, which may not be possible or could require substantial funds and time.

In addition, we could be subject to claims that our employees, or we, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of third parties.

If we are unable to resolve claims that may be brought against us by third parties related to their intellectual property rights on terms acceptable to us, we may be precluded from offering some of our products or using some of our processes.

We may not be able to adequately protect our intellectual property rights. If we fail to adequately enforce or defend our intellectual property rights, our business may be harmed.

Much of the technology used in the markets in which we compete is protected by patents and trade secrets, and our commercial success will depend in significant part on our ability to obtain and maintain patent and trade secret protection for our products and methods. To compete in these markets, we rely on a combination of trade secret protection, nondisclosure and licensing agreements, patents and trademarks to establish and protect our proprietary intellectual property rights, including our proprietary rare earth production processes that are not patented. Our intellectual property rights may be challenged or infringed upon by third parties, or we may be unable to maintain, renew or enter into new license agreements with third-party owners of intellectual property on reasonable terms. In addition, our intellectual property may be subject to infringement or other unauthorized use outside of the U.S. In such case, our ability to protect our intellectual property rights by legal recourse or otherwise may be limited, particularly in countries where laws or enforcement practices are undeveloped or do not recognize or protect intellectual property rights to the same extent as the U.S. Unauthorized use of our intellectual property rights or our inability to preserve existing intellectual property rights could adversely impact our competitive position and results of operations. The loss of our patents could reduce the value of the related products. In addition, the cost to litigate infringements of our patents, or the cost to defend ourselves against patent infringement actions by others, could be substantial and, if incurred, could materially affect our business and financial condition.

Proprietary trade secrets and unpatented know-how are also very important to our business. We rely on trade secrets to protect certain aspects of our technology, especially where we do not believe that patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. Our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our confidential information to competitors, and confidentiality

agreements may not provide an adequate remedy in the event of unauthorized disclosure of confidential or proprietary information. It is expensive and time consuming, with no certain outcome, to pursue a claim that a third party illegally obtained and is using our trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. Failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

We may not be able to obtain additional patents and the legal protection afforded by any additional patents may not adequately protect our rights or permit us to gain or keep any competitive advantage.

Our ability to obtain additional patents is uncertain and the legal protection afforded by these patents is limited and may not adequately protect our rights or permit us to gain or keep any competitive advantage. In addition, the specific content required of patents and patent applications that are necessary to support and interpret patent claims is highly uncertain due to the complex nature of the relevant legal, scientific and factual issues. Changes in either patent laws or interpretations of patent laws in the U.S. or elsewhere may diminish the value of our intellectual property or narrow the scope of our patent protection. Even if patents are issued regarding our products and processes, our competitors may challenge the validity of those patents. Patents also will not protect our products and processes if competitors devise ways of making products without infringing our patents.

If we are unable to perform the obligations under our long-term supply agreement with GM, this could have a material adverse effect on our financial position and results of operations.

We entered into a binding long-term supply agreement with GM. Our ability to fulfil the obligations under our long-term agreement with GM to supply them with magnet materials is subject to a number of risks and contingencies. We are embarking on building the first scaled rare earth magnet manufacturing facility in the U.S. in several decades. While we will be relying on a number of experienced engineers and other third parties in the design, engineering and construction of the Fort Worth Facility, we will be making a number of judgments and assumptions on process design, equipment selection and design, and plant operations, that may or may not prove to be correct. Design, engineering or construction delays may impair our ability to perform under our long-term supply agreement with GM. In addition, we will need to procure the necessary equipment and materials needed to produce magnets and their precursor materials, some of which may be difficult to obtain. There can be no assurance that such equipment and materials will be procured on time or not be delayed due to circumstances beyond our control.

Further, we will need to hire a sufficient number of engineers, operators and other professionals to successfully design and operate the Fort Worth Facility. It may be difficult for us to hire employees with the experience, education and skills needed to produce magnet materials, and we may need to hire employees from other countries if we cannot recruit employees in the U.S. We will also face competition for these employees.

There can be no assurance that, following the completion of construction of the Fort Worth Facility, we will obtain the equipment and materials needed and hire the necessary employees in order to successfully produce magnet materials at the volumes and quality necessary to meet the requirements under our long-term supply agreement with GM. In the event that we are not able to mitigate these risks and fail to comply with the terms of the agreement with GM, this could have a material adverse effect on our financial position and results of operations.

We may not be able to convert current commercial discussions with customers for the sale of REO products into contracts, which may have a material adverse effect on our financial position and results of operations.

In 2023, we completed construction and the initial commissioning of our Stage II project, which included installing a concentrate drying and roasting circuit, upgrading and restarting the product leaching circuit, recommissioning separation and extraction circuits, improving materials handling and brine management capability, and constructing new product finishing circuits to re-establish the full capability to produce separated rare earth products at Mountain Pass. Upon reaching anticipated production rates for REO and other planned downstream products at Mountain Pass, we expect to produce approximately 20,000 MTs of separated REO per year, which includes approximately 6,075 MTs of NdPr oxide per year, excluding cerium concentrate. Prior to reaching expected production rates for REO and other planned downstream products at Mountain Pass, we intend to enter into short- and long-term sales contracts with new customers. However, there can be no assurance that these customers will enter into sales contracts for REO. The failure to enter into such contracts may have a material adverse effect on our financial position and results of operations.

We may not successfully establish or maintain collaborative, joint venture and licensing arrangements, which could adversely affect our ability to vertically integrate into further downstream processing of our REO.

A key element of our long-term business strategy is to vertically integrate into further downstream processing of our REO into rare earth metal, alloys, and finished magnets. To implement this vertical integration strategy successfully, we may need to

license certain intellectual property related to these downstream processes and/or develop the ability, or collaborate with, purchase, or form a joint venture with existing participants in the metal, alloy, and magnet production supply chain. In addition, other licenses that may be necessary for some of these downstream processing steps have not yet been obtained. Any failure to establish or maintain collaborative, joint venture or licensing arrangements for the production of downstream products on favorable terms could adversely affect our business prospects, financial condition or ability to develop and commercialize downstream rare earth products.

Outbreaks, epidemics or pandemics could have an adverse effect on our business.

Outbreaks of infectious diseases, epidemics or pandemics can significantly impact the national and global economy and commodity and financial markets. Impacts may include, among other things, extreme volatility in financial markets, a slowdown in economic activity, extreme volatility in commodity prices and a global recession. Outbreaks, epidemics or pandemics may lead to significant restrictions on travel, temporary business closures, quarantines, and a general reduction in consumer activity and sentiment globally and may impact our business and operations by, among others, increasing the cost of operations, causing shipping delays, reducing employee productivity, limiting travel of our personnel, adversely affecting the health and welfare of our personnel, or preventing or delaying important third-party service providers from performing normal and contracted activities crucial to the operation of our business.

Decisions beyond our control, such as canceled events, restricted travel, barriers to entry, temporary closures or limited availability of county, state or federal government agencies, or other factors may affect our ability to perform mining operations, corporate activities, and other actions that would normally be accomplished without such limitations. The extent to which an outbreak, epidemic or pandemic will impact our operations, our business and the economy is highly uncertain and will also depend on future developments that cannot be predicted, including new information which may emerge concerning the severity of the disease, the duration and spread of the outbreak, including the spread of variants, the scope of travel restrictions imposed, mandatory or voluntary business closures, the impact on businesses and financial and capital markets, and the extent and effectiveness of actions taken throughout the world to contain the virus or treat its impact, including the effectiveness and availability of vaccines. We cannot predict the impact of an outbreak, epidemic or pandemic, but it may materially and adversely affect our business, financial condition and results of operations.

A power outage or shortage at Mountain Pass could temporarily delay mining and processing operations and increase costs, which may materially adversely impact our business.

Our facilities at Mountain Pass are currently powered by a natural gas-powered combined heat and power ("CHP") plant that produces electricity and steam and eliminates reliance on the regional electric power grid. Operation of the CHP plant is necessary to support the entire energy demand of Stage II. While we believe that the CHP plant will provide sufficient electricity and steam to operate our facilities at Mountain Pass, there can be no assurance that there will not be intermittent interruptions in the ability to produce electricity and steam. Instability in electrical supply could cause sporadic outages or brownouts. Any such outages or brownouts could have a negative impact on our production. If the CHP plant is unable to provide sufficient energy for the operation of Mountain Pass or if additional growth projects require energy needs in excess of CHP capacity, we may be required to obtain electricity from a single utility company in Southern California. We could incur higher operating costs, remain subject to the effects of occasional grid power outages and brownouts, and could experience temporary interruptions of processing operations. As a result, our revenue could be adversely impacted and our relationships with our customers could suffer, adversely impacting our ability to generate future revenue and otherwise perform our contractual obligations.

Increasing costs or limited access to raw materials may adversely affect our profitability.

We use significant amounts of chemical reagents to process REE. Though we may enter into long-term purchase agreements, chemical reagents sourced from third parties may be subject to significant volatility in cost and availability. In addition, third parties may not honor their agreements with us and/or declare force majeure, and as a result, we may need to obtain such chemical reagents from other parties at higher costs and expense and there may be a delay in obtaining such chemical reagents. Further, supply chains reliant on sea vessels, train, and/or truck may subject us to transportation delays in obtaining these chemical reagents. We also may not be able to store such chemical reagents without incurring substantial costs. We may not be able to pass increased costs for these chemical reagents through to our customers in the form of price increases. The Mountain Pass site includes a currently idle chlor-alkali facility that may be restarted in the future to produce hydrochloric acid, sodium hydroxide, and sodium hypochlorite. A significant increase in the price or decrease in the availability of these chemicals before we potentially restart our production of them on-site, or restrictions imposed by environmental regulations or law on chemical use, could materially increase our operating costs and adversely affect our profit margins and production volumes. There can be no assurance that we will be able to purchase the necessary chemical reagents from third parties on

terms that are acceptable to us. The failure to obtain chemical reagents as needed will have an adverse effect on our financial condition and results of operations.

Fluctuations in transportation costs or disruptions in transportation services or damage or loss during transport could decrease our competitiveness or impair our ability to supply REE or magnet products to our customers, which could adversely affect our results of operations.

We currently transport our rare earth concentrate and NdPr oxide products via ocean freight. At times during 2021 and 2022, there was a backlog of container ships off the coast of Southern California that delayed shipments in and out of the ports of Los Angeles and Long Beach, the ports that we use to ship our rare earth concentrate product. While we managed to mitigate these intermittent delays in shipping rare earth concentrate product through these ports, our ability to continue to maintain stable shipments may be impacted if port delays due to congestion return or worsen.

In addition, we will in the future need to transport our products to our future customers and our tollers wherever they may be located. Finding affordable and dependable transportation is necessary for us to be able to supply customers around the world. Labor disputes, embargoes, government restrictions, work stoppages, pandemics, derailments, damage or loss events, adverse weather conditions, other environmental events, seasonal changes in supply and demand for transportation, changes to rail or ocean freight systems, domestic or international laws or regulations, permits or other approvals, or other events and activities beyond our control could interrupt or limit available transport services, which could result in customer dissatisfaction and loss of sales and could materially adversely affect our results of operations. Such events and conditions, including flooding and other natural disasters, could also impact the facilities of our customers which could have a material adverse effect on our ability to deliver our product to our customers.

We will need to process REE to exacting specifications in order to provide future customers with a consistently high-quality product. An inability to process REO that meet individual customer specifications may have a material adverse effect on our financial condition or results of operations.

With the commencement of Stage II operations, we expect to be able to process REE to meet customer needs and specifications and to provide customers with a consistently high-quality product while meeting ever-stricter purity requirements. We have limited experience operating our Stage II assets. In the event that certain equipment fails to consistently perform as designed or we are unable to maintain consistent uptime, we may struggle to meet individual customer specifications, which may have a material adverse effect on our financial condition or results of operations. In addition, customer needs and specifications may change with time. Any delay or failure in developing processes to meet changing customer needs and specifications may have a material adverse effect on our financial condition or results of operations.

Diminished access to water may adversely affect our operations.

Processing of REO requires significant amounts of water. The technology we currently use to beneficiate REO is a sustainable process with dry tailings that limits the need for fresh water usage. Although we believe our current process is sustainable, any disruption in the process could prompt the need for significant access to fresh water. Additionally, with the commencement of Stage II operations, we require an even greater amount of water for our CHP plant, separation and extraction processes, and product finishing operations, including significant demand for highly-pure water. We maintain and operate one water supply well field for potable and process water and own land and wells in another water supply well field that we may be able to operate in the future. In addition, significant volumes of water are recycled from process brine to reduce ground water usage. Any disruption to our current process, including our water treatment plant used to make highly-pure water, decreases in available water supply, or inability to recycle sufficient volumes of distillate may have a material adverse effect on our operations and our financial condition or results of operations.

We face regulatory and business risks associated with our investment in VREX Holdco.

We own a minority interest in VREX Holdco, a Singapore company. An entity affiliated with Shenghe is the majority shareholder of VREX Holdco. VREX Holdco owns Vietnam Rare Earth Company Limited (“VREX”), which owns and operates a metal processing plant and related facilities in Vietnam. As a minority shareholder of VREX Holdco, our ability to control the management, record-keeping, operations and decision-making of VREX Holdco is limited.

VREX Holdco’s operations are subject to the significant business, economic, regulatory and competitive uncertainties and contingencies frequently encountered by new businesses and other risks, many of which are beyond VREX Holdco’s or our control. Because VREX Holdco has limited operating history, it may be more difficult for them to prepare for and respond to these types of risks than for a company with an established business and operating cash flow.

VREX Holdco has operations outside the United States, which exposes us to complex foreign and U.S. regulations inherent in doing business in Vietnam. We are subject to regulations imposed by the Foreign Corrupt Practices Act (the "FCPA"), and other anti-corruption laws that generally prohibit U.S. companies and their intermediaries from offering, promising, authorizing or making improper payments to foreign government officials for the purpose of obtaining or retaining business. Violations of the FCPA and other anti-corruption laws may result in severe criminal and civil sanctions as well as other penalties. The SEC and U.S. Department of Justice in recent years have increased their enforcement activities with respect to the FCPA.

Internal control policies and procedures and the compliance program that VREX Holdco has implemented to deter prohibited practices may not be effective in prohibiting its employees, contractors or agents from violating or circumventing our policies and the law. If VREX Holdco's or our employees or agents fail to comply with applicable laws or company policies governing VREX Holdco's international operations, we and our subsidiaries may face investigations, prosecutions and other legal and regulatory proceedings and actions which could result in civil penalties, administrative remedies and criminal sanctions. Any determination that we have violated the FCPA could have a material adverse effect on our financial condition.

Compliance with international and U.S. laws and regulations that apply to VREX Holdco's international operations increases the cost of doing business in foreign jurisdictions. VREX Holdco's employees will also be subject to various reporting and anti-money laundering regulations. Any violation of anti-money laundering laws or regulations by VREX Holdco's employees could have a negative effect on us.

In addition, VREX Holdco has limited operating history with VREX. We entered into the Tolling Agreement with VREX Holdco, whereby we deliver NdPr oxide to VREX Holdco, which VREX Holdco then causes VREX to process into NdPr metal for delivery to our customers globally. We will be providing VREX with a large amount of our inventory of NdPr oxide to process into NdPr metal. We will be subject to risks associated with VREX Holdco and VREX appropriately storing and handling a significant volume and value of our inventory. In the event that VREX Holdco or VREX is unable to store or handle the NdPr oxide or process the NdPr oxide into NdPr metal based on the specifications provided by us, this may have a material adverse effect on our operations and financial condition.

Uncertainty in our estimates of REO reserves could result in lower-than-expected revenues and higher-than-expected costs.

We base our REO reserve estimates on engineering, economic and geological data assembled and analyzed by outside firms, which are reviewed by our engineers and geologists. Ore reserve estimates, however, are necessarily imprecise and depend to some extent on professional interpretation, including statistical inferences drawn from available drilling data, which may prove unreliable. There are numerous uncertainties inherent in estimating quantities and qualities of REO reserves and costs to mine recoverable reserves, including many factors beyond our control. Estimates of economically recoverable REO reserves necessarily depend upon a number of variable factors and assumptions, all of which may vary considerably from actual results, such as:

- geological, mining and processing conditions and/or effects from prior mining that may not be fully identified by available data or that may differ from experience;
- changes to the strategic approach to mining and processing the deposit depending upon market demand, corporate strategy and other prevailing economic conditions;
- assumptions concerning future prices of rare earth products, foreign exchange rates, process recovery rates, transportation costs, operating costs, capital costs and reclamation costs; and
- assumptions concerning future effects of regulation, including the issuance of required permits and taxes by governmental agencies and foreign government policies relating to the import or export of rare earth products.

Uncertainty in our estimates related to our REO reserves could result in lower-than-expected revenues and higher-than-expected costs or a shortened estimated life for the mine at Mountain Pass. Fluctuations in factors out of our control such as changes in future product pricing, foreign government policies on the import or export of rare earths and foreign exchange rates can have a significant impact on the estimates of reserves and can result in significant changes in the quantum of our reserves period-to-period.

Period-to-period conversion of probable REO reserves to proven ore reserves may result in increases or decreases to the total reported amount of ore reserves. Conversion rates are affected by a number of factors, including geological variability, applicable mining methods and changes in safe mining practices, economic considerations and new regulatory requirements.

Our profitability could be adversely affected if we fail to maintain satisfactory labor relations; work stoppages or similar difficulties could significantly disrupt our operations, reduce our revenues and materially adversely affect our results of operations.

Production at Mountain Pass is dependent upon the efforts of our employees. Although none of our employees are currently subject to any collective bargaining arrangements, our employees could, in the future, choose to be represented as a collective unit, which may result in labor disputes, work stoppages or other disruptions in our production efforts that could adversely affect us.

A work stoppage by any of the third parties providing services in connection with construction projects at Mountain Pass and our magnet facility being developed in Fort Worth, Texas, could significantly delay completion of such projects and disrupt our operations, reduce our revenues and materially adversely affect our results of operations.

A shortage of skilled technicians and engineers may further increase operating costs, which may materially adversely affect our results of operations.

Efficient production of rare earth products and magnet materials using modern techniques and equipment requires skilled technicians and engineers. In addition, our optimization and downstream efforts will significantly increase the number of skilled operators, maintenance technicians, engineers and other personnel required to successfully operate our business. In the event that we are unable to hire, train and retain the necessary number of skilled technicians, engineers and other personnel there could be an adverse impact on our labor costs and our ability to reach anticipated production levels in a timely manner, which could have a material adverse effect on our results of operations.

We depend on key personnel for the success of our business.

We depend on the services of our senior management team and other key personnel. The loss of the services of any member of senior management or a key employee could have an adverse effect on our business. We may not be able to locate, attract or employ on acceptable terms qualified replacements for senior management or other key employees if their services are no longer available.

Because of the dangers involved in the mining of minerals and the manufacture of mineral products, there is a risk that we may incur liability or damages as we conduct our business.

The mining of minerals and the manufacture of mineral products involve numerous hazards that could cause bodily harm or environmental damage and subject us to liability. These hazards include: (i) unusual and unexpected rock formations affecting ore or wall rock characteristics; (ii) ground or slope failures of the open-pit mine, overburden stockpiles, and/or tailings disposal areas; (iii) environmental hazards; (iv) industrial accidents and/or processing upsets; (v) periodic interruptions due to inclement or hazardous weather conditions or other acts of God; and (vi) mechanical equipment failure and facility performance problems.

Although we maintain insurance to address certain risks involved in our business, such as coverage for property damage, business interruption, natural disasters, terrorism and workers compensation, there can be no assurance that our coverage will be adequate for liabilities incurred or that insurance will continue to be available to us on economically reasonable terms. Additionally, we cannot be certain that all claims we may make under our insurance policies will be deemed to be within the scope of, or fully covered by, our policies. We might also become subject to liability for environmental issues, damage or other hazards that may be uninsurable or for which we may elect not to insure because of premium costs or commercial impracticality. These policies contain limits of coverage and exclusions that are typical of such policies generally. The payment of such premiums, or the assumption of such liabilities, may have a material adverse effect on our financial position and results of operations.

Our facilities or operations could be adversely affected by events outside of our control, such as natural disasters, wars or health epidemics or pandemics.

We may be impacted by natural disasters, wars, health epidemics or pandemics or other events outside of our control. For example, Mountain Pass is located in San Bernardino County, California, near active faults, that could lead to nearby earthquakes. If major disasters such as earthquakes, wildfires, health epidemics or pandemics, floods or other events occur, or our information system or communications network breaks down or operates improperly, our ability to continue operations at Mountain Pass may be seriously damaged, or we may have to stop or delay production and shipment of our products. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results and financial condition.

We are dependent upon information technology systems, which are subject to cyber threats, disruption, damage and failure.

We depend upon information technology systems in the conduct of our operations. Our information technology systems are subject to disruption, damage or failure from a variety of sources, including, without limitation, computer viruses, security breaches, cyber-attacks, natural disasters and defects in design. Cybersecurity incidents, in particular, are evolving and include, but are not limited to, malicious software, attempts to gain unauthorized access to data and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information or the corruption of data. Various measures have been implemented to manage our risks related to information technology systems and network disruptions. However, given the unpredictability of the timing, nature and scope of information technology disruptions, we could potentially be subject to downtimes, operational delays, the compromising of confidential or otherwise protected information, destruction or corruption of data, security breaches, other manipulation or improper use of our systems and networks or financial losses from remedial actions, any of which could have a material adverse effect on our business, operating results and financial condition.

Risks Related to Environmental Regulation

Our operations are subject to extensive and costly environmental requirements; current and future laws, regulations and permits impose significant costs, liabilities or obligations or could limit or prevent our ability to continue our current operations or to undertake new operations.

We are subject to numerous and detailed federal, state and local environmental laws, certifications, regulations, permits, and other legal requirements applicable to the mining and mineral processing industry, including, without limitation, those pertaining to employee health and safety, air emissions, water usage, wastewater and stormwater discharges, air quality standards, GHG emissions, waste management, plant and wildlife protection, handling and disposal of hazardous and radioactive substances and waste, remediation of soil and groundwater contamination, land use, reclamation and restoration of properties, the discharge of materials into the environment, procurement of certain materials used in our operations, and groundwater quality and availability. These requirements may result in significant costs, liabilities and obligations, impose conditions that are difficult to achieve or otherwise delay, limit or prohibit current or planned operations and future growth. Consequently, the modernization and expansion of Mountain Pass and the development of our Fort Worth Facility may be delayed, limited or prevented and current operations may be curtailed. Failure to comply with these laws, regulations and permits, including as they evolve, may result in the assessment of administrative, civil and criminal penalties, the issuance of injunctions to limit or cease operations, fines, or the suspension or revocation of permits and other sanctions. Pursuant to such requirements, we may also be subject to third-party claims, including for damages to property or injury to persons arising from our operations. Moreover, environmental legislation and regulation are evolving in a manner that may impose stricter standards and enforcement, increased fines and penalties for non-compliance, cessation of operations, more stringent environmental assessments, and a heightened degree of responsibility for companies and their officers, directors and employees. In addition, mine safety has been the subject of increasing scrutiny resulting in federal and state legislatures and other regulatory authorities imposing more stringent regulatory requirements on mining operations. Any changes in environmental laws, regulations or permits (or the interpretation or enforcement thereof) or any sanctions, damages, costs, obligations or liabilities in respect of these matters could have a material adverse effect on our business and/or the results of our operations and financial condition.

Our operations use hazardous materials and generate hazardous waste and radioactive byproducts. While we maintain procedures for and conduct training on the handling and disposing of chemicals or other substances by our personnel, risks, including bodily injury and property damage, persist. Moreover, mining and processing of rare earths has occurred at Mountain Pass since 1952, and contamination is known to exist around the facility. We may be subject to claims under environmental laws, for toxic torts, natural resource damages and other liabilities, as well as for the investigation and remediation of soil, surface water, groundwater and other environmental media. Mountain Pass is subject to an order issued by the Lahontan Regional Water Quality Control Board, primarily related to contamination emanating from certain on-site impoundments active during prior periods of operation, pursuant to which we and previous owners have conducted various investigatory and remedial actions. These remedial activities include groundwater monitoring, extraction and treatment. We are still in the process of delineating the extent of groundwater contamination at and around the facility and cannot assure you that we will not incur material costs relating to the remediation of such contamination. Also, prior to our acquisition of Mountain Pass, leaks in a wastewater pipeline from Mountain Pass to offsite evaporation ponds on the Ivanpah dry lake bed caused contamination. Pursuant to a settlement agreement, that contamination has been remediated by Chevron Mining Inc., which retained ownership of the ponds and the pipeline and provided a full indemnity to the previous buyer of Mountain Pass for liabilities related to the Ivanpah wastewater pipeline. In 2023, the remaining portion of the pipeline was removed from Mountain Pass and safely disposed. In addition to claims arising out of our current or former properties, such claims may arise in connection with contaminated third-party sites at which we have disposed of waste. Under the federal Comprehensive Environmental Response,

Compensation and Liability Act, and analogous state statutes, our liability for claims for contamination at our current or former properties, and at third-party sites at which we disposed of waste, may be joint and several, so that we may be held responsible for more than our share of any contamination, or even for the entire share. These and similar unforeseen impacts that our operations may have on the environment, as well as human exposure to hazardous or radioactive materials or wastes, could have a material adverse effect on our business, reputation, results of operations and financial condition.

In connection with our current and future operations and growth plans, we may need to amend or obtain additional permits that impose strict requirements relating to various environmental and health and safety matters. To obtain certain permits, we may be required to conduct environmental studies and present data to governmental authorities pertaining to the potential impact of our current and future operations upon the environment and take steps to avoid or mitigate those impacts, particularly impacts to desert flora and fauna. Furthermore, the permitting processes and development of supporting materials, including any environmental impact statements, may be costly and time-consuming. These permit processes and requirements, and the interpretation and enforcement thereof, change frequently, and any such future changes could materially adversely affect our mining operations and results of operations. In some cases, the public (including environmental interest groups) has the right to comment upon, and submit objections to, permit applications and environmental impact statements prepared in connection therewith, and otherwise participate in the permitting process, including challenging the issuance of permits. Accordingly, permits required for our operations, including the modernization and expansion of Mountain Pass, may not be issued, maintained, amended or renewed in a timely fashion or at all, or may be issued or renewed upon conditions that restrict our ability to conduct operations. Any such failure to obtain, maintain, amend or renew permits, or other permitting delays, including in connection with any environmental impact analyses, could have a material adverse effect on our results of operations and financial condition or otherwise impose significant restrictions on our ability to conduct our business.

Legislation and increased regulation regarding climate change could impose significant costs on us and our suppliers, including costs related to increased energy requirements, capital equipment, environmental monitoring, permitting, reporting and other costs to comply with such regulations. Our operations emit greenhouse gases, and with the restart of our CHP plant in 2022, our emissions exceeded inclusion thresholds of the California cap-and-trade program, resulting in the Company being re-entered into the program. As such, allowances will be directly allocated to us annually, with fluctuations based on energy usage and regulatory provisions. We expect that our emissions will continue to increase as our separations production ramps, which would require us to purchase additional allowances, with the price of allowances subject to market volatility. Any adopted future climate change regulations could negatively impact our ability to compete with companies situated in areas and countries not subject to such limitations. Given the political significance, regulatory or compliance obligations and uncertainty around the impact of climate change and how it should be addressed, we cannot predict how legislation and regulation will affect our financial condition, operating performance and ability to compete. Furthermore, even without such regulation, increased awareness and any adverse publicity in the global marketplace, including the investing community, about potential impacts on climate change by us or other companies in our industry could harm our reputation or our access to capital. The potential physical impacts of climate change on our operations are highly uncertain and would be particular to the geographic circumstances in areas in which we operate. These impacts may adversely impact the cost, production and financial performance of our operations.

Our inability to acquire, maintain or renew financial assurances related to the reclamation and restoration of mining property, or inaccuracies in the assumption underlying our reclamation plan and mine closure obligations, could have a material adverse effect on our business, results of operations and financial condition.

Under the California Surface Mining and Reclamation Act, we are generally obligated to restore property after it has been mined in accordance with regulatory standards and our approved mining plan. Additionally, we are required under various federal, state and local laws to maintain financial assurances, such as surety bonds, to secure such obligations. The failure to acquire, maintain or renew such assurances, as required by federal, state and local laws, could subject us to fines and penalties as well as the revocation of our mining permits. Such failure could result from a variety of factors, including:

- the lack of availability, higher expense or unreasonable terms of such financial assurances;
- the ability of current and future financial assurance counterparties to increase required collateral; and
- the exercise by third-party financial assurance counterparties of any rights to refuse to renew the financial assurance instruments.

It has become increasingly difficult for mining companies to secure new or renew existing surety bonds without posting partial or full collateral to secure the bonds. In addition, the cost to obtain surety bonds has increased while the market terms of the surety bonds generally have become less favorable. It is possible that surety bond issuers may refuse to provide or renew bonds or may demand additional collateral upon the issuance or renewal of the bonds. Our inability to acquire or failure to

maintain or renew such bonds or other financial assurances could have a material adverse effect on our business, financial condition and results of operations.

Federal, state and local laws and regulations establish reclamation and closure standards applicable to our surface mining and other operations as well. Estimates of our total reclamation and mine closing liabilities are based upon our reclamation plan, third-party expert reports, current applicable laws and regulations, certain permit terms, our engineering expertise related to these requirements and review by regulatory agencies. Any change in the underlying assumptions, permissions, or other variation between the estimated liabilities and actual costs could materially and adversely affect our business, results of operations and financial condition.

Risks Related to Our Common Stock

Our stock price has experienced, and may in the future experience, volatility, and you could lose all or part of your investment as a result.

