Molycorp

THE BELIEVERS AND INNOVATORS

INTEGRITY, INNOVATION, INTEGRATION

2011
ANNUAL
REPORT

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MOLYCORP HIGHLIGHTS THROUGH THE YEARS

1949

- Rare earth mineralization (Bastnasite) was discovered at Mountain Pass.

1952

- Production of rare earths began.

1960s

- Development of red phosphor for color TV created large demand for Europium Oxide, a heavy rare earth.
- Europium recovery plant was built and Molycorp supplied most of the world's Europium demand.

1977

- Publicly traded Molycorp was acquired by Union Oil Company of California.

1980s

- Molycorp ramped up production of light and heavy rare earths, meeting a majority of the world's demand.

1998

- Rare earth separations operations suspended due to poor market conditions and process water pipeline breaches.
- Recovery of rare earth concentrates from existing inventories began.

THE TRUE ENTREPRENEURIAL SPIRIT

2002

- Active mining suspended due to reaching capacity in the tailings basin.

2004

- Molycorp received approval of critical 30-year mine plan permit.

2007

- Extraction circuit for Neodymium/ Praseodymium restarted for first time since 1998. Production commenced in 4Q.

2008

- Chevron sold Mountain Pass Facility to private equity investors who formed Molycorp Minerals, LLC.

2010

- Initial public offering and listing on the NYSE of Molycorp, Inc. common stock.
- Processing of stockpiled Bastnasite concentrate began.
- Project Phoenix launched.

2011

- Project Phoenix construction accelerates.
- Molycorp acquires AS Silmet and Santoku America, Inc.
- Formed sintered NdFeB magnet manufacturing joint venture.

2012 (TO DATE)

- Launched sequential start-up of Project Phoenix.
- Announced planned acquisition of Neo Material Technologies.

MODERN MOLYCORP

THE BELIEVERS AND INNOVATORS

Ross R. Bhappu
CHAIRMAN OF THE BOARD

Dear Shareholders:

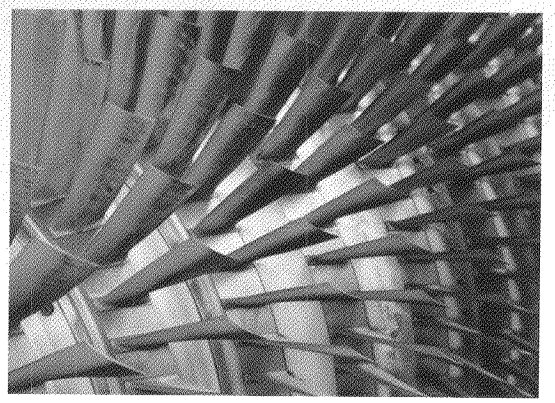
"...we now stand on the cusp of making history."

As a child growing up, Molycorp was a household name and for many years my father, a metallurgical engineering professor at the time, did consulting work for the Company. Now, over 40 years later, I am both proud and humbled as I review Molycorp's accomplishments in 2011 and all that we have achieved since we became a public company in 2010.

The path to success that the Molycorp family has tread was not always an easy one. In fact, after rare earth mining was halted in 2002 at Mountain Pass, few thought this remarkably rich rare earth resource could be brought back to life. The once vibrant, entrepreneurial spirit of Mountain Pass seemed broken. It was, in the words of Winston Churchill, our "darkest hour."

It was a small group of scientists, engineers, workers and private equity investors—The Believers and Innovators of Mountain Pass—who knew that bringing this exceptional asset back online was a "when," not an "if."

We believed that new technologies could be developed that would allow Mountain Pass to produce rare earths efficiently, at a relatively low cost, and with minimal impact on the environment.



Fast forward to today, and we now stand on the cusp of making history. Our "Project Phoenix" expansion and modernization of Mountain Pass will achieve full Phase 1 annual production capacity of 19,050 metric tons by the fourth quarter of 2012. By year-end 2012, we expect to achieve mechanical completion of our Phase 2 production capacity, giving us the ability to produce approximately 40,000 metric tons per year, if customer demand warrants.

In 2011, we added new facilities and capabilities across the globe. Our proposed acquisition of Neo Material Technologies, Inc. will put us in a unique global competitive position as we combine Molycorp's world-class rare earth resource and low-cost production with Neo's proven leadership in the development, processing, and distribution of advanced rare earth products.

Getting to this point hasn't been easy. No history-changing endeavor ever is. But by living our ETHICS values every day—Excellence, Trust, Honesty, Integrity, Creativity, and Safety—and by staying focused on high performance and execution, the Molycorp family is achieving the success that few thought possible.

Sincerely,

Ross R. Bhappu
Chairman of the Board

Mark A. Smith
PRESIDENT,
CHIEF EXECUTIVE OFFICER
& DIRECTOR

Dear Shareholders:

"...we also are strongly positioned to succeed."

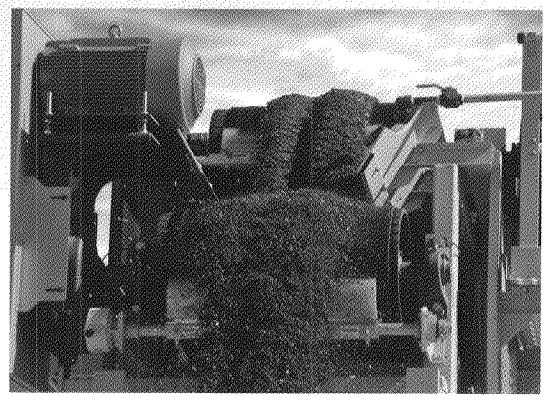
My 25 years of involvement with Mountain Pass has reinforced my belief that, with faith in the future and the courage to innovate, all things are possible. That is why I am so proud that this year's Annual Report is dedicated to "The Believers and Innovators" of Molycorp.

There is a reason that the expansion and modernization of Mountain Pass was christened as "Project Phoenix." The rebirth of this world-class resource into one of the most technologically advanced, energy efficient, and environmentally superior rare earth facilities in the world has been an awesome and inspiring process to witness.

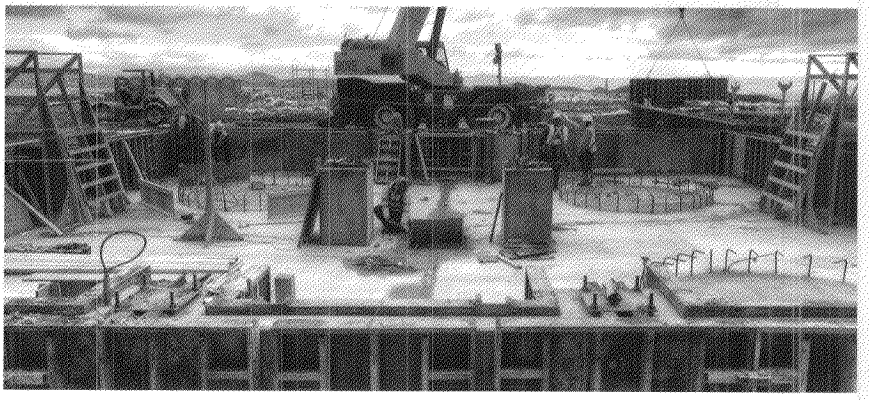
I could not be more proud to report that Project Phoenix is nearing mechanical completion. We are on track to operate at our Phase 1 production rate by the fourth quarter of 2012, and to achieve mechanical completion of our Phase 2 production capacity by the end of 2012. Molycorp is set to take flight again as a global leader in the rare earth space.

We also are strongly positioned to succeed in highly competitive global markets, for these reasons and more:

- **RESOURCE ADVANTAGE:** Mountain Pass is truly a world-class rare earth resource, with its exceptionally high ore grade, highly favorable metallurgy, and extensive reserves and resources.



Freshly crushed rare earth ore



Project Phoenix construction at Mountain Pass

- **EXPERIENCE ADVANTAGE:** Molycorp has one of the most experienced teams in the world with the specialized skills necessary to produce rare earth products. In addition, our workforce operates very safely, having gone (at the time of this writing) more than six-and-one-half years without a lost time incident (LTI) at Molycorp Mountain Pass, and more than 15 years without an LTI at Molycorp Metals and Alloys.

- **CAPITAL ADVANTAGE:** We raised the large amount of capital necessary to execute on our business plan and claim the lead position outside of China. Our rapid Mine-to-Magnets vertical integration puts us even further ahead of the competition.

- **TECHNOLOGY ADVANTAGE:** Our focus on superior technology and innovation has resulted in revolutionary rare earth production methods, improved cost competitiveness, and—like our XSORBX™ products—key sources of future growth.

Our pending acquisition of Neo Material Technologies will further solidify Molycorp's position as a global rare earth technology leader. It also gives us greater exposure to the world's largest and fastest-growing rare earth consuming nation—China—and provides a platform from which we can supply the U.S. and the Western World with critical rare earth products.

The dedication, perseverance, and sweat equity invested in this historic undertaking is a testament to the human spirit. We truly have a team of Believers and Innovators at Molycorp. I am incredibly honored to have been able to play a role in the re-birth of Mountain Pass, and I am excited about what is to come in the years ahead.

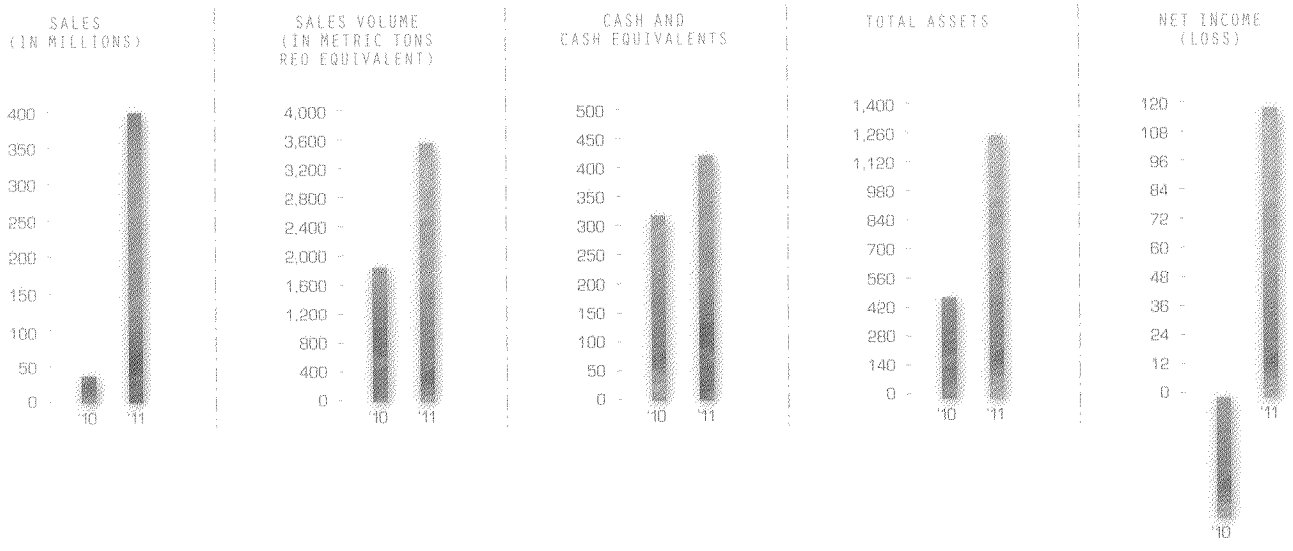
Sincerely,

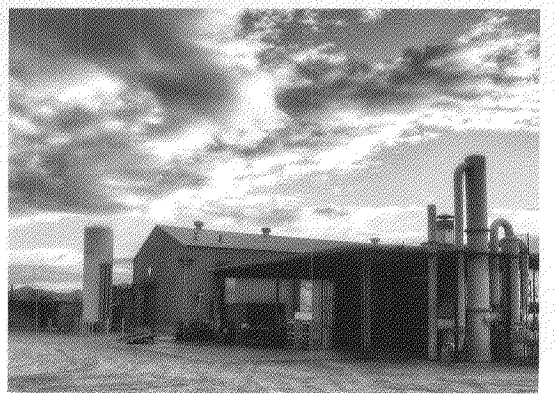
Mark A. Smith
President, Chief Executive Officer & Director

FINANCIAL HIGHLIGHTS

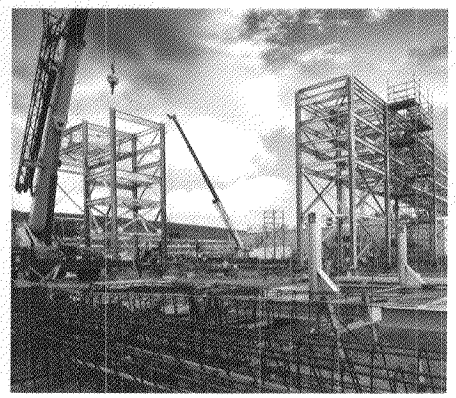
STATEMENT OF OPERATIONS DATA

	Year Ended December 31 2011	2010
	(in millions, except per share and percentage amounts)	
Sales	$ 396.8	$ 35.2
Gross margin	55.2%	-6.9%
Operating Income (loss)	152.9	(51.2)
Net income (loss)	118.3	(50.8)
Diluted earnings (loss) per share of common stock	1.27	(0.81)
Total assets	1,255.1	479.6
Stockholders' equity	845.2	446.5
Cash and cash equivalents	418.9	316.4
Cash from operations	43.0	(28.7)
Capital expenditures	302.2	33.1

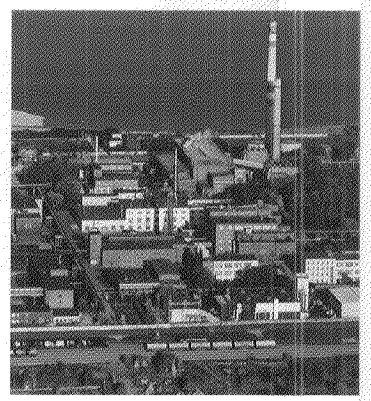




Molycorp Metals and Alloys



Molycorp Mountain Pass



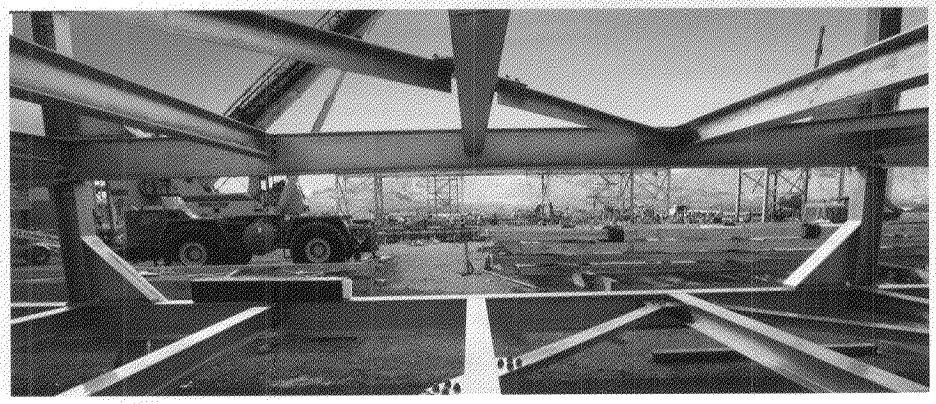
Molycorp Silmet

2011 ACCOMPLISHMENTS

Molycorp achieved a number of critical business and operational milestones in 2011 and into the opening months of 2012. The Company:

- Executed construction on Project Phoenix and kept the project tracking to an accelerated schedule throughout 2011.
- Successfully raised net proceeds of $422.7 million in 2011 in two capital raises to fulfill the capital requirements of both Phase 1 and Phase 2 of Project Phoenix.
- Assembled the components of our Mine-to-Magnets strategy through acquisitions of our Molycorp Metals and Alloys and Molycorp Silmet subsidiaries, and by entering into a joint venture with Daido Steel Co., Ltd. and Mitsubishi Corporation to manufacture sintered neodymium-iron-boron (NdFeB) permanent rare earth magnets.
- Sold a total of 55 metric tons of our proprietary cerium-based XSORBX™ products in 2011, and is on track to sell 20% of our Phase 1 production capacity through XSORBX™ products by the end of 2013.
- Achieved our 2011 contracting goal for Phase 1 production capacity, with 78% of Phase 1 being signed in customer commitments or reserved for XSORBX™ production.[1]
- Entered into a three-year supply agreement with Hitachi Metals, Ltd. for rare earth magnetic materials, such as didymium metal and alloy, and lanthanum oxide.
- Increased our strategic flexibility through a $390 million capital investment from Molibdenos y Metales S.A. (Molymet).
- Made a strategic investment in Boulder Wind Power, Inc., which has developed a rare earth magnet–powered wind turbine generator design that will use magnets that do not require dysprosium, a truly scarce rare earth in today's markets.

[1] One customer has since exercised a volume reduction option in its contract, which reduces by approximately 6% the current level of customer commitments to Phase 1 production. This is expected to be made up with additional customer commitments.



Project Phoenix construction at Mountain Pass

PROJECT PHOENIX AT MOUNTAIN PASS

The massive expansion and modernization of our flagship rare earth production facility at Mountain Pass, California, known as "Project Phoenix," continues on target to achieve our mechanical completion and production targets.

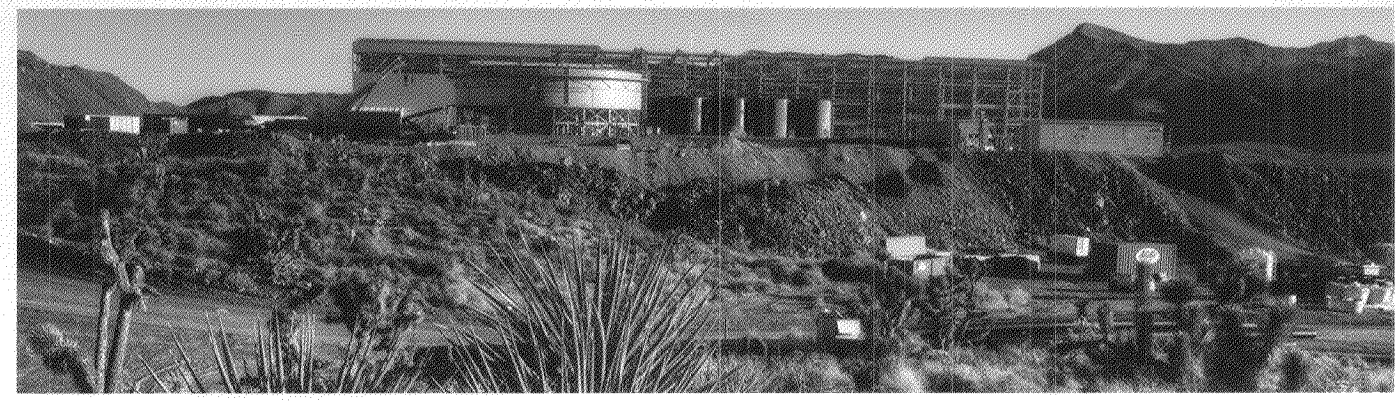
In fact, even though this is one of the largest and most complex construction projects now underway in the North America mining and processing industries, all timelines have been met or exceeded since project launch in 2010.

We expect to be operating our new, state-of-the-art facility at a Phase 1 annual production rate of 19,050 metric tons of rare earth oxide (REO) equivalent by the fourth quarter of 2012.

Mechanical completion of Project Phoenix's Phase 2 production capacity of 40,000 metric tons of REO equivalent is expected to be achieved by the end of 2012.

In February 2012, Molycorp launched the sequential start-up of the Project Phoenix facility, with several of the Project's individual plants initiating operations.

- The Crushing Facility has started operations, and fresh rare earth ore is now being crushed in preparation for processing in the new Mill.



Molycorp's innovative Paste Tailings Facility at Mountain Pass

- The initial Cracking Facility has been brought online, and rare earths from this facility are being recovered.
- We completed the first successful firing of the natural gas-powered turbines in our Combined Heat and Power Plant.

In addition to the start-up of these new facilities, we are now mining approximately 11,200 tons per week.

We also are proud to report that, at the time of this writing, more than 1.6 million project man-hours have been logged in Project Phoenix without a single lost time incident. This underscores our company's deep dedication to the value of safety for all Molycorp employees and contractors.

When the Project Phoenix facility is up and running at its full Phase 1 production rate, we will be producing rare earth products in one of the world's most technologically advanced, energy efficient, and environmentally superior rare earth facilities in the world. We also expect to be the world's lowest-cost producer of rare earth oxides.

The combination of these achievements is a testament to the Molycorp family's dedication to Excellence, Trust, Honesty, Integrity, Creativity, and Safety—our ETHICS values.

2011: A YEAR IN REVIEW

SNAPSHOT

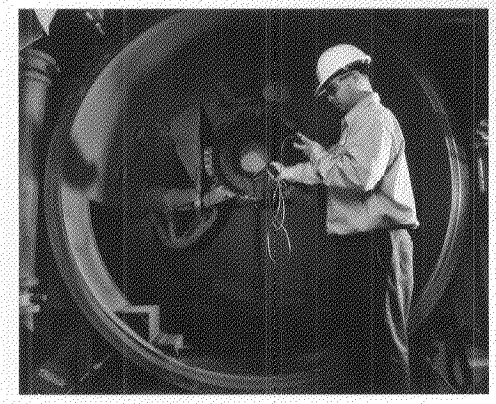
DELIVERING

WE DELIVERED PRODUCTS TO CUSTOMERS AROUND THE GLOBE.

Molycorp Mountain Pass

PRODUCTION ACCOMPLISHMENTS AND HIGHLIGHTS

- Production Volume: 3,516 mt REO equivalent
- Net Sales: $397 million
- Positive Cash Flow from Operations: $43 million
- EPS: $1.27 per diluted share



Alloy production at Molycorp Metals and Alloys

MINE-TO-MAGNETS DEVELOPMENT

From the outset, our business plan has centered on rebuilding the full rare earth material supply chain from Mine-to-Magnets.

Molycorp is now conducting rare earth mineral extraction, oxide production, and rare earth metal and alloy manufacturing. Our joint venture with Daido Steel and Mitsubishi Corporation is expected to produce sintered NdFeB magnets following the operational start-up of the joint venture's first magnet manufacturing facility by the end of 2012.

MOLYCORP SILMET

In April 2011, we acquired AS Silmet, a rare earth oxide and rare metal produce in Sillamäe, Estonia. This gave us expanded high purity oxide production, as well as the capability to make the rare metals niobium and tantalum. At the end of 2011, the facility also added neodymium metal making to its list of capabilities.

Now known as Molycorp Silmet, this extraordinary facility and its highly trained staff has provided us with an important base of operations in Europe.

MAGNET JOINT VENTURE:

Construction of the sintered NdFeB magnet manufacturing facility in Nakatsugawa, Japan, by the joint venture of Daido Steel, Mitsubishi Corporation, and Molycorp is proceeding rapidly. The facility is expected to begin operations by the end of 2012. It will utilize next-generation technology licensed from Intermetallics, Inc., a partnership between Mitsubishi, Daido, and Dr. Masato Sagawa, co-inventor of the NdFeB magnet. The joint venture will take full advantage of Daido's commercial-scale magnet manufacturing technologies, Mitsubishi's domestic and international marketing and sales network, and Molycorp's rare earth oxide, metal, and alloy manufacturing resources and capabilities. The joint venture is contemplating several more manufacturing plants, as marketing and sales activities are advanced.

MOLYCORP METALS AND ALLOYS

In April 2011, we also acquired Santoku America, Inc., the former U.S. subsidiary of Japan's Santoku Corporation, located in Tolleson, Arizona. This acquisition gave us access to critical intellectual property related to NdFeB alloy production and the capability to manufacture rare earth alloys and rare earth metals. It also brought to the Molycorp family one of the world's most highly skilled set of individuals in the rare earth metal and alloy space.

INTERMETALLICS JAPAN MAGNET MANUFACTURING JOINT VENTURE

Molycorp assembled the final piece of our Mine-to-Magnets business plan by advancing downstream into the manufacturing of highly sought after sintered NdFeB magnets through our joint venture with Daido Steel and Mitsubishi Corporation (see above), which we announced in November 2011. These next-generation magnets will be used in the automotive and energy efficient appliance sectors.

ADVANCING FURTHER DOWNSTREAM

While these important developments enabled the Company to complete its five step, Mine-to-Magnets supply chain, we intend to progress even further downstream. In September, we made a $20 million investment in Boulder Wind Power, a start-up company with groundbreaking new wind turbine technology that can be powered by dysprosium-free rare earth magnets.

The technology's efficiency gains are so substantial that it enables wind power production at a lower, unsubsidized cost than fossil fuel-based power.

GROWING MARKETS: DUAL-PURPOSE DEMAND

From flat screen televisions to electric vehicles, numerous advanced technologies require rare earths' unique properties as well as the energy efficiency they enable. This dual-purpose demand is rising worldwide. While impacted significantly by the world's developed economies, demand for these technologies is increasingly driven by growth in the emerging markets in China, Southeast Asia, India, Brazil, and elsewhere. Below are key market segments impacted by this dual-purpose growth:

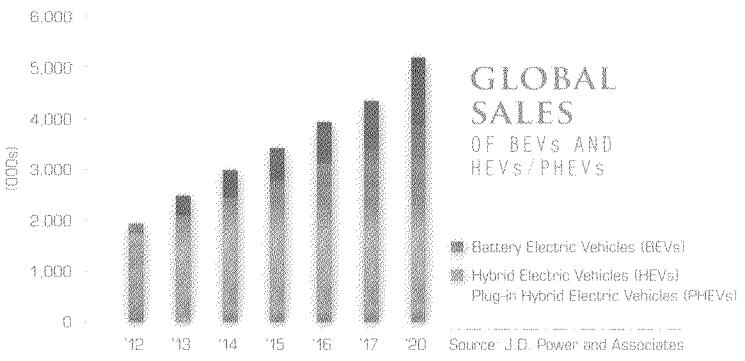
ENERGY EFFICIENT APPLIANCES: Small electric motors, powered by rare earth magnets, are essential in home appliances and significantly improve their energy efficiency. These motors represent approximately 45% of global power consumption, according to the International Energy Agency. Using rare earth permanent magnets in these motors can reduce power consumption up to 20%. ▪ **Market Growth:** The energy efficient home improvement market, which includes home appliances, is forecast to increase from $38.3 billion in 2009 to $50.2 billion by 2014. *(Pike Research)*

ENERGY EFFICIENT LIGHTING: Compact fluorescent light bulbs (CFLs) and light-emitting diodes (LEDs) require rare earth phosphors to produce visible light. According to the U.S. Department of Energy, CFL and LED lighting use 75% less energy than standard incandescent light bulbs and have longer life spans. Several countries are increasing their lighting efficiency standards, elevating demand for

energy efficient lighting. • **Market Growth:** LED demand to advance at a 62% compound annual growth rate through 2015; fluorescent lighting projected to grow from $34 billion in 2010 to $49 billion in 2015. *(Goldman Sachs Investment Research and Roskill)*

WIND POWER: Direct drive wind turbine generators made with permanent magnets (PMGs) greatly increase turbine efficiency and reliability by eliminating the gearboxes in current models. Gearboxes are typically where mechanical failure occurs and are difficult and costly to repair. With projected growth in larger turbines and deployments in remote locations, PMG turbines' higher efficiency and reliability can be critical to their economic success. • **Market Growth:** Global wind power capacity to grow from 240 gigawatts (GW) in 2011 to 563 GW by 2017. *(Global Wind Energy Council and Pike Research)*

AUTOMOBILES: Modern automobiles often require more than 100 small motors that power steering columns, windows, windshield wipers, and more. Rare earth permanent magnets decrease the size and weight of these small motors by up to 90%, resulting in lighter, more efficient automobiles. Hybrid and electric vehicles use rare earths in even higher volumes than conventional automobiles. • **Market Growth:** Hybrid, plug-in electric and battery electric vehicles combined sales to grow from nearly 1 million in 2011 to 5.2 million in 2020. *(Pike Research and J.D. Power)*



SAFETY AND SUSTAINABILITY

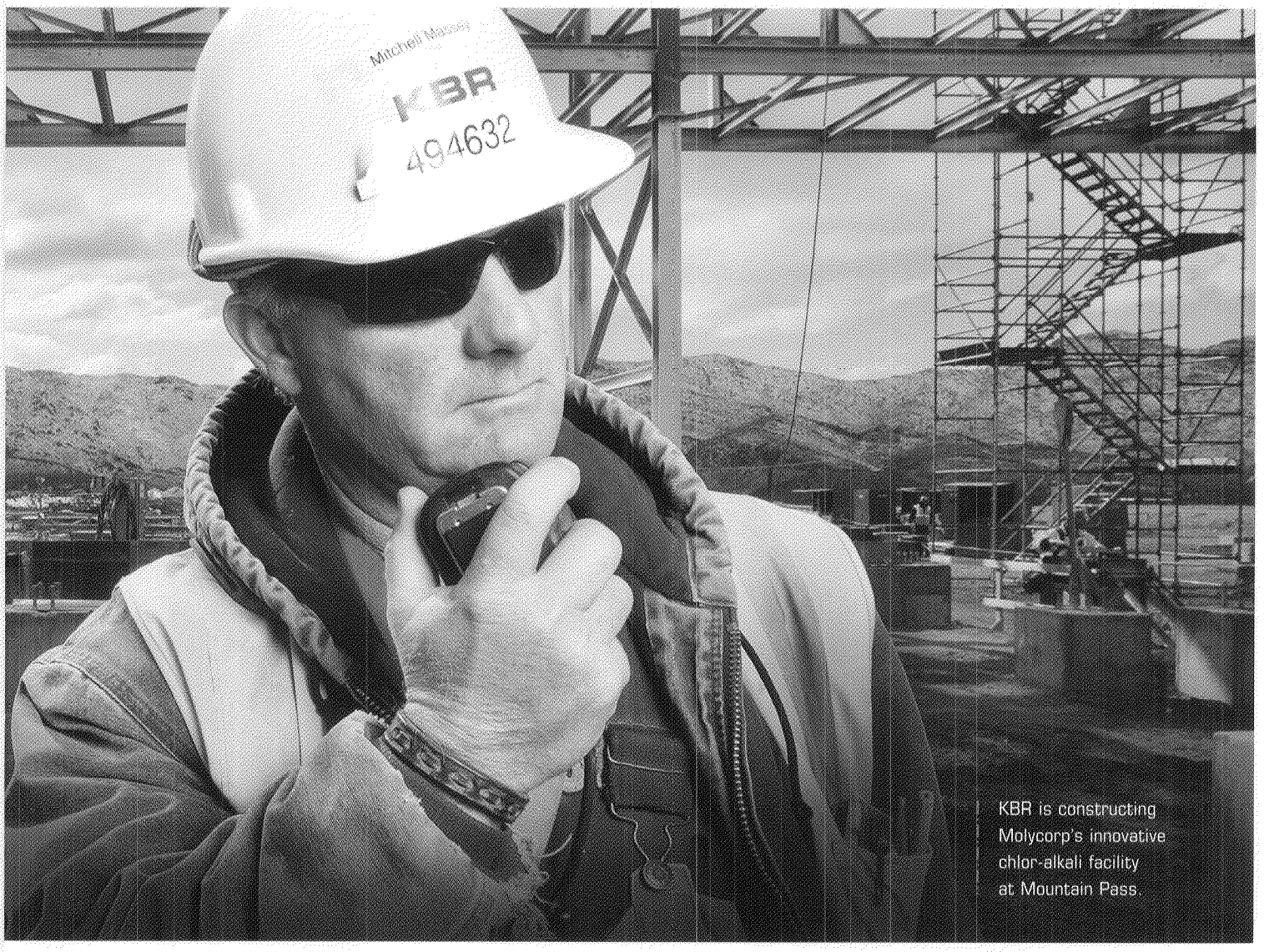
Our commitments to worker safety and superior environmental stewardship reflect our core values.

SAFETY: ENSURING THAT THE MOLYCORP FAMILY GOES HOME SAFE EACH NIGHT

With intense ongoing construction, as well as heightened production output, the opportunity for Lost Time Incidents (LTIs) has grown accordingly. Our team members have responded to the challenge by elevating their performance.

As of this writing, Molycorp Mountain Pass has gone more than six-and-one-half-years without an LTI, and Molycorp Metals and Alloys has gone more than 15 years without an LTI.

Project Phoenix met all of its 2011 safety goals and, as of this writing, our team has logged over 1.6 million safe hours worked without an LTI.

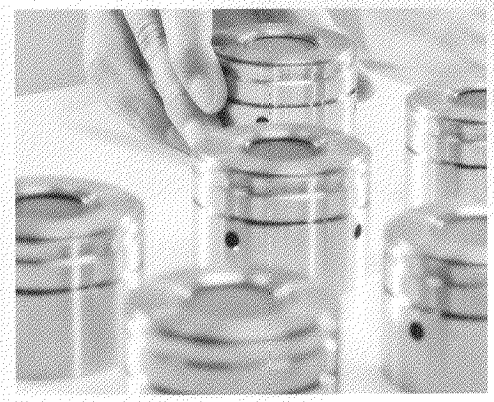


KBR is constructing Molycorp's innovative chlor-alkali facility at Mountain Pass.

SUSTAINABILITY: SETTING NEW STANDARDS OF PERFORMANCE IN OUR INDUSTRY

Sustainable, energy efficient operations are good for the environment and good for our business:

- Our new natural gas-powered, combined heat and power (CHP) plant is expected to cut our energy costs by over 80%, improve our energy reliability, and reduce our greenhouse gas emissions by 19% over conventional technology.
- The amount of fresh feed water needed for our process decreases by approximately 44%.
- We will now recycle our process water and produce the reagents needed for rare earth separations. This eliminates 230 million gallons of process water disposal and reduces our processing costs significantly.
- Our new tailings technology produces a material with a paste-like consistency that sets up into a solid, which eliminates the need for a tailings dam and the storage of large amounts of water behind it.



TECHNOLOGY AND INNOVATION

We fundamentally believe that technology innovation is a key factor of success in the rare earths and rare metals industries. Technology is enabling Molycorp to re-emerge as a global leader in the rare earths market, and it will be a cornerstone of our future growth.

From better processing that increases rare earth recoveries to innovative downstream products that use the materials more efficiently, we are building and investing in leading edge technologies across the entire rare earth supply chain.

Below are some of the examples where innovation and technology are driving Molycorp to global greater competitiveness:

- **CRACKING:** Our scientists have advanced proprietary cracking technology, which gives us the capability to process a wide range of rare earth-bearing materials, including bastnasite, monazite, and rare earth-containing recyclable materials.

- **XSORBX™:** The expanding applications for our XSORBX™ water treatment and purification technology continue to exceed even our own high expectations for the material. The technology's ability to remove a remarkably broad spectrum of water pollutants and pathogens is opening up new frontiers in water treatment, and it is enabling us to move our cerium into high volume, high margin markets with enormous potential for future growth.

- **MAGNETS:** In November 2011, we proudly announced our joint venture with Daido Steel Co., Ltd., and the Mitsubishi Corporation that will manufacture next-generation, sintered NdFeB. The groundbreaking technology produces a higher strength magnet that uses less dysprosium, with higher production yields.

- **BOULDER WIND POWER, INC.:** As early stage investors in Boulder Wind Power, we are big believers in their highly efficient, dysprosium-free, permanent magnet generator, wind turbine technology and see it as the key to cost-competitive wind power. Material availability risk is the principal limitation to highly efficient, cost-effective wind power deployment at scale, and we believe BWP's technology can lead the way.

- **COOPERATIVE RESEARCH WITH AMES NATIONAL LAB:** In March, we entered a cooperative research and development agreement (CRADA) with Ames National Laboratory at Iowa State University. Our work together, funded in part by the Department of Energy's Advanced Research Projects Agency-Energy (ARPA-E), is principally focused on advances in magnetics.

- **RECYCLING:** As a key part of our strategy to address heavy rare earth demand, we are directing substantial R&D efforts to better understand how to recycle and reuse rare earths. A highly promising near-term recycling target is compact fluorescent light bulbs, which use the heavy rare earth phosphors like europium, terbium, and yttrium.

XSORBX™ — MARKETS AND GROWTH

Our proprietary XSORBX™ water purification products are among the most important innovations that our scientists have developed over the past decade.

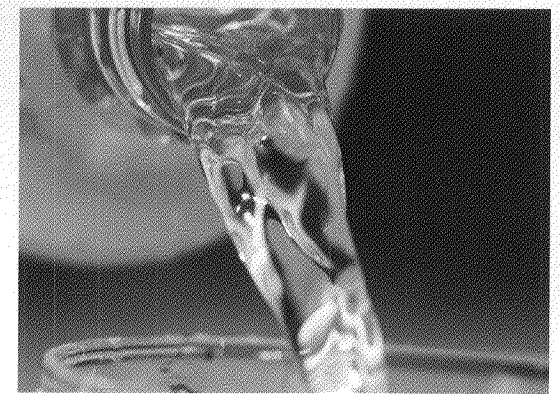
In 2011, we began to realize the full extent of XSORBX™'s capabilities and the prominent role the technology will play in Molycorp's future.

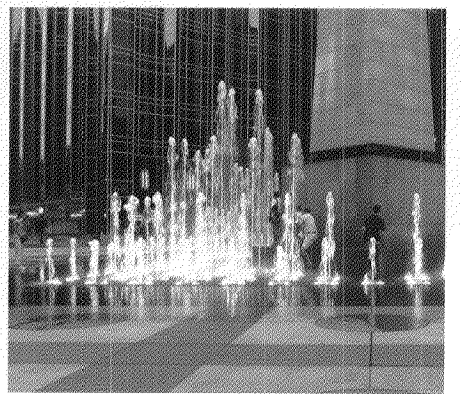
Not only does XSORBX™ hold the potential to revolutionize water treatment and purification, it also creates high-volume, high value end markets for the cerium produced at Mountain Pass. This greatly improves our cost competitiveness and shields us from traditionally lower cerium prices.

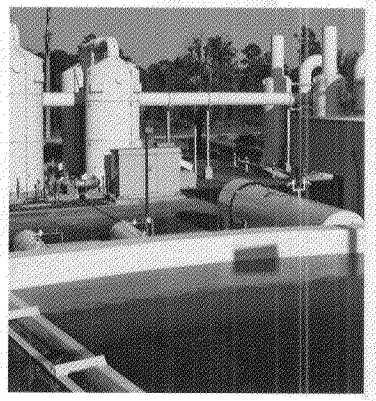
WIDE RANGING WATER PURIFICATION CAPABILITIES

XSORBX™'s strong affinity for arsenic was the capability that first caught the attention of Molycorp scientists. They soon found, however, that it also removed from water, heavy metals such as lead, chromium, mercury, and selenium. Each is a key contaminant that industrial and municipal water treatment facilities have difficulty removing cost-effectively.

Further research demonstrated that XSORBX™ had a remarkable ability to attract phosphates, which cause the spread of algae in recreational pool, spa, and fountain water uses. With the increased use of fertilizers and pesticides, phosphates are an emerging pollutant in municipal water systems.







XSORBX™ also proved capable of capturing fluorides, pesticides, tannic and hummic acids, and pharmaceuticals. Preliminary testing has also demonstrated that it kills viruses and bacteria with an effectiveness that could be many times greater than standard disinfection methods such as bleach.

In 2011, we subjected XSORBX™ to rigorous testing by the Water Quality Association (WQA) and other independent labs. The testing demonstrated that XSORBX™ meets or exceeds the National Sanitation Foundation's (NSF) capacity and toxicity standards for aesthetic effects, health effects, and drinking water system components.

Given the enormous potential of this technology, Molycorp devised a global patent strategy to protect its property rights in XSORBX™. This now encompasses over 300 issued and pending patents filed in the U.S. and internationally.

FOUR HIGH VOLUME MARKETS

We have identified four principal markets for XSORBX™ products:

- Wastewater: municipal and industrial;
- Recreational, pool, and spa;
- Municipal drinking water; and
- Consumer water purification, such as tabletop pitchers and backpacking water filters

In addition to its wide-ranging efficacy, XSORBX™ is a more efficient treatment option. It results in decreased reagent use, fewer reagent refills and decreased solids precipitation, all of which are critical for cost-conscious municipalities and water treatment facilities.

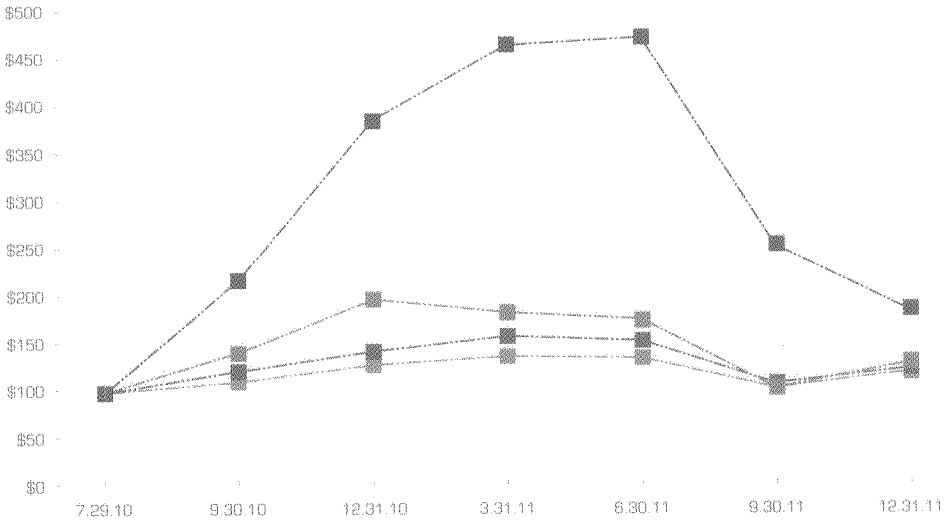
Our early market seeding efforts in 2011 gained significant traction, and as a result, we chose to dedicate 20% of our Phase 1 production to XSORBX™. We foresee XSORBX™ playing an increasingly important role in the company's long-term success.

Project Phoenix construction at Mountain Pass

COMPARISON OF 17-MONTH CUMULATIVE TOTAL RETURN*

Among Molycorp, Inc., the Russell 2000 Index, the S&P Diversified Chemicals Index, and the S&P Diversified Metals & Mining Index

*$100 invested on 7/29/10. Fiscal year ending December 31.



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

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

For the fiscal year ended December 31, 2011

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 001-34827

Molycorp, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**27-2301797**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
5619 Denver Tech Center Parkway, Suite 1000 Greenwood Village, Colorado	**80111**
(Address of principal executive offices)	(Zip Code)

(303) 843-8040

(Registrant's telephone number, including area code)

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

Title of Each Class	**Name of Each Exchange on Which Registered**
Common Stock, par value $0.001 per share	New York Stock Exchange
Series A Mandatory Convertible Preferred Stock, par value $0.001 per share	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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

Large accelerated filer ☒	Accelerated filer ☐	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant computed by reference to the price at which the common equity was last sold as of the last business day of the registrant's most recently completed second fiscal quarter: $3,432,088,751

As of February 24, 2012, the registrant had 83,895,822 shares of common stock, par value $0.001 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required by Items 10, 11, 12, 13 and 14 of Part III is incorporated by reference from portions of the registrant's definitive proxy statement relating to its 2012 annual meeting of stockholders to be filed within 120 days after December 31, 2011.

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PART I

In this Annual Report on Form 10-K, unless the context requires otherwise, references to "Molycorp," "we," "our" or "us" refer to Molycorp, LLC and its consolidated subsidiaries prior to the Corporate Reorganization (as described below) and Molycorp, Inc. and its consolidated subsidiaries after the corporate reorganization. As used in this Annual Report on Form 10-K, the term "ton" means a ton (equal to 2,000 pounds), the term "mt" means a metric tonne (equal to 2,205 pounds), the term "Roskill" means Roskill Consulting Group Limited, a rare-earth market consultant, the term "IMCOA" means the Industrial Minerals Company of Australia Pty Ltd, a rare-earth market consultant, and the term "Rest of World" means the entire world except China. For definitions of certain rare earth-related and mining terms, see "Glossary of Selected Mining Terms." IMCOA data is accurate to within 20% of the stated amounts. IMCOA data takes into account only legal exports of rare earths, and ignores illegal exports from China and usage thereof, which could be significant due to the difficulties with accurately collecting information with respect thereto.

ITEM 1. BUSINESS.

Our Business

We are the largest rare earth oxide, or REO, producer in the Western hemisphere and own one of the world's largest, most fully developed rare earth projects outside of China. We also own one of the largest rare earth oxide and rare metal producers in Europe, and the only producer of rare earth alloys in the United States. Upon the full execution of our "mine-to-magnets" strategy and completion of our initial modernization and expansion plan, which we refer to as Project Phoenix Phase 1, and second-phase capacity expansion plan, which we refer to as Project Phoenix Phase 2, at our Mountain Pass, California rare earth mine and processing facility, which we refer to as our Molycorp Mountain Pass facility, we expect to be one of the world's most integrated producers of rare earth products, including oxides, metals, alloys and magnets. Following the completion of Project Phoenix Phase 2 construction, we expect to have the ability to produce, if customer demand warrants, up to approximately 40,000 mt of REO per year by mid-2013 at our Molycorp Mountain Pass facility, or approximately double the amount we will be able to produce upon completion of Project Phoenix Phase 1.