The trading price of our common stock has historically experienced, and may continue to experience, significant volatility, which could cause you to lose all or part of your investment. Moreover, as a result of the decrease in the market price of NdPr oxide in 2023, our Realized Price per REO MT decreased from $11,974 for the year ended December 31, 2022, to $6,854 for the year ended December 31, 2023. This negatively impacted our results of operations, which in turn has resulted in a dramatic decrease in the trading price of the Company's common stock. You may not be able to resell your shares at an attractive price due to a number of factors such as those listed in "Risks Relating to our Business and Industry" above and the following: (a) fluctuations in demand for, and prices of, REE and magnet products; (b) results of operations that vary from the expectations of securities analysts and investors; (c) changes in expectations as to the Company's future financial performance, including financial estimates and investment recommendations by securities analysts and investors; (d) declines in the market prices of stocks generally and market prices of mining-related companies in particular; (e) strategic actions by the Company or its competitors; (f) announcements by the Company or its competitors of significant contracts, acquisitions, joint ventures, other strategic relationships or capital commitments; (g) any significant change in the Company's management; (h) changes in general economic or market conditions or trends in the Company's industry or markets; (i) changes in business or regulatory conditions, including new laws or regulations or new interpretations of existing laws or regulations applicable to the Company's business; (j) future sales of the Company's common stock or other securities; (k) investor perceptions of the investment opportunity associated with the Company's common stock relative to other investment alternatives; (l) the public's response to press releases or other public announcements by the Company or third parties, including the Company's filings with the SEC; (m) litigation involving the Company, the Company's industry, or both, or investigations by regulators into the Company's operations or those of our competitors; (n) guidance, if any, that the Company provides to the public, any changes in this guidance or the Company's failure to meet this guidance; (o) the development and sustainability of an active trading market for the Company's stock; (p) actions by institutional or activist stockholders; (q) declines in the market price of our stock as a result of negative reports on the Company by research firms that engage in short selling; (r) changes in accounting standards, policies, guidelines, interpretations or principles; and (s) other events or factors, including those resulting from natural disasters, war, acts of terrorism, health pandemics or responses to these events.

Volatility in our stock price could adversely affect our business and financing opportunities. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of the Company's actual operating performance. In addition, price volatility may be greater if the public float and trading volume of our common stock is low.

In the past, following periods of market volatility, stockholders have instituted securities class action litigation. If the Company was involved in securities litigation, it could have a substantial cost and divert resources and the attention of executive management from the Company's business regardless of the outcome of such litigation.

Because there are no current plans to pay cash dividends on our common stock for the foreseeable future, you may not receive any return on investment unless you sell your common stock for a price greater than that which you paid for it.

We intend to retain future earnings, if any, for future operations, expansion and debt repayment and there are no current plans to pay any cash dividends for the foreseeable future. The declaration, amount and payment of any future dividends on shares of our common stock will be at the sole discretion of our Board. Our Board may take into account general and economic conditions, our financial condition and results of operations, our available cash and current and anticipated cash needs, capital requirements, contractual, legal, tax, and regulatory restrictions, implications on the payment of dividends to our stockholders or by our subsidiaries to us and such other factors as our Board may deem relevant. In addition, our ability to pay dividends may be limited by covenants of any future indebtedness we incur. As a result, you may not receive any return on an investment in our common stock unless you sell our common stock for a price greater than that which you paid for it.

Future sales, or the perception of future sales, by us or our stockholders in the public market could cause the market price for our common stock to decline.

The sale of shares of common stock in the public market, or the perception that such sales could occur, could harm the prevailing market price of shares of common stock. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

In the future, we may also issue our securities in connection with investments or acquisitions. The amount of shares of common stock issued in connection with an investment or acquisition could constitute a material portion of our then-outstanding shares of common stock. Any issuance of additional securities in connection with investments or acquisitions may result in additional dilution to our stockholders.

Anti-takeover provisions in our organizational documents could delay or prevent a change of control.

Certain provisions of our Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws may have an anti-takeover effect and may delay, defer or prevent a merger, acquisition, tender offer, takeover attempt or other change of control transaction that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares held by our stockholders.

These provisions provide for, among other things: (i) no cumulative voting with respect to the election of our Board; (ii) the division of the our Board into three classes, with only one class of directors being elected in each year; (iii) the ability of our Board to issue one or more series of preferred stock; (iv) advance notice for nominations of directors by stockholders and for stockholders to include matters to be considered at our annual meetings; (v) certain limitations on convening special stockholder meetings; (vi) limiting the ability of stockholders to act by written consent; (vii) the ability of our Board to fill a vacancy created by the expansion of the board of directors or the resignation, death, or removal of a director in certain circumstances; (viii) providing that our Board is expressly authorized to make, alter or repeal our bylaws; (ix) the removal of directors only for cause; and (x) that certain provisions may be amended only by the affirmative vote of at least 66.7% of the shares of common stock entitled to vote generally in the election of our directors.

These anti-takeover provisions could make it more difficult for a third party to acquire us, even if the third party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing and to cause us to take other corporate actions you desire.

Our Second Amended and Restated Certificate of Incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

The Second Amended and Restated Certificate of Incorporation provides that, subject to limited exceptions, any (i) derivative action or proceeding brought on behalf of the Company, (ii) action asserting a claim of breach of a fiduciary duty owed by any director, officer, stockholder or employee to the Company or its stockholders, (iii) action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or our Second Amended and Restated Certificate of Incorporation or our Amended and Restated Bylaws or (iv) action asserting a claim governed by the internal affairs doctrine shall, to the fullest extent permitted by law, be exclusively brought in the Court of Chancery of the State of Delaware or, if such court does not have subject matter jurisdiction thereof, another state or federal court located within the State of Delaware. The Second Amended and Restated Certificate of Incorporation also provides that, to the fullest extent permitted by law, the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the U.S. federal securities laws, including the Securities Act and the Exchange Act. Additionally, investors cannot waive our compliance with federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our certificate of incorporation described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with the Company or its directors, officers or other employees, which may discourage such lawsuits against the Company and its directors, officers and employees. There is uncertainty as to whether a court would enforce such an exclusive forum provision with respect to claims under the Securities Act. If a court were to find these provisions of our Second Amended and Restated Certificate of Incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business and financial condition.

Increased scrutiny regarding our sustainability and ESG practices could impact our reputation and our stock price.

In June 2023, we released our ESG report for fiscal year 2022, which highlights our key achievements, metrics and ESG strategy. Our sustainability report also includes our policies and practices on a variety of ESG matters, including water management and preservation; recycling; diversity, inclusion and meritocracy; employee health and safety; and human capital management. In addition, our business faces increasing scrutiny related to ESG issues, including sustainable development, renewable resources, environmental stewardship, supply chain management, climate change, diversity, inclusion and meritocracy, workplace conduct, human rights, philanthropy and support for local communities. Implementation of our environmental and sustainability initiatives will require financial expenditures and employee resources.

The publication of our ESG report may result in increased investor, media, employee, and other stakeholder attention to our ESG initiatives, and such stakeholders may not be satisfied with our ESG practices or initiatives. Organizations that inform investors on ESG matters have developed rating systems for evaluating companies on their approach to ESG. Unfavorable ratings may lead to negative investor sentiment, which could negatively impact our stock price. Any failure, or perceived failure, to respond to ESG concerns could harm our business and reputation. In addition, certain influential institutional investors are also increasing their focus on ESG practices and are placing importance on the implications and social cost of their investments. If our ESG practices do not meet the standards set by these investors, they may choose not to invest in our common stock, or if our peer companies outperform us in their ESG initiatives, potential or current investors may elect to invest with our competitors instead. If we do not comply with investor or stockholder expectations and standards in connection with our ESG initiatives, or are perceived to have not responded appropriately to address ESG issues within our company, our brand and reputation, as well as our business, financial condition, and results of operations could be negatively impacted, and our share price could be materially and adversely affected.

Risks Relating to our Convertible Notes

The conditional conversion feature of our Convertible Notes, if triggered, may adversely affect our financial condition and operating results.

We completed an offering of Convertible Notes in March 2021. In the event the conditional conversion feature of our Convertible Notes is triggered, holders of the Convertible Notes will be entitled to convert them at any time during specified periods at their option. If one or more holders elect to convert their Convertible Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their Convertible Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Convertible Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

Conversion of our Convertible Notes may dilute the ownership interest of our stockholders or may otherwise depress the price of our common stock.

The conversion of some or all of our Convertible Notes may dilute the ownership interests of our stockholders. Upon conversion of the notes, we have the option to pay or deliver, as the case may be, cash, shares of our common stock, or a combination of cash and shares of our common stock. If we elect to settle our conversion obligation in shares of our common stock or a combination of cash and shares of our common stock, any sales in the public market of our common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the Convertible Notes may encourage short selling by market participants that engage in hedging or arbitrage activity, and anticipated conversion of the notes into shares of our common stock could depress the price of our common stock.

Certain provisions in the indenture governing the Convertible Notes may delay or prevent an otherwise beneficial takeover attempt of us.

Certain provisions in the indenture governing the Convertible Notes may make it more difficult or expensive for a third party to acquire us. For example, the indenture governing the Convertible Notes requires us to repurchase the notes for cash upon the occurrence of a fundamental change (as defined in the indenture governing the Convertible Notes) of us and, in certain circumstances, to increase the conversion rate for a holder that converts their Convertible Notes in connection with a make-whole fundamental change (as defined in the indenture governing the Convertible Notes). A takeover of us may trigger the requirement that we repurchase the Convertible Notes and/or increase the conversion rate, which could make it more costly for a potential acquirer to engage in such takeover. Such additional costs may have the effect of delaying or preventing a takeover of us that would otherwise be beneficial to investors.

Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our debt.

Our ability to make scheduled payments of the principal of, to pay interest on, or to refinance our indebtedness, including our Convertible Notes, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. In addition, holders of the Convertible Notes will have the right to require us to repurchase their notes for cash upon the occurrence of certain fundamental changes. Upon conversion of the Convertible Notes, unless we elect to deliver solely shares of our common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the notes being converted. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

The Company's information security program is managed by a dedicated Chief Technology Officer ("CTO"), who has over 25 years of professional experience within information technology roles, including 15 years of security consulting experience. The CTO leads the information technology department, which is responsible for enterprise-wide cybersecurity strategy, policy, standards, architecture, and processes. The Company's Cybersecurity Incident Response Committee (the "CIRC"), which is comprised of the Company's CTO, Chief Financial Officer, General Counsel, Senior Vice President of Financial Reporting and Technical Accounting, and Senior Director of Internal Audit, meets periodically and more often, as needed, in the event cybersecurity incidents are identified.

As part of the Company's overall risk assessment process, the enterprise risk management framework considers cybersecurity risk alongside other company risks. The Company's internal audit department collaborates with the Company's information technology department to gather insights for assessing, identifying and managing cybersecurity threat risks, their severity, and potential mitigations. The Company actively engages with key vendors, industry participants, and intelligence and law enforcement communities as part of its continuing efforts to evaluate and enhance the effectiveness of its information security policies and procedures.

In addition, the Company's vendor management program addresses cybersecurity risks associated with its use of third-party service providers including suppliers, software and cloud-based service providers. The Company proactively evaluates the cybersecurity risk of a third party by utilizing a repository of risk assessments, external monitoring sources, threat intelligence during contracting, and vendor selection processes. Security issues are documented and tracked, and periodic monitoring of third parties is conducted in an effort to mitigate risk.

The Company's CTO provides periodic reports to the Audit Committee of the Company's Board of Directors, as well as the CIRC, as appropriate. These periodic reports include updates on the Company's cyber risks and threats, the status of projects to strengthen its information security systems, assessments of the information security program, and the emerging threat landscape. The information security program is regularly evaluated by the CTO with the results of those reviews reported to the CIRC, the Audit Committee of the Company's Board of Directors, and the Board of Directors, as appropriate.

Cybersecurity threats, including as a result of any previous cybersecurity incidents, have not materially affected nor are they reasonably likely to affect the Company, including its business strategy, results of operations or financial condition.

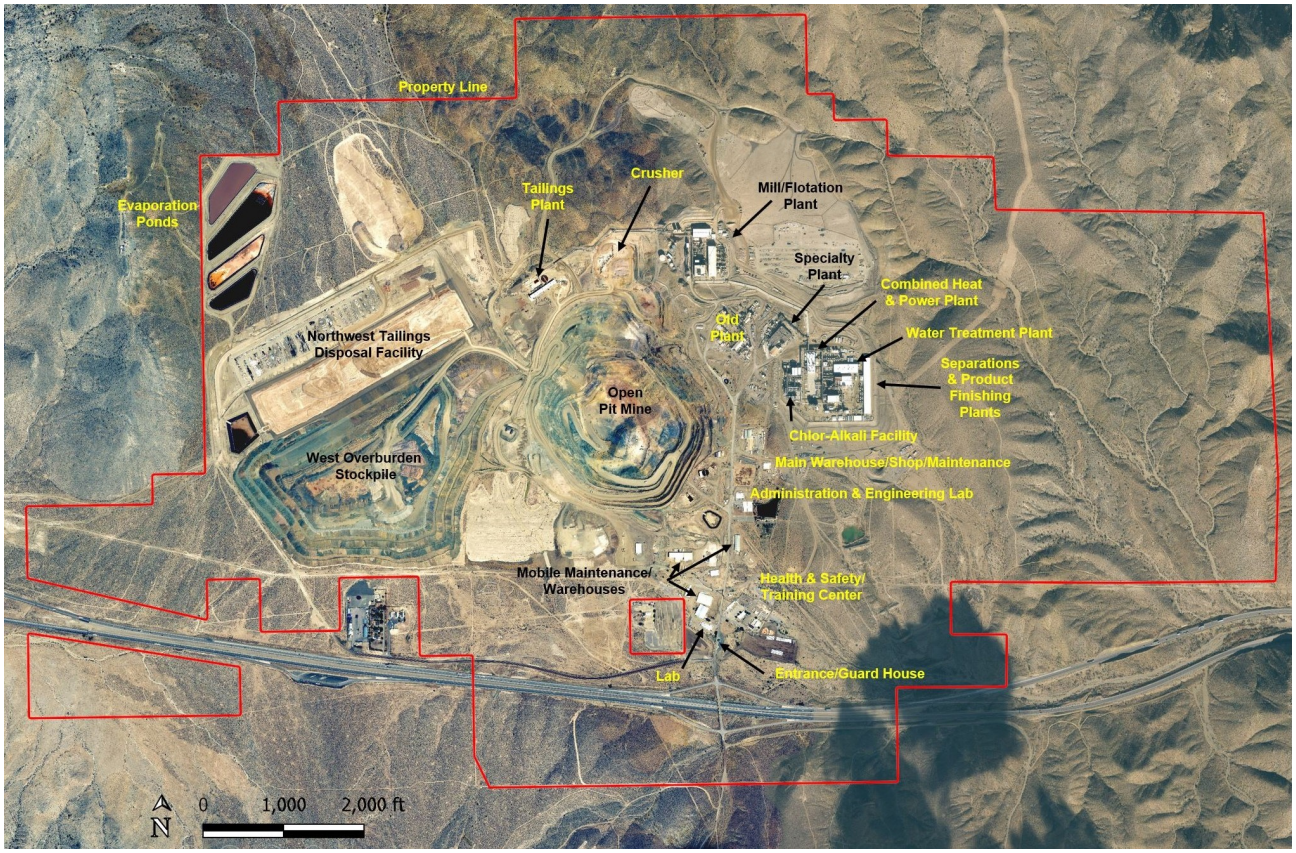
ITEM 2. PROPERTIES

Mountain Pass

The Company owns and operates the Mountain Pass Rare Earth Mine and Processing Facility (previously defined as "Mountain Pass"), which is located on 2,222 fee simple acres of land, approximately 50 miles southwest of Las Vegas, Nevada, near Mountain Pass, San Bernardino County, California, at geographic coordinates 35°28'56"N latitude and 115°31'54"W longitude. Mountain Pass includes an open-pit mine in the production stage, infrastructure supporting mining and processing operations, overburden and ore stockpiles, a crusher, a mill/flotation plant, hydrometallurgy facilities, separation plants, product finishing facilities, tailings processing and storage facilities, a water treatment plant, an idle chlor-alkali facility, and on-site evaporation ponds, as well as laboratory facilities to support product analysis and research and development activities, offices, maintenance shops, warehouses and support buildings. In 2023, the Company completed recommissioning activities on its previously idle separation facilities at Mountain Pass and completed construction of new assets, which are utilized to separate rare earth concentrate into other products, including NdPr oxide. The Mountain Pass facilities and infrastructure, the majority of which were constructed between 2012 and 2023, are in good operating condition and benefit from routine maintenance. The net carrying amount of property, plant and equipment used in the operation of Mountain Pass was approximately $577 million as of December 31, 2023.

Mountain Pass directly abuts Interstate 15 and may be accessed by existing hard-surface roads. Water at Mountain Pass is supplied through active water wells, pit dewatering, and process water recovery. MP Materials' facilities at Mountain Pass are powered by a natural gas-powered CHP plant, which was installed at Mountain Pass to produce electricity and steam and to minimize or eliminate reliance on the regional electric power grid.

As of December 31, 2023, approximately 1,118 acres of the 2,222 acres were in use (e.g., existing buildings, infrastructure or active disturbance). Portions of the fee lands, none of which are actively being mined or are currently anticipated to be mined for the purpose of recovering ore, are subject to mineral reservations in favor of the U.S. for some properties and the State of California for other properties. The specific minerals reserved on those parcels vary according to the type of land patent or conveyance document through which the land was acquired or conveyed. The Company also owns mining and mill site claims over a further 15,000 acres of adjacent land. The lands surrounding Mountain Pass are mostly public lands managed by the Bureau of Land Management and the National Park Service. In addition, MP Materials holds 525 unpatented lode and mineral mining claims and mill sites under the provisions of The Mining Law of 1872. These mining claims and mill sites provide land for mining, ancillary facilities and expansion capacity around Mountain Pass.



Mountain Pass represents the largest commercial source of rare earth materials in the Western hemisphere. Molybdenum Corporation of America began REE mining operations at Mountain Pass in 1952. Mining, milling and separation processes continued under Unocal Corporation, which purchased Molybdenum Corporation of America in 1977, until 1998. In 2005, ChevronTexaco Corporation acquired Unocal Corporation and then, in 2008, Molycorp Minerals, LLC acquired Mountain Pass from Chevron Mining Inc. Operations relating to mining, milling and separations resumed under Molycorp until they were placed into cold-idle status in mid-2015. In July 2017, the Company acquired Mountain Pass from the Molycorp estate.

The Company holds the necessary permits to operate Mountain Pass, including conditional use and minor use permits from San Bernardino County, California, and an associated environmental impact report, all of which were issued in 2004, which currently allow continued operation of Mountain Pass through 2042, though the Company expects to extend such permits to allow for continued operation through at least 2056. Since restarting operations at the facility in the fourth quarter of 2017, the Company's activities initially focused on the milling and flotation processes, leading to production of a bastnaesite concentrate, rich in REE, with the first concentrate sales in the first quarter of 2018. In third quarter of 2023, the Company also commenced production of separated finished rare earth oxides and compounds.

The bastnaesite ore body at Mountain Pass has been mined as a principal source of REE for a period of over 60 years. The Mountain Pass REE deposit is located within an uplifted block of Precambrian metamorphic and igneous rocks that are bounded to the south and east by basin-fill deposits in California's Ivanpah Valley. The two main groups of rocks in the Mountain Pass area are Early Proterozoic high-grade metamorphic rocks and Middle Proterozoic ultrapotassic rocks and monazitic carbonatites, which carbonatites are associated with higher levels of REE. The total orebody strike length is approximately 2,750 feet and dip extent is 3,000 feet; true thickness of the more than 2% total rare earth oxide ("TREO") grade zone ranges between 15 feet and 250 feet. The percentage of each rare earth material contained in typical Mountain Pass bastnaesite concentrate is estimated to be as follows:

	Estimated Distribution of TREO Content
Element	
Cerium	50.2 %
Lanthanum	32.3 %
Neodymium-Praseodymium	15.7 %
SEG+[(1)]	1.8 %

(1) See the "Rare Earth Resources and Reserves" section below for definition.

Fort Worth Facility

The Company owns approximately 18 acres of land in Fort Worth, Texas, on which it is constructing a metal, alloy, and magnet manufacturing facility as part of its Stage III strategy. The building and building improvements were substantially completed in the fourth quarter of 2023.

Corporate Office

The Company has a lease for corporate office space at 1700 S. Pavilion Center Drive, Suite 800, Las Vegas, Nevada 89135. The lease has an initial term of 91 months expiring in October 2030, with an option to renew for one five-year period at the Company's election.

Rare Earth Resources and Reserves

Introduction

Mineral resources and mineral reserves were estimated by SRK Consulting (U.S.) Inc. ("SRK") for inclusion in this Annual Report. Pursuant to the requirements of Regulation S-K Subpart 1300 ("S-K 1300"), SRK prepared a pre-feasibility level Technical Report Summary for Mountain Pass with an effective date of October 1, 2023 (the "2023 TRS") (refer to Exhibit 96.1 to this Annual Report). The mineral resource and mineral reserve estimated in the 2023 TRS were subsequently depleted by SRK to present an estimate of our resources and reserves as of December 31, 2023. The depletion removed by SRK represents resources and reserves that were extracted from the Mountain Pass open pit from October 1, 2023, through December 31, 2023.

Mineral Resource and Mineral Reserve Definitions

Mineral Resources

Item 1300 of S-K 1300 defines a "mineral resource" as 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 ("COG"), 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.

A "measured mineral resource" is 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.

An "indicated mineral resource" is 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.

An "inferred mineral resource" is 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.

Mineral Reserves

Item 1300 of S-K 1300 defines a "mineral reserve" as 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. A "proven mineral reserve" is the economically mineable part of a measured mineral resource and can only result from conversion of a measured mineral resource. A "probable mineral reserve" is the economically mineable part of an indicated and, in some cases, a measured mineral resource.

Estimation Methodology

Mineral Resources

The mineral resource estimate has been constrained by a geological model considering relevant rock types, structure, and mineralization envelopes as defined by TREO content within relevant geological features. This geological model is informed principally by diamond core drilling and multiple phases of geological mapping. Sectional interpretation based on the combination of these data were used to influence implicit modeling of the geological data with manual controls where appropriate. Data has been composited to reasonable lengths based on the original sample lengths and expected mining unit scale, and outliers have been addressed during estimation using restrictions on influence.

A number of internal controls have been applied over the history of the Mountain Pass deposit to demonstrate the consistency and reliability of historical analytical data supporting mineral resource estimation. Almost all data supporting the mineral resource has been generated by an iteration of a site-based laboratory at the Mountain Pass mine. The Mountain Pass laboratory uses various quality assurance and quality control ("QA/QC") measures to calibrate modern equipment and ensure analytical precision and accuracy. QA/QC generated by previous laboratories has undergone check assays at independent third-party laboratories, and generally demonstrate no consistent bias. The quality analytical database is also supported by a limited

amount of blind quality control samples inserted during a re-assay program, including site-specific standards of known TREO content, a variety of duplicate samples, and blank samples. The implementation and results of these various QA/QC programs have not been fully aligned with current industry standards and are not comprehensive but are considered satisfactory for use in mineral resource estimation.

Estimates have been validated to the input data using statistical and visual comparisons, localized swath plot comparisons of mean grades, and review of the limited mine production reconciliation data to the model. In general, estimates of grade quality are shown to align closely with the input exploration data, but have been demonstrated to be under-reporting relative to the grade control drilling. SRK has categorized uncertainty and risk at Mountain Pass by classifying the contained mineral resource by varying degrees of confidence in the estimate. The mineral resources at the Mountain Pass deposit have been classified in accordance with S-K 1300 definitions. The classification parameters are defined by the distance to composited data, the number of drillholes used to inform estimated block grades and a geostatistical indicator of relative estimation quality (kriging efficiency). As an overall modifier to classification, SRK considered the results from the QA/QC noted above and the observed variability in production reconciliation in the mineral resource classification as well, both of which preclude the assignment of measured resources, as defined by the SEC. Bulk density is based on average density measurements collected from the various rock types over the years, and carbonatite density in particular is supported by extensive mining and processing experience with the materials.

An economic COG of 2.18% TREO has been developed to ensure that material reported as a mineral resource can satisfy the definition of having reasonable prospects for economic extraction as required for the SEC definition. Mineral resources have been constrained within an optimized economic pit shell based on reserve input parameters, with the exception of the assumed equivalent concentrate price ($12,461 per dry short ton (“ST”) of 60% TREO concentrate), which is set 15% higher than the reserves price. The equivalent concentrate price used for pit optimization reflects the gross contained value realized from sales of the four individual REO products (see below) produced from the onsite separations facility. The equivalent concentrate price is calculated based on (i) the expected percentage distribution of the REO products in the bastnaesite concentrate, (ii) the expected metallurgical recoveries for the separations facility and (iii) the expected sales prices for the REO products. For purposes of calculating the end-of-year (“EOY”) 2022 mineral resources, the equivalent concentrate price was reflected net of the operating costs of the separations facility, while the equivalent concentrate price for EOY 2023 mineral resources is reflected gross of these costs, with the operating costs instead included along with the other estimated operating costs (mining; processing; selling, general and administrative (“SG&A”); etc.) that were used in the pit optimization.

For mineral resources, a revenue factor of 1.0 is selected which corresponds to a break-even pit shell volume. SRK notes that the pit selected for mineral resources has been influenced by setbacks relative to critical infrastructure such as the tailing storage and the mill and flotation facilities.

A description of the methodology used to calculate mineral resources is provided in Exhibit 96.1 to this Annual Report.

Mineral Reserves

SRK developed a life-of-mine (“LoM”) plan for the Mountain Pass operation in support of mineral reserves. During 2023 the Company completed construction of a separations facility at Mountain Pass that allows the Company to separate bastnaesite concentrate into four individual REO products for sale. The separations facility is currently ramping up and the Company expects the plant to operate at full design capacity by the end of 2024. For economic modeling of the mineral reserves, SRK assumed that 2024 production will be a combination of bastnaesite concentrate sales and sales of four individual REO products: neodymium and praseodymium (previously defined as “NdPr”) oxide; samarium, europium, and gadolinium (“SEG+”) oxalate; lanthanum carbonate; and cerium chloride. Forecast economic parameters are based on historical cost performance for process, transportation, and administrative costs, as well as a first principles estimation of future mining costs. Forecast revenue from concentrate sales and individual separated product sales is based on a preliminary market study commissioned by the Company.

From this evaluation, pit optimization was performed based on an equivalent concentrate price of $10,836 per dry ST of 60% TREO concentrate. The equivalent concentrate price reflects the gross contained value realized from sales of the four individual REO products produced from the onsite separations facility. The equivalent concentrate price is calculated based on (i) the expected percentage distribution of the REO products in the bastnaesite concentrate, (ii) the expected metallurgical recoveries for the separations facility and (iii) the expected sales prices for the REO products. For purposes of calculating the EOY 2022 mineral reserves, the equivalent concentrate price was reflected net of the operating costs of the separations facility, while the equivalent concentrate price for EOY 2023 mineral reserves is reflected gross of these costs, with the operating costs instead included along with the other estimated operating costs (mining, processing, SG&A, etc.) that were used in the pit optimization.

The results of pit optimization guided the design and scheduling of the ultimate pit. SRK generated a cash flow model which indicated positive economics for the LoM plan, which provides the basis for the reserves. Reserves within the new ultimate pit are sequenced for the remaining 33-year LoM (2024 through 2056).

The costs used for pit optimization include estimated mining, processing, sustaining capital, transportation, and administrative costs, including an allocation of corporate costs. Processing and SG&A costs used for pit optimization were based on historical actual costs.

Processing recovery for concentrate is variable based on a mathematical relationship to estimate overall TREO recovery versus ore grade. The calculated COG for the reserves is 2.43% TREO, which was applied to indicated blocks contained within an ultimate pit, the design of which was guided by economic pit optimization.

The optimized pit shell selected to guide final pit design was based on a combination of the revenue factor ("RF") 0.70 pit (used on the north half of the deposit) and the RF 1.00 pit shell (used on the south half of the deposit). The inter-ramp pit slopes used for the mineral reserves pit design are based on geotechnical studies and range from 44° to 47°.

Measured resources in stockpiles were converted to proven reserves. Indicated pit resources were converted to probable reserves by applying the appropriate modifying factors to potential mining pit shapes created during the mine design process. Inferred resources present within the LoM pit are treated as waste. Internal controls to demonstrate the consistency and reliability of the historic analytical data supporting the mineral resource estimate (which forms the basis for the mineral reserve estimate) are discussed above.

A description of the methodology used to calculate mineral reserves is provided in Exhibit 96.1 to this Annual Report.

Results

Mineral Resources

As of December 31, 2023, SRK estimates total indicated resources of 1.45 million STs with an average grade of 2.75% TREO and 9.09 million STs of inferred resources with an average grade of 5.05% TREO. Mineral resources are reported exclusive of mineral reserves. The reference point for mineral resources is in situ material.

Category	Resource Type	Cut-Off TREO (%)	Mass	Average Value					
			Million Short Tons (dry)	TREO[1] (%)	La_2O_3[2] (%)	CeO_2[2] (%)	Pr_6O_{11}[2] (%)	Nd_2O_3[2] (%)	Sm_2O_3[2] (%)
Indicated	Within the Reserve Pit	2.18	0.94	2.31	0.75	1.15	0.10	0.28	0.02
	Within the Resource Pit	2.18	0.51	3.56	1.16	1.78	0.15	0.43	0.03
Total Indicated		**2.18**	**1.45**	**2.75**	**0.89**	**1.37**	**0.12**	**0.33**	**0.02**
Inferred	Within the Reserve Pit	2.18	6.68	5.52	1.80	2.75	0.23	0.67	0.05
	Within the Resource Pit	2.18	2.41	3.74	1.22	1.86	0.16	0.45	0.03
Total Inferred		**2.18**	**9.09**	**5.05**	**1.65**	**2.52**	**0.21**	**0.61**	**0.04**

(1) TREO% represents the total of individually assayed light rare earth oxides on a 99.7% basis of total contained TREO, based on the historical site analyses.

(2) Percentage of individual light rare earth oxides are based on the average ratios; La_2O_3 is calculated at a ratio of 32.6% grade of TREO% equivalent estimated grade, CeO_2 is calculated at a ratio of 49.9% of TREO% equivalent estimated grade, Pr_6O_{11} is calculated at a ratio of 4.3% of TREO% equivalent estimated grade, Nd_2O_3 is calculated at a ratio of 12.1% of TREO% equivalent estimated grade, and Sm_2O_3 is calculated at a ratio of 0.9% of TREO% equivalent estimated grade. The sum of light rare earths averages 99.7%; the additional 0.3% cannot be accounted for based on the analyses available to date and has been discounted from this resource statement.

General Notes:

- Mineral resources are reported exclusive of mineral reserves.
- Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into the mineral reserves estimate.
- Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, any apparent rounding errors are considered insignificant.
- Mineral resource tonnage and grade are reported as diluted.