Rare earths are critical inputs in many existing and emerging applications including: clean energy technologies, such as hybrid and electric vehicles and wind power turbines; multiple high-tech uses, including fiber optics, lasers and hard disk drives; numerous defense applications, such as guidance and control systems and global positioning systems; and advanced water treatment technology for use in industrial, military and outdoor recreation applications. Global demand for rare earth elements, or REEs, is projected to steadily increase both due to continuing growth in existing applications and increased innovation and development of new end uses. We have made significant investments, and expect to continue to invest, in developing technologically advanced applications and proprietary applications for individual REEs.

Our Corporate History and Structure

Molycorp Minerals, LLC, a Delaware limited liability company formerly known as Rare Earth Acquisitions LLC, was formed on June 12, 2008 to purchase the Mountain Pass, California rare earth deposit and associated assets from Chevron Mining Inc., a subsidiary of Chevron Corporation. Prior to the acquisition, the Molycorp Mountain Pass facility was owned by Chevron Mining Inc. and, before 2005, by Unocal Corporation. Molycorp, LLC, which was the parent of Molycorp Minerals, LLC, was formed on September 9, 2009 as a Delaware limited liability company. Molycorp, Inc. was formed on March 4, 2010 as a new Delaware corporation and was not, prior to the date of the consummation of its initial public offering, conducting any material activities.

The members of Molycorp, LLC contributed either (a) all of their member interests in Molycorp, LLC or (b) all of their equity interests in entities that hold member interests in Molycorp, LLC (and no other assets or liabilities) to Molycorp, Inc. in exchange for shares of Molycorp, Inc. Class A common stock. Additionally, all of the holders of profits interests in Molycorp Minerals, LLC, which were represented by incentive shares, contributed all of their incentive shares to Molycorp, Inc. in exchange for shares of Molycorp, Inc. Class B common stock. Accordingly, Molycorp, LLC and Molycorp Minerals, LLC became subsidiaries of Molycorp, Inc., which we refer to as the "Corporate Reorganization". Following the Corporate Reorganization, Molycorp, LLC was merged with and into Molycorp Minerals, LLC. Immediately prior to the consummation of Molycorp, Inc.'s initial public offering, all of the shares of Class A common stock and Class B common stock were converted into shares of common stock.

On April 1, 2011, we completed the acquisition of a 90.023% controlling stake in AS Silmet located in Sillamäe, Estonia, which is now known as Molycorp Silmet AS or Molycorp Sillamäe, one of only two rare earth processing facilities in Europe. On October 24, 2011, we acquired the remaining 9.977% ownership interest in Molycorp Sillamäe. This acquisition provides us with a European base of operations and significantly increases our annual capacity to produce REO by approximately 3,000 mt. Molycorp Sillamäe sources rare earth feed stocks for production of its products primarily from our Molycorp Mountain Pass facility. The main focus of this acquired business is on the production of REOs and metals, including production of neodymium metal, a critical component in the manufacture of neodymium-iron-boron, or NdFeB, permanent rare earth magnets. On April 15, 2011, we acquired Santoku America, Inc., which is based in Tolleson, Arizona, and which is now known as Molycorp Metals and Alloys, Inc. or Molycorp Tolleson, the only producer of rare earth alloys in the United States. This acquisition provides us with access to certain intellectual property relative to the development, processing and manufacturing of neodymium and samarium magnet alloy products.

On August 22, 2011, we opened an office in Tokyo, Japan to provide customer support as well as consulting and technical services to our customers in Japan.

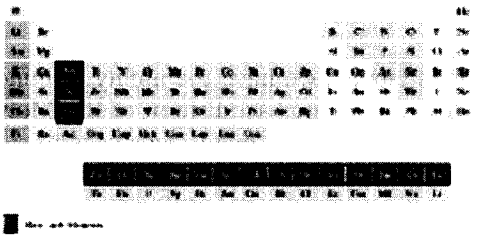
We have three operating segments: Molycorp Mountain Pass, Molycorp Tolleson and Molycorp Sillamäe. Each of the segments has only one production and shipping location. Sales to external customers by geographic area are based on the location in which the sale originated. Please refer to the Notes to the Consolidated Financial Statements included in this Annual Report on Form 10-K for financial information about our operating segments, and to the Management's Discussion and Analysis of Financial Condition and Results of Operations included in this Annual Report on Form 10-K for information about sales by product and by operating segment.

Rare Earth Industry Overview

The Rare Earth Elements

The REE group includes 17 elements, namely the 15 lanthanide elements, which are cerium, lanthanum, neodymium, praseodymium, promethium (which does not occur naturally), samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium, and two elements that have similar chemical properties to the lanthanide elements—yttrium and scandium. The oxides produced from processing REEs are collectively referred to as REOs. Light and heavy REEs are contained in all rare earth deposits, including in our deposit at our Molycorp Mountain Pass facility. Heavy REEs generally command higher sales prices on a per pound basis than light REEs because heavy REEs are not as prevalent. Cerium, lanthanum, neodymium, praseodymium and samarium are considered "light REEs" that are more predominant in bastnasite, while europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium are considered "heavy REEs" that are more predominant in monazite. Our reserves are bastnasite, but there are also known monazite occurrences near our Molycorp Mountain Pass facility. In December 2011, the U.S.

Department of Interior Bureau of Land Management granted us authorization to commence exploratory drilling at an occurrence of heavy rare earths located near our Molycorp Mountain Pass facility. Preliminary exploration at the site has shown rare earth mineralization with an average ore grade of approximately four percent and a relatively high percentage of heavy REEs, such as terbium, dysprosium, europium and samarium, as well as relatively high percentages of yttrium, neodymium, and praseodymium.



Global Rare Earth Market

REEs have unique properties that make them critical materials to many existing applications upon which society has become dependent as well as many emerging applications. Examples include:

- *Clean-Energy Technologies:* hybrid and electric vehicles, wind power turbines and compact fluorescent lighting;
- *High-Technology Applications:* miniaturization of cell phones, personal digital assistant devices, digital music players, hard disk drives used in computers, computing devices, "ear bud" speakers and microphones, as well as fiber optics, lasers and optical temperature sensors;
- *Critical Defense Applications:* guidance and control systems, communications, global positioning systems, radar and sonar; and
- *Advanced Water Treatment:* industrial, military, homeland security and domestic and foreign aid applications.

Our Mine Process and Development Plans

We and SRK Consulting (U.S.), Inc., or SRK Consulting, estimated total proven reserves as of February 6, 2010 of 88.0 million pounds of REO contained in 0.480 million tons of ore, with an average ore grade of 9.38%, and probable reserves of 2.12 billion pounds of REO contained in 13.108 million tons of ore, with an average ore grade of 8.20%, in each case using a cut-off grade of 5.0%, at our Molycorp Mountain Pass mine. As a result of increased REE prices during the three-year period ended December 31, 2011, the estimated economic cut-off grade for the deposit at our Molycorp Mountain Pass mine is less than the 5% cut-off grade initially applied by SRK Consulting. In addition to REE pricing, the cut-off grade calculation includes other technical inputs, such as process recovery and operating cost information. We continue to evaluate our operating cost and cost recovery information. Currently, we do not propose a change to the 5% cut-off grade that defines our reserve estimate. Accordingly, as of December 31, 2011, our estimated proven and probable reserves remain 88.0 million pounds of REO and 2.12 billion pounds of REO, respectively. Upon the completion of Project Phoenix Phase 1, which we expect to be completed by the end of the third quarter of 2012, we expect to have the capacity to produce approximately 19,050 mt of REO per year at our Molycorp Mountain Pass facility. Following the completion of Project Phoenix Phase 2 construction, which we expect to be by the end of the fourth quarter of 2012, we expect to have the ability to produce, if customer demand warrants, approximately 40,000 mt of REO per year by mid-2013 at our Molycorp Mountain Pass facility, or approximately double the amount we expect to be able to produce upon completion of Project Phoenix Phase 1. Based on our estimated reserves and an expected annual

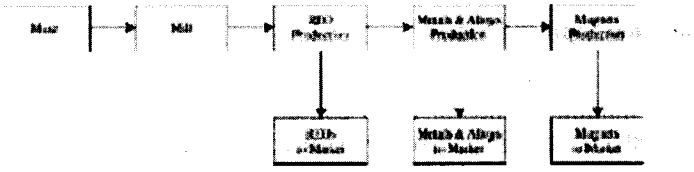
production rate of approximately 19,050 mt of REO under Project Phoenix Phase 1, the expected mine life of our Molycorp Mountain Pass mine is in excess of 30 years (SRK Consulting has preliminarily indicated, however, that doubling the amount of production pursuant to Project Phoenix Phase 2 would reduce the current mine life by half, assuming no additional exploration, conversion of known mineralized material to reserves, no realization of anticipated improvements in recoveries, and all other factors, such as cut-off grade, remain constant.)

Mine-to-Oxides

At our Molycorp Mountain Pass facility, we have the ability to mine, crush, mill and separate rare earth ore to produce individual REEs. Since our acquisition of the Molycorp Mountain Pass facility, we have been producing and selling REOs from stockpiled feedstocks to significantly improve our solvent extraction technologies and capabilities. As of December 31, 2011, we had achieved greater than 98% recovery in our solvent extraction units at commercial scale for cerium, lanthanum, and didymium, which we believe is one of the highest recovery rates in the world. We have also developed the expertise to produce the following REEs in many usable forms: bastnasite concentrate; cerium; lanthanum; neodymium; praseodymium; europium; samarium; gadolinium; dysprosium; and terbium. When used to describe the current recovery rate for our solvent extraction units, the term "commercial scale" means that the solvent extraction units are operating at such a production rate that the scale-up factor required to achieve the desired production rate is less than 10 times the current production rate.

Processing at our Molycorp Mountain Pass facility entails mining the bastnasite ore followed by crushing and milling it to a fine powder. Milled bastnasite ore is then processed by flotation whereby the bastnasite, which is a mineral containing light and heavy rare earth elements, floats to the surface and is separated from the waste material, which sinks in a series of flotation cells. The resultant bastnasite concentrate is then processed by leaching (cracking) with acid solutions followed by a series of solvent-extraction separation steps that produce various individual REO minerals, generally in a high purity oxide form.

Commencing in the first quarter of 2012, monazite component will also be cracked in our new separation process.



Oxides-To-Metals/Alloys

We sell and transport a portion of the REOs we produce at our Molycorp Mountain Pass and Molycorp Sillamäe facilities to customers for use in their particular applications. The remainder of the REOs are processed into rare earth metals and rare earth alloys. We produce rare earth metals outside of the United States through third-party tolling arrangements and through tolling at our Molycorp Sillamäe facility. A portion of these metals is sold to end-users, and we process the rest into rare earth alloys at our Molycorp Tolleson facility in Arizona. These rare earth alloys can be used in a variety of applications, including but not limited to: electrodes for nickel metal hydride battery production; samarium cobalt, or SmCo, magnet production; and NdFeB magnet production. A portion of these rare earth alloys will be manufactured into NdFeB magnets as part of our alloy and magnet production joint ventures described below, and we expect to sell the rest to end-users.

In August 2011, we entered into a preliminary agreement with Hitachi Metals, Ltd., or Hitachi, for the supply of magnetic rare earth products and lanthanum. Under the three-year agreement, we will

initially provide the rare earth products to Hitachi from our current commercial scale operations at our Molycorp Mountain Pass facility. Following completion of Project Phoenix Phase 1, we can supply the rare earth products from our Molycorp Mountain Pass facility or our other facilities (including Molycorp Tolleson and Molycorp Sillamäe) for the remaining term of the agreement. Prices under this agreement are based on international market price indexes published by third parties and typically used by the rare earth industry.

On November 28, 2011, we formed a joint venture, Intermetallics Japan Joint Venture or IJJV, with Daido Steel Co., Ltd., or Daido, and Mitsubishi Corporation, or Mitsubishi, to manufacture and sell next-generation NdFeB permanent rare earth magnets using a technology licensed from Intermetallics, Inc., a partnership between Mitsubishi, Daido and Dr. Masato Sagawa, co-inventor of the NdFeB magnet. Concurrently with the formation of this joint venture, we entered into a supply agreement with Mitsubishi (acting as the procurement agent) and Daido to sell to the joint venture certain rare earth products at the conditions set forth in the supply agreement.

Alloy and Magnet Production Joint Ventures

NdFeB magnets, which are critical components in "green" technologies and the miniaturization of electronics, are primarily manufactured in China (approximately 80%) and Japan (approximately 20%). Our Intermetallics Japan Joint Venture provides us with access to the technology, people and facilities to convert our rare earth materials into high-performance permanent rare earth magnets required for production of hybrid and electric vehicles, high-tech applications and numerous advanced defense systems. We expect the consummation of this joint venture, in conjunction with our modernization plans at our Molycorp Mountain Pass facility and the strategic acquisitions of Molycorp Sillamäe and Molycorp Tolleson, to provide us with the capability to mine, process, separate and alloy individual REEs and manufacture them into NdFeB magnets. This downstream integration, which we refer to as our "mine-to-magnets" strategy, would make us the only fully integrated producer of NdFeB magnets outside of China, helping to secure a rare earth supply chain for the Rest of World. In addition to the foregoing, we continue to explore additional joint ventures or other arrangements with third parties for the production of NdFeB alloys and/or magnets.

Rare earth "mine-to-magnets" production supply chain

Customers

We are working to establish stable revenue streams for the rare earth minerals and products we produce at our three operating facilities.

Molycorp Mountain Pass

In November 2010, we entered into a contract to supply one of our largest customers with a significant amount of our REOs, primarily lanthanum concentrate, through mid-2012 at market-based prices subject to a ceiling based on market prices at June 1, 2010, and a floor. This contract was amended effective July 1, 2011 to increase the price ceiling. Under a second contract, we agreed to supply this same customer with approximately 75% of our lanthanum product production per year, following completion of Project Phoenix Phase 1 at market-based prices, subject to a floor, for a three-year period commencing upon the achievement of expected annual production rates under Project Phoenix Phase 1, which may be extended at the customer's option for an additional three-year period. In February 2012, this same customer exercised a volume reduction right that lowers its purchase obligation for lanthanum products from approximately 75% to approximately 58% of our

lanthanum production per year, following completion of Project Phoenix Phase 1. Accordingly, we intend to secure other customer contracts for our lanthanum products in replacement of the volume reduction from our current customer.

Substantially all of our lanthanum production in 2011, which accounted for approximately 46% of our actual production in the year, was sold pursuant to the contract with one of our principal customers described above under which our pricing is subject to a price ceiling. We expect that production of our remaining materials will generally be sold based on prevailing market prices.

As of December 31, 2011, we had written agreements with customers covering 58% of our expected Project Phoenix Phase 1 production. The lanthanum contract volume reduction described above represents approximately 6% of our expected Project Phoenix Phase 1 production. Prior to commencing full production at our Molycorp Mountain Pass facility, we intend to enter into short-term and long-term sales contracts in advance with existing and new customers for amounts not in excess of our actual planned Project Phoenix Phase 1 production. For certain REEs where the market demand is high, such as europium, we do not expect to enter into letters of intent or contracts, because we believe these REEs can be easily sold.

During the third quarter of 2010, we completed our initial sale of XSORBX® to the water treatment industry, and, as of December 31, 2011, we have allocated 20% of Project Phoenix Phase 1 output to production of XSORBX®. In addition, we are in discussions with multiple large companies regarding the sale of XSORBX®, which will expand demand for cerium in times when it is in surplus and low priced. We have begun to sell XSORBX® for commercial use in the wastewater, recreation, pool and spa, industrial process and other water treatment markets.

We currently depend on a limited number of customers for a significant portion of our consolidated annual sales.

Molycorp Mountain Pass' sales to Hitachi Metals. Ltd. in 2011 accounted for approximately 23% of consolidated sales. Molycorp Mountain Pass' sales to four of its customers represented in total approximately 77% of Molycorp Mountain Pass's sales in 2011.

Percentages of Molycorp Mountain Pass' revenue, net of intercompany sales, by product that accounted for more than ten percent of consolidated sales in 2011, 2010 and 2009, were approximately as follows:

	2011	2010	2009
Lanthanum products	23%	39%	92%
Cerium products	11%	29%	2%
Didymium products	26%	26%	n/a

Molycorp Sillamäe

Molycorp Sillamäe currently sells products to customers in Europe, North and South America, Asia, Russia, and other former Soviet Union countries. Sales to three of Molycorp Sillamäe's customers from April 1, 2011 (the acquisition date) to December 31, 2011, represented in total approximately 45% of Molycorp Sillamäe's sales for that period.

Molycorp Tolleson

Molycorp Tolleson's sales to Santoku Corporation for the period from April 15, 2011 (the acquisition date) to December 31, 2011, were approximately 12% of consolidated sales and approximately 86% of Molycorp Tolleson's sales for that period.

Molycorp Tolleson's sales of neodymium alloys for the period from April 15, 2011 (the acquisition date) to December 31, 2011, were approximately 11% of consolidated sales.

Sources and Availability of Raw Materials

Energy (including electricity and natural gas), hydrochloric acid, sodium hydroxide and water are the principal raw materials used in our Molycorp Mountain Pass operations.

In connection with Project Phoenix Phase 1, we are building a new 24 megawatt Combined Heat and Power or co-generation power plant that will use natural gas to provide reliable electricity and steam to our Molycorp Mountain Pass facility to allow us to achieve our anticipated annual production rate of approximately 19,050 mt of REO. In connection with Project Phoenix Phase 2, we expect to add two additional turbines to the co-generation power plant to increase the plant's capacity to 49 megawatts.

We use significant amounts of hydrochloric acid and sodium hydroxide as chemicals to process REOs at Molycorp Mountain Pass. We ultimately intend to produce and recycle our own hydrochloric acid and sodium hydroxide at our Molycorp Mountain Pass facility; however, the technology we are developing to internally produce these chemicals to significantly reduce our dependence on external supplies has not yet been contructed at our Molycorp Mountain Pass facility. Accordingly, we purchase hydrochloric acid and sodium hydroxide in the open market through multiple suppliers and, as a result, could be subject to significant volatility in the cost or availability of these chemicals. We may not be able to pass increased prices for these chemicals through to our customers in the form of price increases for our products. A significant increase in the price, or decrease in the availability, of these chemicals, before we produce them on site could materially increase our operating costs and adversely affect our profit margins from quarter to quarter. Our operations at Molycorp Mountain Pass also require significant quantities of water to process REOs.

In addition to natural ores and REO concentrates, we utilize energy (electricity), hydrofluoric acid, nitrogen acid, sulphuric acid, tributylphosphate and water for our Molycorp Sillamäe operations. We purchase these raw materials, including chemicals, in the open market through multiple suppliers and, as a result, could be subject to significant volatility in the cost or availability of these materials. We may not be able to pass increased prices for these raw materials through to our customers in the form of price increases for our products. A significant increase in the price, or decrease in the availability of these chemicals could materially increase our operating costs and adversely affect our profit margins from quarter to quarter.

At our Molycorp Tolleson facility, we use didymium, neodymium, samarium and praseodymium rare earth metals, dysprosium iron metal, and a number of non-rare earth metals including iron, ferroboron, cobalt and copper. Except for didymium, we purchase these raw materials in the open market through multiple suppliers and, as a result, could be subject to significant volatility in the cost or availability of these raw materials. We may not be able to pass increased prices for these materials through to our customers in the form of price increases for our products. A significant increase in the price, or decrease in the availability, of these raw materials could materially increase our operating costs and adversely affect our profit margins from quarter to quarter.

Competition

According to IMCOA, global production of rare earth oxide products was approximately 112,000 mt of REO in 2011, and China accounted for approximately 94% of this total. The majority of the remaining production in 2011 was from Molycorp Mountain Pass and Molycorp Sillamäe. Although exploration programs for REEs exist outside of China and Mountain Pass, none of the deposits that are the subject of these programs are currently in production. In addition, at a April 2010 U.S. Government Accountability Office briefing, titled "Rare Earth Materials in the Defense Supply Chain" (Publication No. 111-84), government and industry officials stated that, for a typical exploration-stage mine, once a company has secured the necessary capital to start a mine, it can take from seven to 15 years to bring a property fully online, largely due to the time it takes to comply with multiple state and federal regulations. The time to bring a mine fully online may vary depending on the country and jurisdiction where the property is located.

The principal methods of competition for all our products are pricing, the nature of customers' specifications and ability to meet them, and supply reliability.

Once we reach full planned production rates for REOs at Molycorp Mountain Pass and other planned downstream products at Molycorp Sillamäe and Molycorp Tolleson, the increased competition may lead our REOs competitors, primarily various Chinese producers, to engage in predatory pricing behavior. Any increase in the amount of rare earth products exported from other nations, and increased competition, whether legal or illegal, may result in price reductions, reduced margins and 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.

Patents, Trademarks and Licenses

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 at our three operating segments. We utilize trade secret protection and nondisclosure agreements to protect our proprietary rare earth technology. We also have a proven technology and product development group and as of December 31, 2011, held 94 issued and pending U.S. patents and patent applications, and 172 issued and pending foreign patents and patent applications. The patents issued have an average duration of 12.27 years as of December 31, 2011. The Molycorp Tolleson acquisition provides us with access to certain intellectual property relative to the development, processing and manufacturing of neodymium and samarium magnet alloy products. We intend to rely on patented products, such as XSORBX®, and related licensing agreements to establish proprietary markets for low demand REEs. These 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 will be subject to infringement or other unauthorized use outside of the United States. 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 United States. Unauthorized use of our intellectual property rights or 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.

Research and Development

We have invested significant resources to improve the efficiency of our REO processing operations and the development of new applications for individual REEs. As of December 31, 2011, our product development group consisted of 26 scientists and engineers. In addition, we spent $8.3 million for the year ended December 31, 2011, $2.4 million for the year ended December 31, 2010 and $1.5 million for the period ended December 31, 2009 on research and development.

Employees

As of December 31, 2011, we had a total of 920 employees.

In connection with our ongoing modernization and expansion efforts at our Molycorp Mountain Pass facility, we expect to hire additional employees by the end of 2012.

As of December 31, 2011, 122 employees, or approximately 60% of the workforce at our Molycorp Mountain Pass facility, were represented by the United Steelworkers of America. Our contract with the United Steelworkers of America expires in 2015.

As of December 31, 2011, 186 employees, or approximately 33% of the workforce at our Molycorp Sillamäe facility, were unionized employees. Our contract with the labor union in Estonia is renewed annually by the end of February.

There were no unionized employees at our Molycorp Tolleson facility as of December 31, 2011.

We have not experienced any work stoppages at our Molycorp Mountain Pass facility or Molycorp Sillamäe facilities because of labor disputes with our employees organized under union agreements, and consider our overall employee relations to be excellent.

Environmental, Health and Safety Matters

We are subject to numerous and detailed international, national, federal, state and local laws, regulations and permits affecting the mining and mineral processing industry, including those pertaining to employee health and safety, environmental permitting and licensing, air quality standards, GHG emissions, water usage and disposal, pollution, waste management, plant and wildlife protection, handling and disposal of radioactive substances, remediation of soil and groundwater contamination, land use, reclamation and restoration of properties, the discharge of materials into the environment and groundwater quality and availability. Our Molycorp Sillamäe operations are also subject to the environmental laws, regulations and permits applicable in Estonia, whose requirements are shaped by Estonia's membership in the European Union. These laws, regulations and permits have had, and will continue to have, a significant effect on our results of operations and competitive position and have become increasingly stringent over time. Future laws, regulations or permits, as well as the interpretation or enforcement of existing requirements, may require substantial increases in capital or operating costs or otherwise delay, limit or prohibit our current or future operations. Our management team, employees and consultants have a significant amount of experience working with various international, federal, state and local authorities to address compliance with such laws, regulations and permits. Despite our emphasis on compliance, through training and established policies, we cannot assure you that we have been or will be at all times in compliance with such requirements.

Environmental expenditures

We incurred approximately $6.1 million in 2011, and we expect to incur approximately $6.3 million in 2012, for ongoing operating environmental expenditures at Molycorp Mountain Pass, including salaries, monitoring, compliance, reporting and permits. In addition, we plan to invest significant capital in certain infrastructure at our Molycorp Mountain Pass facility, including impurity removal equipment in our rare earth separations facilities, a chlor-alkali plant, a co-generation power plant and a paste tailings plant and related storage facility. Our planned chlor-alkali plant is expected to reduce the amount of waste salt water that otherwise would be produced by our Molycorp Mountain Pass facility and minimize the need for evaporation ponds to dispose of this waste water. We anticipate the need to transport a portion of the wastewater generated at Molycorp Mountain Pass to permitted offsite disposal facilities in order to repair liner defects in onsite evaporation ponds that were detected earlier in 2011. In addition, while our chlor-alkali plant is being constructed, we intend to remove and dispose of any wastewater generated in excess of our evaporation capability at an off-site location. We incurred approximately $4.9 million in 2011. Our planned co-generation power plant is expected to increase the energy efficiency of our Molycorp Mountain Pass facility by generating steam with waste heat from the power generation process. Our planned paste tailings plant and related storage facility are expected to increase the extent of our water recycling and present lower environmental risks than storing tailings in ponds. We expect to spend approximately $238.0 million during 2012 related to environmentally-driven capital projects on our modernization and expansion project at our Molycorp Mountain Pass facility. We have acquired air emission offset credits for our Molycorp Mountain Pass facility at a cost of approximately $3.1 million, which we believe to be sufficient to operate under Project Phoenix Phase 1 and Project Phoenix Phase 2.

We incurred approximately $0.4 million in 2011 at our Molycorp Sillamäe facility, and we expect to incur approximately the same amount in 2012, for ongoing operating environmental expenditures to comply with the European Union directives and with the Estonian regulatory act governing environmental permitting and licensing. We may have to incur environmental capital and operating costs associated with future possible modernization plans at our Molycorp Sillamäe facility.

Although we have not incurred any significant environmental expenditures at our Molycorp Tolleson facility in 2011, we may have to incur environmental capital and operating costs associated with future possible modernization and expansion plans at our Molycorp Tolleson facility.

Permits and Approvals

Numerous governmental permits and approvals are required for our current and future operations.

We hold conditional use and minor use permits from the County of San Bernardino, which currently allow continued operations of our Molycorp Mountain Pass facility through 2042. With the exception of certain building permits and the permit requirements under Title V of the Clean Air Act, as further discussed below in the *Air Pollution Control* section, we have secured all permits necessary to allow construction and operation of Project Phoenix Phase 1 and Project Phoenix Phase 2 at our Molycorp Mountain Pass facility, including permits to operate from the Lahontan Regional Water Quality Control Board and the Mojave Desert Air Quality Management District. In connection with our planned expansion, we will be required to obtain permit modifications and additional permits for new and replacement processing facilities and utilities, and also may be required to prepare a risk management plan in connection with the presence of ammonia at the planned co-generation power plant and chlorine in certain rare earth separations units. To obtain, maintain and renew these and other environmental permits, we may be required to conduct environmental studies and collect and present to governmental authorities data pertaining to the potential impact that our current or future operations may have upon the environment. We may be unable to obtain additional permits unless we are able to avoid or mitigate those impacts, particularly impacts to desert flora and fauna. The permitting processes and development of supporting materials, including any environmental impact statements, may be costly and time consuming. Any failure to obtain, maintain or renew required permits, or other permitting delays or conditions, may delay, limit or prohibit current or future operations. Consequently, the expansion and modernization of the Molycorp Mountain Pass facility may be delayed, curtailed or prevented, particularly in the event any environmental impact statement is required in connection therewith. 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.

Our Molycorp Sillamäe facility has an Integrated Environmental Permit, which controls its operations in general, and Radiation Practice Licenses for the management of radioactive materials. The Integrated Environmental Permit must be renewed when and if we expand our operations in that facility. The Radiation Practice Licenses are renewed approximately every five years. Some of Radiation Practice Licenses are due for renewal in 2013 and some in 2015.

Our Molycorp Tolleson facility does not currently require an air permit or a wastewater discharge permit. As we expand our operations in that facility, any industrial processes that are added that require permitting will be reviewed and authorized by Maricopa County, Arizona, where our Molycorp Tolleson facility is located.

Mine Health and Safety Laws

The Federal Mine Safety and Health Act of 1977, as amended by the Mine Improvement and New Emergency Response Act of 2006, and the regulations adopted by the California Occupational Safety and Health Administration, impose stringent health and safety standards on numerous aspects of

mining operations, including training of mine personnel, mining procedures, blasting, the equipment used in mining operations and other matters at our Molycorp Mountain Pass facility. As a result of increasing scrutiny surrounding mine safety, federal and state legislatures and other regulatory authorities have imposed more stringent regulatory requirements on mining operations. In 2006, the Mine Safety and Health Administration, or MSHA, promulgated new emergency rules on mine safety that address mine safety equipment, training and emergency reporting requirements. The U.S. Congress enacted the Mine Improvement and New Emergency Response Act of 2006, which significantly amended the Federal Mine Safety and Health Act of 1977, requiring improvements in mine safety practices, increasing criminal penalties and establishing a maximum civil penalty for non-compliance, and expanding the scope of federal oversight, inspection and enforcement activities. The MSHA published final rules implementing the Mine Improvement and New Emergency Response Act to revise both the emergency rules and the MSHA's existing civil penalty assessment regulations, which resulted in an across-the-board increase in penalties from the existing regulations.

We maintain a rigorous safety program. Our Molycorp Mountain Pass employees and contractors are required to complete 24 hours of initial training sessions, as well as annual refresher sessions, which cover all of the potential hazards that may be present at the facility. During the training, our commitment to a safe work environment is reinforced through our Stop Work Authority program, which allows any employee or contractor at the facility to stop work that they deem to be unsafe. As a direct result of this commitment to safety, our Molycorp Mountain Pass facility has an exceptional safety record, which as of December 31, 2011, stood at 2,364 days worked without a lost-time or restricted work accident. Lost-time incidence rate is an industry standard used to describe occupational injuries that result in loss of one or more days from an employee's scheduled work.

The exceptional safety performance record of our Molycorp Mountain Pass facility is further reflected in the following table, which compares rates for all lost time, restricted work and medical treatment incidents per 200,000 hours worked with average rates for mining operations, as determined by MSHA:

	Year Ended December 31,				
	2007	2008	2009	2010	2011
Molycorp Operations	0	1.01	0.86	1.33	1.66
MSHA Rates for Operators	3.73	3.48	2.95	2.83	2.73

Within the last several years, our Molycorp Mountain Pass facility has received numerous awards for safety, including: the MSHA Sentinels of Safety Award (2008, 2006 and 2004); the National Safety Council Awards—Perfect Record (2008, 2007, 2006, 2004); and the National Safety Council Awards—Occupational Excellence achievement award (2009, 2007 and 2004). We believe that our commitment to a safe working environment at our Molycorp Mountain Pass facility provides us with a competitive advantage in attracting and retaining employees. Our Molycorp Tolleson facility has not had a lost-time accident for the past 14 years. Molycorp Sillamäe is certified in ISO 9001, ISO 14001 and OHSAS 18001. Our Molycorp Sillamäe facility has had three lost-time accidents during the second quarter of 2011, and one during the 12 months prior to the acquisition by Molycorp.

Surface Mining Control and Reclamation Relating to our Molycorp Mountain Pass Facility

Our San Bernardino County conditional use and minor use permits, along with the approved mine reclamation plan and state laws and regulations establish operational, reclamation and closure standards for all aspects of our surface mining operations at our Molycorp Mountain Pass facility. Comprehensive environmental protection and reclamation standards must be met during the course of and upon completion of mining activities, and our failure to meet such standards may subject us to fines, penalties or other sanctions.

Our Molycorp Mountain Pass facility reclamation obligations require that we take certain reclamation actions concurrent with mining and that we restore the surface area upon completion of mining in 2042. Financial assurances are generally required to secure the performance of these reclamation obligations. To satisfy these financial assurance requirements, we typically obtain surety bonds, which are renewable on a yearly basis. Although we expect to continue to obtain and renew such bonds, it has become increasingly difficult for mining companies to secure new or renew existing surety bonds without the posting of partial or full collateral. In addition, surety bond costs have increased while the market terms of surety bonds have generally become less favorable. It is possible that surety bond issuers may refuse to provide or renew bonds or may demand additional collateral upon those issuances or renewals. Our inability to obtain or failure to maintain or renew these bonds could have a material adverse effect on our business and results of operations.

As of December 31, 2011, we had financial assurance requirements of $27.6 million related to our Molycorp Mountain Pass facility that were satisfied with surety bonds, which we have placed with California state and regional agencies.

Water Usage and Pollution Control

The federal Clean Water Act and similar national, state and local laws and regulations affect surface mining and processing operations, including operations at our Molycorp Mountain Pass facility, by imposing restrictions on the discharge of pollutants, including tailings and other material, into waters. These requirements are complex and subject to amendments, legal challenges and changes in implementation. Recent court decisions, regulatory actions and proposed legislation have created uncertainty over the jurisdiction and permitting requirements of the federal Clean Water Act. Individual or general permits under Section 404 of the Clean Water Act are required if we discharge dredged or fill materials into jurisdictional waters of the United States. In addition, our Lahontan Regional Water Quality Control Board permit for our Molycorp Mountain Pass facility establishes treatment standards for wastewater discharges to engineered impoundments, and require regular monitoring and reporting on the performance of the Molycorp Mountain Pass wastewater management operations. Until our chlor-alkali plant is operational, we intend to dispose of wastewater using our existing on-site evaporation ponds and, as needed, via off-site disposal. All of the melting and pouring operations used in the production of metals and alloys at Molycorp Tolleson utilize vacuum induction melting (VIM) furnaces. VIM furnace operations do not generate any significant quantities of wastewater and, therefore, there is no industrial wastewater discharge permit required for the facility.

The discharge of wastewater by Molycorp Sillamäe operations are governed by its Integrated Environmental Permit.

Air Pollution Control

The federal Clean Air Act and similar national, state and local laws and regulations affect our surface mining and processing operations at our Molycorp Mountain Pass facility, both directly and indirectly. We currently operate and maintain numerous air pollution control devices at our Molycorp Mountain Pass facility under permits from the California Mojave Desert Air Quality Management District. We generally must obtain permits before we install new sources of air pollution, which may require us to do air quality studies and obtain emission offset credits, which can be costly and time consuming to procure. The anticipated increased emissions from the planned co-generation plant and other combustion sources at our Molycorp Mountain Pass facility will trigger permit requirements under Title V of the Clean Air Act. In addition, the regulations of the California Air Resources Board will require us to retrofit or replace off-road, on-road and forklift vehicles to achieve emission standards for nitrogen oxides and particulate matter (10 microns).

Our Molycorp Mountain Pass operations also emit greenhouse gases, or GHGs. Pursuant to existing GHG requirements, we expect that following the expansion of our Molycorp Mountain Pass facility we will be required to report annual GHG emissions from our operations. Additional GHG emission related requirements are in various stages of development. For example, the U.S. Congress is considering various legislative proposals to address climate change. In addition, the United States Environmental Protection Agency, or EPA, has issued regulations, including the "Tailoring Rule," that subject GHG emissions from stationary sources to the Prevention of Significant Deterioration and Title V provisions of the federal Clean Air Act. California is also implementing regulations pursuant to its Global Warming Solutions Act that establish a state-wide cap-and-trade program for GHG emissions. Any such regulations could require us to modify existing permits or obtain new permits, implement additional pollution control technology, curtail operations or increase significantly our operating costs, any of which could adversely affect our business, financial condition, reputation, operating performance and product demand. However, such regulations might also present opportunities for our industry to the extent they increase the demand for rare earth products used in clean-technology applications, such as hybrid and electric vehicles and wind power turbines. Our Molycorp Mountain Pass operations consume significant amounts of energy and, accordingly, are subject to fluctuations in energy costs. These costs may increase significantly in part as an indirect result of GHG and other air emission regulations applicable to third-party power suppliers. The VIM furnaces utilized at our Molycorp Tolleson facility for all of the melting and pouring operations in the production of metals and alloys have no fugitive emissions to the atmosphere. The Integrated Environmental Permit issued to Molycorp Sillamäe regulates the discharge of air pollution in accordance with the requirements of Estonian laws and regulations.

Hazardous and Radioactive Substances and Wastes

We generate, manage and dispose of solid and hazardous waste at our Molycorp Mountain Pass and Molycorp Sillamäe facilities.

In reference to the Molycorp Mountain Pass operations, the federal Comprehensive Environmental Response Compensation and Liability Act, known as CERCLA, and analogous federal and state laws impose liability, without regard to fault or the legality of the original conduct, on certain classes of persons that are considered to have contributed to the actual or threatened release of a "hazardous substance" into the environment. Persons who are or were responsible for such releases of hazardous substances under CERCLA, which can include waste generators, site owners, lessees and others, may be subject to joint and several liability for the costs of remediating such hazardous substances and for damages to natural resources. Accordingly, we may be subject to liability under CERCLA and similar federal and state laws for properties that we currently own, lease or operate or that we or our predecessors have previously owned, leased or operated, and sites to which we or our predecessors sent waste materials. Pursuant to a 1998 clean up and abatement order issued by the Lahontan Regional Water Quality Control Board, we have conducted and are continuing to conduct various investigatory, monitoring and remedial activities related to contamination at and around our Molycorp Mountain Pass facility. These activities include soil remediation and the operation of groundwater monitoring and recovery wells, water treatment systems and evaporation ponds. Also, prior to our acquisition of the Molycorp Mountain Pass facility, leaks in a wastewater pipeline from the facility to offsite evaporation ponds on the Ivanpah dry lake bed caused contamination. However, that contamination is being remediated by Chevron Mining Inc., who retained ownership of the ponds and the pipeline. Although Chevron Mining Inc. is obligated to indemnify us for certain potential environmental losses associated with activities that occurred prior to our purchase of the Molycorp Mountain Pass facility, the amount of such indemnity is limited and may not be sufficient to cover such losses.

In 2009, the EPA announced that it is developing financial responsibility requirements under CERCLA for certain facilities within the hardrock mining industry. If applicable to our current or

future operations at our Molycorp Mountain Pass facility, these requirements could impose on us significant additional costs or obligations.

REOs contain naturally occurring radioactive substances, such as thorium and uranium. The mining and processing of REOs involves the handling and disposal of such substances, and accordingly we are subject to extensive safety, health and environmental laws, regulations and permits regarding radioactive substances. Significant costs, obligations or liabilities may be incurred with respect to such requirements, and any future changes in such requirements (or the interpretation or enforcement thereof) may have a material adverse effect on our business or results of operations. One such permit pursuant to which our Molycorp Mountain Pass facility currently operates is a Radioactive Materials License issued and administered by the California Department of Health Services Radiologic Health Branch. The license is a broad scope license, which provides for the safe management of radioactive materials at our Molycorp Mountain Pass facility under the direction of the Radiation Safety Officer with oversight from a Radiation Safety Committee. A failure to maintain or renew this license could materially adversely affect our business or results of operations.

The storage and disposal of low-level radioactive wastes by Molycorp Sillamäe are governed by its Radioactive Practice Licenses. Radioactive materials are present at our Molycorp Sillamäe facility, and we incur costs to manage and dispose of such materials. In addition, the long history of industrial operations at our Molycorp Sillamäe facility may have caused soil, surface water and groundwater contamination at and around the facility. The facility was constructed in 1948 and has since been used for, among other industrial purposes, the processing of uranium ore and alum shale.

Demolition of structures in connection with facility expansion and modernization generates waste in addition to that associated with processing and ongoing remediation activities. In connection with Project Phoenix Phase 1 and Project Phoenix Phase 2 at our Molycorp Mountain Pass facility and possible future modernization and expansion effort at our Molycorp Sillamäe facility, we will incur additional costs to handle, store and dispose of such wastes.

Endangered Species Act Relating to our Molycorp Mountain Pass Facility

The federal Endangered Species Act and counterpart state legislation protect species threatened with possible extinction. Such laws and related regulations may have the effect of prohibiting or delaying us from obtaining mining permits and may impose restrictions on pipeline or road building and other mining or construction activities in areas containing the affected species or their habitats. Several species indigenous to Molycorp Mountain Pass, California, including the desert tortoise, are protected under the Endangered Species Act and California Endangered Species Act.

Use of Explosives Relating to our Molycorp Mountain Pass Facility

In connection with our surface mining activities at our Molycorp Mountain Pass facility, we use explosives, which are subject to regulation, including under the federal Safe Explosives Act. Violation of these regulatory requirements may result in fines, imprisonment, revocation of permits and/or seizure or forfeiture of explosive materials.

Other Environmental Laws

We are required to comply with numerous other international, national, federal, state and local environmental laws and regulations in addition to those previously discussed. These additional laws include, for example, the California Environmental Quality Act, the National Environmental Policy Act, the Emergency Planning and Community Right-to-Know Act, the California Accidental Release Prevention Program and various Estonian and European Union requirements.

Executive Officers of the Registrant

The following table sets forth certain information regarding our executive officers as of February 24, 2012.

Name	Age	Position
Mark A. Smith	52	President, Chief Executive Officer and Director
James S. Allen	45	Chief Financial Officer and Treasurer
John L. Burba, PhD	60	Executive Vice President and Chief Technology Officer
John F. Ashburn, Jr.	57	Executive Vice President and General Counsel
Ksenia A. Adams	30	Corporate Controller
Douglas J. Jackson	51	Senior Vice President, Business Development and Sales/Marketing
John K. Bassett	62	Senior Vice President, Operations

Mark A. Smith has been our Chief Executive Officer and has served as a director since October 2008 and our President since March 2010. From April 2006 until October 2008, Mr. Smith was president and chief executive officer of Chevron Mining Inc., a wholly-owned subsidiary of Chevron Corporation, and from August 2005 until April 2006 he was vice president of Chevron Mining Inc. In his positions at Chevron Mining Inc., Mr. Smith was responsible for 1,500 employees, approximately $500 million in revenue, three coal mines, one molybdenum mine and the Molycorp Mountain Pass rare earth mine. From June 2000 until August 2005, Mr. Smith was a vice president for Unocal Corporation, an oil and gas exploration and production company, which previously owned the Molycorp Mountain Pass facility, where he was responsible for managing all real estate, remediation, mining and carbon groups. Mr. Smith has served on the board of directors of Avanti Mining Inc., a molybdenum mining company, since November 2009 and on the board of directors of Talison Lithium Limited, a global producer of Lithium, since August 2010. Mr. Smith received his B.S. degree in agricultural engineering from Colorado State University in 1981 and his J.D., cum laude, from Western State University College of Law in 1990.

James S. Allen has been our Chief Financial Officer since December 2009 and Treasurer since March 2010. From October 2005 until April 2009, Mr. Allen was an audit partner at KPMG LLP, a public accounting firm, and from June 2002 until September 2005, Mr. Allen was an audit senior manager at KPMG. During his time at KPMG, Mr. Allen was responsible for the professional development of managers and staff, the execution of audit engagements and other projects in accordance with firm and professional standards, as well as various other business development and administrative matters including maintenance of client relationships. A certified public accountant, Mr. Allen received his B.S. degree in business administration—accounting from Colorado State University in 1989.

John L. Burba, PhD has been our Chief Technology Officer since October 2008, and was promoted to the position of Executive Vice President and Chief Technology Officer in September of 2009. From August 2005 until October 2008, Mr. Burba was vice president of technology at Chevron Mining Inc., where he was involved in identifying and developing technologies for Chevron Mining's businesses, including coal, molybdenum and rare earths. From July 2002 until August 2005, Mr. Burba was vice president of technology at Molycorp Inc., a subsidiary of Unocal Corporation. Mr. Burba received his B.S. degree in chemistry in 1974, his M.S. in physical chemistry in 1976 and his PhD in physical chemistry from Baylor University in 1979.

John F. Ashburn, Jr. has been our General Counsel and Executive Vice President since December 2008, and served as our Secretary from December 2008 until April 2010. From August 2005 until November 2008, Mr. Ashburn was senior counsel of Chevron Mining Inc. From April 1990 until August 2005, Mr. Ashburn was senior counsel of Unocal Corporation, an oil and gas exploration and

production company. Mr. Ashburn received his B.S. degree in psychology from Northern Illinois University in 1976 and his J.D. from Northern Illinois University School of Law in 1980.

Ksenia A. Adams has been our Corporate Controller since July 2009. From May 2007 until July 2009, Ms. Adams was an audit manager with KPMG LLP. From October 2002 until May 2007, Ms. Adams was a senior member of the audit staff of KPMG. Ms. Adams is a certified public accountant and received her B.S. degree in accounting from Colorado State University in 2002.