- The mineral resource model has been depleted for historical mining based on the December 31, 2023, pit topography.
- Pit optimization is based on an average TREO% equivalent concentrate price of $12,461 per dry ST of 60% TREO concentrate, average mining cost at the pit exit of $1.70 per dry ST mined plus $0.068 per dry ST mined for each 15 feet bench above or below the pit exit, combined milling and SG&A costs of $78.94 per dry ST ore milled, separations facility costs of $1,551 per dry ST of 60% TREO concentrate treated, freight of $163 per ST of dry product shipped, sustaining capital costs of $30.48 per dry ST of ore mined, and overall pit slope angles of 39° to 45° including ramps.
- The mineral resource statement reported herein only includes the REE cerium, lanthanum, neodymium, praseodymium, and samarium (often referred to as LREE). While other REE, often referred to as HREE, are present in the deposit, they are not accounted for in this estimate due to historic data limitations.

The following table is provided to show the change in mineral resources from December 31, 2022, to December 31, 2023:

Description	Estimate Date	Million Short Tons (dry)	TREO (%)	La_2O_3 (%)	CeO_2 (%)	Pr_6O_{11} (%)	Nd_2O_3 (%)	Sm_2O_3 (%)
Indicated Mineral Resources	December 31, 2023	1.45	2.75	0.89	1.37	0.12	0.33	0.02
Indicated Mineral Resources	December 31, 2022	1.43	2.83	0.92	1.41	0.12	0.34	0.03
Difference		**0.02**	**(0.08)**	**(0.03)**	**(0.04)**	**0.00**	**(0.01)**	**(0.01)**
% Difference[(1)]		**1.4 %**	**(2.8)%**	**(2.8)%**	**(2.7)%**	**(2.0)%**	**(2.1)%**	**(21.6)%**
Inferred Mineral Resources	December 31, 2023	9.09	5.05	1.65	2.52	0.21	0.61	0.04
Inferred Mineral Resources	December 31, 2022	8.90	5.13	1.67	2.56	0.22	0.62	0.04
Difference		**0.19**	**(0.08)**	**(0.02)**	**(0.04)**	**(0.01)**	**(0.01)**	**0.00**
% Difference[(1)]		**2.1 %**	**(1.7)%**	**(1.3)%**	**(1.8)%**	**(1.7)%**	**(1.8)%**	**(3.8)%**

(1) Percentages do not recompute as presented due to rounding.

The difference as compared to the previous year is due to inferred resources located within the mineral reserve pit that were mined and processed during 2023, and a change in the mineral resource COG due to updated project economics.

Mineral Reserves

As of December 31, 2023, SRK estimates total proven reserves of 0.64 million STs of ore with an average grade of 4.28% TREO and 27.82 million STs of probable reserves with an average ore grade of 6.25%. The Company's total proven and probable reserves are estimated as 28.46 million STs with an average grade of 6.20%. The reference point for the mineral reserves is material delivered to the Mountain Pass mill and flotation facilities.

Based on these estimated reserves, the Company's expected remaining mine life is approximately 33 years (2024 through 2056) to complete the processing of stockpiles and separations.

The following table states the amount of the Company's proven and probable mineral reserves as of December 31, 2023.

Category	Description	Run-of-Mine			Concentrate
		Million Short Tons (dry)	TREO%	MY%	Million Short Tons (dry)
Proven	Current Stockpiles	0.64	4.28	3.68	0.02
	In situ	—	—	—	—
	Proven Totals	0.64	4.28	3.68	0.02
Probable	Current Stockpiles	—	—	—	—
	In situ	27.82	6.25	6.60	1.84
	Probable Totals	27.82	6.25	6.60	1.84
Proven + Probable	**Current Stockpiles**	**0.64**	**4.28**	**3.68**	**0.02**
	In situ	**27.82**	**6.25**	**6.60**	**1.84**
	Proven + Probable Totals	**28.46**	**6.20**	**6.54**	**1.86**

General Notes:

- Reserves stated as contained within an economically mineable open pit design stated above a 2.43% TREO COG.
- Mineral reserves tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding.
- MY% (mass yield) calculation is based on 60% concentrate grade of the product and the ore grade dependent metallurgical recovery. MY% = (TREO% * Met recovery)/60% concentrate TREO grade.
- Indicated mineral resources have been converted to probable reserves. Measured mineral resources have been converted to proven reserves.
- Reserves are diluted at the contact of the 2% TREO geological model triangulation (further to dilution inherent to the resource model and assume selective mining unit of 15 feet x 15 feet x 30 feet).
- Mineral reserves tonnage and grade are reported as diluted.
- Pit optimization is based on an average TREO% equivalent concentrate price of $10,836 per dry ST of 60% TREO concentrate, average mining cost at the pit exit of $1.70 per dry ST mined plus $0.068 per dry ST mined for each 15 feet bench above or below the pit exit, combined milling and SG&A costs of $78.94 per dry ST ore milled, separations facility costs of $1,551 per dry ST of 60% TREO concentrate treated, freight of $163 per ST of dry product shipped, sustaining capital costs of $30.48 per dry ST of ore mined, and overall pit slope angles of 39° to 45° including ramps.
- Reserves contain material inside and outside permitted mining but within mineral lease.
- Reserves assume 100% mining recovery.
- The strip ratio for the remaining reserves is 6.3 to 1 (waste to ore ratio).
- The mineral reserves were estimated by SRK.

The following table is provided to show the change in reserves from December 31, 2022, to December 31, 2023:

		Run-of-Mine			Concentrate
Description	**Estimate Date**	**Million Short Tons (dry)**	**TREO%**	**MY%**	**Million Short Tons (dry)**
Proven + Probable Reserves	December 31, 2023	28.46	6.20	6.54	1.86
Proven + Probable Reserves	December 31, 2022	29.30	6.32	6.69	1.96
Difference		**(0.84)**	**(0.12)**	**(0.15)**	**(0.10)**
% Difference		**(2.9)%**	**(1.9)%**	**(2.2)%**	**(5.1)%**

The reason for the differences between the two estimates is due to reserves that were mined and processed during 2023. It is noted that reserves depletion due to mining and processing during 2023 was partially offset by additional above COG material that was identified by closely spaced blasthole sampling. This above COG material was not included in the previous reserves estimate because the material had not been identified by the wider spaced resource drilling that informed the resource block model utilized for the 2023 TRS.

Factors and Assumptions Affecting Mineral Resource and Mineral Reserve Estimates

There are numerous uncertainties inherent in estimating quantities and qualities of REO reserves and costs to mine recoverable reserves, including many factors beyond our control. We will regularly evaluate our REO reserve estimates. This may be done in conjunction with additional exploration drilling programs. The estimates of REO reserves as to both quantity and quality will also be updated to reflect new drilling or other data received. Estimates of economically recoverable REO reserves, however, necessarily depend upon a number of variable factors and assumptions, all of which may vary considerably from actual results, such as:

- geological, mining and processing conditions and/or effects from prior mining that may not be fully identified by available data or that may differ from experience;
- the strategic approach to mining and processing the deposit may change depending upon market demand, corporate strategy and other prevailing economic conditions;
- assumptions concerning future prices of rare earth products, foreign exchange rates, process recovery rates, transportation costs, operating costs, capital costs, and reclamation costs; and

- assumptions concerning future effects of regulation, including the issuance of required permits and taxes by governmental agencies and foreign government policy relating to import or export of rare earth products.

Actual REO tonnage recovered from identified REO reserves and revenues and expenditures with respect to the same may vary materially from estimates. Further, period-to-period, our future estimates of REO reserves may fluctuate significantly as macroeconomic conditions and our level of understanding with respect to the deposit change. These estimates may not accurately reflect our actual REO reserves. Any inaccuracy in our estimates related to our REO reserves could result in lower-than-expected revenues and higher-than-expected costs.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may be subject to legal and governmental proceedings and claims in the ordinary course of business. We are not currently a party to any material legal or governmental proceedings, and, to our knowledge, none is threatened.

ITEM 4. MINE SAFETY DISCLOSURES

The information concerning mine safety violations or 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 Annual Report.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information and Trading Symbol for Common Stock

The Company's common stock is currently quoted on the NYSE under the symbol "MP".

Holders of Record

According to Continental Stock Transfer & Trust Company, the Company's transfer agent, there were 128 active holders of record of the Company's common stock as of February 15, 2024. The actual number of stockholders is greater than these numbers and includes holders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. These numbers of active holders of record also do not include holders whose shares may be held in trust by other entities.

Dividends

The Company has not paid any cash dividends on its common stock to date. The payment of cash dividends in the future will be dependent upon the Company's revenues and earnings, capital requirements and general financial condition. The payment of any cash dividends will be within the discretion of the Company's Board of Directors at such time. In addition, the Company is not currently contemplating and does not anticipate declaring any stock dividends in the foreseeable future as it is currently expected that available cash resources will be utilized in connection with our ongoing operations and capital expenditures to support our development projects.

Unregistered Sales of Equity Securities

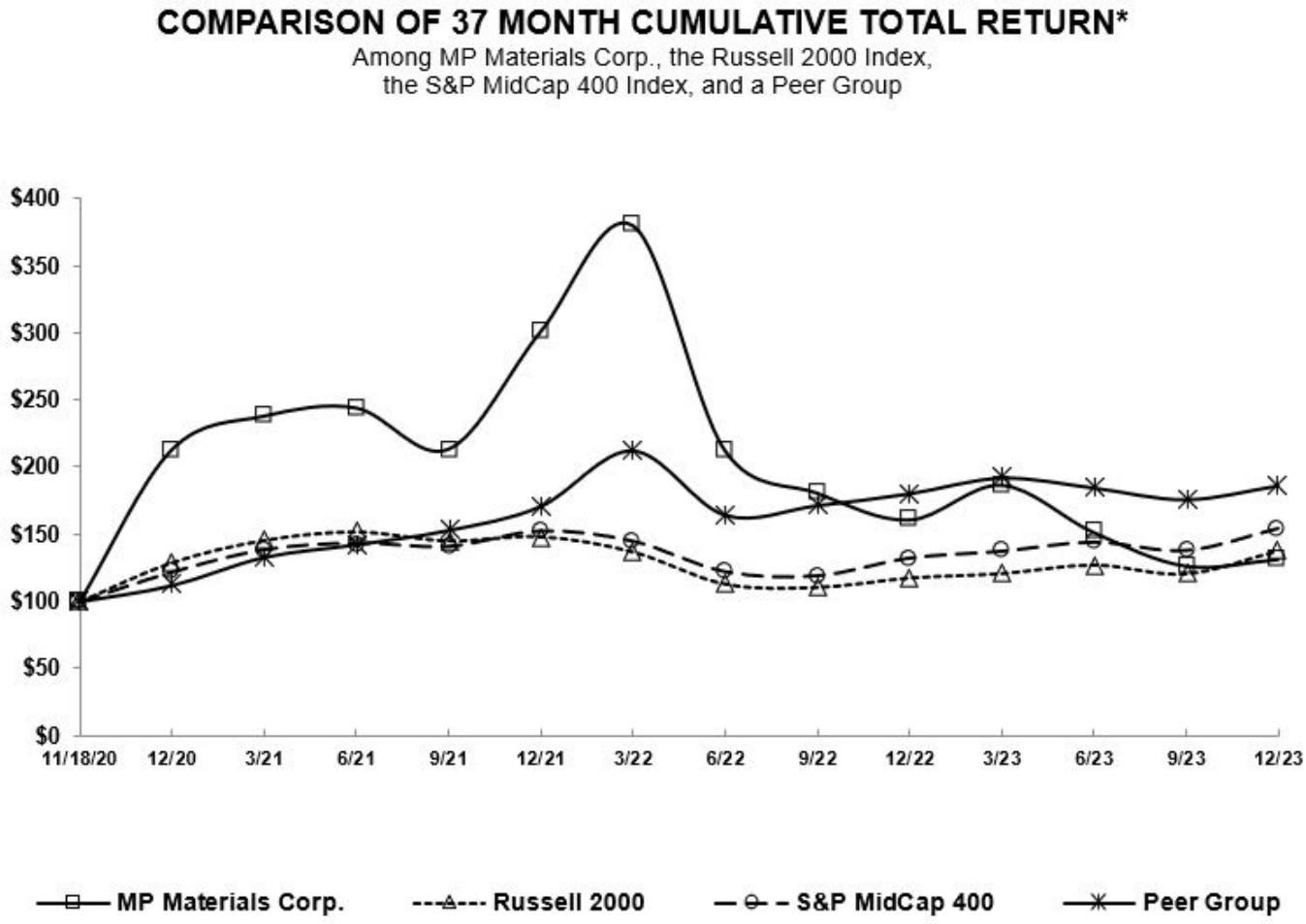
On August 18, 2023, the Company acquired a license to use patented technology, technical know-how, and other intellectual property pertaining to the development and manufacturing of magnetic products in exchange for 435,729 shares of its common stock. Pursuant to the terms of the agreement to acquire the license, 152,504 shares were issued immediately and the remaining shares will be issued as follows: 43,573 shares on each of the first, second, and third anniversaries of the acquisition date and an additional 152,506 shares on the fourth anniversary of the acquisition date. The securities were issued in reliance upon the exemption from registration available under Regulation S under the Securities Act of 1933, as amended.

Repurchase of Securities

During the three months ended December 31, 2023, neither the Company nor any of its affiliates repurchased shares of the Company's common stock registered under Section 12 of the Exchange Act.

Stock Performance Graph

The following graph compares the cumulative total stockholder return for the Company's common stock to the cumulative total returns for the Russell 2000 Index, S&P MidCap 400 Index and a peer group. The peer group consists of the following companies: Albemarle Corporation, Westlake Chemical Corporation, CF Industries Holdings, Inc., Reliance Steel & Aluminum Co., The Mosaic Company, Steel Dynamics, Inc., Axalta Coating Systems Ltd., Ashland Global Holdings Inc., Quaker Chemical Corporation, Cleveland-Cliffs Inc., Alcoa Corporation, Commercial Metals Company, Cabot Corporation and Compass Minerals International, Inc. The total cumulative return calculations are for the period commencing November 18, 2020, for investments in stock, or October 31, 2020, for investments in index, and ending December 31, 2023, and include the reinvestment of dividends. The stock price performance shown in this graph is based on historical data and is neither indicative of, nor intended to forecast, future stock price performance.



*$100 invested on November 18, 2020, in stock or October 31, 2020, in index, including reinvestment of dividends. Fiscal year ended December 31st.

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	11/18/20	12/31/20	12/31/21	12/31/22	12/31/23
MP Materials Corp.	$ 100.00	$ 213.19	$ 300.99	$ 160.90	$ 131.54
Russell 2000 Index	$ 100.00	$ 128.68	$ 147.75	$ 117.55	$ 137.45
S&P MidCap 400 Index	$ 100.00	$ 121.73	$ 151.87	$ 132.03	$ 153.74
Peer Group	$ 100.00	$ 112.07	$ 170.93	$ 180.34	$ 186.27

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our Consolidated Financial Statements and related notes appearing elsewhere in this annual report on Form 10-K for the year ended December 31, 2023 (this "Annual Report"). A discussion of changes in our results of operations and cash flows between years ended December 31, 2022 and 2021, has been omitted from this Annual Report, but may be found in "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, Comparison of the Years Ended December 31, 2022, 2021, and 2020," of our annual report on Form 10-K for the year ended December 31, 2022, filed with the U.S. Securities and Exchange Commission on February 28, 2023. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. The actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, including, but not limited to, those set forth under "Item 1A. Risk Factors" and elsewhere in this Annual Report. See also "Cautionary Note Regarding Forward-Looking Statements."

Executive Overview

MP Materials Corp., including its subsidiaries ("we," "our," and "us"), is the largest producer of rare earth materials in the Western Hemisphere. We own and operate the Mountain Pass Rare Earth Mine and Processing Facility ("Mountain Pass"), the only rare earth mining and processing site of scale in North America, and are also constructing a rare earth metal, alloy and magnet manufacturing facility in Fort Worth, Texas (the "Fort Worth Facility"), where we anticipate manufacturing neodymium-iron-boron ("NdFeB") permanent magnets and its precursor products.

We produce rare earth concentrate products as well as refined rare earth oxides and related products. The rare earth concentrate is principally sold pursuant to the Offtake Agreement to Shenghe (as such terms are defined in Note 20, "Related Party Transactions," in the notes to the Consolidated Financial Statements), that, in turn, typically sells that product to refiners in China. Following the commissioning of our Stage II optimization project ("Stage II") in the third quarter of 2023, we began producing separated rare earth products, including neodymium-praseodymium ("NdPr") oxide, that we began selling to customers globally in the fourth quarter of 2023. Additionally, in April 2022, we entered into a long-term agreement with General Motors Company (NYSE: GM) ("GM") to supply U.S.-sourced and manufactured rare earth materials and finished magnets for the electric motors in more than a dozen models based on GM's Ultium Platform. These developments are part of our Stage III downstream expansion strategy ("Stage III").

Certain rare earth elements ("REE") serve as critical inputs for the rare earth magnets inside the electric motors and generators powering carbon-reducing technologies such as hybrid and electric vehicles (referred to collectively as "xEVs") and wind turbines, as well as drones, defense systems, robotics and many other high-growth, advanced technologies. Our integrated operations at Mountain Pass combine low production costs with high environmental standards, thereby restoring American leadership to a critical industry with a strong commitment to sustainability.

Highlights from the year ended December 31, 2023, include:

- Completed construction and/or initial commissioning of all circuits of our Stage II optimization project;
- Commenced production and sales of separated rare earth products in the third quarter and fourth quarter of 2023, respectively;
- Announced "Upstream 60K" strategy targeting an approximately 50% expansion of rare earth oxide ("REO") in concentrate output at Mountain Pass within four years with modest incremental investment;
- Maintained strong concentrate production volumes despite continued construction and commissioning activities;
- Completed construction of the building for the Fort Worth Facility, opened the office space that will serve as our company-wide magnetics headquarters, and made further progress on advancing our metal and magnet-making production capabilities;
- Advanced the engineering and design and began procuring equipment for our heavy rare earth elements ("HREE") processing and separations facility at Mountain Pass (the "HREE Facility");
- Entered into a tolling agreement with and subsequently acquired a 49% equity interest in VREX Holdco (as defined in the "Recent Developments" section below);
- Maintained a strong balance sheet with cash, cash equivalents and short-term investments totaling $997.8 million as of December 31, 2023, despite significant capital expenditures to support Stage II, the Fort Worth Facility, and the HREE Facility;

- Generated revenue of $253.4 million, net income of $24.3 million, and diluted earnings per share ("EPS") of $0.14;
- Generated Adjusted EBITDA (see below) of $102.5 million, Adjusted Net Income (see below) of $71.4 million, and Adjusted Diluted EPS (see below) of $0.39; and
- Generated net cash provided by operating activities of $62.7 million.

Our results of operations for the year ended December 31, 2023, demonstrate solid operational execution against a weak pricing backdrop. Our Stage I concentrate operations continue to deliver strong production levels despite significant work on completing construction and commissioning of Stage II circuits as well as advancing the HREE Facility at Mountain Pass. Upon initial commissioning of the Stage II circuits, we commenced production of separated rare earth products in the third quarter of 2023. Also in the third quarter of 2023, we began shipments of NdPr oxide to tollers for processing into NdPr metal. Furthermore, we began selling separated rare earth products in the fourth quarter of 2023, beginning with NdPr oxide. While we made significant progress on scaling production of separated rare earth products in the fourth quarter of 2023, we expect that it may take several quarters to achieve our designed throughput of separated products.

In addition, our Stage III magnetics team continued to make significant progress on our strategy to re-establish magnet manufacturing in the U.S., including completing building construction and moving into the office portion of the Fort Worth Facility, and installing our first major pieces of process and magnet prototype production equipment, while advancing the organization's engineering and manufacturing technology capabilities.

We consider net income and diluted EPS to be the most directly comparable financial measures calculated in accordance with generally accepted accounting principles in the U.S. ("GAAP") to Adjusted EBITDA, Adjusted Net Income, and Adjusted Diluted EPS, which are non-GAAP financial measures. Refer to the "Non-GAAP Financial Measures" section below for the definitions of Adjusted EBITDA, Adjusted Net Income, and Adjusted Diluted EPS, as well as a reconciliation of net income to Adjusted EBITDA and Adjusted Net Income, and Diluted EPS to Adjusted Diluted EPS.

Recent Developments

Distribution Agreement with Sumitomo

In February 2023, we entered into a distribution agreement (the "Distribution Agreement") with Sumitomo Corporation of Americas ("Sumitomo"), under which Sumitomo serves as the exclusive distributor of NdPr oxide and NdPr metal, produced by us, to Japanese customers. Further, in connection with the Distribution Agreement, we intend to collaborate with Sumitomo on other business opportunities related to rare earth processing and downstream products. Under the terms of the Distribution Agreement, Sumitomo will be paid a variable commission. The initial term of the Distribution Agreement is through the end of 2025 with options to renew annually.

Patent and Intellectual Property License

In August 2023, we acquired a license to use patented technology, technical know-how, and other intellectual property pertaining to the development and manufacturing of magnetic products in exchange for 435,729 shares of our common stock. Contemporaneous with the acquisition of the license, we entered into a long-term consulting agreement in support of integrating the licensed technology and know-how into our existing processes aimed at the development of magnetic products.

Tolling Agreement with and Investment in VREX Holdco

In October 2023, we entered into a tolling agreement with VREX Holdco Pte. Ltd. ("VREX Holdco") (the "Tolling Agreement"), a subsidiary of Shenghe. VREX Holdco owns Vietnam Rare Earth Company Limited ("VREX"), which owns and operates a metal processing plant and related facilities in Vietnam. Pursuant to the Tolling Agreement, we deliver NdPr oxide to VREX Holdco, which VREX Holdco then causes VREX to process into NdPr metal for delivery to our customers globally. As several of our potential customers that manufacture magnets outside of China prefer to purchase NdPr metal in addition to NdPr oxide, this Tolling Agreement will enable us to distribute NdPr products more widely to customers in Japan and other global markets. During the term of the Tolling Agreement, we will pay VREX Holdco a processing fee per unit of rare earth metal produced. We maintain title to the products and directly enter into sales agreements for the produced NdPr metal. The initial term of the Tolling Agreement is three years and may be renewed for additional three-year terms.

In December 2023, we invested $9.7 million of cash in exchange for a 49% equity interest in VREX Holdco. Refer to Note 6, "Equity Method Investment," in the notes to the Consolidated Financial Statements for additional information.

New Offtake Agreement

In January 2024, we entered into a new offtake agreement with Shenghe (the "New Offtake Agreement") that replaced and extended the Offtake Agreement. The initial term of the New Offtake Agreement is two years, with the option for us to extend the term for an additional one-year period. The terms of the New Offtake Agreement are substantially the same as those of the Offtake Agreement with the exception of the addition of NdPr metal into the definition of non-concentrate rare earth products. See Note 20, "Related-Party Transactions," in the notes to the Consolidated Financial Statements for a discussion of the Offtake Agreement, including its terms.

Key Performance Indicators

We have historically used and/or currently use the following key performance indicators ("KPIs") to evaluate the performance of our business. However, as our business continues to evolve and transitions from production of rare earth concentrate to production of separated rare earth products, the metrics that management uses to evaluate the business may continue to change or be revised. For example, beginning with the first quarter of 2024, we will no longer present Production Cost per REO MT, which is a metric focused solely on Stage I concentrate operations, as it will no longer be meaningful in evaluating and understanding our business or operating results. In addition, during 2023, upon the production of separated products, we identified three new KPIs of our business: NdPr Production Volume, NdPr Sales Volume and NdPr Realized Price per KG. Our calculations of these KPIs may differ from similar measures published by other companies in our industry or in other industries. The following table presents our KPIs:

	Year ended December 31,			Amount Change		% Change	
(in whole units or dollars, except percentages)	2023	2022	2021	2023 vs. 2022	2022 vs. 2021	2023 vs. 2022	2022 vs. 2021
Rare earth concentrate							
REO Production Volume (MTs)	41,557	42,499	42,413	(942)	86	(2)%	— %
REO Sales Volume (MTs)	36,837	43,198	42,158	(6,361)	1,040	(15)%	2 %
Realized Price per REO MT	$ 6,854	$ 11,974	$ 7,745	$ (5,120)	$ 4,229	(43)%	55 %
Production Cost per REO MT	$ 2,058	$ 1,728	$ 1,493	$ 330	$ 235	19 %	16 %
Separated NdPr products							
NdPr Production Volume (MTs)	200	N/A	N/A	N/A	N/A	N/A	N/A
NdPr Sales Volume (MTs)	10	N/A	N/A	N/A	N/A	N/A	N/A
NdPr Realized Price per KG	$ 70	N/A	N/A	N/A	N/A	N/A	N/A

N/A = Not applicable as there was neither NdPr production nor sales volume in these periods.

REO Production Volume

We measure our REO-equivalent production volume for a given period in metric tons ("MTs"), our principal unit of sale for our concentrate product. This measure refers to the REO content contained in the rare earth concentrate we produce and, beginning in the second quarter of 2023, includes volumes fed into downstream circuits for commissioning and starting up our separations facilities and for producing separated NdPr product, the latter of which is also included in our KPI, NdPr Production Volume. Our REO Production Volume is a key indicator of our mining and processing capacity and efficiency.

The rare earth concentrate is a processed, concentrated form of our mined rare earth-bearing ores. While our unit of production and sale is a MT of contained REO, the actual weight of our rare earth concentrate is significantly greater, as the concentrate also contains non-REO minerals, loss-on-ignition, and residual moisture from the production process. We target REO content of greater than 60% per dry MT of concentrate (referred to as "REO grade"). The elemental distribution of REO in our concentrate is relatively consistent over time and production lot. We consider this the natural distribution, as it reflects the distribution of elements contained, on average, in our ore.

REO Sales Volume

Our REO Sales Volume for a given period is calculated in MTs. A unit, or MT, is considered sold once we recognize revenue on its sale as determined in accordance with GAAP. Our REO Sales Volume is a key measure of our ability to convert our concentrate production into revenue. Our REO Sales Volume for the year ended December 31, 2023, included both traditional concentrate as well as roasted concentrate.

Realized Price per REO MT

We calculate the Realized Price per REO MT for a given period as the quotient of: (i) our rare earth concentrate sales, which are determined in accordance with GAAP, for a given period and (ii) our REO Sales Volume for the same period. Realized Price per REO MT is an important measure of the market price of our concentrate product. For the year ended December 31, 2021, we adjusted our rare earth concentrate sales for the revenue impact of tariff rebates related to prior period sales, resulting in the use of a non-GAAP financial measure, Total Value Realized. See the "Non-GAAP Financial Measures" section below for a reconciliation of our Total Value Realized, which is a non-GAAP financial measure, to our rare earth concentrate sales, which is determined in accordance with GAAP.

Production Cost per REO MT

We calculate the Production Cost per REO MT for a given period as the quotient of: (i) our Production Costs (see below) for a given period and (ii) our REO Sales Volume for the same period. We define Production Costs, which is a non-GAAP financial measure, as our cost of sales (excluding depletion, depreciation and amortization) ("COS") less stock-based compensation expense included in COS, shipping and freight costs, and costs not attributable to concentrate sales.

Production Cost per REO MT is a key indicator of our concentrate production efficiency. As a significant portion of our cash costs of Stage I production are fixed, our Production Cost per REO MT is influenced by mineral recovery, REO grade, plant feed rate and production uptime. See the "Non-GAAP Financial Measures" section below for a reconciliation of our Production Costs, which is a non-GAAP financial measure, to our COS, which is determined in accordance with GAAP, as well as the calculation of Production Cost per REO MT.

NdPr Production Volume

We measure our NdPr Production Volume for a given period in MTs, our principal unit of sale for our NdPr separated products. NdPr Production Volume refers to the volume of finished and packaged NdPr oxide produced at Mountain Pass for a given period. NdPr Production Volume is a key indicator of our separating and finishing capacity and efficiency.

NdPr Sales Volume

Our NdPr Sales Volume for a given period is calculated in MTs and on an NdPr oxide-equivalent basis (see example below). A unit, or MT, is considered sold once we recognize revenue on its sale, whether sold as NdPr oxide or NdPr metal, as determined in accordance with GAAP. For NdPr metal sales, the MTs sold and included in NdPr Sales Volume are calculated on the basis of the volume of NdPr oxide used to produce such NdPr metal. For example, assuming a material conversion ratio of 1.25, a sale of 100 MTs of NdPr metal would be included in this KPI as 125 MTs of NdPr oxide-equivalent. NdPr Sales Volume is a key measure of our ability to convert our production of separated NdPr products into revenue.

We expect to have a mix of contracts with customers where we will sell NdPr as (i) oxide, (ii) metal, where the amount of oxide required to produce such metal is variable, and (iii) metal, where we have a guarantee of the amount produced and sold based on the amount of oxide consumed. Among other factors, differences between quarterly NdPr Production Volume and NdPr Sales Volume may be caused by the time required for the conversion of NdPr oxide to NdPr metal, including time in-transit.

NdPr Realized Price per KG

We calculate the NdPr Realized Price per kilogram ("KG") for a given period as the quotient of: (i) our NdPr oxide and metal sales, which are determined in accordance with GAAP, for a given period and (ii) our NdPr Sales Volume for the same period. NdPr Realized Price per KG is an important measure of the market price of our NdPr products.

Factors Affecting Our Performance

We believe we are uniquely positioned to capitalize on the key trends of electrification and supply chain security, particularly as domestic EV production grows. Our continued success depends to a significant extent on our ability to take advantage of the following opportunities and meet the challenges associated with them.

Demand for REE

The key demand drivers for REE are a diverse array of growing end markets, including: electric mobility (e.g., traction motors in passenger and commercial xEVs, etc.); renewable power generation (e.g., wind power generators); energy-efficient motors, pumps, and compressors (e.g., heating, ventilation and air conditioning ("HVAC") systems, elevators, escalators, etc.);

industrial and service robotics (e.g., motors, actuators, brakes and sensors used in industrial and service robots); consumer and medical applications (e.g., smart phones and other mobile devices, computing devices, speakers and microphones, fiber optics, laser crystals, x-ray equipment, etc.); critical defense systems (e.g., guidance and control systems, avionics, global positioning systems, radar and sonar, drones, etc.); and catalysts and phosphors (e.g., vehicle emissions reduction, fuel refining, energy-efficient lighting, etc.). Accordingly, the demand for our products may be impacted by demand for these downstream products, particularly the continued growth in xEVs.

Despite the current macroeconomic conditions, we continue to believe we benefit from the growth of the rare earth market, particularly the market for NdPr and permanent magnets, and from several demand tailwinds for REE. These include the trend toward electrification; geographic supply chain diversification, particularly in relation to China; the U.S. government initiatives to restore domestic supply of critical minerals; and the increasing acceptance of environmental, social and governance mandates.