Douglas J. Jackson has been our Vice President, Business Development since November 1, 2010 and was promoted to the position of Senior Vice President, Business Development and Sales/Marketing in June of 2011. From 2002 to 2010, he was a private investor and in 2010 he founded and is the principal of Optimal Solutions SV LLC, a management consulting company. From 1988 to 2002, he was with Dyno Nobel, Inc., or Dyno, the largest operating subsidiary of Dyno Nobel ASA, a global commercial explosive supplier. While with Dyno, Mr. Jackson held a variety of positions, including serving as President and Chief Executive Officer, where he had the responsibility for operations in North America and South America, Dyno's largest market, while establishing new operations in the high growth markets of Latin America. Mr. Jackson started his career at Unocal Corporation, where his roles included Engineer-Chemical Sales/Service and District Sales Manager—Industrial Chemical Marketing. Mr. Jackson received his B.S. degree in engineering from Washington State University in 1983 and his MBA from California State University in 1988.

John K. Bassett has been our Vice President, Operations since January 24, 2011 and was promoted to the position of Senior Vice President, Operations in June of 2011. From 2005 to 2011, he was President of Seadrift Coke L.P., or Seadrift, a manufacturer of petroleum needle coke. As President of Seadrift, Mr. Bassett had profit and Loss responsibility, including sales and safety performance. Mr. Bassett started his career in petroleum refining and was refinery general manager of two refineries. He received his degree in Chemical Engineering from the University of Illinois in 1972.

Website access to company reports

We use our Investor Relations website, www.molycorp.com, as a channel for routine distribution of important information, including news releases, analyst presentations and financial information. We post filings as soon as reasonably practicable after they are electronically filed with, or furnished to, the U.S. Securities and Exchange Commission, or SEC, including our annual, quarterly, and current reports on Forms 10-K, 10-Q, and 8-K; our proxy statements; and any amendments to those reports or statements. All such postings and filings are available on our Investor Relations website free of charge. In addition, this website allows investors and other interested persons to sign up to automatically receive e-mail alerts when we post news releases and financial information on our website. The SEC also maintains a website, www.sec.gov, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The content on any website referred to in this Annual Report on Form 10-K is not incorporated by reference into this Annual Report on Form 10-K unless expressly noted.

ITEM 1A. RISK FACTORS.

The following are certain risk factors that could affect our business, financial position, results of operations or cash flows. These risk factors should be considered along with the forward-looking statements contained in this Annual Report on Form 10-K because these factors could cause our actual results or financial condition to differ materially from those projected in forward-looking statements. The following discussion is not an all-inclusive listing of risks, although we believe these are the more material risks that we face. If any of the following occur, our business, financial position, results of operations or cash flows could be negatively affected.

Risks Related to Our Business

The production of rare earth products is a capital-intensive business and our ongoing modernization and expansion efforts at our Molycorp Mountain Pass facility to reach initial planned production rates by the end of the third quarter of 2012 and to expand our capacity to produce, if customer demand warrants, up to approximately 40,000 mt of REO per year by mid-2013 will require the commitment of substantial resources. Any unanticipated costs or delays associated with our ongoing modernization and expansion efforts at our Molycorp Mountain Pass facility could have a material adverse effect on our financial condition or results of operations.

Our ongoing modernization and expansion efforts at our Molycorp Mountain Pass facility to reach initial planned production rates by the end of the third quarter of 2012 and to expand our capacity to produce, if warranted by customer demand, up to approximately 40,000 mt of REO per year by mid-2013 require the commitment of substantial resources for operating expenses and capital expenditures. We expect to incur total capital expenditures of approximately $895 million, excluding capitalized interest, to implement Project Phoenix Phase 1 and Project Phoenix Phase 2. Our capital expenditures for Project Phoenix Phase 1 and Project Phoenix Phase 2 totaled to $388.5 million on an accrual basis in 2011, excluding capitalized interest. Our estimated expenses may increase in subsequent years as consultants, personnel and equipment associated with advancing development and commercial production are added. The progress of our modernization and expansion efforts at our Molycorp Mountain Pass facility and the amounts and timing of expenditures will depend in part on the following:

- the replacement of a significant portion of the existing process, plant and equipment that consists of aging or outdated facilities and equipment, retooling and development and the preparation of the mine pit for renewed production of ore;
- maintaining required federal, state and local permits;
- the results of consultants' analysis and recommendations;
- negotiating contracts for equipment, earthwork, construction, equipment installation, labor and completing infrastructure and construction work;
- negotiating sales and off-take contracts for our planned production;
- the execution of any joint venture agreements or similar arrangements with strategic partners; and
- other factors, many of which are beyond our control.

Most of these activities require significant lead times and must be advanced concurrently. Any unanticipated costs or delays associated with our ongoing modernization and expansion efforts at our Molycorp Mountain Pass facility 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.

The actual amount of capital required for the expansion and modernization of our Molycorp Mountain Pass facility may vary materially from our current estimates, in which case we would need to raise additional funds, which may delay completion and have a material adverse effect on our business and financial condition.

The anticipated funding required to complete the expansion and modernization of our Molycorp Mountain Pass facility, including Project Phoenix Phase 2, is based on certain estimates and assumptions we have made about the additional facilities, equipment, labor, permits and other factors required to complete the project. If any of these estimates or assumptions change, the actual timing and amount of capital required to complete Project Phoenix Phase 1 and Project Phoenix Phase 2 may vary materially from what we anticipate. Additional funds may be required in the event of significant

departures from our current expansion and modernization plan, unforeseen delays, cost overruns, engineering design changes or other unanticipated expenses. There can be no assurance that additional financing will be available to us, or, if available, that it can be obtained on a timely basis and on commercially acceptable terms.

There is no assurance that we will be able to successfully implement Project Phoenix Phase 1 and Project Phoenix Phase 2 within our current timetable, that the actual costs of the capacity expansion will not exceed our current estimated costs or that we will be able to secure off-take agreements for the incremental production capacity, and we cannot provide any assurance as to the actual operating costs once we have completed the capacity expansion.

Our Board of Directors, or Board, approved Project Phoenix Phase 2 in January 2011. Following the completion of Project Phoenix Phase 2 construction, which we expect to be by the end of the fourth quarter of 2012, we expect to have the ability to produce, if warranted by customer demand, up to approximately 40,000 mt of REO per year by mid-2013 at our Molycorp Mountain Pass facility, or approximately double the amount we expect to be able to produce upon completion of Project Phoenix Phase 1 . We have commenced work on Project Phoenix Phase 2 as we are working on Project Phoenix Phase 1, and there is no assurance that our work on Project Phoenix Phase 2 will not interfere with our completion of Project Phoenix Phase 1. In certain cases, including separations and power, we will need to install additional capacity. Because we will have expenditures on Project Phoenix Phase 2 before completion of Project Phoenix Phase 1, any funding insufficiency for the capacity expansion could also impact completion of our initial plan. Also, our total estimate of capital expenditures of $895 million, excluding capitalized interest, for the completion of Project Phoenix Phase 1 and Project Phoenix Phase 2 has not been independently reviewed, and actual costs could vary significantly. There is no assurance that we will be able to secure additional funding that may be required to complete Project Phoenix Phase 2 on terms acceptable to us or at all.

We do not believe we will need to obtain additional permits for Project Phoenix Phase 1 or Project Phoenix Phase 2, other than air and certain building permits. However there is no assurance that we will not in the future learn of permits that we will be required to obtain or existing permits that we will be required to modify.

We have not yet performed a detailed study of expected operating costs for Project Phoenix Phase 2, and we have not yet commissioned SRK Consulting or any other expert to prepare an external model or study of operating costs. While we have not identified any reason to believe that there will be any per unit increase in operating costs under Project Phoenix Phase 2 as compared to Project Phoenix Phase 1 (assuming we are able to sell all of our capacity under Project Phoenix Phase 1), we cannot provide any assurances as to the actual operating costs, and such costs could be higher. In addition, we have not secured off-take commitments for the incremental production from Project Phoenix Phase 2, and we cannot assure that we will secure such commitments.

Any failure to successfully implement Project Phoenix Phase 1 or Project Phoenix Phase 2 due to insufficient funding, delays or unanticipated costs, or to realize the anticipated benefits of Project Phoenix Phase 1 or Project Phoenix Phase 2, including securing off-take commitments for the incremental production, could have a material adverse effect on our business, financial condition and results of operations.

We may be unsuccessful in raising the necessary capital to execute our current business plan.

Under our current business plan, we intend to spend approximately $895 million in the aggregate, excluding capitalized interest, on capital expenditures to implement Project Phoenix Phase 1 and Project Phoenix Phase 2. The $895 million includes an additional $114 million in acceleration costs approved by the Board in October 2011. If the assumptions on which we based our estimated capital expenditures of $895 million change or are inaccurate, we may require additional funding. We may also

require additional financing as part of our joint venture with Mitsubishi and Daido to manufacture NdFeB permanent rare earth magnets in Japan, which is not included in our estimated capital expenditures of $895 million. Our total estimated capital expenditures of $895 million also do not include corporate, selling, general and administrative expenses, which we estimate to be an additional $50 million to $60 million per year, and capitalized interest. We have spent approximately $419.9 million, on an accrual basis, through December 31, 2011 on capital expenditures to implement Project Phoenix Phase 1 and Project Phoenix Phase 2, excluding capitalized interest.

We expect to finance these capital expenditures, our selling, general and administrative expenses, as well as our working capital requirements with our cash on hand from our initial public offering, our offering of mandatory convertible preferred stock, our private placement of convertible senior notes and anticipated cash flows from operations, combined with traditional debt financing and project financing. There can be no assurance that we will be successful in raising the incremental capital needed to fully execute our business plan on terms acceptable to us, or at all.

In January 2012, we entered into an agreement with Molibdenos y Metales S.A., or Molymet, pursuant to which Molymet has agreed to purchase $390 million of our common stock. The consummation of the offering, which we anticipate to occur in the second quarter of 2012, remains subject to the satisfaction of certain customary closing conditions, including the receipt of certain governmental regulatory approvals. Proceeds from the Molymet investment will be retained by us for general corporate purposes and are expected to be used to finance our future growth, including pursuant to our vertical supply chain integration business model.

We have limited sources of revenue from our operations, and in order to modernize and expand our Molycorp Mountain Pass facility, we may need to obtain further debt and/or equity financing in addition to or in place of the potential financing arrangements identified above.

Our growth depends on the modernization and expansion of our Molycorp Mountain Pass facility, which is our only rare earth mining facility.

Our only rare earth mining facility at this time is our Molycorp Mountain Pass facility. Our continued viability is based on successfully implementing our strategy, including completion of Project Phoenix Phase 1 and Project Phoenix Phase 2 in accordance with our expected timeframe. The deterioration or destruction of any part of our Molycorp Mountain Pass facility may significantly hinder our ability to reach or maintain full planned production rates within the expected time frame or at all. If we are unsuccessful in reaching and maintaining full planned production rates for REOs at the Molycorp Mountain Pass facility, within expected time frames or at all, we may not be able to build a sustainable or profitable business.

We may not successfully establish or maintain collaborative, joint venture and licensing arrangements, or establish new ones, which could adversely affect our ability to develop and commercialize our rare earth products.

A key element of our business strategy is to utilize vertical integration through further downstream processing of our REOs into rare earth metal alloys and finished magnets for clean-energy, high-technology and defense applications. Our acquisitions of Molycorp Sillamäe and Molycorp Tolleson, and our joint venture agreement with Mitsubishi and Daido, reflect this strategy. To implement this "mine-to-magnets" vertical integration successfully, we will need to form other joint ventures with existing magnet producers for the final production of finished rare earth magnets. 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.

We may not be able to convert existing letters of intent with customers for the sale of REO products into binding contracts, or meet the conditions necessary for customers to commence purchasing under existing contracts, which may have a material adverse effect on our financial position and results of operations.

We are working to establish stable revenue streams for the rare earth minerals and products we manufacture at the Molycorp Mountain Pass, Molycorp Sillamäe and Molycorp Tolleson facilities. Pursuant to a contract with one of our largest customers, we are supplying a significant amount of our REOs, primarily lanthanum concentrate, through mid-2012 at market-based prices subject to a ceiling based on market prices at June 1, 2010, and a floor. This contract was amended effective July 1, 2011 to increase the price ceiling. Under a second contract, we agreed to supply this same customer with approximately 75% of our lanthanum product production per year, following completion of Project Phoenix Phase 1 at market-based prices, subject to a floor, for a three-year period commencing upon the achievement of expected annual production rates under Project Phoenix Phase 1, which may be extended at the customer's option for an additional three-year period. In February 2012, this same customer exercised a volume reduction right that lowers its purchase obligation for lanthanum products from approximately 75% to approximately 58% of our lanthanum production per year, following completion of Project Phoenix Phase 1. Accordingly, we intend to secure other customer contracts for our lanthanum products in replacement of the volume reduction from our current customer. As of December 31, 2011, we have secured 58% of Project Phoenix Phase 1 production, and have allocated an additional 20% to production of XSORBX®, for a total of 78% of the 19,050 metric tons of REO that we intend to produce annually under Project Phoenix Phase 1 at our Molycorp Mountain Pass facility. The lanthanum contract volume reduction described above represents approximately 6% of our expected Project Phoenix Phase 1 production. Prior to commencing full production, we intend to enter into other short-term sales contracts and into long-term sales contracts with existing and new customers for amounts not in excess of our actual planned production under Project Phoenix Phase 1 and Project Phoenix Phase 2, respectively. However, there can be no assurance that these customers will enter into binding sales contracts for the same amount of REO products as in the letters of intent, or at all, or that we will secure off-take commitments for the incremental capacity provided by our capacity expansion plan. The failure to enter into binding contracts, or the failure to meet the conditions necessary for customers to commence purchasing under existing agreements, may have a material adverse effect on our financial position and results of operations.

We rely on a limited number of customers for a significant portion of our revenue, and the loss of significant customers, or significant changes in prices or other terms with significant customers could have a material adverse effect on our business, results of operations and financial condition.

There is a limited market for certain products we produce and we depend on a limited number of customers for a significant portion of our consolidated annual sales.

Molycorp Mountain Pass' sales to Hitachi Metals. Ltd. in 2011 accounted for approximately 23% of consolidated sales. Molycorp Mountain Pass' sales to four of its customers, net of intercompany sales, represented in total approximately 77% of Molycorp Mountain Pass's sales in 2011.

Sales to three of Molycorp Sillamäe's customers from April 1, 2011 (the acquisition date) to December 31, 2011, represented in total approximately 45% of Molycorp Sillamäe's sales for that period.

Molycorp Tolleson's sales to Santoku Corporation for the period from April 15, 2011 (the acquisition date) to December 31, 2011, were approximately 12% of consolidated sales and approximately 86% of Molycorp Tolleson's sales for that period.

If our total sales to these customers are reduced or if the prices we realize from these customers are reduced before we are able to reduce costs, our operating results would likely be materially adversely affected. Consequently, significant changes in volume, prices or other terms with these

customers could have a material adverse effect on our business, results of operations and financial condition.

We may be adversely affected by fluctuations in demand for, and prices of, rare earth products.

Because our sole source of revenue is the sale of rare earth minerals and products, changes in demand for, and the market price of, rare earth minerals and products could significantly affect our profitability. The value and price of our common and preferred stock and our financial results may be adversely affected by declines in the prices of rare earth minerals and products. Rare earth minerals and product prices may fluctuate and are affected by numerous factors beyond our control such as interest rates, exchange rates, inflation or deflation, fluctuation in the relative value of the U.S. dollar against foreign currencies on the world market, global and regional supply and demand for rare earth minerals and products, and the political and economic conditions of countries that produce rare earth minerals and products.

As a result of the global economic crisis, rare earth product prices declined by approximately 50% between 2008 and the end of the third quarter of 2009. Similarly, there can be no assurance that the increases in market prices, as seen during 2010 and most of 2011, will be sustained in future periods. Average prices for lanthanum oxide and cerium oxide have decreased by approximately 50% during the second half of 2011 due, in part, to a reduction in reported speculative buying of rare earth materials in China. Protracted periods of low prices for rare earth minerals and products 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 power equipment and other clean technology products, as well as demand in the general automotive and electronic industries. Lack of growth in these markets may adversely affect the demand for our products, which would have a material adverse effect on our business and results of operations.

In contrast, extended periods of high commodity prices may create economic dislocations that may be destabilizing to rare earth minerals supply and demand and ultimately to the broader markets. Periods of high rare earth mineral market prices generally are beneficial to our financial performance. However, strong rare earth mineral prices, as well as real or perceived disruptions in the supply of rare earth minerals, also create economic pressure to identify or create alternate technologies that ultimately could depress future long-term demand for rare earth minerals and products, and at the same time may incentivize development of otherwise marginal mining properties. For example, automobile manufacturers have recently announced plans to develop motors for electric and hybrid cars that do not require rare earth metals due to concerns about the available supply of rare earths. If the automobile industry or other industries reduce their reliance on rare earth products, the resulting change in demand could have a material adverse effect on our business.

Conditions in the rare earth industry have been, and may continue to be, extremely volatile, which could have a material impact on our company.

Conditions in the rare earth industry have been extremely volatile, and prices, as well as supply and demand, have been significantly impacted by a number of factors, principally changes in economic conditions and demand for rare earth materials and changes, or perceived changes, in Chinese quotas for export of rare earth materials. As a result of the global economic crisis, rare earth product prices declined by approximately 50% between 2008 and the end of the third quarter of 2009. According to Metal-Pages, from the beginning of the fourth quarter of 2009 through the end of 2011, average prices for rare earths have risen by approximately 1,100%. Furthermore, over the same period, average prices for some of the most common rare earths (cerium oxide, lanthanum oxide, neodymium oxide, and

praseodymium oxide) have risen by more than 1,000%. Average prices for lanthanum oxide and cerium oxide have decreased by approximately 50% during the second half of 2011 due, in part, to a reduction in reported speculative buying of rare earth materials in China. If conditions in our industry remain volatile, our stock price may continue to exhibit volatility as well. In particular, if prices or demand for rare earths were to decline, our stock price would likely decline, and this could also impair our ability to obtain remaining capital needed for Project Phoenix Phase 1 and Project Phoenix Phase 2 and our ability to find purchasers for our products at prices acceptable to us.

We face a variety of risks associated with acquiring and integrating new business operations that could have a significant negative impact on our business, financial condition and results of operations.

In 2011, we acquired Molycorp Sillamäe in order to increase our production capacity for REOs and rare earth metals, and acquired Molycorp Tolleson in order to provide us with the capability to immediately begin manufacturing and selling rare earth alloys for the production of NdFeB and SmCo magnets, as well as a variety of other specialty alloys and products. We may in the future pursue other strategic acquisitions that we believe would expand our product offerings and capabilities or complement our business. We have limited experience making such acquisitions. Any acquisition that we make will be accompanied by the risks commonly encountered in acquisitions of businesses. The process of integrating acquired businesses, products or technologies may create unforeseen operating difficulties and expenditures. We may have difficulty integrating and assimilating the operations and personnel of any acquired companies, realizing anticipated synergies and maximizing the financial and strategic position of the combined enterprise. We may incur costs necessary to reorganize, expand or otherwise modify existing operations to meet future production needs, and we may also incur closure, demolition and carrying costs for portions of properties, for which we have no operational uses. We may also have difficulty maintaining uniform standards, policies and controls across the organization. The process of integrating acquired businesses may also result in a diversion of management's attention and cause an interruption of, or loss of momentum in, our activities. Additionally, any acquisition that we make may result in the assumption of material liabilities. Businesses and properties we acquire may be in an unexpected condition and may subject us to increased costs and liabilities, including environmental liabilities. The costs and liabilities associated with known risks may be greater than expected, and we may assume unknown liabilities, either of which could have a material adverse effect on our business, financial condition and results of operations. Foreign acquisitions involve risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries. As a result of these risks, the anticipated benefits of these acquisitions may not be fully realized, if at all, and the acquisitions could have a material adverse effect on our business, financial condition and results of operations.

If we finance the necessary capital to execute our current business plan through a securities offering or debt financing, you may experience dilution in the event of an equity financing, or we may be highly leveraged in the event of a debt financing.

We may finance the necessary capital to execute our current business plan, including our vertical supply chain integration business model, through a public or private offering of securities or debt financing.

In January 2012, we entered into an agreement with Molymet pursuant to which Molymet has agreed to purchase $390 million of our common stock. The consummation of the offering, which we anticipate to occur in the second quarter of 2012, remains subject to the satisfaction of certain customary closing conditions, including the receipt of certain governmental regulatory approvals. Proceeds from the Molymet investment will be retained by us for general corporate purposes and are expected to be used to finance our future growth, including pursuant to our vertical supply chain integration business model.

An equity offering may have the effect of diluting the proportionate equity interest and voting power of holders of our common stock. A debt financing may result in us being highly leveraged, and our level of indebtedness could restrict our ability to execute our current business plan.

Our business will be adversely affected if we do not successfully implement new processing technologies and capabilities.

Our processing technologies and capabilities are key components of our competitive strengths and are expected to contribute to low operating costs and increasing the life of the ore body at our Molycorp Mountain Pass facility. In the second quarter of 2010, we began to process bastnasite concentrate from our stockpiles in an effort to significantly improve these technologies and capabilities and optimize recovery rates. Although this effort has been successful at pilot-scale level with over 95% recovery, we may not be able to scale the new technology and recovery rates to commercial levels, or may not be able to do so by the end of 2012, as planned. We are also working to optimize other steps in our production process. Any failure may affect our ability to achieve the expected benefits of the new technologies and may have a material adverse effect on our financial condition or results of operations.

We operate in a highly competitive industry.

The rare earths mining and processing markets are capital intensive and competitive. Our Chinese competitors may have greater financial resources, as well as other strategic advantages to maintain, improve and possibly expand their facilities. Additionally, the Chinese producers have historically been able to produce at relatively low costs due to domestic economic factors. Even upon successful implementation of the new processing technologies and capabilities at the Molycorp Mountain Pass facility, if we are not able to achieve anticipated costs of production, then any strategic advantages that our competitors may have over us, such as lower labor costs, could have a material adverse effect on our business.

The success of our business will depend, in part, on the establishment of new uses and markets for rare earth products.

The success of our business will depend, in part, on the establishment of new markets by us or third parties for certain rare earth products that may be in low demand. Although we are developing rare earth products for use in NdFeB magnets, which are used in critical existing and emerging technologies, such as hybrid and electric vehicles, wind power turbines and compact fluorescent lighting, the success of our business depends on creating new markets and successfully commercializing rare earth products in existing and emerging markets. Any unexpected costs or delays in the commercialization of any of the foregoing products and applications 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 and predatory pricing by our competitors may materially adversely affect our profitability.

The pricing and demand for our products is affected by a number of factors beyond our control, including growth of economic development and the global supply and demand for REO products. According to IMCOA, it is estimated that China accounted for approximately 94% of global REO production in 2011. China also dominates the manufacture of metals and NdFeB magnets from rare earths, a capacity that is not currently found in the United States. Once we reach full planned production rates for REOs and other planned downstream products, the increased competition may lead our competitors to engage in predatory pricing behavior. Any increase in the amount of rare earth products exported from other nations and increased competition may result in price reductions, reduced margins and 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 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. We also have a proven technology and product development group and as of December 31, 2011, we held 94 issued and pending U.S. patents and patent applications, and 172 issued and pending foreign patents and patent applications. We intend to rely on patented products, such as XSORBX®, and related licensing agreements to establish proprietary markets for low demand REEs. These 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 United States. 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 United States. 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 also 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.

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. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. 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 United States 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 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 sell our existing products or 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 United States and elsewhere in the world that relate to our rare earth products and processes. 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, including litigation in particular, would be costly and time consuming and would divert management's attention from our business, which could lead to delays in our expansion and modernization efforts. 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 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.

Power shortages at our Molycorp Mountain Pass facility may temporarily delay mining and processing operations and increase costs, which may materially adversely impact our business.

Due to its position on the regional electric grid, our Molycorp Mountain Pass facility faces occasional power shortages during peak periods. Instability in electrical supply in past years has caused sporadic outages and brownouts and higher costs. Such outages and brownouts have had a negative impact on production. We are currently installing a natural gas powered co-generation power plant as part of our modernization and expansion of our Molycorp Mountain Pass facility to reduce energy costs at our Molycorp Mountain Pass facility as well as minimize or eliminate our reliance on the regional electric power grid. If the installation of the co-generation power plant is significantly delayed, we will remain subject to the effects of occasional power outages and brownouts and could experience temporary interruptions of mining and processing operations. We then may be unable to fill customer orders in a timely manner and may be subject to higher power costs at our Molycorp Mountain Pass facility. 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. In addition, if power to our Molycorp Mountain Pass facility is disrupted during certain phases of our REO extraction process, we may incur significant expenses that may adversely affect our business.

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

We use significant amounts of hydrochloric acid and sodium hydroxide as chemicals to process REOs. We ultimately intend to produce our own hydrochloric acid and sodium hydroxide at our Molycorp Mountain Pass facility. The technology we are developing to internally produce hydrochloric

acid and sodium hydroxide has not yet been implemented at our Molycorp Mountain Pass facility. Accordingly, we purchase hydrochloric acid and sodium hydroxide in the open market and, as a result, we could be subject to significant volatility in the cost or availability of these chemicals. We may not be able to pass increased prices for these chemicals through to our customers in the form of price increases. A significant increase in the price, or decrease in the availability, of these chemicals before we produce them on site could materially increase our operating costs and adversely affect our profit margins from quarter to quarter.

Fluctuations in transportation costs or disruptions in transportation services could increase competition or impair our ability to supply rare earth minerals or products to our customers, which could adversely affect our results of operations.

We transport cerium, lanthanum, neodymium, praseodymium and didymium oxide products from our Molycorp Mountain Pass facility to our Molycorp Sillamäe and Molycorp Tolleson facilities where we produce rare earth metals and alloys. Finding affordable and dependable transportation is important because it allows us to supply customers, third parties under tolling agreements and our operating facilities around the world. Labor disputes, derailments, adverse weather conditions or other environmental events and changes to rail or ocean freight systems could interrupt or limit available transport services, which could result in customer dissatisfaction and loss of sales potential and could materially adversely affect our results of operations.

We must process REOs to exacting specifications in order to provide customers with a consistently high quality product. An inability to perfect the mineral extraction process to meet individual customer specifications may have a material adverse effect on our financial condition or results of operations.

We process REOs to meet customer needs and specifications and to provide customers with a consistently high quality product and a purity higher than previously achieved in prior mining operations at our Molycorp Mountain Pass facility. An inability to perfect the mineral extraction process to meet individual customer specifications 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 REOs Molycorp Mountain Pass requires significant amounts of water. The technology we are developing at our Molycorp Mountain Pass facility to significantly reduce our need for fresh water, including the proprietary production of our own hydrochloric acid and sodium hydroxide from waste water at our own chlor-alkali plant, has not yet been constructed. Any decrease or disruption in our available water supply until this technology is successfully developed may have a material adverse effect on our operations and our financial condition or results of operations.

Inaccuracies in our estimates of REO reserves and resource deposits could result in lower than expected revenues and higher than expected costs.

We base our REO reserve and resource 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 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 non-reserve REO deposits 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 and mining conditions and/or effects from prior mining that may not be fully identified by available data or that may differ from experience;
- assumptions concerning future prices of rare earth products, operating costs, mining technology improvements, development costs and reclamation costs; and
- assumptions concerning future effects of regulation, including the issuance of required permits and taxes by governmental agencies.

Any inaccuracy in our estimates related to our REO reserves and non-reserve REO deposits could result in lower than expected revenues and higher than expected costs or a shortened estimated life for the mine at the Molycorp Mountain Pass facility.

Period-to-period conversion of probable rare earth ore reserves to proven ore reserves may result in increases or decreases to the total reported amount of ore reserves. Conversion, an indicator of the success in upgrading probable ore reserves to proven ore reserves, is evaluated annually. 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.

Work stoppages or similar difficulties could significantly disrupt our operations, reduce our revenues and materially adversely affect our results of operations.

As of December 31, 2011, 122 employees at our Molycorp Mountain Pass facility were covered by a collective bargaining agreement with the United Steelworkers of America that expires in March 2015. Also as of December 31, 2011, 186 employees at our Molycorp Sillamäe facility were unionized employees. A work stoppage at either or both our Molycorp Mountain Pass or Molycorp Sillamäe facilities could significantly 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 using modern techniques and equipment requires skilled technicians and engineers. In addition, our expansion efforts will significantly increase the number of skilled technicians and engineers required to successfully operate our business. In the event that we are unable to hire and train the necessary number of skilled technicians and engineers, there could be an adverse impact on our labor costs and our ability to reach full planned 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 involves numerous hazards, including:

- unusual and unexpected rock formations affecting ore or wall rock characteristics;

- ground or slope failures;
- environmental hazards;
- industrial accidents;
- processing problems;
- periodic interruptions due to inclement or hazardous weather conditions or other acts of God; and
- mechanical equipment failure and facility performance problems.

Although we maintain insurance to address certain risks involved in our business, such as coverage for pollution liability, property damage, business interruption and workers' compensation, there can be no assurance that we will be able to maintain insurance to cover these risks at economically feasible premiums. 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. Furthermore, we do not maintain coverage for losses resulting from acts of terrorism. We might also become subject to liability for environmental 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. For example, our pollution liability policy for our Molycorp Mountain Pass facility has $20 million aggregate and per incident limits and excludes, among other things, costs associated with closure, post-closure and reclamation. 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.

We are currently subject to litigation, including stockholder class action litigation and derivative litigation, the unfavorable outcome of which might have a material adverse effect on our financial condition, operating results and cash flow.

From time to time, we may become subject to various legal and regulatory proceedings relating to our business.

In February 2012, a purported class action lawsuit was filed against us and certain of our current executive officers alleging violations of the federal securities law in connection with statements relating to our third quarter fiscal 2011 financial results and fourth quarter 2011 production guidance that we had filed with or furnished to the SEC, or otherwise made available to the public. We believe that this lawsuit is without merit, and we intend to vigorously defend ourselves against these claims.

In addition, in February 2012, two stockholder derivative lawsuits were filed against us (as a nominal defendant) and certain of our directors, executive officers and stockholders alleging, among other things, breach of fiduciary duty, waste of corporate assets and unjust enrichment by such directors and executive officers, and insider selling and misappropriation of information by such stockholders, in connection with sales of our common stock by such directors, officers and stockholders during 2011.

Due to the inherent uncertainties of litigation and regulatory proceedings, including the current purported class action lawsuit and derivative lawsuits, we cannot determine with certainty the ultimate outcome of any such litigation or proceedings. If the final resolution of any such litigation or proceedings is unfavorable, our financial condition, operating results and cash flows could be materially affected.

Risks Related to Environmental Regulation

Our operations are subject to extensive and costly environmental requirements; and current and future laws, regulations and permits will 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 international, national, federal, state and local environmental laws, regulations and permits, including those pertaining to employee health and safety, environmental permitting and licensing, air quality standards, or GHG emissions, water usage and disposal, pollution, waste management, plant and wildlife protection, including the protection of endangered species, handling and disposal of radioactive substances, remediation of soil and groundwater contamination, land use, reclamation and restoration of properties, the discharge of materials into the environment and groundwater quality and availability. As a result of our acquisition of Molycorp Sillamäe, our operations in Estonia are subject to the environmental laws and regulations of that country, including those applicable to European Union member countries. 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. Consequently, the modernization and expansion of the Molycorp Mountain Pass facility may be delayed, limited or prevented and current operations may be curtailed. Failure to comply with these laws, regulations and permits may result in the assessment of administrative, civil and criminal penalties, the issuance of injunctions to limit or cease operations, 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, these environmental requirements, and the interpretation and enforcement thereof, change frequently and have tended to become more stringent over time. For example, GHG emission regulation is becoming more rigorous. As a result of our planned expansion at our Molycorp Mountain Pass facility, we expect to be required to report annual GHG emissions from our operations, and additional GHG emission related requirements are in various stages of development. The U.S. Congress is considering various legislative proposals to address climate change. In addition, the EPA has issued regulations, including the "Tailoring Rule," that subject GHG emissions from certain stationary sources to the Prevention of Significant Deterioration and Title V provisions of the federal Clean Air Act. California is also implementing regulations pursuant to its Global Warming Solutions Act that establish a state-wide cap-and trade program for GHG emissions. Any such regulations could require us to modify existing permits or obtain new permits, implement additional pollution control technology, curtail operations or increase significantly our operating costs, any of which could adversely affect our business, financial condition, reputation, operating performance and product demand. Any future changes in these 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, results of operations and financial condition.

We are subject to the Occupational Safety and Health Act of 1970, the Federal Mine Safety and Health Act of 1977, the California Labor Code and regulations adopted pursuant thereto, and various regulations applicable in Estonia, which impose stringent health and safety standards on numerous aspects of our operations.

Our operations at our Molycorp Mountain Pass facility are subject to the Federal Mine Safety and Health Act of 1977, as amended by the Mine Improvement and New Emergency Response Act of 2006, and the regulations adopted by the California Occupational Safety and Health Administration, which impose stringent health and safety standards on numerous aspects of mineral extraction and processing operations, including the training of personnel, operating procedures, operating equipment and other matters.

Our operations at our Molycorp Tolleson and Molycorp Mountain Pass facilities, are also subject to the Occupational Safety and Health Act of 1970.

Our operations at the Molycorp Sillamäe facility are subject to the Estonian Health and Safety Act of 1999, and the health and safety requirements for handling hazardous chemicals and materials containing hazardous chemicals under Estonian law.

Our failure to comply with these or other applicable safety and health standards, or changes in such standards or the interpretation or enforcement thereof, could have a material adverse effect on our business, financial condition or otherwise impose significant restrictions on our ability to conduct mineral extraction and processing operations.

Our operations may affect the environment or cause exposure to hazardous substances, any of which could result in material costs, obligations or liabilities.

Our operations at our Molycorp Mountain Pass and Molycorp Sillamae facilities currently use, and in the past have used, hazardous materials and generate, and in the past have generated, hazardous and naturally occurring radioactive wastes. Our Molycorp Sillamäe facility in Estonia has a long history of industrial use, including uranium ore and alum shale processing, as a result of which its operations may have impacted the environment. In addition, our Estonian operations require the management and disposal of radioactive wastes. Our Molycorp Mountain Pass facility has been used for mining and related purposes since 1952, and contamination is known to exist around the facility. We may be subject to claims under environmental laws, regulations and permits 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. Our Molycorp Mountain Pass facility is currently subject to an order issued by the Lahontan Regional Water Quality Control Board pursuant to which we have conducted various investigatory and remedial actions, primarily related to certain onsite impoundments, including groundwater monitoring, extraction and treatment and soil remediation. 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 our Molycorp Mountain Pass facility, leaks in a wastewater pipeline from the Molycorp Mountain Pass facility to offsite evaporation ponds on the Ivanpah dry lake bed caused contamination. However, that contamination is being remediated by Chevron Mining Inc., who retained ownership of the ponds and the pipeline. 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. As a matter of law, and despite any contractual indemnity or allocation arrangements or acquisition agreements to the contrary, our liability for these claims 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 associated with our operations, could have a material adverse effect on our business, reputation, results of operation and financial condition.

We may be unable to obtain, maintain or renew permits necessary for the development or operation of our facilities, which could have a material adverse effect on our business, results of operations and financial condition.

We must obtain, for all our operations, a number of permits that impose strict conditions, requirements and obligations relating to various environmental and health and safety matters in connection with our current and future operations, including the modernization and expansion of our Molycorp Mountain Pass facility. To obtain, maintain and renew certain permits, we may be required to conduct environmental studies and collect and present data to governmental authorities pertaining to the potential impact of our current and future operations upon the environment, including the potential impact on endangered species, and to take steps to avoid or mitigate those impacts. The permitting rules, and interpretation thereof, are complex and have tended to become more stringent over time. In

some cases, the public (including environmental interest groups) has rights to comment upon and submit objections to permit applications and environmental analysis prepared in connection therewith, and otherwise participate in the permitting process, including challenging the issuance of permits, validity of environmental analyses and determinations and performance of permitted activities. Accordingly, permits required for our operations, including the modernization and expansion of our Molycorp Mountain Pass facility, may not be issued, maintained or renewed in a timely fashion or at all, may be issued or renewed with conditions that restrict our ability to conduct our operations economically, or may be subsequently revoked. Any such failure to obtain, maintain or renew permits, or other permitting delays or conditions, including in connection with any environmental impact analyses, could have a material adverse effect on our business, results of operations and financial condition.

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

We are generally obligated to restore property after it has been mined in accordance with regulatory standards and our approved reclamation plan at our Molycorp Mountain Pass facility. We are required under 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 operating 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.

Our inability to acquire or failure to maintain or renew such financial assurances could have a material adverse effect on our business, financial condition and results of operations.

If the assumptions underlying our reclamation plan and mine closure obligations are inaccurate, we could be required to expend materially greater amounts than anticipated to reclaim mined property, which could materially and adversely affect our business, results of operations and financial condition.

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 closure liabilities are based upon our closure and reclamation plans, third-party expert reports, current applicable laws and regulations, certain permit terms and our engineering expertise related to these requirements. Any change in the underlying assumptions 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 Ownership of Our Common Stock and Mandatory Convertible Preferred Stock

A trading market that will provide our stockholders with adequate liquidity may not be sustained. Our common stock has been publicly traded since July 2010, and our mandatory convertible preferred stock since February 2011. The prices of our common and mandatory convertible preferred stock may fluctuate significantly. Accordingly, stockholders could lose all or part of their investment.

Our shares of common stock began trading on the New York Stock Exchange, or NYSE, in July 2010, and our shares of mandatory convertible preferred stock, which we refer to as our preferred stock, began trading on the NYSE in February 2011. Active trading markets for our common stock and

preferred stock may not be sustained, which could depress the market price of our common stock, preferred stock, or both, and could affect your ability to sell your shares of common stock or preferred stock. Limited trading volumes and liquidity may result in wide bid-ask spreads, contribute to significant fluctuations in the market price of our common stock and our preferred stock and limit the number of investors who are able to buy our common stock and preferred stock.

The market price of our common stock has been, and is likely to continue to be, highly volatile and may be influenced by many factors, some of which are beyond our control, including:

- the extremely volatile rare earth industry;
- our quarterly or annual earnings or those of other companies in our industry;
- loss of a large customer;
- changes in accounting standards, policies, guidance, interpretations or principles;
- general economic conditions;
- the failure of securities analysts to cover our stock or changes in financial estimates by analysts;
- future sales of our common stock; and
- other factors described in this "Risk Factors" section.

Our common stock price has been particularly affected by the volatility in the rare earths industry, as the high and the low sales price of our common stock in the period since we went public in July 2010 through February 24, 2012 has ranged from a low of $12.10 to a high of $79.16. If conditions in our industry remain volatile, our common stock price may continue to exhibit volatility as well. In particular, if prices or demand for rare earth were to decline, our stock price would likely decline. The volatility of our preferred stock has been closely correlated to the volatility of our common stock from when we issued our preferred stock in February 2011 through February 24, 2012.

Reports published by securities or industry analysts, including projections in those reports that exceed our actual results, could adversely affect our stock price and trading volume.

Research analysts publish their own quarterly projections regarding our operating results. These projections may vary widely from one another and may not accurately predict the results we actually achieve. Our stock price may decline if we fail to meet securities research analysts' projections. Similarly, if one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price could decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, our stock price or trading volume could decline.

Future sales, or availability for sale, of shares of our common stock or preferred stock by stockholders could depress the market price of our common stock or preferred stock.

Sales of a substantial number of shares of our common stock or preferred stock in the public market, or the perception that large sales could occur, or the conversion of shares of our mandatory convertible preferred stock or convertible senior notes into common stock or the perception that conversion could occur, could depress the market price of our common stock. As of December 31, 2011, we had 83,896,043 shares of our common stock and 2,070,000 shares of our preferred stock outstanding. All of these shares are freely tradable, except for any shares held by our "affiliates" as defined in Rule 144 under the Securities Act of 1933; our affiliates owned 27,220,209 shares of common stock as of December 31, 2011. Up to 4,140,000 shares of common stock, subject to anti-dilution, make-whole and other adjustments, will be issuable upon conversion of shares of mandatory convertible preferred stock. Also, up to 3,221,288 shares of common stock, subject to

anti-dilution, make-whole and other adjustments, will be issuable upon conversion of the convertible senior notes. The common stock issuable upon conversion of the mandatory preferred stock will be freely tradeable and the common stock issuable upon conversion of the convertible senior notes is expected to be freely tradeable after the six-month anniversary of the issuance of such convertible senior notes.

The availability of shares of our capital stock for sale in the future could reduce the market price of our common stock and our preferred stock.

In the future, we may issue additional securities to raise capital. We may also acquire interests in other companies by using a combination of cash and our capital stock, including common stock or securities convertible into our common stock, or just our capital stock. Any of these events may dilute your ownership interest in our company and have an adverse impact on the price of our common stock and our preferred stock. In addition, sales of a substantial amount of our common stock or preferred stock in the public market, or the perception that these sales may occur, could reduce the market price of our common stock or preferred stock. This could also impair our ability to raise additional capital through the sale of our securities.

We do not intend to pay dividends on our common stock, in the foreseeable future.

For the foreseeable future, we intend to retain any earnings, after considering any dividends on our preferred stock, to finance the development of our business, and we do not anticipate paying any cash dividends on our common stock. Any future determination to pay dividends will be at the discretion of our board of directors and will be dependent upon then-existing conditions, including our operating results and financial condition, capital requirements, contractual restrictions, business prospects and other factors that our board of directors considers relevant. So long as any share of our preferred stock remains outstanding, no dividend or distribution may be declared or paid on our common stock unless all accumulated and unpaid dividends have been paid on our preferred stock, subject to exceptions, such as dividends on our common stock payable solely in shares of our common stock. Accordingly, holders of our common stock must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize a return on their shares of common stock.

Anti-takeover provisions contained in our certificate of incorporation and bylaws after the Corporate Reorganization, as well as provisions of Delaware law, could impair a takeover attempt.

Our certificate of incorporation and bylaws provisions may have the effect of delaying, deferring or discouraging a prospective acquiror from making a tender offer for our shares or otherwise attempting to obtain control of us. To the extent that these provisions discourage takeover attempts, they could deprive stockholders of opportunities to realize takeover premiums for their shares. Moreover, these provisions could discourage accumulations of large blocks of common stock, thus depriving stockholders of any advantages which large accumulations of stock might provide.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the General Corporation Law of the State of Delaware. Section 203 prevents some stockholders holding more than 15% of our outstanding common stock from engaging in certain business combinations unless the business combination was approved in advance by our board of directors, results in the stockholder holding more than 85% of our outstanding common stock or is approved by the holders of at least 66⅔% of our outstanding common stock not held by the stockholder engaging in the transaction.

Any provision of our certificate of incorporation or our bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive

a premium for their shares of our common stock and could also affect the price that some investors are willing to pay for our common stock.

Our Board can issue, without stockholder approval, additional preferred stock with voting and conversion rights and convertible debt that could adversely affect the voting power of the holders of common stock.

Our Board can issue, without stockholder approval, additional preferred stock with voting and conversion rights and convertible debt that could adversely affect the voting power of the holders of common stock and reduce the likelihood that such holders will receive dividend payments or payments upon liquidation, including shares of our outstanding preferred stock and convertible senior notes. Such issuance could have the effect of decreasing the market price of the common stock. The issuance of additional preferred stock and/or convertible debt or even the ability to issue additional preferred stock and/or convertible debt could also have the effect of delaying, deterring or preventing a change of control or other corporate action.

Our preferred stock and convertible senior notes may adversely affect the market price of our common stock.

The market price of our common stock is likely to be influenced by our preferred stock and our convertible senior notes. For example, the market price of our common stock could become more volatile and could be depressed by:

- investors' anticipation of the potential resale in the market of a substantial number of additional shares of our common stock received upon conversion of our preferred stock and convertible senior notes;
- possible sales of our common stock by investors who view our preferred stock and/or convertible senior notes as a more attractive means of equity participation in us than owning shares of our common stock; and
- hedging or arbitrage trading activity that may develop involving our preferred stock and our common stock and convertible senior notes.

Our Board and management have broad discretion over the use of our cash reserves and might not apply this cash in ways that increase the value of our stockholders' investment.

We had $418.9 million of cash and cash equivalents as of December 31, 2011, primarily from our initial public offering, our public offering of our preferred stock and from our private placement of convertible senior notes. We intend to use the majority of our remaining cash reserves, including any proceeds received from Molymet, to implement Project Phoenix Phase 1 and Project Phoenix Phase 2 and expand into metal, alloy and magnet production. Our Board and management have broad discretion to use our cash reserves, and our stockholders will be relying on their judgment regarding the application of this cash. Our Board and management might not apply the cash in ways that increase the value of our common stock and preferred stock. Until we use the cash, we plan to invest it, and these investments may not yield a favorable rate of return. If we do not invest or apply the cash in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause the price of our common stock and preferred stock to decline.