However, changes in technology could also drive down the use of REE, including NdPr, in the components in which they are now used, or lead to a decline in reliance on such components altogether. Actual, or perceived, decreases in demand for REE, whether through changes in technology or slower growth in the end markets that utilize REE, could result in a decline in the market price of REE, including NdPr, and/or result in pricing volatility. We also operate in a competitive industry, and many of our key competitors are based in China, where competitors may not be subject to the same rigorous environmental standards and production costs are typically lower than in the U.S.

Maximizing Production Efficiency

Since the implementation of our Stage I optimization plan and the achievement of commercial production of concentrate on July 1, 2019, our quarterly REO Production Volume has exceeded 8,500 MTs, and we have achieved at least 40,000 MTs of annual REO Production Volume since 2021. These results were achieved by optimizing the reagent scheme, reducing process temperatures, improving tailings facility management, and committing to operational excellence, which has allowed us to achieve approximately 92% uptime in 2023. Our Stage I optimization plan enabled us to achieve what we believe to be world-class production cost levels for rare earth concentrate.

In November 2023, we announced our “Upstream 60K” strategy whereby we intend to grow our annual REO Production Volume to approximately 60,000 MTs by expanding upstream capacity via investments in further beneficiation, including the ability to process alternative feedstocks and upgrade lower-grade feedstocks. We aim to achieve this initiative within the next four years with modest incremental capital investment.

The success of our business reflects our ability to continue to manage our costs. Our production achievements in Stage I have provided economies of scale to lower production costs per MT of REO produced in concentrate. Furthermore, we designed our Stage II process flow to capitalize on the inherent advantages of the bastnaesite ore at Mountain Pass, that is well-suited to low-cost refining by selectively eliminating the need to carry cerium, a lower-value mineral, through the separations process. Additionally, our location offers transportation advantages that create meaningful cost efficiencies in securing incoming supplies and shipping of our final products.

We currently operate a single site in a single location, and any stoppage in activity, including for reasons outside of our control, could adversely impact our production, results of operations and cash flows. In addition, several of our current and potential competitors are government supported and may have access to substantially more capital, which may allow them to make similar or greater efficiency improvements or undercut market prices for our product.

Development of Our REE Refining and Downstream Manufacturing Capabilities

Stage II advanced our operations from the production of rare earth concentrate to the separation of individual REE. The project incorporated upgrades and enhancements to the prior facility process flow intended to reliably produce separated REE at a low cost while minimizing our impact on the environment. More specifically, we have reintroduced an oxidizing roasting circuit, reoriented portions of the plant process flow, increased product finishing capacity, improved wastewater management, and made other improvements to materials handling and storage. The reintroduction of the oxidizing roasting circuit allows subsequent stages of the production process to occur at lower temperatures, and with lower volumes of materials and reagents, which supports lower operating and maintenance costs and higher uptime than would otherwise be achievable.

During the third quarter of 2023, we began producing separated rare earth products. However, we expect that it may take several quarters to achieve our designed throughput of separated products. As we increase production of separated products over time, we expect to improve our per-unit production costs of NdPr oxide, which represents a majority of the value contained in our concentrate.

Partially supported by a $35.0 million award from the Department of Defense's Office of Industrial Base Policy, Industrial Base Analysis and Sustainment program, we are currently advancing the facilitating works, engineering and procurement on the HREE Facility, which will be built at Mountain Pass and will be integrated into the rest of our Stage I and Stage II facilities. The HREE Facility is expected to support the separating of HREE contained in the Mountain Pass ore as well as from third-party feedstocks.

In addition, we are constructing the Fort Worth Facility and developing engineering and manufacturing technology to process NdPr oxide into metal and magnets, while incorporating magnet recycling capabilities. These initiatives support our long-term plans to become a leading global source for rare earth magnets. We believe integration into magnet production will provide some protection from commodity pricing volatility, while also enhancing our business profile as the producer of a critical industrial output in addition to a producer of resources. We expect our Stage III efforts to continue to benefit from geopolitical developments, including initiatives to repatriate critical materials supply chains.

Our Mineral Reserves

Our ore body has proven over more than 60 years of operations to be one of the world's largest and highest-grade rare earth resources. As of December 31, 2023, SRK Consulting (U.S.), Inc., an independent consulting firm that we retained to assess our reserves, estimated total proven and probable reserves of 1.86 million short tons of REO contained in 28.46 million short tons of ore at Mountain Pass, with an average ore grade of 6.20%. These estimates use an estimated economical cut-off grade of 2.43% total rare earth oxide. Based on these estimated reserves and our expected annual production rate of REO upon production ramp-up of Stage II, our expected mine life was approximately 33 years as of December 31, 2023. Over time, we expect to be able to continue to grow our expected mine life through additional exploratory drilling and improved processing capabilities, which may result in changes to various assumptions underlying our mineral reserve estimate.

Mining activities in the U.S. are heavily regulated, particularly in California. Regulatory changes may make it more challenging for us to access our reserves. In addition, new mineral deposits may be discovered elsewhere, which could make our operations less competitive.

Results of Operations

Comparison of the Years Ended December 31, 2023, 2022, and 2021

The following table summarizes our results of operations:

(in thousands, except percentages)	For the year ended December 31, 2023	2022	2021	Amount Change 2023 vs. 2022	2022 vs. 2021	% Change 2023 vs. 2022	2022 vs. 2021
Revenue:							
Rare earth concentrate	$ 252,468	$ 517,267	$ 328,563	$ (264,799)	$ 188,704	(51)%	57 %
NdPr oxide and metal	695	—	—	695	—	N/M	N/M
Other rare earth products	282	10,243	3,389	(9,961)	6,854	(97)%	202 %
Total revenue	253,445	527,510	331,952	(274,065)	195,558	(52)%	59 %
Operating costs and expenses:							
Cost of sales[(1)]	92,714	92,218	76,253	496	15,965	1 %	21 %
Selling, general and administrative	79,245	75,857	56,646	3,388	19,211	4 %	34 %
Depreciation, depletion and amortization	55,709	18,356	24,382	37,353	(6,026)	203 %	(25)%
Start-up costs	21,330	7,551	378	13,779	7,173	182 %	N/M
Advanced projects and development	14,932	4,249	4,195	10,683	54	251 %	1 %
Other operating costs and expenses	7,234	1,868	4,753	5,366	(2,885)	287 %	(61)%
Total operating costs and expenses	271,164	200,099	166,607	71,065	33,492	36 %	20 %
Operating income (loss)	(17,719)	327,411	165,345	(345,130)	162,066	(105)%	98 %
Interest expense, net	(5,254)	(5,786)	(8,904)	532	3,118	(9)%	(35)%
Other income, net	56,048	19,527	3,754	36,521	15,773	187 %	420 %
Income before income taxes	33,075	341,152	160,195	(308,077)	180,957	(90)%	113 %
Income tax expense	(8,768)	(52,148)	(25,158)	43,380	(26,990)	(83)%	107 %
Net income	$ 24,307	$ 289,004	$ 135,037	$ (264,697)	$ 153,967	(92)%	114 %
Adjusted EBITDA[(2)]	$ 102,502	$ 388,631	$ 219,077	$ (286,129)	$ 169,554	(74)%	77 %
Adjusted Net Income[(2)]	$ 71,378	$ 320,557	$ 154,187	$ (249,179)	$ 166,370	(78)%	108 %
Free Cash Flow[(2)]	$ (196,398)	$ 22,049	$ (17,517)	$ (218,447)	$ 39,566	N/M	N/M

N/M = Not meaningful.

(1) Excludes depreciation, depletion and amortization.

(2) Non-GAAP financial measures are defined and reconciled to the most directly comparable GAAP financial measures in the "Non-GAAP Financial Measures" section below.

Rare earth concentrate revenue consists primarily of sales of traditional and roasted rare earth concentrate. The sales price of rare earth concentrate sold to Shenghe under both agreements is based on an agreed-upon price per MT, with an adjustment for the ultimate market price of the product realized by Shenghe upon sales to their customers, including the impact of changes in the exchange rate between the Chinese Yuan and the U.S. dollar.

The decrease in rare earth concentrate revenue for the year ended December 31, 2023, as compared to the prior year, was driven by lower Realized Price per REO MT, which decreased by 43% when compared to the prior year, as well as lower REO Sales Volume, which decreased by 15% when compared to the prior year.

Realized Price per REO MT for the year ended December 31, 2023, reflects a significantly softer pricing environment for rare earth products, as compared to the prior year when pricing peaked in February 2022. As noted above in the "Factors Affecting our Performance" section, market prices for rare earth products may be volatile due to actual or perceived changes in supply or demand. The decline in the market prices for rare earth products in 2023 was largely attributable to lower than anticipated growth in demand for magnetic products, which negatively impacted the price of REE. The decrease in REO Sales Volume for the year ended December 31, 2023, was due to the start-up of Stage II operations. A significant portion of the REO produced, which could otherwise have been sold as rare earth concentrate, was used to charge the Stage II circuits, establish separations work-in-process inventory, or produce packaged and finished separated rare earth products, the majority of which have not yet been sold.

Historically, our REO Sales Volume had generally tracked our REO Production Volume over time with slight period-to-period differences caused by the timing of shipments. However, as we continue to ramp up production of separated rare earth

materials, we expect that significant volumes of REO produced from Stage I operations will be retained for separation and not sold as concentrate. In addition, a significant portion of the contained cerium in the REO produced will be intentionally rejected and may not result in finished product. Accordingly, as evidenced in the third and fourth quarters of 2023 (see the "Quarterly Performance Trend" section below), we expect that REO Sales Volume will be significantly lower than REO Production Volume in the future as we produce and sell more separated products.

NdPr oxide and metal revenue consists of sales of NdPr oxide under individual sales agreements, which commenced in the fourth quarter of 2023. As we ramp up production of separated rare earth products, we expect our NdPr oxide and metal revenue to become a larger portion of our total revenue. Accordingly, to the extent we are able to sell a greater portion of NdPr oxide and NdPr metal, we expect that rare earth concentrate revenue will decline in future periods.

Other rare earth products revenue for the year ended December 31, 2023, decreased as compared to the prior year, primarily driven by $8.5 million of revenue related to a sales agreement with Shenghe entered into in March 2022 for certain stockpiles of rare earth fluoride ("REF").

Cost of sales (excluding depreciation, depletion and amortization) consists of production- and processing-related labor costs (including wages and salaries, benefits, bonuses, and stock-based compensation), mining and processing supplies (such as reagents), parts and labor for the maintenance of our mining fleet and processing facilities, other facilities-related costs (such as property taxes and utilities), packaging materials, and shipping and freight costs.

COS for the year ended December 31, 2023, remained relatively flat year over year, primarily due to an increase in Production Cost per REO MT of $330 or 19%, offset by a decrease in REO Sales Volume and $5.5 million in lower shipping and freight costs, which are included in COS but excluded from Production Cost per REO MT. The increase in Production Cost per REO MT was driven by higher payroll costs, including the increase in employee headcount to support the expansion of operations, and to a lesser extent, higher materials and supplies costs as well as higher property and other taxes. Shipping and freight costs decreased due to reductions in trucking rates and diesel fuel prices, as well as lower sales volume. In addition, COS for the year ended December 31, 2023, included a $2.3 million write-down on certain of our inventories (refer to Note 4, "Inventories," in the notes to the Consolidated Financial Statements for more information). Production Cost per REO MT varies period to period based on the timing of scheduled outages of our production facilities for maintenance. See the "Quarterly Performance Trend" section below.

With the commissioning of Stage II in 2023, the expected headcount growth to support our refining operations is largely complete as of December 31, 2023. Therefore, we do not anticipate payroll cost growth to be as significant in future periods, although year-over-year comparisons may still be impacted given the timing of hiring in 2023. In addition, as noted below, given the commencement of initial production of separated products in late 2023, we expect certain salaries and wages of employees previously involved in start-up activities will no longer be considered start-up costs in 2024 as commercial production ramps. Instead, such costs will primarily be included in COS to the extent such costs are not absorbed into inventories. Lastly, we expect other operating costs associated with our Stage II operations, particularly chemical reagents, maintenance expenses, and consumables, which have a significant variable component, to grow in line with production in future periods.

Selling, general and administrative ("SG&A") expenses consist primarily of personnel costs (including salaries, benefits, bonuses, and stock-based compensation) of our administrative functions such as executives, accounting and finance, legal, and information technology; professional services (including legal, regulatory, audit and others); certain engineering expenses; insurance, license and permit costs; corporate office lease cost; office supplies; and certain environmental, health and safety expenses.

SG&A expenses for the year ended December 31, 2023, increased by $3.4 million, or 4%, as compared to prior year, driven primarily by $5.4 million in higher personnel costs (excluding stock-based compensation expense), along with other general and administrative costs required to further build out our corporate infrastructure in support of our downstream expansion. Additionally, with the commencement of the lease for corporate office space in April 2023, we recognized $0.9 million in higher building rent expense compared to the prior year and are expected to incur higher rent expense going forward, when compared to prior year periods. The increase in SG&A was partially offset by $8.0 million in lower stock-based compensation expense due primarily to the timing of grants and the recognition of stock-based compensation on an accelerated basis for virtually all of our stock awards.

Depreciation, depletion and amortization primarily consists of depreciation of property, plant and equipment and depletion of mineral rights. The year-over-year increase in depreciation, depletion and amortization for the year ended December 31, 2023, primarily reflects an increase in depreciation of $38.2 million, resulting from the continued placement of

new circuits and facilities associated with our Stage II optimization project into service, which began at the end of the fourth quarter of 2022.

Start-up costs relate to costs associated with restarting an existing facility or commissioning a new facility, circuit or process of our production, manufacturing, or separations facilities prior to the achievement of commercial production, that do not qualify for capitalization. Such costs, which are expensed as incurred, include certain salaries and wages, outside services, parts, training, and utilities, among other items, used or consumed directly in these start-up activities.

Start-up costs for the year ended December 31, 2023, increased by $13.8 million year over year, of which $12.8 million was associated with our Stage II optimization project and the remaining $1.0 million was associated with our Stage III initiatives. Given the commencement of initial production of separated products in late 2023, we expect start-up costs associated with Stage II will decrease meaningfully in 2024 as commercial production ramps, specifically since salaries and wages of certain employees will no longer be considered start-up, and instead will primarily be included in COS to the extent such costs are not absorbed into inventories. In addition, we currently expect start-up costs pertaining to our Stage III initiatives will increase in 2024 as we advance in starting up and developing our magnetics capability.

Advanced projects and development consists principally of costs incurred in connection with research and development of new processes or to significantly enhance our existing processes, and certain government contracts, as well as costs incurred to support growth initiatives or pursue other opportunities. Advanced projects and development for the year ended December 31, 2023, increased year over year primarily due to costs incurred for legal, consulting, and advisory services to support growth initiatives, such as potential acquisitions, mergers, or other investments, which increased by $9.0 million, and continued investment in research and development activities, which increased by $1.5 million and related primarily to Stage III magnetics.

Other operating costs and expenses consists primarily of accretion of asset retirement and environmental obligations; gains or losses on disposals of long-lived assets, including demolition costs; and write-downs of legacy stockpile inventories. Other operating costs and expenses for the year ended December 31, 2023, increased by $5.4 million year over year as a result of $5.5 million in demolition costs associated with demolishing and removing certain out-of-use older facilities and infrastructure from the Mountain Pass site to accommodate future expansion in rare earth processing.

Interest expense, net principally consists of the expense associated with the 0.25% per annum interest rate and the amortization of the debt issuance costs on our Convertible Notes (as defined in the "Liquidity and Capital Resources" section below) and the amortization of the discount on a prior debt obligation to Shenghe, offset by capitalized interest. Interest expense, net for the year ended December 31, 2023, decreased year over year due to the full repayment of a debt obligation to Shenghe in the first quarter of 2022.

Other income, net consists of interest and investment income and non-operating gains or losses. Other income, net for the year ended December 31, 2023, increased year over year as a result of interest and investment income earned on our short-term investments, which were purchased starting in the second quarter of 2022. Interest and investment income is principally generated from accretion of the discount on such investments.

Income tax expense consists of an estimate of U.S. federal and state income taxes in the jurisdictions in which we conduct business, adjusted for federal, state and local allowable income tax benefits, the effect of permanent differences and any valuation allowance against deferred tax assets. The effective tax rate (income tax expense as a percentage of income before income taxes) was 26.5%, 15.3% and 15.7% for the years ended December 31, 2023, 2022 and 2021, respectively. The effective tax rate for the year ended December 31, 2023, differed from the statutory tax rate of 21% primarily due to a deduction limitation on officers' compensation and a valuation against certain deferred tax assets, offset by the California Competes Tax Credit.

The Section 45X Advanced Manufacturing Production Credit (the "45X Credit") provides a credit equal to 10% of eligible "production costs incurred" with respect to the production and sale of critical minerals, including NdPr oxide. In December 2023, the Internal Revenue Service released proposed regulations on the 45X Credit, which, among other things, clarified the definition of "production costs incurred." The proposed regulations exclude direct and indirect materials costs, including costs related to the extraction or acquisition of raw materials, from the definition of "production costs incurred." If the proposed regulations are approved as currently written, the exclusion of these costs may result in the 45X Credit being materially less than we originally anticipated. We formally submitted comments on the proposed regulations in support of including materials and extraction costs in the definition of "production costs incurred" related to critical minerals under the 45X Credit. For additional information on the 45X Credit, refer to Note 12, "Income Taxes," and Note 16, "Government Grants," in the notes to the Consolidated Financial Statements.

Quarterly Performance Trend

While our business is not highly seasonal in nature, we sometimes experience a timing lag between production and sales, which may result in volatility in our results of operations between periods. The timing lag may be the result of, or influenced by, factors such as the timing and duration of shipments or the time required to convert materials. In addition, quarterly production of concentrate is impacted by the timing of scheduled outages of our production facilities for maintenance, which typically occur in the second and fourth quarters. Finally, starting in the third quarter of 2023, as we ramp up production of separated rare earth materials, we expect that significant volumes of REO produced will be retained for separation and not sold as concentrate.

The following table presents our KPIs for the quarterly periods indicated:

	FY2023				FY2022				FY2021			
(in whole units or dollars)	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Rare earth concentrate												
REO Production Volume (MTs)	9,257	10,766	10,863	10,671	10,485	10,886	10,300	10,828	10,261	11,998	10,305	9,849
REO Sales Volume (MTs)	7,174	9,177	10,271	10,215	10,816	10,676	10,000	11,706	9,674	12,814	9,877	9,793
Realized Price per REO MT	$ 5,622	$ 5,718	$ 6,231	$ 9,365	$ 8,515	$11,636	$13,918	$13,818	$10,101	$ 7,693	$ 7,343	$ 5,891
Production Cost per REO MT[(1)]	$ 2,393	$ 2,020	$ 1,938	$ 1,978	$ 1,928	$ 1,653	$ 1,750	$ 1,594	$ 1,525	$ 1,449	$ 1,538	$ 1,475
Separated NdPr products												
NdPr Production Volume (MTs)	150	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NdPr Sales Volume (MTs)	10	—	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NdPr Realized Price per KG	$ 70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A = Not applicable as there was either no NdPr production volume or no NdPr sales volume in these periods.

(1) As noted above, beginning with the first quarter of 2024, we will no longer present Production Cost per REO MT as this metric is focused solely on Stage I concentrate operations.

Liquidity and Capital Resources

Liquidity refers to our ability to generate sufficient cash flows to meet the cash requirements of our business operations, including working capital and capital expenditure needs, contractual obligations, debt service and other commitments. In recent years, our principal sources of liquidity have been financing through the consummation of the business combination with Fortress Value Acquisition Corp. in November 2020, the issuance of the Convertible Notes in March 2021, and net cash from operating activities. As of December 31, 2023, we had $997.8 million of cash, cash equivalents and short-term investments and $690.0 million principal amount of long-term debt.

Our results of operations and cash flows depend in large part upon the market prices of REO and particularly the price of rare earth concentrate. Rare earth concentrate is not quoted on any major commodities market or exchange and demand is currently constrained to a relatively limited number of refiners, a significant majority of which are based in China. Although we believe that our cash flows from operations and cash on hand are adequate to meet our liquidity requirements for the foreseeable future, uncertainty continues to exist as to the market price of REO, as evidenced by the volatility experienced in 2022 and the significant decrease seen in 2023, primarily due to concerns over the global economic conditions and actual or perceived concerns over increases in the supply of and/or decreases in demand for rare earth products. The significant decrease in the market price of rare earth products in 2023 negatively impacted our cash flows from operations and liquidity.

Our current working capital needs relate mainly to our mining, beneficiation, and separation operations. As we began the transition to selling separated rare earth products in 2023, our working capital needs increased materially, portions of which we expect to continue in 2024 as we ramp up the production and sales of separated rare earth products and advance our Stage III magnetics initiatives.

The completion of our mission to become a fully integrated domestic magnetics producer is expected to be capital intensive. With the construction portion of our Stage II optimization project complete, our principal capital expenditure requirements relate mainly to further investment in Mountain Pass, including the development of the HREE Facility, Upstream 60K, and other growth and investment projects, completing the buildout of the Fort Worth Facility, as well as periodic repairs and maintenance of mining and rare earth processing equipment. We expect to spend between $200 million and $250 million of capital costs in 2024, with further costs for all of these identified projects in 2025. Our future capital requirements will also depend on several other factors, including future acquisitions and potential additional investments in further downstream production.

Our estimated costs or estimated time to complete and commission these projects may increase, potentially significantly, due to factors outside of our control. While we believe that we have sufficient cash resources to fund these initiatives and operating working capital in the near term, we cannot assure this. If our available resources prove inadequate to fund our plans or commitments, we may be forced to revise our strategy and business plans or could be required, or elect, to seek additional funding through public or private equity or debt financings; however, such funding may not be available on terms acceptable to us, if at all. Any delays in our ongoing capital projects or substantial cost increases, including construction costs and related materials costs related to their execution, could significantly impact our ability to maximize our revenue opportunities and adversely impact our business and cash flows.

Debt and Other Long-Term Obligations

Convertible Notes: In March 2021, we issued $690.0 million aggregate principal amount of 0.25% unsecured green convertible senior notes that mature, unless earlier converted, redeemed or repurchased, on April 1, 2026 (the "Convertible Notes"), at a price of par. Interest on the Convertible Notes is payable on April 1st and October 1st of each year, beginning on October 1, 2021.

The Convertible Notes may, at our election, be settled in cash, shares of our common stock, or a combination thereof. We have the option to redeem the Convertible Notes, in whole or in part, beginning on April 5, 2024. The Convertible Notes are convertible into shares of our common stock at an initial conversion price of $44.28 per share, or 22.5861 shares, per $1,000 principal amount of notes, subject to adjustment upon the occurrence of certain corporate events. However, in no event will the conversion exceed 28.5714 shares of common stock per $1,000 principal amount of notes.

Prior to January 1, 2026, at their election, holders of the Convertible Notes may convert their outstanding notes under the following circumstances: (i) during any calendar quarter commencing with the third quarter of 2021 if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (ii) during the five business day period after any five consecutive trading day period (the "measurement period") in which the trading price (as defined in the indenture governing the Convertible Notes) per $1,000 principal amount of Convertible Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day; (iii) if we call any or all of the Convertible Notes for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date; or (iv) upon the occurrence of specified corporate events set forth in the indenture governing the Convertible Notes. On or after January 1, 2026, and prior to the maturity date of the Convertible Notes, holders may convert their outstanding notes at any time, regardless of the foregoing circumstances.

If we undergo a fundamental change (as defined in the indenture governing the Convertible Notes), holders may require us to repurchase for cash all or any portion of their outstanding notes at a price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date. In addition, following certain corporate events that occur prior to the maturity date of the Convertible Notes or if we deliver a notice of redemption, we will, in certain circumstances, increase the conversion rate for holders who elect to convert their outstanding notes in connection with such corporate event or notice of redemption, as the case may be.

At the time of issuance, we aimed to allocate an amount equal to the net proceeds from the Convertible Notes offering to existing or future investments in, or the financing or refinancing of, eligible "green projects" intended to reduce our environmental impact and/or enable the production of low-carbon technologies. As of December 31, 2023, all the net proceeds from the Convertible Notes offering were allocated to investments in eligible green projects, including through the utilization of the permitted 36-month lookback period. Until such time that the allocation was complete, the net proceeds were held for general corporate purposes.

Equipment Notes: We have financing agreements for the purchase of certain equipment, including trucks, tractors, loaders, graders, and various other machinery. As of December 31, 2023, we had $4.7 million in principal (and accrued interest) outstanding under the equipment notes, of which $2.1 million is due within the next 12 months.

Leases: We have lease arrangements for certain equipment and facilities, including office space, vehicles and equipment used in our operations. As of December 31, 2023, we had future expected lease payment obligations totaling $10.4 million, with $1.7 million due within the next 12 months. See Note 11, "Leases," in the notes to the Consolidated Financial Statements for further information.

Purchase Obligations: Our outstanding purchase obligations as of December 31, 2023, primarily consist of purchase orders initiated with vendors and suppliers in the ordinary course of business for operating and maintenance capital

expenditures that will be settled within one year. In certain instances, we are permitted to cancel, reschedule or adjust these orders. Consequently, only a small portion of these outstanding purchase orders relate to firm, non-cancelable and unconditional obligations. We have also entered into long-term supply arrangements for certain chemical reagents used in our operations, which is based on current consumption requirements.

Asset Retirement and Environmental Obligations: See Note 8, "Asset Retirement and Environmental Obligations," in the notes to the Consolidated Financial Statements for our estimated cash requirements to settle asset retirement and environmental obligations.

Other: In order to support our Fort Worth Facility, we expect to hire at least an additional 100 full-time employees within the next two years, which will result in additional cash requirements for salaries, benefits and training. We also expect to spend an additional $5 million to $6 million within the next year on completing the implementation of a new enterprise resource planning system. Lastly, our engineering, procurement, and construction contracts are typically cancellable.

Cash Flows

The following table summarizes our cash flows:

	For the year ended December 31,			Amount Change		% Change	
(in thousands, except percentages)	2023	2022	2021	2023 vs 2022	2022 vs 2021	2023 vs 2022	2022 vs 2021
Net cash provided by (used in):							
Operating activities	$ 62,699	$ 343,514	$ 101,971	$ (280,815)	$ 241,543	(82)%	237 %
Investing activities	$ 68,697	$ (1,356,971)	$ (119,363)	$ 1,425,668	$ (1,237,608)	N/M	N/M
Financing activities	$ (9,917)	$ (24,191)	$ 666,109	$ 14,274	$ (690,300)	(59)%	N/M

N/M = Not meaningful.

Net Cash Provided by Operating Activities: Net cash provided by operating activities decreased by $280.8 million for the year ended December 31, 2023, as compared to the prior year, reflecting a decrease in revenue, an increase in inventories to support our Stage II separations facilities as well as our Stage III initiatives, and a $1.2 million increase in cash paid for income taxes, as compared to the prior year. The decrease in net cash provided by operating activities was partially offset by a $20.4 million increase in interest received on our short-term investments and money market funds for the year ended December 31, 2023, as compared to the prior year. In addition, $13.6 million of our revenue was excluded from cash provided by operating activities for the year ended December 31, 2022, since that portion of the sales price was retained by Shenghe to reduce the debt obligation, with no similar amount in the current year.

Net Cash Provided by (Used in) Investing Activities: Net cash provided by investing activities was $68.7 million for the year ended December 31, 2023, compared to net cash used in investing activities of $1,357.0 million in the prior year. The change related primarily to activity in our short-term investments, with the total activity (i.e., purchases, sales, and maturities) in the current year resulting in net cash proceeds of $337.4 million, which were largely used to fund additions to property, plant and equipment. For the year ended December 31, 2022, the total activity in our short-term investments resulted in net cash purchases of $1,035.5 million. Additions to property, plant and equipment for the year ended December 31, 2023, which related primarily to construction spend on our Stage II optimization project, the Fort Worth Facility, and other investments in Mountain Pass, decreased by $64.7 million when compared to the prior year, which was largely due to the timing of substantially completing the assets associated with the Stage II optimization project. Net cash provided by investing activities in the current year was partially offset by a $9.7 million payment in exchange for a 49% equity interest in VREX Holdco.

Net Cash Used in Financing Activities: Net cash used in financing activities decreased by $14.3 million for the year ended December 31, 2023, as compared to the prior year, reflecting lower tax withholding on stock-based awards and lower principal payments on debt obligations and finance leases, principally due to a $2.9 million payment to Shenghe in the prior year to fully satisfy the debt obligation.

Non-GAAP Financial Measures

We present Adjusted EBITDA, Adjusted Net Income, Adjusted Diluted EPS, Free Cash Flow, Production Costs, and Total Value Realized, which are non-GAAP financial measures that we use to supplement our results presented in accordance with GAAP. These measures may be similar to measures reported by other companies in our industry and are regularly used by securities analysts and investors to measure companies' financial performance. Adjusted EBITDA, Adjusted Net Income,

Adjusted Diluted EPS, Free Cash Flow, Production Costs, and Total Value Realized are not intended to be substitutes for any GAAP financial measures and, as calculated, may not be comparable to other similarly titled measures of performance or liquidity of other companies within our industry or in other industries.

Adjusted EBITDA

We define Adjusted EBITDA as our GAAP net income before interest expense, net; income tax expense or benefit; and depreciation, depletion and amortization; further adjusted to eliminate the impact of stock-based compensation expense; initial start-up costs; transaction-related and other costs; accretion of asset retirement and environmental obligations; gain or loss on disposals of long-lived assets; certain write-downs of inventories; tariff rebates; and other income or loss. We present Adjusted EBITDA because it is used by management to evaluate our underlying operating and financial performance and trends. Adjusted EBITDA excludes certain expenses that are required in accordance with GAAP because they are non-recurring, non-cash or are not related to our underlying business performance. This non-GAAP financial measure is intended to supplement our GAAP results and should not be used as a substitute for financial measures presented in accordance with GAAP.