We are required by Section 404 of the Sarbanes-Oxley Act to evaluate the effectiveness of our internal controls. If we are unable to achieve and maintain effective internal controls, particularly in a period of anticipated rapid growth, our operating results and financial condition could be harmed.

We are required to comply with Section 404 of the Sarbanes-Oxley Act. Section 404 requires that we evaluate our internal control over financial reporting to enable management to report on the effectiveness of those controls. Management is responsible for establishing and maintaining adequate

internal control over financial reporting. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our consolidated financial statements in accordance with U.S. GAAP.

We have taken steps to improve our internal control over financial reporting and we have incurred significant costs to remediate identified deficiencies and improve our internal controls, and will incur additional expense as we undertake the modernization and expansion of the Molycorp Mountain Pass facility. As we implement this modernization and expansion, the resulting growth in our business will require us to implement additional internal controls. To comply with Sarbanes-Oxley requirements, especially during this period of anticipated rapid growth, we will need to further upgrade our systems, including information technology, implement additional financial and management controls, reporting systems and procedures and hire additional accounting, finance and legal staff. If we are unable to upgrade our systems and procedures or hire the necessary additional personnel in a timely and effective fashion, we may not be able to comply with our financial reporting requirements and other rules that apply to public companies.

As a public company, we are required to obtain an audit report from our independent registered public accounting firm regarding the effectiveness of our internal control over financial reporting. If we fail to implement the requirements of Section 404 in a timely manner, if we or, to the extent applicable, our independent registered public accounting firm are unable to conclude that our internal control over financial reporting is effective, or if we fail to comply with our financial reporting requirements, investors may lose confidence in the accuracy and completeness of our financial reports.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

Our Molycorp Mountain Pass Facility

At the Molycorp Mountain Pass facility, we own an open-pit mine containing one of the world's most fully developed rare earth deposits outside of China. In addition to the mine, our Molycorp Mountain Pass facility includes associated crushing, milling, flotation and separation facilities. These facilities are not currently in full operation, and are being modernized or refurbished in connection with Project Phoenix Phase 1 and Project Phoenix Phase 2. Our Molycorp Mountain Pass facility is located approximately 60 miles southwest of Las Vegas, Nevada near Mountain Pass, San Bernardino County, California. Our Molycorp Mountain Pass facility straddles Interstate 15 and may be accessed by existing hard-surface roads, which we use to transport products from our Molycorp Mountain Pass facility to our customers using commercial vehicles.

Molybdenum Corporation of America began REO mining operations at the Molycorp Mountain Pass facility in 1952. REO production at the Molycorp Mountain Pass facility, as well as milling and separation processes, continued under Unocal Corporation, which purchased Molybdenum Corporation of America in 1977, until 1998. In 1998, most rare earth separation operations were suspended, primarily due to leaks in a wastewater pipeline that transported waste salt water to evaporation ponds on the Ivanpah dry lake bed. Mining and milling operations continued until 2002 when those operations were also placed on standby due to softening prices for REOs, a lack of additional tailings disposal capacity and delays in obtaining permits required for the new paste tailings storage facility. Unocal Corporation thereafter sold or otherwise disposed of substantially all of the mining equipment at the Molycorp Mountain Pass facility (e.g., shovels, haul trucks, etc.) prior to being acquired by Chevron Corporation in 2005. Rare earth separation operations resumed in 2007 when Chevron Mining Inc., a wholly-owned subsidiary of Chevron Corporation, reactivated a portion of the plant using stockpiled rare earth concentrates as a feedstock. Since 2007, the operation has produced lanthanum, cerium and mixed neodymium and praseodymium products. On September 30, 2008, we acquired the Mountain Pass, California rare earth deposit and associated assets from Chevron Mining Inc. through Rare Earth Acquisitions LLC (which was later renamed Molycorp Minerals, LLC). The acquisition by us excluded certain assets and liabilities, including certain liabilities related to environmental and employment matters, that were retained by Chevron Corporation.

We hold conditional and minor use permits from the County of San Bernardino, along with an approved mine reclamation plan, which allow continued operations of our Molycorp Mountain Pass facility through 2042. Since our acquisition of the Molycorp Mountain Pass facility in 2008, we have processed and sold approximately 5,100 mt of REOs from stockpiled feedstocks.

We recommenced mining operations in December 2010 and are preparing to recommence milling operations, which we expect to occur early in 2012, although there can be no assurance.

Our Molycorp Mountain Pass facility consists of approximately 2,222 acres of fee land, of which approximately 805 acres are currently in use (e.g., existing buildings, infrastructure or active disturbance). The lands surrounding our Molycorp Mountain Pass facility are mostly public lands managed by the Bureau of Land Management and the National Park Service. In addition to the 2,222 acres we hold in fee, we also hold 489 unpatented lode and mineral mining claims and mill sites under the provisions of The Mining Law of 1872. We acquired our mineral rights at our Molycorp Mountain Pass facility with the purchase of the Mountain Pass, California rare earth deposit and associated assets from Chevron Mining Inc. in 2008. Our mineral rights, surface rights and mining claims are not subject to royalties or encumbrances, although we are responsible for making annual maintenance and tax payments on our unpatented mill sites. These mining claims and mill sites could provide land for mining, ancillary facilities and expansion capacity around our Molycorp Mountain Pass facility.

Our Molycorp Mountain Pass facility includes an open-pit mine, overburden stockpiles, a crusher and mill/flotation plant, a separation plant, a mineral recovery plant tailings storage areas and on-site evaporation ponds, as well as laboratory facilities to support research and development activities, offices, warehouses and support buildings. The majority of the physical plant and equipment we acquired at Molycorp Mountain Pass is over 20 years old, substantially all of which is being replaced as part of Project Phoenix Phase 1 and Project Phoenix Phase 2. We expect to expand the open-pit mine both laterally to the west, southwest and north as well as deepening vertically. Overburden stockpiles have been designed and permitted to the west and north of the mining operation, and will provide storage capacity sufficient to accommodate the remaining overburden material for the existing permitted life of the mine.

In connection with Project Phoenix Phase 1 and Project Phoenix Phase 2, we are building new facilities, including the construction of a control lab, additional warehousing and raw material storage facilities. We also have decided to build a new mill instead of refurbishing our existing mill. The new mill will be sized for daily production of up to 2,000 mt. All the new design changes are allowed under our current operating permits. We are also building a new paste tailings operation and new roads at our Molycorp Mountain Pass facility. The construction of the paste tailings operation, which consists of a paste tailings filter plant and paste tailings storage facility, is authorized by our San Bernardino County conditional use permit and an operating permit issued by the Lahontan Regional Water Quality Control Board, and we began its construction during the second quarter of 2010. Although the operating cost of the paste tailings operation is expected to be greater than it would be for a conventional tailings pond, which is the method prior owners used at the Molycorp Mountain Pass facility, we expect that the increased water recycling and reduced environmental risks associated with the paste tailings facility will ultimately mitigate that additional cost.

The total cost of the property, plant and equipment at our Molycorp Mountain Pass facility, net of applicable accumulated amortization and depreciation, as of December 31, 2011 was $465.1 million.

Following the completion of Project Phoenix Phase 1, we expect to have the ability to mine, crush, mill and separate 2,000 tons of rare earth ore per day to produce individual REOs that meet or exceed industry standards for purity.

Our facilities currently rely on electricity provided by Southern California Edison. Due to its position on the regional electric grid, our Molycorp Mountain Pass facility can experience power shortages during peak periods. Instability in electrical supply in past years has caused sporadic outages and brownouts. Such outages and brownouts have had a negative impact on our production. In connection with our initial modernization and expansion efforts at the Molycorp Mountain Pass facility, we are building a new 24 megawatt co-generation power plant that will use natural gas to provide

reliable electricity and steam to our facilities to allow us to achieve our anticipated annual production rate of approximately 19,050 mt of REO. The completion of the co-generation power plant is dependent on several factors, including obtaining the permits required to build and operate the co-generation power plant. Following the completion of the co-generation power plant, we expect it to provide 100% of our production power requirements to achieve an annual production rate of 19,050 mt of REO and 83% of our overall power requirements. In connection with Project Phoenix Phase 2, we will add two additional turbines to the co-generation power plan to increase the plant's capacity to 49 megawatts, which will allow us to achieve an annual production rate of approximately 40,000 mt of REO. At an annual production rate of 40,000 mt of REO per year, we expect the co-generation power plant to provide 100% of our production power requirements and 91% of our overall power requirements.

With the exception of certain building permits and the permit requirements under Title V of the Clean Air Act, which we will need to obtain as a result of the anticipated increased emissions from the planned co-generation plant and other combustion sources at our Molycorp Mountain Pass facility, we have secured all permits necessary to allow construction and operation of Project Phoenix Phase 1 and Project Phoenix Phase 2 at our Molycorp Mountain Pass facility, including permits to operate from the Lahontan Regional Water Quality Control Board and the Mojave Desert Air Quality Management District. In connection with our planned expansion, we will be required to obtain permit modifications and additional permits for new and replacement processing facilities and utilities, including the chlor-alkali plant, and also may be required to prepare a risk management plan in connection with the presence of ammonia at the planned co-generation power plant and chlorine in certain rare earth separations units.

The REE deposit at our Molycorp Mountain Pass facility 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 REEs. The currently defined zone of REE mineralization exhibits a strike length of approximately 2,750 feet in a north-northwest direction and extends for approximately 7,000 feet down dip from surface. The true thickness

of the greater than 3.0% REO zone ranges from 15 feet to 250 feet. The percentage of each rare earth material contained in the Molycorp Mountain Pass facility bastnasite ore is estimated to be as follows:

Element	Estimated Percentages of Bastnasite Ore
Cerium	48.8%
Lanthanum	34.0%
Neodymium	11.7%
Praseodymium	4.2%
Samarium	0.79%
Gadolinium	0.21%
Europium	0.13%
Yttrium	0.12%
Other REE (including Dysprosium and Terbium)	0.05%

Rare Earth Reserves and Non-Reserve Deposits

As of February 6, 2010, SRK Consulting, an independent consulting firm that we retained to assess our reserves, estimated total proven reserves of 88.0 million pounds of REO contained in 0.480 million tons of ore, with an average ore grade of 9.38%, and probable reserves based on historic and estimated recoveries of 2.12 billion pounds of REO contained in 13.108 million tons of ore, with an average ore grade of 8.20%, in each case using a cut-off grade of 5.0% REO. As a result of increased REE prices during the three-year period ended December 31, 2011, the estimated economic cut-off grade for the deposit is less than the 5% cut-off grade initially applied by SRK Consulting. In addition to REE pricing, the cut-off grade calculation includes other technical inputs such as process recovery and operating cost information. Our ongoing testing effort during 2012 will finalize the operating cost estimate for oxide production. Following completion of the operating cost review, updated process costs and recoveries will be reflected in the proven and probable reserve statement. Accordingly, as of December 31, 2011, our estimated proven and probable reserves remain 88.0 million pounds of REO and 2.12 billion pounds of REO, respectively. As of December 31, 2011, we began mining of fresh ore for use in the new plant, below the de minimis amount that would require accounting for the depletion of our mineral reserve.

SEC Guidelines

The SEC has established guidelines contained in Industry Guide 7 that set forth technical, legal and economic criteria for determining whether our ore reserves can be classified as proven and probable.

"Reserves" are defined by the SEC Industry Guide 7 as that part of a mineral deposit that could be economically and legally extracted or produced at the time of the reserve determination. SEC Industry Guide 7 divides reserves between "proven reserves" and "probable reserves," which are defined as follows:

- "proven reserves" are reserves for which:
  - quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling; and
  - the sites for inspection sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established.
- "probable reserves" are reserves for which quantity and grade and/or quality are computed from information similar to that used for proven reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

Methodology

Our Molycorp Mountain Pass facility has been subject to extensive drilling since the beginning of mining operations in 1952. We also maintain detailed geologic logs, on-site assay records and databases and geologic cross-sections. In addition, we have recently expanded our on-site exploratory drilling program to confirm the existence and extent of bastnasite, monazite and other rare earth phosphate mineral occurrences in unexplored areas of our Molycorp Mountain Pass facility. When estimating proven and probable reserves, however, we rely on the interpretations made during prior mining campaigns at our Molycorp Mountain Pass facility, the U.S. Geological Survey and various consulting companies, including SRK Consulting, to identify the regional and mine area geology and hydrogeology, regional and local structure, deposit geology, current pit slope stability conditions and REE recoveries.

Proven Reserves. SRK Consulting compiled a drill hole database from prior drilling at our Molycorp Mountain Pass facility. The majority of core samples in the deposit area analyzed by SRK Consulting range from 50 feet to 250 feet along the strike of the ore body and 150 feet to 350 feet down dip. The sample data for proven ore reserves consists of survey data, lithologic data and assay results.

Probable Reserves. Probable ore reserves are based on longer projections and the maximum distance between drill holes is 200 feet. Statistical modeling and the established continuity of the bastnasite ore body as determined from results of over 50 years of mining activity to date support our technical confidence in estimates of tonnage and grade over this projection distance. Where appropriate, projections for the probable ore reserve determination are constrained by any known or anticipated restrictive geologic features.

While we believe that a cut-off grade below 5.0% is economically viable, SRK Consulting decided to base the mining cut-off calculation on a grade of 5.0% REO given historical performance at the Molycorp Mountain Pass mine.

The proven and probable ore reserves are then modeled as a long-term mine plan and additional factors including recoveries, metal prices, mine operating costs and capital estimates are applied to determine the overall economics of the ore reserves.

Results

Proven and probable reserves at the Molycorp Mountain Pass facility as of December 31, 2011 are estimated to be approximately 88.0 million pounds of REO contained in 0.480 million tons of ore, with an average ore grade of 9.38%, and 2.12 billion pounds of REO contained in 13.108 million tons of ore, with an average ore grade of 8.20%, respectively, in each case, using a cut-off grade of 5.0%. We base our REO reserve estimates and non-reserve REO deposit information on engineering, economic and geological data assembled and analyzed by SRK Consulting, which includes various engineers and geologists. Our estimates of REO reserves and non-reserve REO deposits as to both quantity and quality will be regularly updated to reflect new drilling or other data received.

The following table provides information as of February 6, 2010 on the amount of our proven and probable REO reserves, which was used to calculate our estimated proven and probable reserves as of December 31, 2011.

Category of Reserves	Average Ore Grade (%)	Ore (Millions of Tons)	Contained REO (Millions of Pounds)
Proven	9.38%	0.480	88
Probable	8.20%	13.108	2,122

In making the estimate above, SRK Consulting:

- assumed we have a 100% working interest in the Molycorp Mountain Pass facility;
- assumed full mining recovery;
- assumed that mine reserves are fully diluted;
- assumed a historic cut-off grade of 5.0% REO within the pit design;
- assumed a metallurgical recovery factor of 65% for the mill facility and 93% for the extraction and separation facilities;
- used the 1997 surface topography for volume control of reserves;
- used the historic three-year average commodity prices set forth in table below; and
- rounded values to the nearest significant number.

Pricing values shown in the following table were used by SRK Consulting in the estimate of our reserves. The prices reflect a combination of three-year trailing averages for REOs and metals based on information from (i) Metal-Pages, (ii) IMCOA and Roskill market studies from 2009 and (iii) alloy pricing formulas

Rare Earth Products	Price(1) (US$/kg)
Non-Metal Products	
Lanthanum oxide	$ 6.60
Cerium oxide for glass applications	4.09
Cerium oxide for water filters	13.20
XSORBX®	9.90
Europium oxide	473.00
Metal Products	
Lanthanum	13.20
Praseodymium	37.99
Neodymium	37.99
Metal Alloys	
NdFeB	35.20
Samarium cobalt	50.60

(1) Prices for certain rare earth products have increased from those used by SRK Consulting in its engineering study. The prices set forth in the following table, are primarily based on information from Metal-Pages and alloy pricing formulas as of December 31, 2011.

Product	December 31, 2011 Price (US$/kg)
Lanthanum Oxide	$ 51.00
Cerium Oxide (Glass Products)	42.50
Europium Oxide	3,790.00
Lanthanum Metal	69.00
Neodymium/Praseodymium Metal	185.00
Nd-Iron-Boron Alloy	295.00(a)
Samarium Cobalt Alloy	45.00(a)

(a) Molycorp market price estimates

Although SRK Consulting assumed pricing levels consistent with those estimated by Roskill, a 38% decrease in average REE prices from such levels, holding all other variables constant, would not materially reduce reserve estimates.

There are numerous uncertainties inherent in estimating quantities and qualities of REO reserves and non-reserve REO deposits and costs to mine recoverable reserves, including many factors beyond our control. We will regularly evaluate our REO reserve and non-reserve REO estimates. This will typically be done in conjunction with expanded, phased drilling programs. Cores are analyzed by geologists to determine mineral types and to identify geological anomalies. Samples along the length of the core are logged and analyzed for total rare earth content, rare earth distribution and mineralogy. This data is entered into a master database and statistically analyzed. The resulting information is used to enhance the mine plan. We also gain information from blast hole cuttings. The estimates of REO reserves and non-reserve REO deposits 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 and mining conditions and/or effects from prior mining that may not be fully identified by available data or that may differ from experience;
- assumptions concerning future prices of rare earth products, operating costs, mining technology improvements, development costs and reclamation costs; and
- assumptions concerning future effects of regulation, including the issuance of required permits and taxes by governmental agencies.

Actual REO tonnage recovered from identified REO reserve and non-reserve REO deposit areas and revenues and expenditures with respect to the same may vary materially from estimates. These estimates may not accurately reflect our actual REO reserves or non-reserve REO deposits. Any inaccuracy in our estimates related to our REO reserves and non-reserve REO deposits could result in lower than expected revenues and higher than expected costs.

Engineering Study

SRK Consulting prepared an engineering study to determine, among other things, the size of the underlying ore body and a mine plan for the restart of the Molycorp Mountain Pass mine and the refurbishment of the processing facilities in connection with Project Phoenix Phase 1. As originally envisioned, the restart plan includes integrated off-site facilities for production of metals and rare earth magnet alloys. SRK Consulting designed the mine plan to ensure an annual production rate of approximately 19,050 mt of REO.

Subsequent to the original engineering study, we proceeded with additional detailed engineering and process testwork for the project. While substantive elements of the engineering design remain fixed in terms of function, our ongoing testing effort during 2012 will finalize the operating cost estimate for oxide production. Following completion of the operating cost review, updated process costs and recoveries will be reflected in the proven and probable reserve statement. At the present time, as a result of increased REE prices, the estimated economic cut-off grade for the deposit is less than the 5% cut-off grade applied by SRK Consulting. Due to the differential between the estimated economic cut-off grade and 5.0% "hard" cut-off grade, there is a margin for operating cost variation without a material adjustment in the proven and probable reserve estimate.

We approved the following changes to the original engineering study. These changes are provided for clarity and do not have a material impact on the proven and probable reserve estimate:

- We conducted additional drilling and exploration work between December 2009 and April 2010 with a primary focus on in-fill drilling and a secondary focus on condemnation. We plan to conduct additional drilling and exploration work in 2012.
- We are constructing a new mill, rather than refurbishing the existing mill prior to the start of full-scale production. With this change, SRK Consulting revised the mine plan to reflect improved access to ore in the southwest and south portion of the open pit. Fundamental production criteria remained unchanged (e.g., 5.0% REO cut-off grade, 19,050 mt REO per year, and overall recovery of 60%); therefore, there is no material change in the mine production schedule.
- We changed the location of the extraction and separations facilities, as well as related infrastructure, from the northwest portion of our property to immediately southeast of the existing process facilities. While the location of these facilities has changed, the production process has not.
- Project planning during the development phase will be performed by us and Eichleay Engineers of California, a consulting firm specializing in project delivery.

We will authorize SRK Consulting to revise the engineering study and to make material adjustments, if any, to the reserve statement following completion of the updated operating cost review and testwork related to process recoveries.

SRK Consulting prepared its engineering study in connection with Project Phoenix Phase 1, but has not yet reviewed Project Phoenix Phase 2 or prepared a revised engineering study to reflect and potential impact of Project Phoenix Phase 2 on capital costs, operating expenses, mine life or reserve estimates. SRK Consulting has preliminarily indicated, however, that doubling the amount of production pursuant to Project Phoenix Phase 2 would reduce the current mine life by half, assuming no additional exploration, no realization of anticipated improvements in recoveries, and all other factors such as cut-off grade remain constant.

Our Molycorp Sillamäe Facility

Our Molycorp Sillamäe facility consists of various manufacturing, research and administration buildings located on 67 acres of land at 2 Kesk Street, Sillamäe, Estonia, 200 kilometers from Tallinn, the Estonian capital. The property is held in fee and is not subject to any major encumbrances or restrictions. At our Molycorp Sillamäe facility, we transform REE's into rare earth oxides and rare earth metals and, as of December 31, 2011, have the capacity to produce 3,000 mt of REO equivalent products per year. At Molycorp Sillamäe we also have a longstanding experience in the manufacturing of niobium and tantalum rare metals. The main equipment we utilized for our production at Molycorp Sillamäe include electron beam furnaces, vacuum induction melting furnaces, shaft furnaces for aluminothermy reduction, rotary tube furnaces, REOs and rare metals solvent extraction lines, and various precipitation tanks.

Our Molycorp Tolleson Facility

Our Molycorp Tolleson facility includes various manufacturing, research, and administration buildings situated on seven acres of land at 8220 West Harrison Street, Tolleson, Arizona, which is just south of Interstate 10 about 15 miles west of Phoenix, Arizona's Sky Harbor Airport. The property is held in fee and is not subject to any major encumbrances or restrictions. At our Molycorp Tolleson facility, we utilize vacuum induction melting furnaces to produce a wide variety of rare earth alloys, complex custom-made alloys, and non-rare earth products containing exotic alloys, such as Ni-based

and Co-based superalloys and experimental binary and ternary alloys for universities and governmental agencies. As of December 31, 2011, our Molycorp Tolleson facility has the installed capacity to produce approximately 1,350 tons of ingot cast alloys and 750 tons of strip cast alloys per year.

Corporate Headquarters

We also lease our executive office space at 5619 Denver Tech Center Parkway, Greenwood Village, Colorado. The leases for Suite 1000, Suite 1005, Suite 1100 and Suite 1150 expire November 2016, subject to renewal options.

ITEM 3. LEGAL PROCEEDINGS.

From time to time, we may become subject to various legal proceedings that are incidental to the ordinary conduct of our business.