The following table presents a reconciliation of our Adjusted EBITDA, which is a non-GAAP financial measure, to our net income, which is determined in accordance with GAAP:

	For the year ended December 31,		
(in thousands)	**2023**	**2022**	**2021**
Net income	$ 24,307	$ 289,004	$ 135,037
Adjusted for:			
Depreciation, depletion and amortization	55,709	18,356	24,382
Interest expense, net	5,254	5,786	8,904
Income tax expense	8,768	52,148	25,158
Stock-based compensation expense[(1)]	25,236	31,780	22,931
Initial start-up costs[(2)]	20,607	7,432	378
Transaction-related and other costs[(3)]	11,435	1,784	3,338
Accretion of asset retirement and environmental obligations[(4)]	908	1,477	2,375
Loss on disposals of long-lived assets, net[(4)]	6,326	391	569
Write-down of inventories[(4)(5)]	—	—	1,809
Tariff rebate[(6)]	—	—	(2,050)
Other income, net[(7)]	(56,048)	(19,527)	(3,754)
Adjusted EBITDA	$ 102,502	$ 388,631	$ 219,077

(1) Principally included in “Selling, general and administrative” within our Consolidated Statements of Operations.

(2) Included in “Start-up costs” within our Consolidated Statements of Operations and excludes any applicable stock-based compensation, which is included in the “Stock-based compensation expense” line above. Relates to certain costs incurred in connection with the commissioning and starting up of our initial separations capability at Mountain Pass and our initial magnet-making capabilities at Fort Worth prior to the achievement of commercial production. These costs include labor of incremental employees hired in advance to work directly on such commissioning activities, training costs, costs of testing and commissioning the new circuits and processes, and other related costs. Given the nature and scale of the related costs and activities, management does not view these as normal, recurring operating expenses, but rather as non-recurring investments to initially develop our separations and magnet-making capabilities. Therefore, we believe it is useful and necessary for investors to understand our core operating performance in current and future periods by excluding the impact of these start-up costs. To the extent additional start-up costs are incurred in the future to expand our separations and magnet-making capabilities after initial achievement of commercial production (e.g., significantly expanding production capacity at an existing facility or building a new separations or magnet manufacturing facility), such costs would not be considered an adjustment for this non-GAAP financial measure.

(3) Principally included in “Advanced projects and development” within our Consolidated Statements of Operations, and pertains to legal, consulting, and advisory services, and other costs associated with specific transactions, including potential acquisitions, mergers, or other investments.

(4) Included in “Other operating costs and expenses” within our Consolidated Statements of Operations.

(5) Represents a non-cash write-down of a portion of our legacy low-grade stockpile inventory during the second quarter of 2021.

(6) Represents non-cash revenue recognized in connection with a tariff rebate received relating to product sales from prior periods.

(7) Amounts for the years ended December 31, 2023 and 2022, are principally comprised of interest and investment income. Amount for the year ended December 31, 2021, principally represents a non-cash gain recognized as a result of the Small Business Administration’s approval to forgive the Paycheck Protection Loan.

Adjusted Net Income and Adjusted Diluted EPS

We calculate Adjusted Net Income as our GAAP net income excluding the impact of stock-based compensation expense; initial start-up costs; transaction-related and other costs; gain or loss on disposals of long-lived assets; certain write-downs of inventories; tariff rebates; and other items that we do not consider representative of our underlying operations; adjusted to give effect to the income tax impact of such adjustments; and the release of valuation allowance. We calculate Adjusted Diluted EPS as our GAAP diluted EPS excluding the per share impact, using adjusted diluted weighted-average shares outstanding as the denominator, of stock-based compensation expense; initial start-up costs; transaction-related and other costs; gain or loss on disposals of long-lived assets; certain write-downs of inventories; tariff rebates; and other items that we do not consider representative of our underlying operations; adjusted to give effect to the income tax impact of such adjustments; and the release of valuation allowance.

Adjusted Net Income and Adjusted Diluted EPS exclude certain expenses that are required in accordance with GAAP because they are non-recurring, non-cash, or not related to our underlying business performance. To calculate the income tax impact of such adjustments on a year-to-date basis, we utilize an effective tax rate equal to our income tax expense excluding material discrete costs and benefits, with any impacts of changes in effective tax rate being recognized in the current period. We present Adjusted Net Income and Adjusted Diluted EPS because it is used by management to evaluate our underlying operating and financial performance and trends. These non-GAAP financial measures are intended to supplement our GAAP results and should not be used as a substitute for financial measures presented in accordance with GAAP.

The following table presents a reconciliation of our Adjusted Net Income, which is a non-GAAP financial measure, to our net income, which is determined in accordance with GAAP:

	For the year ended December 31,		
(in thousands)	**2023**	**2022**	**2021**
Net income	$ 24,307	$ 289,004	$ 135,037
Adjusted for:			
Stock-based compensation expense[(1)]	25,236	31,780	22,931
Initial start-up costs[(2)]	20,607	7,432	378
Transaction-related and other costs[(3)]	11,435	1,784	3,338
Loss on disposals of long-lived assets, net[(4)]	6,326	391	569
Write-down of inventories[(4)(5)]	—	—	1,809
Tariff rebate[(6)]	—	—	(2,050)
Other[(7)]	(51)	(273)	(3,754)
Tax impact of adjustments above[(8)]	(16,482)	(6,716)	(4,071)
Release of valuation allowance	—	(2,845)	—
Adjusted Net Income	$ 71,378	$ 320,557	$ 154,187

(1) Principally included in "Selling, general and administrative" within our Consolidated Statements of Operations.

(2) Included in "Start-up costs" within our Consolidated Statements of Operations and excludes any applicable stock-based compensation, which is included in the "Stock-based compensation expense" line above. Relates to certain costs incurred in connection with the commissioning and starting up of our initial separations capability at Mountain Pass and our initial magnet-making capabilities at Fort Worth prior to the achievement of commercial production. These costs include labor of incremental employees hired in advance to work directly on such commissioning activities, training costs, costs of testing and commissioning the new circuits and processes, and other related costs. Given the nature and scale of the related costs and activities, management does not view these as normal, recurring operating expenses, but rather as non-recurring investments to initially develop our separations and magnet-making capabilities. Therefore, we believe it is useful and necessary for investors to understand our core operating performance in current and future periods by excluding the impact of these start-up costs. To the extent additional start-up costs are incurred in the future to expand our separations and magnet-making capabilities after initial achievement of commercial production (e.g., significantly expanding production capacity at an existing facility or building a new separations or magnet manufacturing facility), such costs would not be considered an adjustment for this non-GAAP financial measure.

(3) Principally included in "Advanced projects and development" within our Consolidated Statements of Operations, and pertains to legal, consulting, and advisory services, and other costs associated with specific transactions, including potential acquisitions, mergers, or other investments.

(4) Included in "Other operating costs and expenses" within our Consolidated Statements of Operations.

(5) Represents a non-cash write-down of a portion of our legacy low-grade stockpile inventory during the second quarter of 2021.

(6) Represents non-cash revenue recognized in connection with a tariff rebate received relating to product sales from prior periods.

(7) Amount for the year ended December 31, 2021, principally represents a non-cash gain recognized as a result of the Small Business Administration's approval to forgive the Paycheck Protection Loan, which is included in "Other income, net" within our Consolidated Statements of Operations.

(8) Tax impact of adjustments is calculated using an adjusted effective tax rate, which excludes the impact of discrete tax costs and benefits, to each adjustment. The adjusted effective tax rates were 25.9%, 16.3% and 17.5% for the years ended December 31, 2023, 2022 and 2021, respectively. See Note 12, "Income Taxes," in the notes to the Consolidated Financial Statements for more information on the effective tax rate.

The following table presents a reconciliation of our Adjusted Diluted EPS, which is a non-GAAP financial measure, to our diluted EPS, which is determined in accordance with GAAP:

	For the year ended December 31,		
	2023	2022	2021
Diluted EPS	$ 0.14	$ 1.52	$ 0.73
Adjusted for:			
Stock-based compensation expense	0.13	0.16	0.12
Initial start-up costs	0.11	0.04	—
Transaction-related and other costs	0.06	0.01	0.02
Loss on disposals of long-lived assets, net	0.03	—	—
Write-down of inventories	—	—	0.01
Tariff rebate	—	—	(0.01)
Other	—	—	(0.02)
Tax impact of adjustments above[(1)]	(0.08)	(0.04)	(0.02)
Release of valuation allowance	—	(0.01)	—
Adjusted Diluted EPS	$ 0.39	$ 1.68	$ 0.83
Diluted weighted-average shares outstanding	178,152,212	193,453,087	189,844,028
Assumed conversion of Convertible Notes[(2)]	15,584,409	—	—
Adjusted diluted weighted-average shares outstanding	193,736,621	193,453,087	189,844,028

(1) Tax impact of adjustments is calculated using an adjusted effective tax rate, which excludes the impact of discrete tax costs and benefits, to each adjustment. The adjusted effective tax rates were 25.9%, 16.3% and 17.5% for the years ended December 31, 2023, 2022 and 2021, respectively. See Note 12, "Income Taxes," in the notes to the Consolidated Financial Statements for more information on the effective tax rate.

(2) The Convertible Notes were antidilutive for GAAP purposes for the year ended December 31, 2023. For purposes of calculating Adjusted Diluted EPS, we have added back the assumed conversion of the Convertible Notes since they would not be antidilutive when using Adjusted Net Income as the numerator in the calculation of Adjusted Diluted EPS.

Total Value Realized

Total Value Realized, which we used to calculate our KPI, Realized Price per REO MT, for the year ended December 31, 2021, is a non-GAAP financial measure. The following table presents a reconciliation of our Total Value Realized, to our rare earth concentrate sales, which is determined in accordance with GAAP, for the year ended December 31, 2021:

(in thousands)	**For the year ended December 31, 2021**
Rare earth concentrate sales	$ 328,563
Adjusted for:	
Tariff rebate[(1)]	(2,050)
Total Value Realized	$ 326,513

(1) Represents non-cash revenue recognized in connection with a tariff rebate received relating to product sales from prior periods.

Production Costs

Production Costs, which we use to calculate our KPI, Production Cost per REO MT, is a non-GAAP financial measure. Production Cost per REO MT is a key indicator of our concentrate production efficiency. As mentioned above, beginning with the first quarter of 2024, we will no longer present Production Cost per REO MT, which is a metric focused solely on Stage I concentrate operations, as it will no longer be meaningful in evaluating and understanding our business or operating results. Accordingly, we will also no longer present Production Costs.

The following table presents a reconciliation of our Production Costs to our COS, which is determined in accordance with GAAP, as well as the calculation of Production Cost per REO MT:

	For the year ended December 31,		
(in thousands, unless otherwise stated)	**2023**	**2022**	**2021**
Cost of sales (excluding depreciation, depletion and amortization)	$ 92,714	$ 92,218	$ 76,253
Adjusted for:			
Stock-based compensation expense[(1)]	(3,932)	(2,853)	(4,294)
Shipping and freight[(2)]	(7,485)	(13,002)	(8,923)
Write-down of inventories[(3)]	(2,285)	—	—
Other[(4)]	(3,198)	(1,715)	(79)
Production Costs	75,814	74,648	62,957
Divided by:			
REO Sales Volume (in MTs)	36,837	43,198	42,158
Production Cost per REO MT (in dollars)	$ 2,058	$ 1,728	$ 1,493

(1) Pertains only to the amount of stock-based compensation expense included in "Cost of sales (excluding depreciation, depletion and amortization)" within our Consolidated Statements of Operations.

(2) Includes $1.3 million for the year ended December 31, 2022, of shipping and freight costs associated with sales of REF stockpiles.

(3) Amount pertains to a write-down of non-concentrate inventories, which is included in "Cost of sales (excluding depreciation, depletion and amortization)" within the Consolidated Statements of Operations.

(4) Amount for the year ended December 31, 2023, pertains to costs (excluding shipping and freight) associated with non-concentrate products. Amount for the year ended December 31, 2022, pertains primarily to costs (excluding shipping and freight) attributable to sales of REF stockpiles.

Free Cash Flow

We calculate Free Cash Flow as net cash provided by operating activities less additions to property, plant and equipment, net of proceeds from government awards used for construction. We believe Free Cash Flow is useful for comparing our ability to generate cash with that of our peers. The presentation of Free Cash Flow is not meant to be considered in isolation or as an alternative to cash flows from operating activities and does not necessarily indicate whether cash flows will be sufficient to fund cash needs.

The following table presents a reconciliation of our Free Cash Flow, which is a non-GAAP financial measure, to our net cash provided by operating activities, which is determined in accordance with GAAP:

	For the year ended December 31,		
(in thousands)	**2023**	**2022**	**2021**
Net cash provided by operating activities[(1)]	$ 62,699	$ 343,514	$ 101,971
Additions to property, plant and equipment, net[(2)]	(259,097)	(321,465)	(119,488)
Free Cash Flow	$ (196,398)	$ 22,049	$ (17,517)

(1) Under the terms of the A&R Offtake Agreement and pursuant to the accounting treatment thereof, $13.6 million and $54.8 million of our revenue for the years ended December 31, 2022 and 2021, respectively, was excluded from cash provided by operating activities since that portion of the sales price was retained by Shenghe to reduce the debt obligation.

(2) Amounts for the years ended December 31, 2023, 2022 and 2021, are net of $2.8 million, $5.1 million and $4.4 million, respectively, in proceeds from government awards used for construction.

Critical Accounting Estimates

Preparation of the Consolidated Financial Statements in accordance with GAAP requires our management to make judgments, estimates and assumptions that impact the reported amount of revenue and operating expenses, assets and liabilities and the disclosure of contingent assets and liabilities. We consider an accounting judgment, estimate or assumption to be critical when (i) the estimate or assumption is complex in nature or requires a high degree of judgment and (ii) the use of different judgments, estimates and assumptions could have a material impact on our Consolidated Financial Statements. Our significant accounting policies are described in Note 2, "Significant Accounting Policies," in the notes to the Consolidated Financial Statements. Our critical accounting estimates are described below.

Revenue

We recognize revenue from sales of rare earth products produced at Mountain Pass. Shenghe purchased the vast majority of our production for the years ended December 31, 2023, 2022 and 2021, and is an affiliate of an equity holder of MP Materials. We recognize revenue at the point in time control of the products transfers to the customer and, under our offtake agreements with Shenghe, our performance obligation is typically satisfied when we deliver products to the agreed-upon shipping point. The transaction price with Shenghe is typically based on an agreed-upon price per MT, with an adjustment for the ultimate market price of the product realized by Shenghe in their sales to their customers, further adjusted for certain contractually negotiated amounts. At the end of each reporting period, we estimate forms of variable consideration, including an assessment on constraining such variable consideration, based on historical experience, current market prices and currency exchange rates, and other factors that can be reasonably anticipated. Historically, the differences between our estimates of variable consideration and actual consideration have not been material to any reporting period.

Asset Retirement Obligations

We recognize asset retirement obligations for estimated costs of legally and contractually required closure, dismantlement, and reclamation activities associated with Mountain Pass. Asset retirement obligations are initially recognized at their estimated fair value in the period in which the obligation is incurred. In determining fair value, management makes estimates based on the expected timing of reclamation activities; cash flows to perform activities, which involves utilizing an assumption for future inflation; amount and uncertainty associated with the cash flows, including adjustments for a market risk premium; and discounts such amounts using a credit-adjusted risk-free rate. Although we base our estimates on historical experience and reevaluate our estimated timing and cash flows regularly, since the majority of the cash flows to settle our asset retirement obligations occur decades in the future, it is inherently difficult to accurately predict the ultimate cash flows used to settle such obligations. As a result, these estimates and assumptions are subjective and can vary over time.

Since December 31, 2020, our asset retirement obligations have decreased from $25.6 million to $5.7 million as of December 31, 2023, as a result of revisions in our estimated timing and cash flows pertaining to required reclamation activities. In particular, as a result of an updated life-of-mine, which revised the estimated timing of cash flows by approximately an additional 13 years, we recorded a decrement of $9.8 million during the year ended December 31, 2021. Furthermore, during the year ended December 31, 2022, we recorded a decrement of $13.1 million, the effect of removing estimated cash flows pertaining to certain of our processing and separations facilities at Mountain Pass that no longer required reclamation. See Note 8, "Asset Retirement and Environmental Obligations," in the notes to the Consolidated Financial Statements for more information.

Recently Adopted and Issued Accounting Pronouncements

Recently adopted and issued accounting pronouncements are described in Note 2, "Significant Accounting Policies," in the notes to the Consolidated Financial Statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We have in the past and may in the future be exposed to certain market risks, including commodity price, foreign currency, and interest rate risks, in the ordinary course of our business, as discussed further below.

Commodity Price Risk

Our results of operations depend in large part upon the market prices of REO and particularly the price of rare earth concentrate. Rare earth concentrate is not quoted on any major commodities market or exchange as product attributes vary and demand is currently constrained to a relatively limited number of refiners, a significant majority of which are based in China.

NdPr represents a significant portion of the economic value of our rare earth concentrate. We expect demand for NdPr to continue to grow, driving demand for our concentrate, separated NdPr oxide, and in the future, permanent magnets containing NdPr. However, actual demand and pricing may fluctuate for numerous reasons beyond our control, including, among other things, supply of NdPr from other producers, discoveries of new mineral properties, technological changes that lead to diminished reliance on NdPr and/or permanent magnets, and shifts in underlying end-user demand for products or components manufactured with NdPr. We have not entered into derivative contracts to protect the price of our products, and do not expect to do so in the foreseeable future, as there is no liquid market for such contracts and their cost may be prohibitive, if they could be obtained at all.

The solvent extraction and finishing processes are highly reliant upon commodity reagents. These reagents, as well as certain other raw materials and supplies we use in our operations, are subject to price volatility caused by weather, supply conditions, political and economic variables and other unpredictable factors. We have not historically used options or swap contracts to manage the volatility related to the above exposures. When possible, we seek to limit our exposure by entering into long-term contracts and price increase limitations in contracts. Also, we currently use natural gas to operate our CHP plant, which powers our processing and separations facilities at Mountain Pass, and expect to use natural gas to power backup generators at our Fort Worth Facility in the future. We generally purchase or expect to purchase natural gas from suppliers at market or tariff rates. From time to time, we use commodity contracts to hedge energy exposures. Such commodity price fluctuations may cause volatility in our results of operations and cash flows in the future.

Foreign Currency Risk

While we currently generate revenue in the United States and in U.S. dollars, the market transactions are denominated mainly in the Chinese Yuan, and we are therefore exposed to currency volatility and devaluation risks. For example, we negotiate monthly U.S. dollar REO prices with Shenghe, which are based in part on the exchange rate between the U.S. dollar and the Chinese Yuan. Geopolitical tensions between the U.S. and China may lead to increased tariffs, preferences for local producers, some of which may be government-supported, changes in taxing regimes or other trade barriers. Foreign currency risk has not historically had a material impact on our results of operations or cash flows. However, as we expand internationally, we become further exposed to foreign currency risk by entering new markets with additional foreign currencies. The economic impact of currency exchange rate movements is often linked to variability in real growth, inflation, interest rates, governmental actions and other factors. Accordingly, to the extent that foreign currency risk becomes material, we may enter into hedging transactions to manage our exposure to fluctuations in foreign currency exchange rates.

Interest Rate Risk

We had cash, cash equivalents and short-term investments totaling $997.8 million as of December 31, 2023, of which $995.0 million was invested in money market funds, U.S. Treasury and agency securities, commercial paper and certificates of deposit. Our cash, cash equivalents and short-term investments are held for working capital and general corporate purposes. We have not historically entered into investments for trading or speculative purposes.

Our cash equivalents and short-term investments are subject to market risk due to changes in interest rates. Fixed-rate securities may have their market value adversely affected due to a rise in interest rates. Due in part to these factors, our future investment income may fall short of our expectations due to changes in interest rates or we may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in interest rates. As our short-term investments are classified as available-for-sale, no gains are recognized due to changes in interest rates. As losses due to changes in interest rates are generally not considered to be credit related, no losses in such investments are recognized due to changes in interest rates unless we intend to sell, it is more likely than not that we will be required to sell, we sell prior to maturity, or we otherwise determine that all or a portion of the decline in fair value is due to credit related factors.

As of December 31, 2023, a hypothetical increase of 100-basis points in interest rates would not have a material impact on the value of our cash equivalents or short-term investments in our Consolidated Financial Statements.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors
MP Materials Corp.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of MP Materials Corp. and subsidiaries (the Company) as of December 31, 2023 and 2022, the related consolidated statements of operations, comprehensive income, changes in stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023 based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company 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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated 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 consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated 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.

Identification and disclosure of related party transactions with Shenghe

As discussed in Note 20 to the consolidated financial statements, the Company has entered into a series of commercial agreements with Shenghe Resources (Singapore) International Trading Pte. Ltd (Shenghe), a related party. Under the agreements, Shenghe purchases rare earth products produced by the Company at specified prices.

We identified the identification and disclosure of the related party transactions with Shenghe as a critical audit matter. Subjective auditor judgment was required in assessing the sufficiency of the procedures performed to determine whether all such transactions were identified and disclosed properly by the Company.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the identification and disclosure of transactions with Shenghe. We applied auditor judgment to determine the nature and extent of procedures to be performed to identify transactions with Shenghe. We evaluated the identification and disclosure of transactions with Shenghe by:

- inquiring of management of the Company and the Audit Committee of the Board of Directors regarding (i) the Shenghe Relationship and (ii) transactions between the Company and Shenghe
- reading the minutes from meetings of the Board of Directors
- obtaining and analyzing underlying documentation for a sample of sales transactions and comparing it to the contractual agreements with Shenghe
- confirming transactions and contractual agreements with Shenghe as of and for the year ended December 31, 2023 and comparing the responses to the Company’s consolidated financial statements
- reading the contractual agreements with Shenghe and comparing the terms to the disclosures in the Company’s consolidated financial statements.

We evaluated the sufficiency of audit evidence obtained by assessing the results of procedures performed over the transactions with Shenghe, including the appropriateness of such evidence.

/s/ KPMG LLP

We have served as the Company’s auditor since 2017.

Denver, Colorado
February 28, 2024

MP MATERIALS CORP. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)	December 31, 2023	December 31, 2022
Assets		
Current assets		
Cash and cash equivalents	$ 263,351	$ 136,627
Short-term investments	734,493	1,045,718
Total cash, cash equivalents and short-term investments	997,844	1,182,345
Accounts receivable, net of allowance for credit losses of $0 and $0, respectively (including related party)	10,029	32,856
Inventories	95,182	57,554
Government grant receivable	19,302	—
Prepaid expenses and other current assets	8,820	21,073
Total current assets	1,131,177	1,293,828
Non-current assets		
Property, plant and equipment, net	1,158,054	935,743
Operating lease right-of-use assets	10,065	99
Inventories	13,350	5,744
Equity method investment	9,673	—
Intangible assets, net	8,881	89
Other non-current assets	5,252	2,284
Total non-current assets	1,205,275	943,959
Total assets	$ 2,336,452	$ 2,237,787
Liabilities and stockholders' equity		
Current liabilities		
Accounts and construction payable	$ 27,995	$ 15,326
Accrued liabilities	73,939	56,939
Income taxes payable	—	21,163
Other current liabilities	6,616	4,053
Total current liabilities	108,550	97,481
Non-current liabilities		
Asset retirement obligations	5,518	5,295
Environmental obligations	16,545	16,580
Long-term debt, net	681,980	678,444
Operating lease liabilities	6,829	15
Deferred government grant	17,433	—
Deferred income taxes	130,793	122,353
Other non-current liabilities	3,025	4,985
Total non-current liabilities	862,123	827,672
Total liabilities	970,673	925,153
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Preferred stock ($0.0001 par value, 50,000,000 shares authorized, none issued and outstanding in either year)	—	—
Common stock ($0.0001 par value, 450,000,000 shares authorized, 178,082,383 and 177,706,608 shares issued and outstanding, as of December 31, 2023 and December 31, 2022, respectively)	17	18
Additional paid-in capital	979,891	951,008
Retained earnings	385,726	361,419
Accumulated other comprehensive income	145	189
Total stockholders' equity	1,365,779	1,312,634
Total liabilities and stockholders' equity	$ 2,336,452	$ 2,237,787

See accompanying notes to the Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except share and per share data)	For the year ended December 31, 2023	2022	2021
Revenue:			
Rare earth concentrate (including related party)	$ 252,468	$ 517,267	$ 328,563
NdPr oxide and metal	695	—	—
Other rare earth products (including related party)	282	10,243	3,389
Total revenue	253,445	527,510	331,952
Operating costs and expenses:			
Cost of sales (excluding depreciation, depletion and amortization) (including related party)	92,714	92,218	76,253
Selling, general and administrative	79,245	75,857	56,646
Depreciation, depletion and amortization	55,709	18,356	24,382
Start-up costs	21,330	7,551	378
Advanced projects and development	14,932	4,249	4,195
Other operating costs and expenses	7,234	1,868	4,753
Total operating costs and expenses	271,164	200,099	166,607
Operating income (loss)	(17,719)	327,411	165,345
Interest expense, net	(5,254)	(5,786)	(8,904)
Other income, net	56,048	19,527	3,754
Income before income taxes	33,075	341,152	160,195
Income tax expense	(8,768)	(52,148)	(25,158)
Net income	$ 24,307	$ 289,004	$ 135,037
Earnings per share:			
Basic	$ 0.14	$ 1.64	$ 0.78
Diluted	$ 0.14	$ 1.52	$ 0.73
Weighted-average shares outstanding:			
Basic	177,181,661	176,519,203	173,469,546
Diluted	178,152,212	193,453,087	189,844,028

See accompanying notes to the Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in thousands)	For the year ended December 31, 2023	2022	2021
Net income	$ 24,307	$ 289,004	$ 135,037
Other comprehensive income (loss), net of tax:			
Change in net unrealized gains (losses) on available-for-sale securities	(44)	189	—
Total comprehensive income	$ 24,263	$ 289,193	$ 135,037

See accompanying notes to the Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(in thousands, except share data)	Preferred Stock		Common Stock		Additional Paid-in Capital	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Income	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance as of January 1, 2021	—	$ —	170,719,979	$ 17	$ 916,482	$ (62,622)	$ —	$ 853,877
Redemption of Public Warrants	—	—	7,080,005	1	(2)	—	—	(1)
Stock-based compensation	—	—	180,026	—	22,931	—	—	22,931
Forfeiture of restricted stock	—	—	(90,000)	—	—	—	—	—
Shares used to settle payroll tax withholding	—	—	(73,456)	—	(3,330)	—	—	(3,330)
Net income	—	—	—	—	—	135,037	—	135,037
Other	—	—	—	—	218	—	—	218
Balance as of December 31, 2021	—	—	177,816,554	18	936,299	72,415	—	1,008,732
Stock-based compensation	—	—	357,845	—	33,066	—	—	33,066
Shares used to settle payroll tax withholding	—	—	(467,791)	—	(18,357)	—	—	(18,357)
Net income	—	—	—	—	—	289,004	—	289,004
Unrealized gains on available-for-sale securities	—	—	—	—	—	—	189	189
Balance as of December 31, 2022	—	—	177,706,608	18	951,008	361,419	189	1,312,634
Stock-based compensation	—	—	472,047	—	27,104	—	—	27,104
Shares used to settle payroll tax withholding	—	—	(248,776)	(1)	(7,184)	—	—	(7,185)
Common stock issued to acquire intangible asset	—	—	152,504	—	8,963	—	—	8,963
Net income	—	—	—	—	—	24,307	—	24,307
Unrealized losses on available-for-sale securities	—	—	—	—	—	—	(44)	(44)
Balance as of December 31, 2023	—	$ —	178,082,383	$ 17	$ 979,891	$ 385,726	$ 145	$ 1,365,779

See accompanying notes to the Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)	For the year ended December 31, 2023	2022	2021
Operating activities:			
Net income	$ 24,307	$ 289,004	$ 135,037
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, depletion and amortization	55,709	18,356	24,382
Accretion of asset retirement and environmental obligations	908	1,477	2,375
Accretion of discount on short-term investments	(26,316)	(9,958)	—
Gain on forgiveness of Paycheck Protection Loan	—	—	(3,401)
Loss on disposals of long-lived assets, net	808	391	569
Stock-based compensation expense	25,236	31,780	22,931
Accretion of debt discount and amortization of debt issuance costs	3,536	4,034	7,384
Write-downs of inventories	2,285	—	1,809
Revenue recognized in exchange for debt principal reduction	—	(13,566)	(54,828)
Deferred income taxes	8,455	17,789	17,425
Decrease (increase) in operating assets:			
Accounts receivable (including related party)	22,827	18,153	(47,420)
Inventories	(47,099)	(24,314)	(8,229)
Government grant receivable	(19,302)	—	—
Prepaid expenses, other current and non-current assets	2,377	(8,223)	(4,154)
Increase (decrease) in operating liabilities:			
Accounts payable and accrued liabilities	11,305	1,962	5,530
Income taxes payable	(21,163)	17,700	3,463
Deferred government grant	19,120	—	—
Other current and non-current liabilities	(294)	(1,071)	(902)
Net cash provided by operating activities	62,699	343,514	101,971
Investing activities:			
Additions to property, plant and equipment	(261,897)	(326,595)	(123,870)
Purchases of short-term investments	(1,185,477)	(2,779,666)	—
Proceeds from sales of short-term investments	507,736	1,463,160	—
Proceeds from maturities of short-term investments	1,015,190	281,000	—
Investment in equity method investee	(9,673)	—	—
Proceeds from sale of property, plant and equipment	18	—	125
Proceeds from government awards used for construction	2,800	5,130	4,382
Net cash provided by (used in) investing activities	68,697	(1,356,971)	(119,363)
Financing activities:			
Proceeds from issuance of long-term debt	—	—	690,000
Principal payments on debt obligations and finance leases	(2,732)	(5,834)	(2,435)
Payment of debt issuance costs	—	—	(17,749)
Tax withholding on stock-based awards	(7,185)	(18,357)	(3,330)
Other	—	—	(377)
Net cash provided by (used in) financing activities	(9,917)	(24,191)	666,109
Net change in cash, cash equivalents and restricted cash	121,479	(1,037,648)	648,717
Cash, cash equivalents and restricted cash beginning balance	143,509	1,181,157	532,440
Cash, cash equivalents and restricted cash ending balance	$ 264,988	$ 143,509	$ 1,181,157
Reconciliation of cash, cash equivalents and restricted cash:			
Cash and cash equivalents	$ 263,351	$ 136,627	$ 1,179,297
Restricted cash, current	1,290	6,287	1,344
Restricted cash, non-current	347	595	516
Total cash, cash equivalents and restricted cash	$ 264,988	$ 143,509	$ 1,181,157

See accompanying notes to the Consolidated Financial Statements.

MP MATERIALS CORP. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of Business: MP Materials Corp., including its subsidiaries (the "Company" or "MP Materials"), is the largest producer of rare earth materials in the Western Hemisphere. The Company, which is headquartered in Las Vegas, Nevada, owns and operates the Mountain Pass Rare Earth Mine and Processing Facility ("Mountain Pass"), the only rare earth mining and processing site of scale in North America, and is constructing a rare earth metal, alloy and magnet manufacturing facility in Fort Worth, Texas (the "Fort Worth Facility"), where the Company anticipates manufacturing neodymium-iron-boron ("NdFeB") permanent magnets and its precursor products.

The Company produces rare earth concentrate products as well as refined rare earth oxides and related products. The rare earth concentrate is principally sold pursuant to the Offtake Agreement to Shenghe (as such terms are defined in Note 20, "Related-Party Transactions"), a related party of the Company, that, in turn, typically sells that product to refiners in China. Following the commissioning of the Company's Stage II optimization project ("Stage II") in the third quarter of 2023, the Company began producing separated rare earth products, including neodymium-praseodymium ("NdPr") oxide, that it began selling to customers globally in the fourth quarter of 2023. Additionally, in April 2022, the Company entered into a long-term agreement with General Motors Company (NYSE: GM) ("GM") to supply U.S.-sourced and manufactured rare earth materials and finished magnets for the electric motors in more than a dozen models based on GM's Ultium Platform. These developments are part of the Company's Stage III downstream expansion strategy ("Stage III").

Operating segments are defined as components of an enterprise engaged in business activities, about which separate financial information is available and evaluated regularly by the chief operating decision maker ("CODM"), or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's CODM views the Company's operations and manages the business as one reportable segment.

The cash flows and profitability of the Company's operations are significantly affected by the market price of rare earth products. The prices of rare earth products are affected by numerous factors beyond the Company's control. The products of the Company are sold globally, with a primary focus in the Asian market due to the refining, metallization, and magnet manufacturing capabilities of the region. Rare earth products are critical inputs in hundreds of existing and emerging clean-tech applications including electric vehicles and wind turbines as well as robotics, drones, and defense applications.

Basis of Presentation: The Consolidated Financial Statements of the Company have been prepared in accordance with generally accepted accounting principles in the U.S. ("GAAP") and with the rules and regulations of the U.S. Securities and Exchange Commission (the "SEC").

NOTE 2—SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation: The Consolidated Financial Statements include the accounts of MP Materials Corp. and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Concentration of Risk: Financial instruments that potentially subject the Company to credit risk consist principally of cash, cash equivalents and short-term investments, and receivables from customers. The Company believes that its credit risk is limited because the Company's current contracts are with companies that have a reliable payment history. The Company does not believe that it is exposed to any significant risks related to its cash accounts, money market funds, or short-term investments.

As of December 31, 2023, Shenghe was the Company's principal customer and accounted for more than 90% of revenue. Rare earth concentrate is not quoted on any major commodities market or exchange and demand for rare earth concentrate is currently constrained to a relatively limited number of refiners, a significant majority of which are based in China. Uncertainty exists as to the market price of rare earth oxide ("REO"), as evidenced by the volatility experienced in 2022 and 2023 primarily due to concerns over the global economic conditions and actual or perceived concerns over increases in the supply of or slower growth in the demand for rare earth products. Furthermore, while revenue is generated in the U.S., Shenghe conducts its primary operations in China and may transport and sell products in the Chinese market. Therefore, the Company's revenue is affected by Shenghe's ultimate realized prices in China, including the impact of changes in the exchange rate between the Chinese Yuan and the U.S. dollar. In addition, the ongoing economic conflict between China and the U.S., which has previously resulted in tariffs and trade barriers, may negatively affect the Company's business and results of operations. See Note 20, "Related-Party Transactions," for additional information.

***Use of Estimates*:** The preparation of the Consolidated Financial Statements in conformity with GAAP requires management to make estimates and assumptions that affect (i) the reported amounts of assets and liabilities, (ii) the disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements, and (iii) the reported amounts of revenues and expenses during the reporting period. The more significant areas requiring the use of management estimates and assumptions relate to the useful lives and recoverability of long-lived assets (such as the effects of mineral reserves and cash flows from operating the mine in determining the life of the mine); the valuation allowance of deferred tax assets; asset retirement and environmental obligations; and determining the net realizable value of inventories. Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Accordingly, actual results may differ from those estimates.

Cash, Cash Equivalents and Investments: Cash and cash equivalents consist of all cash balances and highly liquid investments, including commercial paper, certificates of deposit, and U.S. treasury and agency securities, with a maturity of three months or less at the time of purchase.

The Company's investments in U.S. treasury and agency securities, commercial paper, and certificates of deposit have been classified and accounted for as available-for-sale securities and the Company reevaluates the classification each reporting period. The Company classifies its available-for-sale securities that do not otherwise meet the requirements to be accounted for as cash equivalents as either current or non-current based on each instrument's underlying contractual maturity date as well as the Company's expectations of sales and redemptions within the next twelve months. See Note 3, "Cash, Cash Equivalents and Investments," for additional information.

Available-for-sale securities are recorded at fair value each reporting period. For unrealized losses in securities that the Company intends to hold and will not more likely than not be required to sell before recovery, the Company further evaluates whether declines in fair value below amortized cost are due to credit or non-credit related factors. The Company considers credit related impairments to be changes in value that are driven by a change in the creditor's ability to meet its payment obligations and records an allowance and recognizes a corresponding loss when the impairment is incurred.

Unrealized non-credit related losses and unrealized gains are reported, net of income taxes, in "Accumulated other comprehensive income" within the Company's Consolidated Balance Sheets, until realized. Realized gains and losses are determined based on the specific identification method and are reported in "Other income, net" within the Company's Consolidated Statements of Operations upon realization. Premiums and discounts are amortized or accreted over the life of the related available-for-sale security as an adjustment to yield using the straight-line method. Interest income is recognized when earned. These amounts are reported in "Other income, net" within the Company's Consolidated Statements of Operations. Accrued interest receivable was $0.9 million and $2.5 million as of December 31, 2023 and 2022, respectively, and is included in "Prepaid expenses and other current assets" within the Company's Consolidated Balance Sheets.

Restricted Cash: Restricted cash consists of funds that are contractually restricted as to usage or withdrawal due to legal agreement. The Company determines current or non-current classification based on the expected duration of the restriction. Current and non-current restricted cash is included in "Prepaid expenses and other current assets" and "Other non-current assets," respectively, within the Consolidated Balance Sheets.

Accounts Receivable: Accounts receivable pertain to receivables arising from contracts with customers and are recorded at the invoiced amount and do not bear interest. The Company evaluates its estimate of expected credit losses based on historical experience and current economic conditions for each portfolio of customers, though at present, the amounts are typically concentrated in a single customer. As of December 31, 2023 and 2022, the Company did not have an allowance for expected credit losses, as principally all of the Company's receivables are from Shenghe and there is no history or expectation of uncollectible amounts.

Inventories: Inventories consist of raw materials, supplies, mined ore stockpiles, work in process, and finished goods. Raw materials and supplies consist of spare parts, reagent chemicals, maintenance supplies, and packaging materials used in the production of rare earth products. Mined ore stockpiles represent bastnaesite ore that has been mined and stockpiled for future processing. Work in process consists of bastnaesite ore and separated rare earth products in various stages of the production process, as well as finished and packaged NdPr oxide shipped to tollers for processing into NdPr metal. Finished goods primarily consists of packaged traditional or roasted bastnaesite concentrate as well as finished and packaged NdPr oxide and NdPr metal (including quantities tolled) that is ready for sale.

Raw materials, mined ore stockpiles, work in process, and finished goods are carried at average cost. Supplies are carried at moving average cost. All inventories are carried at the lower of cost or net realizable value, which represents the estimated selling price of the product during the ordinary course of business based on current market conditions less reasonably predictable costs of completion, disposal, and transportation. Inventory cost includes all costs directly attributable to the

manufacturing process, including labor and stripping costs, and an appropriate portion of production overhead costs, including depreciation, based on normal capacity of the production facilities.

Stockpiled ore tonnages are verified by periodic surveys. The Company evaluates the carrying amount of inventory each reporting period, considering recent market prices, slow-moving items, obsolescence, excess inventory levels, and other factors and recognizes related write-downs if it is determined that the inventory is impaired. Mined ore stockpiles that are not expected to be processed within the next twelve months and raw materials and spare parts that are not expected to be consumed within the next twelve months are classified as non-current. See also Note 4, "Inventories."

Property, Plant and Equipment: Property, plant and equipment are recorded at cost and depreciated over their useful lives. Expenditures for new property, plant and equipment and improvements that extend the useful life or functionality of the assets are recorded at their cost of acquisition or construction. Depreciation on property, plant and equipment is recognized on a straight-line basis over their estimated useful lives, as follows:

	Years
Land improvements	10-25
Buildings and building improvements	10-40
Machinery and equipment	3-20

Assets under construction include costs directly attributable to the construction or development of long-lived assets. These costs may include labor and employee benefits associated with the construction of the asset, site preparation, permitting, engineering and design, installation and assembly, procurement, insurance, legal, initial commissioning, and interest on borrowings to finance the construction of the assets. Depreciation is not recorded on the related assets until they are ready for their intended use. Repair and maintenance costs that do not extend the useful life of an asset are expensed as incurred. Gains and losses arising from the sale or disposal of property, plant and equipment are determined as the difference between the proceeds from sale or disposal and the carrying amount of the asset, and are included, along with demolition costs, in "Other operating costs and expenses" within the Company's Consolidated Statements of Operations.

Property, plant and equipment primarily relate to the Company's open-pit mine and processing and separations facility at Mountain Pass as well as the building associated with the Company's Fort Worth Facility. In addition to the mine pit, Mountain Pass includes a crusher and mill/flotation plant, mineral recovery and separation plants, tailings processing and storage facilities, product finishing facilities, on-site evaporation ponds, a combined heat and power plant, water treatment plant, a chlor-alkali plant, as well as laboratory facilities to support research and development activities, offices, warehouses and support infrastructure. See also Note 5, "Property, Plant and Equipment."

Mineral Rights: The Company capitalizes costs for acquiring and leasing mining properties and expenses costs to maintain mineral rights as incurred. Depletion on mineral rights is recognized on a straight-line basis over the estimated remaining useful life of the mine, which was approximately 33 years as of December 31, 2023. The Company determined that the straight-line method of depletion appropriately captures the estimated economic costs of extracting the minerals of the mine across its estimated useful life, and aligns with the benefit obtained from the depletion of the asset consistent with the current mine plan. Mineral rights are classified as a component of "Property, plant and equipment" within the Company's Consolidated Balance Sheets. See also Note 5, "Property, Plant and Equipment."

Leases: The Company determines if an arrangement is, or contains, a lease at contract inception. In some cases, the Company has determined that its lease arrangements include both lease and non-lease components. The Company has elected to use a practical expedient to account for each separate lease component and its associated non-lease components as a single lease component for the majority of its asset classes. The Company recognizes right-of-use ("ROU") assets and lease liabilities upon commencement for all leases with a lease term greater than 12 months. The Company has elected to use a practical expedient to not recognize leases with a lease term of 12 months or less in the Consolidated Balance Sheets for the majority of its asset classes. These short-term leases are expensed on a straight-line basis over the lease term.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at commencement date of the lease based on the present value of lease payments over the lease term. When the rate implicit in the lease cannot be readily determined, the Company utilizes its incremental borrowing rate in determining the present value of the future lease payments. Lease liabilities are accreted each period and reduced for payments. The ROU asset also includes other adjustments, such as for the effects of lease prepayments, initial lease costs, or lease incentives received. The lease term may include periods covered by options to extend or terminate the lease when it is either reasonably certain that the Company will

exercise a renewal option, or reasonably certain it will not exercise an early termination option. For operating leases, lease expense is recognized on a straight-line basis over the lease term. For finance leases, the ROU asset amortizes on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset (or the useful life of the underlying asset if title transfers at the end of the lease term or there is a purchase option the Company is reasonably certain to exercise) and the lease liability accretes interest based on the interest method using the discount rate determined at lease commencement. For operating and finance leases, variable lease payments not included in the lease liability are expensed as incurred unless such costs are capitalized as part of another asset (e.g., inventory). Additionally, ROU assets are subject to impairment testing whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. If the carrying amounts of ROU assets exceed their fair value, the excess amount is recognized as an impairment. See also Note 11, "Leases."

Impairment of Long-Lived Assets: Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. In estimating undiscounted cash flows, assets are grouped at the lowest level for which there are identifiable cash flows that are largely independent of undiscounted cash flows from other asset groups. The Company's estimates of undiscounted cash flows are based on numerous assumptions, and it is possible that actual cash flows may differ significantly from estimates, as actual produced reserves, prices, commodity-based and other costs, and closure costs are each subject to significant risks and uncertainties. The estimated undiscounted cash flows used to assess recoverability of long-lived assets and to measure the fair value of the Company's mining operations are derived from current business plans, which are developed using short-term price forecasts reflective of the current price environment and the Company's projections for long-term average prices. In addition to short- and long-term price assumptions, other assumptions include estimates of production costs; proven and probable mineral reserve estimates, including the timing and cost to develop and produce the reserves; value beyond proven and probable estimates; and estimated future closure costs.

If the carrying amount of the long-lived asset or asset groups is not recoverable on an undiscounted cash flows basis, an impairment is recognized to the extent that the carrying amount exceeds its fair value. Fair value is determined through various valuation techniques, including discounted cash flow models, quoted market values, and third-party independent appraisals, based on the approach the Company believes a market participant would use.

Equity Method Investment: Investments in equity securities are accounted for under the equity method if the Company has the ability to exercise significant influence, but not control, over an investee's operating and financial policies. Judgment regarding the level of influence includes considering key factors such as the Company's ownership interest, representation on the board of directors, participation in policy-making decisions and material intra-entity transactions. Under the equity method, an investment's carrying amount is adjusted for the Company's share of the investee's net income or loss (including other comprehensive income or loss), amortization/accretion of certain basis differences (if any), capital contributions to and distributions from an investee, as well as any other-than-temporary impairments.

The Company records its share of an equity method investment's net income or loss on a one-quarter lag due to the timing of when an investee's financial statements become available. The Company evaluates material events occurring during the one-quarter lag to determine whether the effects of such events should be reflected or disclosed within the Company's Consolidated Financial Statements. For intra-entity transactions between the Company and its equity method investee, the Company eliminates its share of profits and losses until realized by the Company or investee. Such elimination is recorded as an adjustment of the carrying amount of the equity method investment.

The Company evaluates its equity method investment for impairment whenever events or changes in circumstances indicate that the carrying amount of its investment may not be recoverable. If such conditions exist, the Company compares the estimated fair value of the investment to its carrying amount to determine if an impairment is indicated, and if so, determines whether the impairment is "other-than-temporary" based on its assessment of all relevant factors, including consideration of the Company's intent and ability to retain its investment. If the Company determines the decline is other-than-temporary, an impairment is recognized for the excess amount by which the investment's carrying amount exceeds its fair value. See Note 6, "Equity Method Investment," for additional information.

Intangible Assets: Indefinite-lived intangible assets are tested annually for impairment, or more frequently if events or changes in circumstances indicate that it is more likely than not that the assets are impaired. If the carrying amounts of the indefinite-lived intangible assets exceed their fair value, the excess amount is recognized as an impairment. Intangible assets that have a definite life are amortized on a straight-line basis over their estimated useful lives to reflect the expected pattern of economic benefits consumed. The Company reviews the carrying amount of its amortizing intangible assets for possible impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. If the carrying amounts of the amortizing intangible assets exceed their fair value, the excess amount is recognized as an impairment. Once an impairment of an intangible asset has been recorded, it cannot be reversed. See also Note 7, "Intangible Assets."

Asset Retirement Obligations: The Company recognizes asset retirement obligations ("ARO") for estimated costs of legally and contractually required closure, dismantlement, and reclamation activities associated with Mountain Pass. ARO are initially recognized at their estimated fair value in the period in which the obligation originates. Fair value is based on the expected timing of reclamation activities, cash flows to perform activities, amount and uncertainty associated with the cash flows, including adjustments for a market risk premium, and discounted using a credit-adjusted risk-free rate. The liability is accreted over time through periodic charges to earnings and reduced as reclamation activities occur with differences between estimated and actual amounts recognized as an adjustment to operating expenses. Accretion of asset retirement obligations is included in "Other operating costs and expenses" within the Company's Consolidated Statements of Operations.

Subsequent increments in expected undiscounted cash flows are measured at their discounted values using updated estimates of the Company's credit-adjusted risk-free rate applied to the increment only. Subsequent decrements in expected undiscounted cash flows are reduced based on the weighted-average credit-adjusted risk-free rate associated with the obligation. When increments and decrements are caused by a change in the estimated timing of settlement, the Company treats the increase in cash flows in the year of the updated estimate as an increment and the increase in cash flows in the original year as a decrement. Associated asset retirement costs, including the effect of increments and decrements, are recognized as adjustments to the related asset's carrying amount and depreciated over the related asset's remaining useful life. If a decrement is greater than the carrying amount of the related asset, the difference is recognized as a reduction to depreciation expense. See also Note 8, "Asset Retirement and Environmental Obligations."

Environmental Obligations: The Company has certain environmental remediation obligations that primarily relate to groundwater monitoring activities. Estimated remediation costs are accrued based on management's best estimate at the end of each reporting period of the costs expected to be incurred to settle the obligation when those amounts are probable and estimable. Such cost estimates may include ongoing care, maintenance and monitoring costs associated with remediation activities. Changes in remediation estimates are reflected in earnings in the period the estimate is revised. Remediation costs included in environmental obligations are discounted to their present value when payments are readily estimable, and are discounted using a risk-free rate, which the Company derives from U.S. Treasury yields. Accretion of environmental obligations is included in "Other operating costs and expenses" within the Company's Consolidated Statements of Operations. See also Note 8, "Asset Retirement and Environmental Obligations."

Debt Issuance Costs: Costs that are incurred by the Company in connection with the issuance of debt are deferred and amortized to interest expense using the effective interest method over the contractual term of the underlying indebtedness. Debt issuance costs reduce the carrying amount of the associated debt. See also, Note 10, "Debt Obligations."

Commitments and Contingencies: Liabilities for loss contingencies arising from claims, assessments, litigation, fines and penalties, and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. If a loss contingency is not probable or reasonably estimable, disclosure of the contingency and estimated range of loss, if determinable, is made in the financial statements when it is at least reasonably possible that a material loss could be incurred. Legal costs incurred in connection with loss contingencies are expensed as incurred. See also Note 13, "Commitments and Contingencies."

Revenue Recognition: The Company's revenue comes from sales of rare earth products produced at Mountain Pass. The Company's sales are primarily to an affiliate of Shenghe. The Company's performance obligation is to produce and deliver rare earth products and the Company recognizes revenue at the point in time control of the products transfers to the customer, which is typically when the rare earth products are delivered to the agreed-upon shipping point. At that time, the customer has the ability to direct the use of and obtain substantially all of the remaining benefits from the products, and the customer bears the risk of loss. Commissions paid to distributors are deemed to be consideration payable to customers and are recorded as a reduction of the transaction prices.

For sales to unrelated third parties, the transaction price is agreed to at the time the sale is entered into. For sales to Shenghe, the transaction price is based on a preliminary market price (net of taxes, tariffs, and certain other agreed charges) less applicable discounts per metric ton ("MT"), subject to an adjustment for the ultimate market price of the product realized by Shenghe upon sales to their customers. Consequently, the ultimate market prices are a form of variable consideration. Initial pricing is typically billed upon delivering the product to the agreed-upon shipping point and paid within 30 days or less. Final adjustments to prices may take longer to resolve. When the final price has not been resolved by the end of a reporting period, the Company estimates the expected sales price based on the initial price, current market pricing and known quality measurements, and further constrains such amounts to an amount that is probable not to result in a significant reversal of previously-recognized revenue. Revenue from product sales is recorded net of taxes collected from customers that are remitted to governmental authorities. When necessary and appropriate, the Company applies a portfolio approach in estimating a refund obligation. See also Note 15, "Revenue Recognition."

Government Grants: Government grants represent benefits provided by federal, state, or local governments that are not subject to the scope of Accounting Standards Codification ("ASC") Topic 740, "Income Taxes" ("ASC 740"). Government grants are recognized when there is reasonable assurance the conditions of the grant will be met, and the grant will be received. When a grant is related to the purchase or construction of a long-lived asset (considered asset-based grants), the funds received are recorded as reductions of the related asset's carrying amount, thereby reducing future depreciation expense. Alternatively, when a grant is related to an expense item (considered income-based grants), it is recognized as a reduction of expense to which the grant activity relates over the periods necessary to match the grant on a systematic basis to the costs that it is intended to compensate. See also Note 16, "Government Grants."

Stock-Based Compensation: The cost of employee services received in exchange for an award of equity instruments is based on the grant-date fair value of the award. The fair value of Stock Awards (as defined in Note 17, "Stock-based Compensation") is equal to the fair value of the Company's stock on the grant date. The fair value of performance awards that include performance and/or market conditions is determined using a Monte Carlo simulation technique. The Monte Carlo simulation requires the use of inputs and assumptions such as the grant-date closing stock price, expected volatility, correlation coefficient to relevant peer groups or indices, risk-free interest rate and dividend yield.

Compensation cost for Stock Awards with graded vesting schedules is recognized on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in substance, multiple awards, which results in accelerated recognition of compensation cost. Compensation cost for performance awards with cliff vesting schedules is recognized on a straight-line basis over the requisite service period. Compensation cost is not adjusted based on the actual achievement of the market-based performance goals. The Company accounts for forfeitures in the period in which they occur based on actual forfeitures. See also Note 17, "Stock-based Compensation."

Start-up Costs: Costs associated with restarting an existing facility or commissioning a new facility, circuit or process of the Company's production, manufacturing, or separations facilities prior to the achievement of commercial production, that do not qualify for capitalization, are expensed as incurred and considered start-up costs. Such costs may include certain salaries and wages, outside services, parts, training, and utilities, among other items, used or consumed directly in these start-up activities.

Earnings Per Share: Basic earnings per share ("EPS") is computed by dividing net income by the weighted-average number of common shares outstanding during the period. Diluted EPS reflects the additional dilution for all potentially dilutive securities such as unvested Stock Awards. See also Note 19, "Earnings per Share."

Income Taxes: The Company accounts for income taxes using the balance sheet method, recognizing certain temporary differences between the book basis of the liabilities and assets and the related income tax basis for such liabilities and assets. This method generates either a net deferred income tax liability or asset for the Company, as measured by the statutory tax rates in effect. The Company derives a deferred income tax expense or benefit by recording the change in either the net deferred income tax liability or asset balance for the year. The Company's policy, if it were to have uncertain tax positions, is to recognize interest and/or penalties related to unrecognized tax benefits as part of its income tax expense. See also Note 12, "Income Taxes."

Valuation of Deferred Tax Assets: The Company's deferred income tax assets include certain future tax benefits. The Company records a valuation allowance against any portion of those deferred income tax assets when it believes, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred income tax asset will not be realized. The Company reviews the likelihood that the benefit of the deferred tax assets will be realized and the need for valuation allowances on a quarterly basis, or more frequently if events indicate that a review is required.

Certain categories of evidence carry more weight in the analysis than others based upon the extent to which the evidence may be objectively verified. The Company looks to the nature and severity of cumulative pretax losses (if any) in the current three-year period ending on the evaluation date, recent pretax losses and/or expectations of future pretax losses. Other factors considered in the determination of the probability of the realization of the deferred tax assets include, but are not limited to: earnings history; projected future financial and taxable income based upon existing reserves and long-term estimates of commodity prices; the duration of statutory carry forward periods; prudent and feasible tax planning strategies readily available that may alter the timing of reversal of the temporary difference; nature of temporary differences and predictability of reversal patterns of existing temporary differences; and the sensitivity of future forecasted results to commodity prices and other factors.

Concluding that a valuation allowance is not required is difficult when there is significant negative evidence which is objective and verifiable, such as cumulative losses in recent years. However, recent cumulative losses are not solely determinative of the need for a valuation allowance. The Company also considers all other available positive and negative evidence in its analysis. See also Note 12, "Income Taxes."

Recently Issued Accounting Pronouncements: During the year ended December 31, 2023, there were no accounting pronouncements adopted by the Company that had a material impact on the Company's Consolidated Financial Statements.

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2023-07, "Improvements to Reportable Segment Disclosures" ("ASU 2023-07"), which expands public entities' segment disclosures by requiring disclosure of significant segment expenses that are regularly provided to the CODM and included within each reported measure of segment profit or loss, an amount and description of its composition for other segment items, and interim disclosures of a reportable segment's profit or loss and assets. All disclosure requirements under ASU 2023-07 are also required for public entities with a single reportable segment. ASU 2023-07 is effective for the Company's fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted, and should be applied on a retrospective basis. The Company is currently evaluating the effect of adopting ASU 2023-07 on its disclosures.

In December 2023, the FASB issued ASU No. 2023-09, "Improvements to Income Tax Disclosures" ("ASU 2023-09"), which enhances public entities' existing income tax disclosures to better assess how an entity's operations, related tax risks, tax planning and operational opportunities affect its tax rate and prospects for future cash flows. ASU 2023-09 requires public entities to annually disclose specific categories in the rate reconciliation table of the income tax footnote and provide additional information for reconciling items that meet a quantitative threshold. ASU 2023-09 is effective for the Company's annual periods beginning after December 15, 2024, with early adoption permitted. The Company is currently evaluating the effect of adopting ASU 2023-09 on its disclosures.

Reclassifications: Certain amounts in prior periods have been reclassified to conform to the current year presentation.

NOTE 3—CASH, CASH EQUIVALENTS AND INVESTMENTS

The following table presents the Company's cash, cash equivalents and short-term investments:

	December 31, 2023				December 31, 2022			
(in thousands)	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Estimated Fair Value	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Cash:								
Demand deposits	$ 2,795	$ —	$ —	$ 2,795	$ 7,373	$ —	$ —	$ 7,373
Cash equivalents:								
Money market funds	61,166	—	—	61,166	64,855	—	—	64,855
U.S. agency securities	—	—	—	—	63,605	1	(2)	63,604
U.S. Treasury securities	92,113	14	—	92,127	795	—	—	795
Commercial paper	93,447	15	—	93,462	—	—	—	—
Certificates of deposit	13,799	2	—	13,801	—	—	—	—
Total cash equivalents	260,525	31	—	260,556	129,255	1	(2)	129,254
Total cash and equivalents	263,320	31	—	263,351	136,628	1	(2)	136,627
Short-term investments:								
U.S. agency securities	118,370	—	(78)	118,292	979,878	361	(17)	980,222
U.S. Treasury securities	615,962	249	(10)	616,201	65,586	1	(91)	65,496
Total short-term investments	734,332	249	(88)	734,493	1,045,464	362	(108)	1,045,718
Total cash, cash equivalents and short-term investments	$ 997,652	$ 280	$ (88)	$ 997,844	$ 1,182,092	$ 363	$ (110)	$ 1,182,345

The Company does not intend to sell, nor is it more likely than not that the Company will be required to sell, any investments in unrealized loss positions before recovery of their amortized cost basis. The Company did not recognize any credit losses related to its available-for-sale investments during the years ended December 31, 2023 and 2022. The unrealized losses on the Company's available-for-sale investments were primarily due to unfavorable changes in interest rates subsequent to initial purchase. None of the available-for-sale investments held as of December 31, 2023, were in a continuous unrealized loss position for greater than 12 months and the unrealized losses and the related risk of expected credit losses were not material.

The Company recognized the following income and expense amounts, all of which are included in "Other income, net" within the Company's Consolidated Statements of Operations:

	For the year ended December 31,		
(in thousands)	2023	2022	2021
Gross realized gains	$ 575	$ 258	$ —
Gross realized losses	$ 203	$ 573	$ —
Interest and investment income[1]	$ 55,637	$ 19,774	$ —

(1) Includes interest and investment income on the Company's available-for-sale securities and other money market funds.

As of December 31, 2023, the fair values of available-for-sale investments, by remaining contractual maturity, were as follows:

(in thousands)	
Due within one year	$ 911,096
Due after one year through two years	22,787
Total	$ 933,883

NOTE 4—INVENTORIES

The Company's inventories consisted of the following:

	December 31,	
(in thousands)	2023	2022
Raw materials and supplies, including spare parts[1]	$ 42,371	$ 28,590
Mined ore stockpiles	28,507	25,502
Work in process	15,019	1,710
Finished goods	9,285	1,752
Total current inventories	95,182	57,554
Add: Non-current portion[2]	13,350	5,744
Total inventories	$ 108,532	$ 63,298

(1) Includes raw materials to support activities pertaining to the Company's rare earth metal, alloy and magnet manufacturing capabilities.

(2) Represents stockpiled ore that is not expected to be processed within the next 12 months as well as certain raw materials that are not expected to be consumed within the next 12 months. The stockpiled ore amounts as of December 31, 2023 and 2022, were $9.1 million and $5.7 million, respectively.

During the fourth quarter of 2023, the Company determined that the cost of a portion of its inventory exceeded its net realizable value, resulting in a write-down on certain inventories of $2.3 million, which is included in "Cost of sales (excluding depreciation, depletion and amortization) (including related party)" within the Consolidated Statement of Operations for the year ended December 31, 2023. This write-down was largely attributable to elevated carrying costs of the Company's initial production of separated products given the early stage of ramping the Stage II facilities to normalized production levels.

No write-downs of inventories were recorded for the year ended December 31, 2022.

During the second quarter of 2021, the Company recognized a write-down of a portion of its legacy low-grade stockpile inventory of $1.8 million, after determining that it contained a significant amount of alluvial material that did not meet the Company's requirement for mill feed and, as a result, was deemed unusable. Since the write-down pertained to a legacy stockpile, it was included in "Other operating costs and expenses" within the Consolidated Statement of Operations for the year ended December 31, 2021, rather than in "Cost of sales (excluding depreciation, depletion and amortization) (including related party)."

NOTE 5—PROPERTY, PLANT AND EQUIPMENT

The Company's property, plant and equipment consisted of the following:

(in thousands)	December 31, 2023	December 31, 2022
Land and land improvements	$ 27,091	$ 16,102
Buildings and building improvements	92,203	15,111
Machinery and equipment	503,145	186,388
Assets under construction	211,848	338,482
Mineral rights	438,395	438,395
Property, plant and equipment, gross	1,272,682	994,478
Less: Accumulated depreciation and depletion	(114,628)	(58,735)
Property, plant and equipment, net	$ 1,158,054	$ 935,743

Additions to Property, Plant and Equipment: The Company capitalized expenditures related to property, plant and equipment of $280.0 million, $361.2 million and $138.0 million for the years ended December 31, 2023, 2022 and 2021, respectively, including amounts not yet paid (see Note 21, "Supplemental Cash Flow Information"). The capitalized expenditures related primarily to buildings and building improvements, machinery and equipment, and assets under construction to support the Company's Stage II optimization project, its Fort Worth Facility, its HREE Facility (as defined in Note 16, "Government Grants"), and other assets at Mountain Pass. Additionally, the capitalized expenditures for the year ended December 31, 2022, included the purchase of approximately 18 acres of land in Fort Worth, Texas.

Placement of Assets into Service: During the year ended December 31, 2023, the Company placed assets into service relating to its Stage II optimization project, primarily machinery and equipment, as well as its Stage III initiatives, relating primarily to the land improvements and building of its Fort Worth Facility.

Change in Estimates of Asset Retirement Costs: As a result of decrements to the Company's ARO during the third quarter of 2022 and fourth quarter of 2021, the carrying amount of the Company's total property, plant and equipment was reduced by $10.4 million and $8.7 million, respectively, the majority of which pertained to buildings, machinery and equipment, and assets under construction, in the amounts of $0.6 million, $2.7 million and $6.7 million, respectively, and $2.0 million, $2.4 million and $3.2 million, respectively. Additionally, the Company's depreciation expense for the years ended December 31, 2022 and 2021, was reduced by $2.7 million and $1.1 million, respectively, reflecting the excess of the decrement over the carrying amount of the related property, plant and equipment. See Note 8, "Asset Retirement and Environmental Obligations," for further information on the decrements.

The Company's depreciation and depletion expense were as follows:

(in thousands)	For the year ended December 31, 2023	2022	2021
Depreciation expense	$ 43,998	$ 5,808	$ 6,825
Depletion expense[(1)]	$ 11,067	$ 12,209	$ 17,200

(1) At the beginning of the fourth quarter of 2021, as a result of an updated life of mine, the Company revised its estimate of the remaining useful life of the mineral rights to approximately 35 years from approximately 23 years.

The Company recognized $5.5 million of demolition costs for the year ended December 31, 2023, which are included in "Other operating costs and expenses" within the Company's Consolidated Statements of Operations, incurred in connection with demolishing and removing certain old facilities from the Mountain Pass site that have never been used in the Company's operations. There were no property, plant and equipment impairments recognized for the years ended December 31, 2023, 2022 and 2021. For information on the Company's asset-based government grants, which impact the carrying amount of the Company's property, plant and equipment, see Note 16, "Government Grants."

NOTE 6—EQUITY METHOD INVESTMENT

In December 2023, the Company invested $9.7 million of cash in exchange for a 49% equity interest in VREX Holdco Pte. Ltd. ("VREX Holdco"), an entity incorporated in Singapore. Shenghe, a related party to the Company, owns the remaining 51% equity interest in VREX Holdco. VREX Holdco wholly owns Vietnam Rare Earth Company Limited ("VREX"), which owns

and operates a metal processing plant and related facilities in Vietnam. As discussed in Note 20, "Related-Party Transactions," in October 2023, the Company entered into the Tolling Agreement (as defined in Note 20, "Related-Party Transactions") with VREX Holdco whereby VREX Holdco causes VREX to process the Company's NdPr oxide into NdPr metal for delivery to the Company's customers globally.

The Company determined that VREX Holdco is a variable interest entity, but that the Company is not the primary beneficiary since it does not meet both of the following characteristics: (i) have the power to direct the activities that most significantly impact the economic performance of VREX Holdco and (ii) have the obligation to absorb losses or the right to receive benefits from VREX Holdco that could potentially be significant to VREX Holdco. In the Company's determination that it is not the primary beneficiary, among other factors, it considered that all major decisions regarding the operations, capital structure and financial condition of VREX Holdco and VREX are subject to approval by VREX Holdco's board of directors, which is not controlled by the Company. In addition, Shenghe is responsible for the day-to-day project management and operations of VREX Holdco and VREX. Consequently, the Company does not consolidate VREX Holdco, and instead, accounts for its investment in VREX Holdco under the equity method of accounting as it has the ability to exercise significant influence, but not control, over VREX Holdco's operating and financial policies via its seats on the board of directors and its related party agreements.

As of December 31, 2023, the difference between the carrying amount of the Company's investment in VREX Holdco, which was $9.7 million, and the amount of underlying equity in the net assets of the investee substantially relates to equity method goodwill, which is not amortized by the Company as a basis difference. The Company records its share of VREX Holdco's net income or loss on a one-quarter lag due to the timing of when the investee's financial statements become available. Due to the timing of the investment and the one-quarter lag, the Company did not record any income or loss from this equity method investment during the year ended December 31, 2023. With the exception of the initial investment, there were no contributions to, or distributions received from, VREX Holdco during the year ended December 31, 2023.

The Company capitalizes to inventories the tolling fees paid to VREX Holdco pursuant to the Tolling Agreement. To the extent intra-entity profits or losses remain in the Company's inventories balance as of each reporting period date, the Company will eliminate its proportional share of such profits or losses until the inventory is sold to an unrelated party. As of December 31, 2023, the tolling fees capitalized to inventories subject to elimination were immaterial. See Note 20, "Related-Party Transactions," for a discussion on the transactions between the Company and VREX Holdco during the year ended December 31, 2023.

As of December 31, 2023, the Company evaluated its equity method investment for impairment to determine if there were any events or changes in circumstances that would indicate if the carrying amount of its investment had experienced an "other-than-temporary" decline in value. As a result, no impairment charge was recorded during the year ended December 31, 2023.

NOTE 7—INTANGIBLE ASSETS

In August 2023, the Company acquired a license to use patented technology, technical know-how, and other intellectual property pertaining to the development and manufacturing of magnetic products in exchange for 435,729 shares of the Company's common stock. Pursuant to the terms of the agreement to acquire the license, 152,504 shares were issued immediately and the remaining shares will be issued as follows: 43,573 shares on each of the first, second, and third anniversaries of the acquisition date and an additional 152,506 shares on the fourth anniversary of the acquisition date.

Upon obtaining the license, the Company recorded a definite-lived intangible asset in the amount of $9.0 million, based on the closing price of the Company's common stock on the acquisition date. The intangible asset will be amortized on a straight-line basis, with no estimated residual value, over the estimated useful life of 7.5 years, which the Company based on the life of the patents associated with the licensed technology.

Contemporaneous with the acquisition of the license, the Company entered into a consulting agreement in support of integrating the licensed technology and know-how into its existing processes aimed at the development of magnetic products. Unless earlier terminated, under the consulting agreement, the Company will pay a total of approximately $15 million over the next four years, of which, the first payment will be in cash on the first anniversary of the consulting agreement and the payments pertaining to the second, third, and fourth anniversaries of the consulting agreement may be settled in cash or shares of the Company's common stock at the Company's election. The Company will ratably record an expense over the four years unless the costs qualify for capitalization.

The Company's intangible assets were as follows:

(in thousands)	December 31, 2023	December 31, 2022
Intangible assets with indefinite lives:		
Emissions allowances	$ 316	$ 89
Intangible assets with definite lives:		
Patent and intellectual property license	8,963	—
Less: Accumulated amortization	(398)	—
Patent and intellectual property license, net	8,565	—
Intangible assets, net	$ 8,881	$ 89

Amortization expense related to amortizing intangible assets was $0.4 million for the year ended December 31, 2023. There was no amortization expense related to amortizing intangible assets recognized for years ended December 31, 2022 and 2021. No impairment charges were recorded during the years ended December 31, 2023, 2022 and 2021.

The following table presents the estimated amortization expense based on amortizing intangible assets as of December 31, 2023:

(in thousands)	
Period:	
2024	$ 1,195
2025	1,195
2026	1,195
2027	1,195
2028	1,195
Thereafter	2,590
Total	$ 8,565

NOTE 8—ASSET RETIREMENT AND ENVIRONMENTAL OBLIGATIONS

Asset Retirement Obligations

The Company estimates ARO based on the requirements to reclaim certain land areas associated with mineral extraction activities and certain related facilities at Mountain Pass. Minor reclamation activities related to discrete portions of the Company's operations are ongoing. As of December 31, 2023, the Company estimated a significant portion of the cash outflows for major reclamation activities including the retirement of Mountain Pass will be incurred beginning in 2056.

In June 2021, San Bernardino County approved a re-zoning request for certain of the Company's properties such that certain of the Company's processing and separations facilities would be zoned for industrial end uses as opposed to the prior "resource conservation" designation. In September 2022, and as a result of the re-zoning of this land, the Company received final approval from San Bernardino County and the Division of Mine Reclamation (California) on a revised reclamation plan. The revision removed from the regulatory oversight under The Surface Mining and Reclamation Act of 1975 the majority of the buildings and equipment used in the processing and separations facilities, including the land underlying such buildings and equipment.

In the third quarter of 2022, as a result of the final approval of the reclamation plan, the Company revised its estimated cash flows pertaining to the settlement of the reclamation and removal activities associated with Mountain Pass, including removing the previous estimates of the cash flows associated with the processing and separations facilities that no longer require reclamation. The changes in estimates resulted in an ARO decrement of $13.1 million, of which $10.4 million reduced the carrying amounts of the associated property, plant and equipment, and $2.7 million, reflecting the excess of the decrement over the carrying amount of the related property, plant and equipment, was recorded as a reduction to depreciation expense for the year ended December 31, 2022.

In the fourth quarter of 2021, the Company revised its estimated timing and cash flows pertaining to the settlement of the reclamation and removal activities associated with Mountain Pass as a result of an updated life of mine where the Company

determined that the estimated commencement of the reclamation and removal activities would then occur in 2056 and 2057 for a significant portion of the assets requiring reclamation at the time. The changes in estimates resulted in an ARO decrement of $9.8 million, of which $8.7 million reduced the carrying amounts of the associated property, plant and equipment, and $1.1 million, reflecting the excess of the decrement over the carrying amount of the related property, plant and equipment, was recorded as a reduction to depreciation expense for the year ended December 31, 2021.

The following is a summary of the Company's ARO:

	December 31,	
(in thousands)	**2023**	**2022**
Beginning balance	$ 5,475	$ 17,757
Obligations settled	(180)	(144)
Accretion expense	407	976
Revision in estimated cash flows	—	(13,114)
Ending balance	$ 5,702	$ 5,475

The balance as of both December 31, 2023 and 2022, included current portions of $0.2 million, which are included in "Other current liabilities" within the Company's Consolidated Balance Sheets. The total estimated future undiscounted cash flows required to satisfy the Company's ARO as of December 31, 2023 and 2022, were $50.2 million and $50.4 million, respectively. As of December 31, 2023, the credit-adjusted risk-free rate ranged between 6.5% and 12.0% depending on the timing of expected settlement and when the increment was recognized. There were no significant increments or decrements for the year ended December 31, 2023, and there were no significant increments for the years ended December 31, 2022 and 2021.

Environmental Obligations

The Company has certain environmental monitoring and remediation obligations related to the monitoring of groundwater contamination. The Company engaged an environmental consultant to develop a remediation plan and remediation cost projections based upon that plan. Utilizing the consultant's plan, the Company developed an estimate of future cash payments for the environmental obligations.

As of December 31, 2023, the Company estimated the cash outflows related to these environmental activities will be incurred annually over the next 24 years. The Company's environmental obligations are measured at the expected value of future cash outflows discounted to their present value using a discount rate of 2.93%. There were no significant changes in the estimated remaining costs for the years ended December 31, 2023, 2022 and 2021.

The total estimated aggregate undiscounted cost of $26.7 million and $27.2 million as of December 31, 2023 and 2022, respectively, principally related to water monitoring activities required by state and local agencies. Based on the Company's estimate of the cost and timing and the assumption that payments are considered to be fixed and reliably determinable, the Company has discounted the liability. The balance as of both December 31, 2023 and 2022, included current portions of $0.5 million, which are included in "Other current liabilities" within the Company's Consolidated Balance Sheets.

As of December 31, 2023, the total environmental costs were as follows (in thousands):

Year ending December 31,	
2024	$ 536
2025	552
2026	569
2027	587
2028	605
Thereafter	23,806
Total	26,655
Effect of discounting	(9,574)
Total environmental obligations	$ 17,081

Financial Assurances

The Company is required to provide certain government agencies with financial assurances relating to closure and reclamation obligations. As of December 31, 2023 and 2022, the Company had financial assurance requirements of $45.4 million and $43.5 million, respectively, which were satisfied with surety bonds placed with applicable California state and regional agencies.

NOTE 9—ACCRUED LIABILITIES

The Company's accrued liabilities consisted of the following:

	December 31,	
(in thousands)	**2023**	**2022**
Accrued payroll and related	$ 14,499	$ 10,909
Accrued construction costs	46,976	39,226
Accrued taxes	3,373	281
Other accrued liabilities	9,091	6,523
Accrued liabilities	$ 73,939	$ 56,939

NOTE 10—DEBT OBLIGATIONS

The Company's long-term debt was as follows:

	December 31,	
(in thousands)	**2023**	**2022**
Convertible Notes due 2026	$ 690,000	$ 690,000
Less: Unamortized debt issuance costs	(8,020)	(11,556)
Long-term debt, net	$ 681,980	$ 678,444

Convertible Notes

On March 26, 2021, the Company issued $690.0 million aggregate principal amount of 0.25% unsecured green convertible senior notes that mature, unless earlier converted, redeemed or repurchased, on April 1, 2026 (the "Convertible Notes"), at a price of par. Interest on the Convertible Notes is payable on April 1st and October 1st of each year, beginning on October 1, 2021. The Convertible Notes may, at the Company's election, be settled in cash, shares of common stock of the Company, or a combination thereof. The Company has the option to redeem the Convertible Notes, in whole or in part, beginning on April 5, 2024. The Company received net proceeds of $672.3 million from the issuance of the Convertible Notes.

The Convertible Notes are convertible into shares of the Company's common stock at an initial conversion price of $44.28 per share, or 22.5861 shares, per $1,000 principal amount of notes, subject to adjustment upon the occurrence of certain corporate events. However, in no event will the conversion price exceed 28.5714 shares of common stock per $1,000 principal amount of the Convertible Notes. As of December 31, 2023, based on the initial conversion price, the maximum number of shares that could be issued to satisfy the conversion feature of the Convertible Notes was 19,714,266. The Convertible Notes' if-converted value did not exceed its principal amount as of December 31, 2023.

Prior to January 1, 2026, at their election, holders of the Convertible Notes may convert their outstanding notes under the following circumstances: (i) during any calendar quarter commencing with the third quarter of 2021 if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (ii) during the five business day period after any five consecutive trading day period (the "measurement period") in which the trading price (as defined in the indenture governing the Convertible Notes) per $1,000 principal amount of Convertible Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such trading day; (iii) if the Company calls any or all of the Convertible Notes for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date; or (iv) upon the occurrence of specified corporate events set forth in the indenture governing the Convertible Notes. On or after January 1, 2026, and prior to

the maturity date of the Convertible Notes, holders may convert their outstanding notes at any time, regardless of the foregoing circumstances.

If the Company undergoes a fundamental change (as defined in the indenture governing the Convertible Notes), holders may require it to repurchase for cash all or any portion of their outstanding notes at a price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date. In addition, following certain corporate events that occur prior to the maturity date of the Convertible Notes or if the Company delivers a notice of redemption, it will, in certain circumstances, increase the conversion rate for holders who elect to convert their outstanding notes in connection with such corporate event or notice of redemption, as the case may be.

Interest expense related to the Convertible Notes was as follows:

	For the year ended December 31,		
(in thousands)	**2023**	**2022**	**2021**
Coupon interest	$ 1,725	$ 1,725	$ 1,318
Amortization of debt issuance costs	3,536	3,517	2,675
Convertible Notes interest expense	$ 5,261	$ 5,242	$ 3,993

The debt issuance costs are being amortized to interest expense over the term of the Convertible Notes at an effective interest rate of 0.51%. The remaining term of the Convertible Notes was 2.3 years as of December 31, 2023.

Equipment Notes

The Company has financing agreements for the purchase of certain equipment, including trucks, tractors, loaders, graders, and various other machinery. The Company's equipment notes, which are secured by the purchased equipment, have terms of between 4 to 5 years and interest rates of between 0.0% and 6.5% per annum. See also Note 21, "Supplemental Cash Flow Information."

The current and non-current portions of the equipment notes, which are included within the Consolidated Balance Sheets in "Other current liabilities" and "Other non-current liabilities," respectively, were as follows:

	December 31,	
(in thousands)	**2023**	**2022**
Equipment notes		
Current	$ 2,106	$ 2,392
Non-current	2,637	4,743
	$ 4,743	$ 7,135

Paycheck Protection Loan

In April 2020, the Company obtained a loan of $3.4 million pursuant to the Paycheck Protection Program under the CARES Act (the "Paycheck Protection Loan"). In June 2021, the Company received notification from the Small Business Administration that the Paycheck Protection Loan and related accrued interest was forgiven. Consequently, for the year ended December 31, 2021, the Company recorded a gain on forgiveness of the Paycheck Protection Loan in the amount of $3.4 million, which is included in "Other income, net" within the Company's Consolidated Statements of Operations.

Interest expense, net

Interest expense, net, was as follows:

	For the year ended December 31,		
(in thousands)	**2023**	**2022**	**2021**
Interest expense	$ 5,580	$ 6,146	$ 9,168
Interest capitalized to property, plant and equipment, net	(326)	(360)	(264)
Interest expense, net	$ 5,254	$ 5,786	$ 8,904

Debt Maturities

The following is a schedule of debt repayments as of December 31, 2023:

(in thousands)	Convertible Notes	Equipment Notes
Year ending December 31,		
2024	$ —	$ 2,106
2025	—	2,098
2026	690,000	539
2027	—	—
2028	—	—
Thereafter	—	—
Total minimum payments	$ 690,000	$ 4,743

As of December 31, 2023, none of the agreements governing the Company's indebtedness contain financial covenants.

NOTE 11—LEASES

The Company has operating and finance leases for certain office space, warehouses, vehicles and equipment used in its operations, with lease terms ranging from one month to nine years. The majority of these leases require monthly lease payments that may be subject to annual increases throughout the lease term. Certain of these leases also include renewal options at the election of the Company to renew or extend the lease for an additional one to five years. The Company's lease agreements do not contain material residual value guarantees or restrictive covenants. As of December 31, 2023, the Company was not reasonably certain of exercising any material purchase, renewal, or termination options contained within its lease agreements. No ROU asset impairment charges were recorded during the years ended December 31, 2023, 2022 and 2021.

In November 2021, the Company entered into a lease agreement for corporate office space. The lease commenced in the second quarter of 2023, and at lease commencement, the Company recorded an operating lease liability of $7.3 million and an ROU asset of $10.3 million, primarily comprised of the lease liability as well as $2.9 million of payments for lessor-owned tenant improvements. The lease has an initial term of 91 months expiring in October 2030, with an option to renew for one five-year period at the election of the Company. Excluding rent abatement in the first year of the lease, the initial annual base rent payment is $1.2 million, subject to an annual escalator.

Total lease cost included the following components:

(in thousands)	Location on Consolidated Statements of Operations	For the year ended December 31, 2023	2022	2021
Operating lease cost	Primarily Selling, general and administrative	$ 1,328	$ 424	$ 780
Finance lease cost				
Amortization of right-of-use assets	Depreciation, depletion and amortization	246	339	357
Interest on lease liabilities	Interest expense, net	32	44	60
		278	383	417
Short-term lease cost	Primarily Cost of sales (excluding depreciation, depletion and amortization) (including related party)	2,134	1,509	1,163
		$ 3,740	$ 2,316	$ 2,360

Information related to lease terms and discount rates was as follows:

	December 31,	
	2023	2022
Weighted-average remaining lease term:		
Operating leases	6.6 years	1.2 years
Finance leases	4.4 years	1.8 years
Weighted-average discount rate:		
Operating leases	6.9 %	3.1 %
Finance leases	6.0 %	6.3 %

As of December 31, 2023, the maturities of the Company's operating and finance lease liabilities were as follows:

(in thousands)	Operating Leases	Finance Leases
Period:		
2024	$ 1,452	$ 228
2025	1,472	179
2026	1,362	59
2027	1,370	54
2028	1,403	54
Thereafter	2,663	106
Total lease payments	9,722	680
Less: Imputed interest	(1,934)	(97)
Total	$ 7,788	$ 583

Supplemental disclosure for the Consolidated Balance Sheets related to the Company's operating and finance leases is as follows:

		December 31,	
(in thousands)	**Location on Consolidated Balance Sheets**	**2023**	**2022**
Operating leases:			
Right-of-use assets	Operating lease right-of-use assets	$ 10,065	$ 99
Operating lease liability, current	Other current liabilities	$ 959	$ 84
Operating lease liability, non-current	Operating lease liabilities	6,829	15
Total operating lease liabilities		$ 7,788	$ 99
Finance leases:			
Right-of-use assets	Other non-current assets	$ 591	$ 451
Finance lease liability, current	Other current liabilities	$ 195	$ 354
Finance lease liability, non-current	Other non-current liabilities	388	242
Total finance lease liabilities		$ 583	$ 596

NOTE 12—INCOME TAXES

Income tax expense consisted of the following:

(in thousands)	For the year ended December 31, 2023	2022	2021
Current:			
Federal	$ (178)	$ (24,382)	$ (4,818)
State	(135)	(9,977)	(2,915)
Total current	(313)	(34,359)	(7,733)
Deferred:			
Federal	(11,334)	(19,236)	(15,851)
State	2,879	1,447	(1,574)
Total deferred	(8,455)	(17,789)	(17,425)
Total tax expense	$ (8,768)	$ (52,148)	$ (25,158)

Income before income taxes, by tax jurisdiction, was as follows:

(in thousands)	For the year ended December 31, 2023	2022	2021
United States	$ 33,075	$ 341,152	$ 160,195

Income taxes differed from the amounts computed by applying the U.S. federal income tax rate of 21% to pretax income as a result of the following:

(in thousands, except tax rates)	For the year ended December 31, 2023 Percent	2023 Amount	2022 Percent	2022 Amount	2021 Percent	2021 Amount
Computed income tax expense at the statutory rate	21.0 %	$ (6,946)	21.0 %	$(71,642)	21.0 %	$(33,641)
Changes resulting from:						
State and local income taxes, net of federal benefits	2.6 %	(867)	3.3 %	(11,395)	2.7 %	(4,288)
Limitation on officer's compensation	11.0 %	(3,640)	2.3 %	(8,067)	1.7 %	(2,638)
Depletion in excess of basis	— %	—	(4.5)%	15,248	(6.1)%	9,663
Paycheck Protection Loan forgiveness	— %	—	— %	—	(0.5)%	714
Foreign-derived intangible income	— %	—	(4.0)%	13,676	(1.8)%	2,886
California Competes Tax Credit, net of federal detriment	(11.3)%	3,753	(0.9)%	3,160	(1.2)%	1,975
Excess tax benefits (expense) on stock-based compensation	0.6 %	(190)	(1.0)%	3,575	(0.6)%	974
Valuation allowance	4.1 %	(1,360)	(0.8)%	2,845	0.5 %	(821)
Section 45X Advanced Manufacturing Credit	(0.1)%	38	— %	—	— %	—
State rate change and other state adjustments	(1.6)%	514	— %	—	— %	—
Other, net	0.2 %	(70)	(0.1)%	452	— %	18
Total effective tax rate and income tax expense	26.5 %	$ (8,768)	15.3 %	$(52,148)	15.7 %	$(25,158)

The tax effects of temporary differences that gave rise to significant portions of the deferred income tax assets and deferred income tax liabilities were as follows:

(in thousands)	December 31, 2023	December 31, 2022
Deferred tax assets:		
Asset retirement and environmental obligations	$ 5,640	$ 5,643
Net operating losses	25,107	—
Inventories	15,310	12,448
Research and experimental costs	960	691
Stock-based compensation	5,065	3,785
Organization costs	688	776
Lease liabilities	2,084	173
Credits	3,057	346
Other	439	178
Gross deferred tax assets	58,350	24,040
Less: Valuation allowance	(1,706)	(346)
Net deferred tax assets	56,644	23,694
Deferred tax liabilities:		
Property, plant and equipment	(83,834)	(36,481)
Prepaid expenses	(520)	(1,567)
ROU assets	(2,638)	(138)
Deferred revenue	(3,270)	(6,604)
Mineral rights	(97,127)	(101,195)
Other	(48)	(62)
Total deferred tax liabilities	(187,437)	(146,047)
Non-current deferred tax liabilities, net	$ (130,793)	$ (122,353)

As of December 31, 2023 and 2022, the Company had net operating loss carryforwards for federal income tax purposes of $119.6 million and zero, respectively, and did not have any in either period for state income tax purposes. The federal net operating loss may be carried forward indefinitely. As of December 31, 2023, the Company considered the positive and negative evidence to determine the need for a valuation allowance to offset its deferred tax assets and has concluded that it is more likely than not that, with the exception of certain deferred tax assets related to California Alternative Minimum Tax credits, its deferred tax assets will be realized through future taxable temporary differences, principally resulting from the deferred tax liability recorded from the acquisition of Secure Natural Resources LLC ("SNR") in the 2020 tax year.

During the fourth quarter of 2021, the Company received notice from the State of California that it had been awarded a California Competes Tax Credit ("CCTC") of $14.8 million that is available to be offset against the Company's California state income tax liability over the next several years. The credit is allocated in varying amounts over a five-year period based on the Company's ability to meet certain milestones related to California employees hired, the annual wage of these employees, and the capital investments made by the Company in California. Once the annual milestones are met, a credit amount is awarded. However, a portion of the credit could be "clawed back" if the milestones are not continually met for each of the three following years. For the years ended December 31, 2023, 2022, and 2021, it was determined that the Company had met the relevant annual milestones for the CCTC and as a result, the Company recorded a credit of $4.8 million, $4.0 million, and $2.5 million, respectively, which resulted in an income tax benefit and a reduction to the Company's California state income tax payable for the 2023, 2022 and 2021 tax years.

In August 2022, the U.S. government enacted the Inflation Reduction Act of 2022, which, among other things, provides several tax incentives to promote clean energy adoption for tax years beginning after December 31, 2022. Specifically, the Section 45X Advanced Manufacturing Production Credit (the "45X Credit") provides a credit equal to 10% of eligible "production costs incurred" with respect to the production and sale of critical minerals, including NdPr oxide. For more information on the 45X Credit, see Note 16, "Government Grants."

The Company has evaluated its tax positions for the years ended December 31, 2023, 2022 and 2021, and determined that there were no uncertain tax positions requiring recognition in the Consolidated Financial Statements. The tax years from 2020 onward remain open to examination by the taxing jurisdictions to which the Company is subject.

NOTE 13—COMMITMENTS AND CONTINGENCIES

Litigation: The Company may become party to lawsuits, administrative proceedings and government investigations, including environmental, regulatory, construction, and other matters, in the ordinary course of business. Large, and sometimes unspecified, damages or penalties may be sought in some matters, and certain matters may require years to resolve. Other than the matter described below, the Company is not aware of any pending or threatened litigation that it believes would have a material adverse effect on its Consolidated Financial Statements.

The Company is currently in dispute with a general contractor for a construction project, which may go to binding arbitration. The Company disputes that it owes any monies in connection with this construction project. The Company is unable to estimate a range of loss, if any, at this time. If an unfavorable outcome were to occur in the case, it is possible that the impact could be material to the Company's Consolidated Financial Statements in the period in which any such outcome becomes probable and reasonably estimable.

401(k) Plan: The Company maintains a qualified defined contribution retirement plan under the provisions of Section 401(k) of the Internal Revenue Code, which covers all eligible employees (the "MP 401(k) Plan"). Under the MP 401(k) Plan, eligible employees may contribute up to 90% of their pretax salary, subject to the Internal Revenue Service annual contribution limits. The Company makes a discretionary match contribution, where applicable, of 100% of employees' elective salary deferrals, up to a maximum of 4% of eligible employee compensation. For the years ended December 31, 2023, 2022, and 2021, the Company recognized contribution expense of $2.0 million, $0.9 million, and $0.6 million, respectively.

NOTE 14—STOCKHOLDERS' EQUITY

Common Stock and Preferred Stock

The Company's certificate of incorporation authorizes it to issue up to 500,000,000 shares, consisting of (i) 450,000,000 shares of common stock and (ii) 50,000,000 shares of preferred stock, each with a par value of $0.0001 per share.

Public Warrants

Warrants to purchase 11,499,968 shares of the Company's common stock at $11.50 per share (the "Public Warrants") were issued in connection with the initial public offering of Fortress Value Acquisition Corp., the special purpose acquisition company that acquired MP Mine Operations LLC, a Delaware limited liability company ("MPMO") and SNR on November 17, 2020 (the "Business Combination"), pursuant to the Warrant Agreement, dated April 29, 2020 (the "Warrant Agreement"), by and between the Company and Continental Stock Transfer & Trust Company ("CST"), as warrant agent. These warrants qualified as equity instruments as they were indexed to the Company's stock and settlement in shares was within the Company's control.

On May 4, 2021, at the direction of the Company, CST, in its capacity as warrant agent, delivered a notice of redemption to each of the registered holders of the outstanding Public Warrants for a redemption price of $0.01 per warrant (the "Redemption Price"), that remained outstanding on June 7, 2021 (the "Redemption Date"). In accordance with the Warrant Agreement, the Company's Board of Directors elected to require that, upon delivery of the notice of redemption, all Public Warrants were to be exercised only on a "cashless basis." Accordingly, a holder exercising a Public Warrant was deemed to pay the $11.50 per warrant exercise price by the surrender of 0.3808 of a share of common stock that such holder would have been entitled to receive upon a cash exercise, resulting in exercising warrant holders receiving 0.6192 of a share of common stock for each Public Warrant surrendered for exercise. All Public Warrants that remained unexercised on the Redemption Date were delisted, voided and no longer exercisable, and the holders had no rights with respect to those Public Warrants, except to receive the Redemption Price.

During the year ended December 31, 2021, the Company issued 7,080,005 shares of its common stock as a result of the cashless exercise of 11,434,455 Public Warrants. The Company redeemed the remaining 65,513 Public Warrants outstanding at the Redemption Date for a nominal amount.

NOTE 15—REVENUE RECOGNITION

The following table disaggregates the Company's revenue from contracts with customers by type of good sold, which are transferred to customers at a point in time:

	For the year ended December 31,		
(in thousands)	2023	2022	2021
Rare earth concentrate	$ 252,468	$ 517,267	$ 328,563
NdPr oxide and metal	695	—	—
Other rare earth products	282	10,243	3,389
Total revenue	$ 253,445	$ 527,510	$ 331,952

The Company evaluates the recognition of revenue based on the criteria set forth in ASC Topic 606, "Revenue from Contracts with Customers." Given the nature of the Company's contracts with customers, contract assets and contract liabilities are not material for any period presented. Furthermore, the amount of revenue recognized in the periods presented from performance obligations that were satisfied (or partially satisfied) in previous periods were not material to any period presented. Refer to Note 2, "Significant Accounting Policies," for the Company's revenue recognition policies.

Rare earth concentrate revenue is primarily generated from sales to Shenghe under the amended and restated offtake agreement ("A&R Offtake Agreement") for sales between January 2022 and February 2022, or the Offtake Agreement (as defined in Note 20, "Related-Party Transactions") for sales beginning in March 2022. The sales price of rare earth concentrate sold to Shenghe under both agreements is based on an agreed-upon price per MT, with an adjustment for the ultimate market price of the product realized by Shenghe upon sales to their customers, including the impact of changes in the exchange rate between the Chinese Yuan and the U.S. dollar.

NdPr oxide and metal revenue was generated from sales that commenced in the fourth quarter of 2023 under individual sales agreements. Other rare earth product revenue was generated primarily from sales of non-concentrate products, including sales to Shenghe of certain stockpiles of rare earth fluoride for the year ended December 31, 2022.

NOTE 16—GOVERNMENT GRANTS

Asset-Based Grants: In November 2020, the Company was awarded a Defense Production Act Title III technology investment agreement ("TIA") from the Department of Defense ("DOD") to establish domestic processing for separated light rare earth elements (this "project") in the amount of $9.6 million. Pursuant to the terms of the TIA, the Company was required to utilize the funds to acquire property and equipment that contribute to the mission of this project. Furthermore, in exchange for these funds, the Company is required to provide the DOD with periodic reporting specific to this project for up to approximately five years.

During the years ended December 31, 2022 and 2021, pursuant to the TIA, the Company received $5.1 million and $4.4 million, respectively, in reimbursements from the DOD. The funds received reduced the carrying amount of certain fixed assets associated with the Company's Stage II optimization project, which were included in machinery and equipment as of December 31, 2023 and 2022. As of December 31, 2023, the Company is entitled to receive an additional $0.1 million from the DOD under the TIA.

In February 2022, the Company was awarded a $35.0 million contract by the DOD's Office of Industrial Base Analysis and Sustainment program to design and build a facility to process heavy rare earth elements ("HREE") at Mountain Pass (the "HREE Facility") (the "HREE Production Project Agreement"). The Company must utilize the funds to acquire property and equipment that will contribute to commercial-scale production of separated HREE at Mountain Pass. The Company will be paid fixed amounts upon the completion of certain project milestones. In exchange for these funds, the DOD will have certain rights to technical data following the completion of the project. The funds received pursuant to the HREE Production Project Agreement reduce the carrying amount of the fixed assets associated with the HREE Facility. During the year ended December 31, 2023, the Company had received $2.8 million from the DOD under the HREE Production Project Agreement, which reduced the carrying amount of assets under construction.

Income-Based Grants: As mentioned in Note 12, "Income Taxes," in August 2022, the U.S. government enacted the Inflation Reduction Act of 2022, which, among other things, promotes clean energy adoption by providing several tax incentives for the domestic production and sale of eligible components for tax years beginning after December 31, 2022. Specifically, the 45X Credit provides a credit equal to 10% of eligible "production costs incurred" with respect to the

production and sale of critical minerals, including NdPr oxide. In December 2023, the Internal Revenue Service released proposed regulations on the 45X Credit which, among other things, clarified that the definition of "production costs incurred" excludes direct and indirect materials costs, including costs related to the extraction or acquisition of raw materials.

For corporate taxpayers, the 45X Credit is eligible for the direct pay election, which allows a refund of the credit in excess of tax liability. The Company intends to make this election on its 2023 tax return, and such election is binding, unless revoked, for five years (i.e., through 2027). Accordingly, the Company determined that the 45X Credit is not within the scope of ASC 740, and instead, should be accounted for as an income-based grant. As such, during the period that the 45X Credit is refundable, the Company will recognize such credit as a reduction to either "Cost of sales (excluding depreciation, depletion and amortization) (including related party)" or "Depreciation, depletion and amortization," within the Company's Consolidated Statements of Operations, depending on the location of the corresponding expense, in the period the critical mineral is sold to a customer. Within the Company's Consolidated Balance Sheets, such 45X Credit is reflected in "Government grant receivable" and, when applicable, "Deferred government grant."

As of December 31, 2023, the 45X Credit in government grant receivable of $19.3 million as well as the related deferred government grant of $19.1 million, of which $1.7 million is included in "Other current liabilities" within the Company's Consolidated Balance Sheet, primarily related to the inclusion of tax depreciation on assets that support production of critical minerals, including the Company's Stage II circuits that were placed into service during 2023 and qualify for bonus tax depreciation treatment. The deferred government grant associated with tax depreciation in 2023 will be recognized as a reduction of depreciation expense on a straight-line basis over the remaining estimated useful life of the underlying long-lived assets, which is approximately 11 years. For the year ended December 31, 2023, the benefits recognized from income-based government grants in the Company's Consolidated Statements of Operations were not material.

NOTE 17—STOCK-BASED COMPENSATION

2020 Incentive Plan: In November 2020, the Company's stockholders approved the MP Materials Corp. 2020 Stock Incentive Plan (the "2020 Incentive Plan"), which permits the Company to issue stock options (incentive and/or non-qualified); stock appreciation rights ("SARs"); restricted stock, restricted stock units ("RSUs") and other stock awards ("Stock Awards"); and performance awards. As of December 31, 2023, the Company has not issued any stock options or SARs.

Pursuant to the 2020 Incentive Plan, 9,653,671 shares of common stock were initially available for issuance. The number of shares of common stock available under the 2020 Incentive Plan may be increased annually on the first day of each calendar year, beginning with the year ended December 31, 2021, and continuing until (and including) the year ending December 31, 2030, with such annual increase equal to the lesser of (i) 2% of the number of shares of stock issued and outstanding on December 31st of the immediately preceding fiscal year and (ii) an amount determined by the Board of Directors. The number of shares of common stock that remain available for future grants under the 2020 Incentive Plan shall be reduced by the sum of the aggregate number of shares of common stock that become subject to outstanding options, outstanding free-standing SARs, outstanding Stock Awards, and outstanding performance awards denominated in shares of common stock, other than substitute awards. As of December 31, 2023, there were 5,928,540 shares available for future grants under the 2020 Incentive Plan.

Market-Based PSUs: In February 2023, pursuant to the 2020 Incentive Plan, the Compensation Committee of the Company's Board of Directors adopted a performance share plan (the "2023 Performance Share Plan"). Pursuant to the 2023 Performance Share Plan, for the year ended December 31, 2023, the Company granted 62,709 of market-based performance stock units ("PSUs") at target, all of which cliff vest after a requisite performance and service period of three years. The PSUs have the potential to be earned at between 0% and 200% of the number of awards granted depending on the level of growth of the Company's total shareholder return ("TSR") as compared to the TSR of the S&P 400 Index and the S&P 400 Materials Group over the performance period. The fair value of the market-based PSUs was determined using a Monte Carlo simulation technique.

The following table contains information on the Company's performance awards:

	Number of Shares	Weighted-Average Grant Date Fair Value
Nonvested as of January 1, 2023	—	$ —
Granted	62,709	$ 50.40
Vested	—	$ —
Forfeited	—	$ —
Nonvested as of December 31, 2023	62,709	$ 50.40

As of December 31, 2023, the unamortized compensation cost not yet recognized related to performance awards totaled $2.1 million and the weighted-average period over which the costs are expected to be recognized was 2.0 years.

Stock Awards: Pursuant to the terms and conditions of certain executive employment agreements, in connection with the consummation of the Business Combination, 2,013,006 shares of restricted stock were issued in November 2020, of which 200,000 shares immediately vested and the remainder of shares were to vest ratably pursuant the respective employment agreements over the requisite service period of four years.

The Company granted 805,322, 382,742 and 1,026,387 RSUs to employees during the years ended December 31, 2023, 2022, and 2021, respectively, which, with the exception of 67,700, 36,461 and 80,350 RSUs granted during the years ended December 31, 2023, 2022 and 2021, respectively, that vested immediately, vest ratably in equal installments over the requisite service period of four years.

Additionally, the Company granted 48,177, 23,975 and 18,394 RSUs to non-employee directors during the years ended December 31, 2023, 2022, and 2021, respectively, of which, 10,691, 6,881 and 5,810 vested immediately into tax-deferred stock units ("DSUs") during the years ended December 31, 2023, 2022 and 2021, respectively. The remaining RSUs granted vest into DSUs upon the earlier of one year after the grant date and the next annual stockholder meeting. The DSUs are settled as shares of common stock of the Company upon the earlier of (i) June 15th of the fifth year after grant, (ii) a change in control of the Company, or (iii) the director's separation from the Board, unless the director elects to defer settlement until retirement.

The grant date fair value of the Company's Stock Awards is based on the closing stock price of the Company's shares of common stock on the date of grant. The weighted-average grant date fair value of Stock Awards granted during the years ended December 31, 2023, 2022, and 2021 was $24.13, $38.52 and $41.24, respectively.

The following table contains information on the Company's Stock Awards:

	Number of Shares	Weighted-Average Grant Date Fair Value
Nonvested as of January 1, 2023	2,208,163	$ 26.76
Granted	853,499	$ 24.13
Vested	(841,466)	$ 25.80
Forfeited	(44,475)	$ 28.34
Nonvested as of December 31, 2023	2,175,721	$ 26.06

As of December 31, 2023, the unamortized compensation cost not yet recognized related to Stock Awards totaled $23.2 million and the weighted-average period over which the costs are expected to be recognized was 1.8 years. The total fair value of Stock Awards that vested during the years ended December 31, 2023, 2022 and 2021, was $20.7 million, $40.0 million and $10.9 million, respectively.

Stock-Based Compensation: The Company's stock-based compensation and related income tax benefit were recorded as follows:

(in thousands)	For the year ended December 31, 2023	2022	2021
Cost of sales (excluding depreciation, depletion and amortization) (including related party)	$ 3,932	$ 2,853	$ 4,294
Selling, general and administrative	20,508	28,554	18,246
Start-up costs	723	119	—
Advanced projects and development	73	254	391
Total stock-based compensation expense	$ 25,236	$ 31,780	$ 22,931
Stock-based compensation capitalized to property, plant and equipment, net	$ 1,868	$ 1,286	$ —
Income tax benefit for stock-based compensation arrangements	$ —	$ 4,256	$ 3,185

NOTE 18—FAIR VALUE MEASUREMENTS

ASC Topic 820, "Fair Value Measurement," establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2 Quoted prices in markets that are not active, quoted prices for similar assets or liabilities in active markets, quoted prices or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability and model-based valuation techniques (e.g. the Black-Scholes model) for which all significant inputs are observable in active markets.

Level 3 Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (supported by little or no market activity).

The Company's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of assets and liabilities and their placement within the fair value hierarchy. The following methods and assumptions are used to estimate the fair value of each class of financial instruments for which it is practicable to estimate. The fair value of the Company's accounts receivable, accounts payable, and accrued liabilities approximates the carrying amounts because of the immediate or short-term maturity of these financial instruments.

Cash, Cash Equivalents and Restricted Cash

The Company's cash, cash equivalents and restricted cash are classified within Level 1 of the fair value hierarchy. The carrying amounts reported in the Consolidated Balance Sheets approximate the fair value of cash, cash equivalents and restricted cash due to the short-term nature of these assets.

Short-term Investments

The fair value of the Company's short-term investments, which are classified as available-for-sale securities, is estimated based on quoted prices in active markets and is classified as a Level 1 measurement.

Convertible Notes

The fair value of the Company's Convertible Notes is estimated based on quoted prices in active markets and is classified as a Level 1 measurement.

Equipment Notes

The Company's equipment notes are classified within Level 2 of the fair value hierarchy because there are inputs that are directly observable for substantially the full term of the liability. Model-based valuation techniques for which all significant

inputs are observable in active markets were used to calculate the fair values of liabilities classified within Level 2 of the fair value hierarchy.

Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The carrying amounts and estimated fair values by input level of the Company's financial instruments were as follows:

	December 31, 2023				
(in thousands)	Carrying Amount	Fair Value	Level 1	Level 2	Level 3
Financial assets:					
Cash and cash equivalents	$ 263,351	$ 263,351	$ 263,351	$ —	$ —
Short-term investments	$ 734,493	$ 734,493	$ 734,493	$ —	$ —
Restricted cash	$ 1,637	$ 1,637	$ 1,637	$ —	$ —
Financial liabilities:					
Convertible Notes	$ 681,980	$ 619,496	$ 619,496	$ —	$ —
Equipment notes	$ 4,743	$ 4,628	$ —	$ 4,628	$ —

	December 31, 2022				
(in thousands)	Carrying Amount	Fair Value	Level 1	Level 2	Level 3
Financial assets:					
Cash and cash equivalents	$ 136,627	$ 136,627	$ 136,627	$ —	$ —
Short-term investments	$ 1,045,718	$ 1,045,718	$ 1,045,718	$ —	$ —
Restricted cash	$ 6,882	$ 6,882	$ 6,882	$ —	$ —
Financial liabilities:					
Convertible Notes	$ 678,444	$ 610,650	$ 610,650	$ —	$ —
Equipment notes	$ 7,135	$ 6,807	$ —	$ 6,807	$ —

NOTE 19—EARNINGS PER SHARE

Basic EPS is computed by dividing net income by the weighted-average number of common shares outstanding during the period. Diluted EPS is computed by dividing net income by the weighted-average number of common shares outstanding plus the effect of dilutive potential common shares outstanding during the period using the treasury stock method or the if-converted method, as applicable.

The following table reconciles the weighted-average common shares outstanding used in the calculation of basic EPS to the weighted-average common shares outstanding used in the calculation of diluted EPS:

	For the year ended December 31,		
	2023	2022	2021
Weighted-average shares outstanding, basic	177,181,661	176,519,203	173,469,546
Assumed conversion of Public Warrants	—	—	2,840,624
Assumed conversion of Convertible Notes	—	15,584,409	11,997,860
Assumed conversion of restricted stock	609,326	921,772	1,257,360
Assumed conversion of RSUs	361,225	427,703	278,638
Weighted-average shares outstanding, diluted	178,152,212	193,453,087	189,844,028

The following table presents potentially dilutive shares that were not included in the computation of diluted EPS because to do so would have been antidilutive:

	For the year ended December 31,		
	2023	2022	2021
Convertible Notes	15,584,409	—	—
RSUs	3,184	24,442	18,322
Total	15,587,593	24,442	18,322

The following table presents the calculation of basic and diluted EPS for the Company's common stock:

	For the year ended December 31,		
(in thousands, except share and per share data)	2023	2022	2021
Calculation of basic EPS:			
Net income	$ 24,307	$ 289,004	$ 135,037
Weighted-average shares outstanding, basic	177,181,661	176,519,203	173,469,546
Basic EPS	$ 0.14	$ 1.64	$ 0.78
Calculation of diluted EPS:			
Net income	$ 24,307	$ 289,004	$ 135,037
Interest expense, net of tax[(1)]:			
Convertible Notes[(2)]	—	4,441	3,366
Diluted income	$ 24,307	$ 293,445	$ 138,403
Weighted-average shares outstanding, diluted	178,152,212	193,453,087	189,844,028
Diluted EPS	$ 0.14	$ 1.52	$ 0.73

(1) The years ended December 31, 2022, and 2021, were tax-effected at a rate of 15.3% and 15.7%, respectively.

(2) The Convertible Notes were antidilutive for the year ended December 31, 2023. Convertible debt becomes antidilutive whenever its interest expense (net of tax) per common share obtainable upon conversion exceeds basic EPS.

NOTE 20—RELATED-PARTY TRANSACTIONS

Offtake Agreement: In March 2022, the Company entered into an offtake agreement (the "Offtake Agreement") with Shenghe Resources (Singapore) International Trading Pte. Ltd. ("Shenghe"), a majority-owned subsidiary of Leshan Shenghe Rare Earth Co., Ltd. whose ultimate parent is Shenghe Resources Holding Co., Ltd., a leading global rare earth company listed on the Shanghai Stock Exchange. The Offtake Agreement became effective upon the termination of the amended and restated offtake agreement with Shenghe. The initial term of the Offtake Agreement is two years, with the option to extend the term at the Company's discretion for an additional one-year period.

Pursuant to the Offtake Agreement, and subject to certain exclusions, Shenghe is obligated to purchase on a "take or pay" basis the rare earth concentrate produced by the Company as the exclusive distributor in China, with certain exceptions for the Company's direct sales globally. In addition, at the discretion of the Company, Shenghe may be required to purchase on a "take or pay" basis certain non-concentrate rare earth products, although the Company may sell all non-concentrate rare earth products in its sole discretion to customers or end users in any jurisdiction.

The sales price of rare earth concentrate sold to Shenghe is based on an agreed-upon price per metric ton, with an adjustment for the ultimate market price of the product realized by Shenghe upon sales to their customers. The sales price and other terms applicable to a quantity of offtake products are set forth in monthly purchase agreements between the Company and Shenghe. Under the Offtake Agreement, Shenghe is paid a variable commission on net proceeds to the Company.

In January 2024, the Company entered into a new offtake agreement with Shenghe (the "New Offtake Agreement") that replaced and extended the Offtake Agreement. The initial term of the New Offtake Agreement is two years, with the option for the Company to extend the term for an additional one-year period. The terms of the New Offtake Agreement are substantially the same as those of the Offtake Agreement with the exception of the addition of NdPr metal into the definition of non-concentrate rare earth products.

Tolling Agreement with VREX Holdco: In October 2023, prior to the Company's investment in VREX Holdco, the Company entered into a tolling agreement with VREX Holdco (the "Tolling Agreement"). Pursuant to the Tolling Agreement, the Company delivers NdPr oxide to VREX Holdco, which VREX Holdco then causes VREX to process into NdPr metal for delivery to the Company's customers globally. As several of the Company's potential customers that manufacture magnets outside of China prefer to purchase NdPr metal in addition to NdPr oxide, this Tolling Agreement enables the Company to distribute NdPr products more widely to customers in Japan and other global markets. During the term of the Tolling Agreement, the Company will pay VREX Holdco a processing fee per unit of rare earth metal produced. The Company maintains title to the products and directly enters into sales agreements for the produced NdPr metal. The initial term of the Tolling Agreement is three years and may be renewed for additional three-year terms.

During the year ended December 31, 2023, prior to the Company's investment in VREX Holdco, the Company made a payment of $1.2 million to VREX Holdco for tolling services, of which, the majority was for services yet to be performed by VREX. Refer to Note 6, "Equity Method Investment," for additional information on the investment in VREX Holdco.

Revenue and Cost of Sales: The Company's related-party revenue and cost of sales were as follows:

	For the year ended December 31,		
(in thousands)	**2023**	**2022**	**2021**
Revenue:			
Rare earth concentrate	$ 242,516	$ 487,006	$ 326,599
Other rare earth products[(1)]	$ —	$ 9,740	$ —
Cost of sales (excluding depreciation, depletion and amortization)	$ 89,260	$ 88,681	$ 75,930

(1) Represents sales agreements with Shenghe for non-concentrate products, including certain stockpiles of rare earth fluoride.

Purchases of Materials and Supplies: The Company purchases certain reagent products (generally produced by an unrelated third party manufacturer) used in the flotation process as well as other materials from Shenghe in the ordinary course of business. Total purchases for the years ended December 31, 2023, 2022 and 2021, totaled $8.3 million, $18.5 million and $4.8 million, respectively.

Accounts Receivable: As of December 31, 2023 and 2022, $9.2 million and $29.8 million, respectively, of the accounts receivable as stated on the Consolidated Balance Sheets, were receivable from and pertained to sales made to Shenghe in the ordinary course of business.

NOTE 21—SUPPLEMENTAL CASH FLOW INFORMATION

Supplemental cash flow information and non-cash investing and financing activities were as follows:

	For the year ended December 31,		
(in thousands)	**2023**	**2022**	**2021**
Supplemental cash flow information:			
Cash paid for interest	$ 2,059	$ 2,096	$ 1,204
Cash payments related to income taxes, net	$ 20,105	$ 18,860	$ 4,172
Change in construction payables and accrued construction costs	$ 18,086	$ 34,569	$ 14,082
Supplemental non-cash investing and financing activities:			
Common stock issued to acquire intangible asset	$ 8,963	$ —	$ —
Operating ROU assets obtained in exchange for lease liabilities	$ 7,690	$ 168	$ —
Finance ROU assets obtained in exchange for lease liabilities	$ 371	$ 42	$ 88
Property, plant and equipment acquired with equipment notes	$ —	$ —	$ 9,407
Revenue recognized in exchange for debt principal reduction	$ —	$ 13,566	$ 54,802
Paycheck Protection Loan forgiveness	$ —	$ —	$ 3,401
Decrease in estimates of asset retirement costs	$ —	$ 10,395	$ 8,713

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial and accounting officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of December 31, 2023. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this Annual Report on Form 10-K (this "Annual Report"), our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in reports we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining a system of internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of our financial reporting and preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our financial statements in accordance with accounting principles generally accepted in the United States of America; providing reasonable assurance that our receipts and expenditures are made in accordance with authorizations of our management and directors; and providing reasonable assurance that unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements would be prevented or detected on a timely basis.

Management conducted an assessment of the effectiveness of our internal control over financial reporting based on the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission in the *Internal Control—Integrated Framework (2013)*. Based on this assessment, our management concluded that our internal control over financial reporting was effective as of December 31, 2023, to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States of America.

Attestation Report of the Registered Public Accounting Firm

The effectiveness of our internal control over financial reporting as of December 31, 2023, has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report which is included in Part II, Item 8 of this Annual Report.

Changes in Internal Control Over Financial Reporting

During the fourth quarter of the year ended December 31, 2023, there were no changes in our internal control over financing reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that have materially affected, or are reasonably likely to materially affect our internal control over financing reporting.

ITEM 9B. OTHER INFORMATION

During the fourth quarter of the year ended December 31, 2023, none of the Company's directors or officers (as defined in Rule 16a-1(f) of the Securities Exchange Act of 1934) adopted, terminated or modified a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K of the Securities Act of 1933).

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The remaining information required by this item concerning directors and corporate governance is hereby incorporated by reference to the Company's definitive proxy statement for its Annual Meeting of Stockholders (the "2024 Proxy Statement"), to be filed with the SEC within 120 days after December 31, 2023, pursuant to Regulation 14A under the Securities Act. Information required by this item concerning executive officers is included in Part I of this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is hereby incorporated by reference to the 2024 Proxy Statement, except as to information disclosed therein pursuant to Item 402(v) of Regulation S-K relating to pay versus performance.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is hereby incorporated by reference to the 2024 Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is hereby incorporated by reference to the 2024 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is hereby incorporated by reference to the 2024 Proxy Statement.

PART IV

ITEM 15. EXHIBIT AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Annual Report:

(1) Report of Independent Registered Public Accounting Firm

Auditor Name: KPMG LLP

Auditor Location: Denver, CO

Auditor Firm ID: 185

Financial Statements (see Item 8. "Financial Statements and Supplementary Data" and incorporated herein by reference).

(2) Financial Statement Schedules (Schedules to the Financial Statements have been omitted because the information required to be set forth therein is not applicable or is shown in the accompanying Financial Statements or notes thereto).

(3) Exhibits (incorporated herein by reference or filed as part of this Annual Report).

Ex. No.	Description
2.1	Agreement and Plan of Merger, dated as of July 15, 2020, by and among Fortress Value Acquisition Corp., FVAC Merger Corp. I, FVAC Merger LLC II, FVAC Merger LLC III, FVAC Merger LLC IV, MP Mine Operations LLC and Secure Natural Resources LLC (incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on July 15, 2020).
2.2	Amendment No. 1 to the Agreement and Plan of Merger, dated as of August 26, 2020, by and among Fortress Value Acquisition Corp., FVAC Merger Corp. I, FVAC Merger LLC II, FVAC Merger LLC III, FVAC Merger LLC IV, MP Mine Operations LLC and Secure Natural Resources LLC (incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on August 27, 2020).
3.1	Second Amended and Restated Certificate of Incorporation of MP Materials Corp. (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on November 17, 2020).

Ex. No.	Description
3.2	Amended and Restated Bylaws of MP Materials Corp. (incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on November 17, 2020).
4.1	Description of Securities (incorporated herein by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K for the year ended on December 31, 2021).
4.2	Indenture, dated as of March 26, 2021, by and between MP Materials Corp. and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on March 26, 2021).
4.3	Form of 0.25% Green Convertible Senior Notes due 2026 (included as Exhibit A to Exhibit 4.1) (incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on March 26, 2021).
10.1	Amended and Restated Registration Rights Agreement, dated November 17, 2020, by and between MP Materials Corp.(f/k/a Fortress Value Acquisition Corp.) and the restricted stockholders (incorporated herein by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed on November 17, 2020).
10.2	Registration Rights Agreement, dated as of March 26, 2021, by and among MP Materials Corp. and BofA Securities, Inc. and Deutsche Bank Securities Inc., as representatives of the initial purchasers of the Convertible Notes (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 26, 2021).
10.3†	MP Materials Corp. 2020 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.7 to the Company's Current Report on Form 8-K filed on November 17, 2020).
10.4	Form of Indemnification Agreement (incorporated herein by reference to Exhibit 10.8 to the Company's Current Report on Form 8-K filed on November 17, 2020).
10.5†	Employment Agreement, dated November 18, 2021, effective as of January 1, 2022, between MP Materials Corp. and James H. Litinsky (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 19, 2021).
10.6†	Employment Agreement, dated November 18, 2021, effective as of January 1, 2022, between MP Materials Corp. and Ryan Corbett (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on November 19, 2021).
10.7†	Employment Agreement, dated November 18, 2021, effective as of January 1, 2022, between MP Materials Corp. and Michael Rosenthal (incorporated herein by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on November 19, 2021).
10.8†	Employment Agreement, dated November 18, 2021, effective as of January 1, 2022, between MP Materials Corp. and Elliot D. Hoops (incorporated herein by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed on November 19, 2021).
10.9†	Form of MP Materials Corp. 2020 Stock Incentive Plan Restricted Stock Unit Agreement (incorporated herein by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2021).
10.10†	Form of MP Materials Corp. 2020 Stock Incentive Plan Non-Employee Director Restricted Stock Unit Award Agreement (incorporated herein by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2021).
10.11†	Form of MP Materials Corp. 2020 Stock Incentive Plan Restricted Stock Award Agreement (incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2021).
10.12†	Form of MP Materials Corp. 2020 Stock Incentive Plan Restricted Stock Unit Award Agreement (incorporated herein by reference to Exhibit 10.15 to the Company's Annual Report on Form 10-K for the year ended on December 31, 2021).
10.13†	Form of MP Materials Corp. 2020 Stock Incentive Plan Restricted Stock Unit Award Agreement with Performance Conditions (incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2023).
10.14+++	Amended and Restated Offtake Agreement, dated as of May 19, 2020, between MPMO and Shenghe Resources (Singapore) (incorporated herein by reference to Exhibit 10.15 to the Company's Registration Statement on Form S-4 filed with the SEC on August 27, 2020).

Ex. No.	Description
10.15+++	Offtake Agreement, dated as of March 4, 2022, between MP Mine Operations LLC and Shenghe Resources (Singapore) International Trading PTE LTD. (incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022).
10.16†	MP Materials Corp. 2021 Director Deferred Compensation Plan (incorporated herein by reference to Exhibit 10.14 to the Company's Annual Report on Form 10-K for the year ended December 31, 2020).
10.17†*	MP Materials Corp. Compensation Recoupment Policy.
10.18*	MP Materials Corp. Insider Trading Policy.
21.1*	Subsidiaries of the Registrant.
23.1*	Consent of KPMG LLP.
23.2*	Consent of SRK Consulting (U.S.), Inc.
23.3*	Consent of Adamas Intelligence Inc.
23.4*	Consent of SGS North America, Inc.
24.1*	Power of Attorney (included as part of signature page).
31.1*	CEO Certification pursuant to rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	CFO Certification pursuant to rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	CEO Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	CFO Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
95.1*	Mine Safety Disclosure pursuant to Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act.
96.1*	Technical Report Summary of SRK Consulting (U.S.), Inc. prepared for MP Materials Corp. and issued effective as of October 1, 2023.
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Inline XBRL File (included in Exhibit 101).
*	Filed herewith.
**	Furnished herewith.
†	Indicates a management contract or compensatory plan or arrangement.
+	Annexes, schedules and/or exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. MP Materials Corp. agrees to furnish supplementally a copy of any omitted attachment to the SEC on a confidential basis upon request.
++	Certain portions of this exhibit (indicated by "[***]") have been omitted pursuant to Regulation S-K, Item (601)(b)(10).

ITEM 16. FORM 10-K SUMMARY

Not applicable.

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.

MP MATERIALS CORP.

Dated: February 28, 2024

By: /s/ Ryan Corbett
Ryan Corbett
Chief Financial Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of MP Materials Corp. hereby severally constitute and appoint James H. Litinsky and Ryan Corbett, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for her or him and in her or his name, place and stead, and in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and generally to do all things in our names and on our behalf in such capacities to enable MP Materials Corp. to comply with the provisions of the Securities Exchange Act of 1934, as amended, and all the requirements of the Securities Exchange Commission.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Name	Title	Date
/s/ James H. Litinsky James H. Litinsky	Chief Executive Officer (principal executive officer), Chairman of the Board of Directors and Director	February 28, 2024
/s/ Ryan Corbett Ryan Corbett	Chief Financial Officer (principal financial and accounting officer)	February 28, 2024
/s/ Gen. Richard B. Myers Gen. Richard B. Myers	Director	February 28, 2024
/s/ Andrew A. McKnight Andrew A. McKnight	Director	February 28, 2024
/s/ Arnold Donald Arnold Donald	Director	February 28, 2024
/s/ Randall Weisenburger Randall Weisenburger	Director	February 28, 2024
/s/ Maryanne R. Lavan Maryanne R. Lavan	Director	February 28, 2024
/s/ Connie K. Duckworth Connie K. Duckworth	Director	February 28, 2024