In February 2012, a purported class action lawsuit captioned, *Angelo Albano, Individually and on Behalf of All Others Similarly Situated v. Molycorp, Inc., et al.*, was filed against us and certain of our executive officers in the U.S. District Court for the District of Colorado. This federal court action alleges, among other things, that we and those officers violated Section 10(b) of the Securities Act of 1933 and Rule 10b-5 under the Securities Exchange Act of 1934 in connection with statements relating to our third quarter fiscal 2011 financial results and fourth quarter 2011 production guidance that we had filed with or furnished to the SEC, or otherwise made available to the public. The plaintiffs seek damages, including interest, equitable relief and reimbursement of the costs and expenses they incur in the lawsuit. We believe the allegations are without merit and that we have valid defenses to such allegations. We intend to defend this action vigorously. We are unable to provide meaningful quantification of how the final resolution of these claims may impact our future consolidated financial position or results of operations.

In addition, in February 2012, two stockholder derivative lawsuits captioned, *Thomas B. Wells, Derivatively on Behalf of Molycorp, Inc. v. Mark A. Smith, et al.* and *Ira Gaines, Individually and as Trustee of Paradise Wire & Cable Defined Benefit Plan Dated 11/1/84, Derivatively on behalf of Molycorp, Inc. v. Mark A. Smith, et al.*, were filed against us (as a nominal defendant) and certain of our directors, executive officers and stockholders in the U.S. District Court for the District of Colorado and The Court of Chancery of the State of Delaware, respectively. These actions allege, among other things, breach of fiduciary duty, waste of corporate assets and unjust enrichment by such directors and executive officers, and insider selling and misappropriation of information by such stockholders, in connection with sales of our common stock by such directors, officers and stockholders during 2011. The complaints in the lawsuits seek, among other things, awards to us and against the defendants of damages, restitution and disgorgement of profits in an unspecified amount.

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 on Form 10-K.

PART II

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

Common Stock Price Range

Our common stock is listed on The New York Stock Exchange under the symbol "MCP." Our initial public offering was priced at $14.00 per share on July 29, 2010. The following table sets forth, for the periods indicated, the high and low sales prices for our common stock as reported on The New York Stock Exchange.

	Low	High
Year ending December 31, 2011		
Fourth Quarter	$23.05	$42.90
Third Quarter	$31.41	$66.62
Second Quarter	$46.40	$79.16
First Quarter	$40.25	$62.80
Year ended December 31, 2010		
Fourth Quarter	$26.02	$55.22
Third Quarter (from July 29, 2010)	$12.10	$30.00

As of February 24, 2012, there were approximately 290 holders of record of our common stock.

Since our inception, we have not paid any cash dividends on our common stock. For the foreseeable future, we intend to retain any earnings, after considering any dividends on our preferred stock, to finance the development of our business. We do not anticipate paying any cash dividends on our common stock. Any future determination to pay dividends, including on our preferred stock, will be at the discretion of our Board and will depend upon then-existing conditions, including our operating results and our financial condition, capital requirements, contractual restrictions, business prospects and other factors that our Board may deem relevant. So long as any share of our preferred stock remains outstanding, no dividend or distribution may be declared or paid on our common stock unless all accrued and unpaid dividends have been paid on our mandatory convertible preferred stock, subject to exceptions, such as dividends on our common stock payable solely in shares of our common stock.

Use of Proceeds

Our initial public offering ("IPO") of common stock, par value $0.001 per share, was effected through a Registration Statement on Form S-1 (Registration No. 333-166129) that was declared effective by the SEC on July 29, 2010. There has been no material change in the planned use of proceeds from our IPO from that described in the final prospectus related to the IPO dated July 29, 2010 filed by us with the SEC pursuant to Rule 424(b). Through December 31, 2011, we have applied all of the proceeds from the IPO as follows: approximately $291.0 million for capital expenditures, including construction and refurbishment of our Molycorp Mountain Pass facility, $22.1 million as cash collateral deposit requirements net of refunds of $18.2 million, $56.5 million for business acquisitions, including investments in non-marketable securities, and $9.0 million for working capital needs.

ITEM 6. SELECTED FINANCIAL DATA.

Upon the formation of Molycorp, LLC on September 9, 2009, all members of Molycorp Minerals, LLC contributed their member interests to Molycorp, LLC in exchange for member interests in Molycorp, LLC. That exchange was treated as a reorganization of entities under common control and Molycorp Minerals, LLC is the predecessor to Molycorp, LLC. Accordingly, all financial information of Molycorp, LLC for periods prior to its formation is the historical financial information

of Molycorp Minerals, LLC. Molycorp Minerals, LLC acquired the Mountain Pass, California rare earth deposit and associated assets from Chevron Mining Inc., a subsidiary of Chevron Corporation, on September 30, 2008.

The selected consolidated financial data as of and for the years ended December 31, 2011, 2010 and 2009, and for the period from June 12, 2008 (Inception) through December 31, 2011 has been derived from Molycorp, Inc's audited consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. The selected consolidated financial data for the period from June 12, 2008 (Inception) through December 31, 2008 have been derived from Molycorp, LLC's audited consolidated financial statements and the related notes.

Molycorp, Inc. was formed on March 4, 2010 for the purpose of continuing the business of Molycorp, LLC in corporate form. On April 15, 2010, the members of Molycorp, LLC contributed either (a) all of their member interests in Molycorp, LLC or (b) all of their equity interests in entities that hold member interests in Molycorp, LLC (and no other assets or liabilities) to Molycorp, Inc. in exchange for shares of Molycorp, Inc., and, as a result, Molycorp, LLC became a wholly owned subsidiary of Molycorp, Inc. Accordingly, all financial information of Molycorp, Inc. for periods prior to the corporate reorganization is the historical financial information of Molycorp, LLC.

As a limited liability company, the taxable income and losses of Molycorp, LLC were reported on the income tax returns of its members. Molycorp, Inc. is subject to federal and state income taxes and will file consolidated income tax returns. If the corporate reorganization had been effective as of January 1, 2009, our net loss of $28.6 million for the year ended December 31, 2009 would have generated an unaudited pro forma deferred income tax benefit of $11.3 million for the year ended December 31, 2009 assuming a combined federal and state statutory income tax rate. However, as realization of such tax benefit would not have been assured, we would have also established a valuation allowance of $11.3 million to eliminate such pro forma tax benefit.

The financial data for all periods prior to April 15, 2010 gives retroactive effect to the corporate reorganization as if it had occurred on June 12, 2008.

On April 1, 2011, we completed the acquisition of a 90.023% controlling stake in AS Silmet located in Sillamäe, Estonia, which is now known as Molycorp Silmet AS or Molycorp Sillamäe, one of only two rare earth processing facilities in Europe. On October 24, 2011, we acquired the remaining 9.977% ownership interest in Molycorp Sillamäe.

On April 15, 2011, we acquired Santoku America, Inc., which is based in Tolleson, Arizona, and which is now known as Molycorp Metals and Alloys, Inc. or Molycorp Tolleson, the only producer of rare earth alloys in the United States.

The selected consolidated financial data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements and the notes thereto included elsewhere in this Annual Report on Form 10-K.

Statement of Operations Data	Year Ended December 31, 2011	2010	2009	From June 12, 2008 (Inception) through December 31, 2008	Total from June 12, 2008 (Inception) through December 31, 2011
(In thousands, except for share and per share data)					
Sales	$ 396,831	$ 35,157	$ 7,093	$ 2,137	$ 441,218
Cost of goods sold(1)	(177,890)	(37,591)	(21,785)	(13,027)	(250,293)
Selling, general and administrative expense(2)	(64,387)	(47,513)	(12,685)	(2,979)	(127,564)
Depreciation and amortization expense	(733)	(319)	(191)	(19)	(1,262)
Accretion expense	(955)	(912)	(1,006)	(250)	(3,123)
Operating income (loss)	152,866	(51,178)	(28,574)	(14,138)	58,976
Net income (loss) attributable to Molycorp stockholders	$ 117,526	$ (50,774)	$ (28,587)	$ (14,074)	$ 24,091
Weighted average shares outstanding (Common shares)(3)					
Basic	83,454,221	62,332,054	39,526,568	38,829,225	58,197,912
Diluted	85,220,017	62,332,054	39,526,568	38,829,225	58,694,839
Income (loss) per share of common stock:					
Basic	$ 1.29	$ (0.81)	$ (0.72)	$ (0.36)	$ 0.24
Diluted	$ 1.27	$ (0.81)	$ (0.72)	$ (0.36)	$ 0.25

Balance Sheet Data	December 31, 2011	2010	2009	2008
(In thousands)				
Cash and cash equivalents	$ 418,855	$316,430	$ 6,929	$ 2,189
Total current assets	639,044	353,432	18,520	8,710
Total assets	1,255,125	479,560	97,666	95,355
Total non-current liabilities	178,623	12,335	13,528	13,196
Total liabilities	409,895	33,047	23,051	17,279
Stockholders' equity	845,230	446,513	74,615	78,076

Other Financial Data	Year Ended December 31, 2011	2010	2009	From June 12, 2008 (Inception) through December 31, 2008	Total from June 12, 2008 (Inception) through December 31, 2011
(In thousands)					
Capital expenditures(4)	$302,180	$33,129	$7,285	$321	$342,915

(1) Cost of goods sold includes write-downs of inventory to estimated net realizable value of $2.8 million, $2.5 million, $9.0 million, $9.5 million and $23.8 million for the years ended December 31, 2011, 2010, 2009, for the period from June 12, 2008 (Inception) through December 31, 2008, and cumulatively for the period from June 12, 2008 (Inception) through December 31, 2011, respectively. Cost of goods sold also includes a $1.0 million write-down of bastnasite stockpile inventory based on estimated stockpile REO quantities at December 31, 2010.

Cost of goods sold also includes $1.7 million and $2.3 million of WIP inventory impairments for the year ended December 31, 2010 and 2011, respectively.

(2) Includes stock-based compensation of $4.7 million in 2011, $28.7 million in 2010, $0.2 million in 2009 and $0.2 million for the period from June 12, 2008 (Inception) through December 31, 2008, respectively.

(3) Weighted average shares outstanding gives retroactive effect to the corporate reorganization, the conversion of all of our Class A common stock and Class B common stock into shares of common stock and the consummation of our initial public offering, and the 38.23435373-for-one stock split completed by Molycorp, Inc. on July 9, 2010 as if such events had occurred on June 12, 2008.

(4) As reflected in cash flows from investing activities in our consolidated statements of cash flows.

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

The following discussion and analysis should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The following discussion and analysis contains forward-looking statements that reflect our plans, estimates and beliefs and involves risks and uncertainties. Our actual results could differ materially from those discussed in these forward-looking statements as a result of various factors, including those discussed below, under the headings "Risk Factors" and "Special Note Regarding Forward-Looking Statements" and in other parts of this Annual Report on Form 10-K. In this Annual Report on Form 10-K, unless the context requires otherwise, references to "Molycorp," "we," "our" or "us" refer to Molycorp, LLC and its consolidated subsidiaries prior to the Corporate Reorganization (as described below) and Molycorp, Inc. and its consolidated subsidiaries after the Corporate Reorganization.

Overview

Presentation

Molycorp, Inc. was formed on March 4, 2010 for the purpose of continuing the business of Molycorp, LLC in corporate form. On April 15, 2010, the members of Molycorp, LLC contributed either (a) all of their member interests in Molycorp, LLC or (b) all of their equity interest in entities that held member interests in Molycorp, LLC (and no other assets or liabilities) to Molycorp, Inc. in exchange for Molycorp, Inc. Class A common stock. Accordingly, Molycorp, LLC and its wholly owned subsidiary, Molycorp Minerals, LLC, or Molycorp Minerals, became subsidiaries of Molycorp, Inc., which we refer to as the Corporate Reorganization. On June 15, 2010, Molycorp LLC was merged with and into Molycorp Minerals.

We have three operating segments: Molycorp Mountain Pass, Molycorp Tolleson and Molycorp Sillamäe. Each of the segments has only one production and shipping location. Sales to external customers by geographic area are based on the location in which the sale originated.

Recent Developments

In the first quarter of 2011, we completed a public offering of 5.50% Series A Mandatory Convertible Preferred Stock, or Convertible Preferred Stock, $0.001 par value per share. In connection with this offering, we issued 2,070,000 shares of Convertible Preferred Stock for $100.00 per share. Total net proceeds of the offering were $199.6 million after underwriting discounts and commissions and offering expenses payable by Molycorp, Inc. Each share of the Convertible Preferred Stock will automatically convert on March 1, 2014 into between 1.6667 and 2.0000 shares of Molycorp's common stock, subject to anti-dilution adjustments. At any time prior to March 1, 2014, holders may elect to convert each share of the Convertible Preferred Stock into shares of common stock at the minimum conversion rate of 1.6667 shares of common stock per share of Convertible Preferred Stock, subject to anti-dilution adjustments. The Convertible Preferred Stock is not redeemable.

On April 1, 2011, we completed the acquisition of a 90.023% controlling stake in AS Silmet located in Sillamäe, Estonia, one of only two rare earth processing facilities in Europe. We acquired 80% of the outstanding shares of AS Silmet, which is now known as Molycorp Silmet or Molycorp Sillamäe, from AS Silmet Grupp in exchange for 1,593,419 shares of Molycorp common stock, contractually valued at $80 million based on the average closing price of our common stock as reported by The New York Stock Exchange for the 20 consecutive trading days immediately preceding April 1, 2011, the initial acquisition date. AG Silmet Grupp retained a 9.977% ownership interest in Molycorp Sillamäe. We acquired the other 10.023% from Treibacher Industrie AG for $9.0 million in cash. The total purchase price for the acquisition of the 90.023% controlling stake was $81.7 million for accounting purposes, which reflects the fair value of the 1,593,419 shares of our common stock as of the initial acquisition date. On October 24, 2011, we acquired the remaining 9.977% ownership interest in Molycorp Sillamäe for $10.0 million in cash. The Molycorp Sillamäe acquisition provides us with a European base of operations and significantly increases our current rare earth annual production capacity by approximately 3,000 mt REO equivalent. Molycorp Sillamäe sources rare earth feed stocks for production of its products primarily from our Mountain Pass, California rare earth mine and processing facility, which we refer to as our Molycorp Mountain Pass facility. The main focus of this newly acquired business is on the production of rare earth oxides, or REOs, and metals, including didymium metal, a critical component in the manufacture of neodymium-iron-boron, or NdFeB, permanent rare earth magnets. Molycorp Sillamäe's manufacturing operation is located in Sillamäe, Estonia and Molycorp Sillamäe currently sells products to customers in Europe, North and South America, Asia, Russia, and other former Soviet Union countries.

On April 15, 2011, we completed the acquisition from Santoku Corporation, or Santoku, of all the issued and outstanding shares of capital stock of Santoku America, Inc., which is now known as Molycorp Metals and Alloys, or Molycorp Tolleson, a corporation based in Tolleson, Arizona, in an all-cash transaction for $17.5 million. The acquisition provides us with access to certain intellectual properties relative to the development, processing and manufacturing of neodymium and samarium magnet alloy products. Pursuant to the stock purchase agreement, Santoku provides consulting services to us for the purpose of maintaining and enhancing the quality of our products. On the same date, we entered into a five-year marketing and distribution agreements with Santoku for the sale and distribution of neodymium and samarium cobalt, or SmCo, magnet alloy products produced by each party. Additionally, we entered into a rare earth products purchase and supply agreement through which Molycorp Tolleson supplies Santoku with certain rare earth alloys for a two-year period at prices equal to the feedstock cost plus the applicable product premium as such terms are defined in the agreement.

On August 22, 2011, we opened an office in Tokyo, Japan to provide customer support as well as consulting and technical services to our customers in Japan. Total capital invested for the opening of the office in Tokyo was $0.7 million as of December 31, 2011.

In August 2011, we entered into a preliminary agreement with Hitachi Metals, Ltd., or Hitachi, for the supply of magnetic rare earth products and lanthanum. Under the three-year agreement, we will initially provide the rare earth products to Hitachi from our current commercial scale operations at Molycorp Mountain Pass. Following completion of our initial modernization and expansion plan at our Molycorp Mountain Pass facility, which we refer to as Project Phoenix Phase 1, we can supply the rare earth products from our new facility at Molycorp Mountain Pass or our other facilities (including Tolleson and Sillamäe) for the remaining term of the agreement. Prices under this agreement are based on international market price indexes published by third parties and typically used by the rare earth industry. Molycorp and Hitachi have suspended negotiations concerning the formation of a joint venture for the production of rare earth alloys and magnets in the United States, and for Molycorp to acquire a license from Hitachi for certain technology related to the production of rare earth magnets.

The negotiations were suspended due to the inability to reach agreement on certain key matters affecting the value of the joint venture to each party.

On November 28, 2011, Molycorp, Daido Steel Co., Ltd., or Daido, and Mitsubishi Corporation, or Mitsubishi, formed a joint venture, Intermetallics Japan Joint Venture or IJJV, to manufacture and sell next-generation NdFeB permanent rare earth magnets. The joint venture will manufacture sintered NdFeB permanent rare earth magnets with technology licensed from Intermetallics, Inc., a partnership between Mitsubishi, Daido, and Dr. Masato Sagawa, co-inventor of the NdFeB magnet. The new company will take full advantage of Daido's commercial-scale magnet manufacturing technologies, Mitsubishi's domestic and international marketing and sales network, and Molycorp's REO, metal, and alloy manufacturing resources and capabilities. The capital contribution ratio of the newly formed company is 30.0% by Molycorp, 35.5% by Daido, and 34.5% by Mitsubishi. We will contribute, upon achievement of certain milestones and subject to our Boards' approval, Japanese Yen (JPY) 2.5 billion in cash (or approximately $32.7 million based on the JPY/ U.S. dollar exchange rate as of January 31, 2012), in exchange of ordinary shares of the joint venture over a period of twelve months starting in January 2012. Additionally, the joint venture will be financed by a government subsidy sponsored by Japan's Ministry of Economy, Trade, and Industry. The joint venture plans to construct an initial 500 metric-ton-per-year magnet manufacturing facility in Nakatsugawa, Japan (Gifu Prefecture), with operations expected to commence by January 2013. The joint venturers began working on the new facility in late December 2011 and expect to eventually expand operations in the U.S. and elsewhere. The technology to be used by the joint venture is a new and novel approach that does not depend on the use of patents held by other magnet companies. This technology allows for the manufacture of permanent rare earth magnets that deliver greater performance with less reliance on dysprosium, a relatively scarce rare earth. The process also results in higher production yields. Target markets for the joint venture are the automotive and home appliance markets. These markets, as well as other markets for environmentally friendly technologies, are forecast to be significant drivers of demand growth for permanent rare earth magnets. The joint venture has been provisionally awarded a supply agreement for a next-generation electric vehicle with a major automotive manufacturer.

Concurrently with the formation of the joint venture, we, Mitsubishi (acting as the procurement agent) and the newly formed company entered into a supply agreement by which we will sell to the joint venture certain rare earth products at the conditions set forth in the supply agreement.

In January 2012, we entered into an agreement with Molibdenos y Metales S.A., or Molymet, the world's largest processor of the strategic metals molybdenum and rhenium headquartered in Santiago, Chile, pursuant to which Molymet has agreed to purchase 12.5 million shares of our common stock for $390 million, which amount was determined based on the average daily volume weighted average price of our common stock on The New York Stock Exchange for the 20 consecutive trading days immediately preceding the date of the agreement, plus a 10% premium. Pursuant to the agreement, we are obligated, at closing, to increase the size of our Board of Directors, or Board, and have given Molymet the right to nominate a member of our Board for so long as Molymet owns a certain percentage of our common stock. Additionally, the agreement provides Molymet with three demand registration rights for the shares of common stock it is purchasing pursuant to the agreement.

The consummation of the offering, which we anticipate to occur in the second quarter of 2012, remains subject to the satisfaction of certain customary closing conditions, including the receipt of certain governmental regulatory approvals. Proceeds from the Molymet investment will be retained by us for general corporate purposes and are expected to be used to finance our future growth, including pursuant to our vertical supply chain integration business model.

As a result of our acquisitions of Molycorp Tolleson and Molycorp Sillamäe, we added facilities and equipment for metal conversion and alloy production within the Molycorp organization. We transport cerium, lanthanum, neodymium, praseodymium, dysprosium, terbium and samarium oxide

products from our Molycorp Mountain Pass facility to Molycorp Sillamäe and Molycorp Tolleson to produce rare earth metals and alloys.

Upon the full execution of our "mine-to-magnets" strategy and completion of Project Phoenix Phase 1, and our second-phase capacity expansion plan, which we refer to as Project Phoenix Phase 2, we expect to be one of the world's most integrated producers of rare earth products, including oxides, metals, alloys and magnets. Rare earths are critical inputs in many existing and emerging applications including: clean energy technologies, such as hybrid and electric vehicles and wind power turbines; multiple high-tech uses, including fiber optics, lasers and hard disk drives; numerous defense applications, such as guidance and control systems and global positioning systems; and advanced water treatment technology for use in industrial, military and outdoor recreation applications. Global demand for rare earth elements, or REEs, is projected to steadily increase both due to continuing growth in existing applications and increased innovation and development of new end uses. Our goals:

- develop innovative rare earth technologies and products vital to green energy, high-tech, defense and industrial applications;
- be commercially sustainable, globally competitive, profitable and environmentally superior;
- act as a responsible steward of our rare earth resources; and
- use our technology to improve the daily lives of people throughout the world.

We have made significant investments, and expect to continue to invest, in developing technologically advanced and proprietary applications for individual rare earth elements, or REEs. Under our "mine to magnets" strategy, we plan to integrate the rare earths supply chain: mining; oxide processing; production of metals and alloys; and production of rare earth based magnets. We are in the process of modernizing and expanding our production capabilities at our Molycorp Mountain Pass facility, and our recent acquisitions of Molycorp Tolleson and Molycorp Sillamäe provide us with additional capacity for the production of rare earth oxides as well as the ability to produce rare earth metals and alloys.

Our vision is to be the rare earth products and technology company recognized for its "ETHICS"—Excellence, Trust, Honesty, Integrity, Creativity and Safety. Since July 2005, the Molycorp Mountain Pass facility has not had a lost-time accident and has received the coveted "Sentinels of Safety" award from the Mine Safety and Health Administration, or MSHA, for three of the last six years. Additionally, the Molycorp Tolleson facility has not had a lost-time accident for the past 15 years and the Molycorp Sillamäe facility has had three lost-time accidents during the second quarter of 2011, and one during the 12 months prior to the acquisition by us.

Key Industry Factors

Demand for Rare Earth Products

Global consumption of REEs is projected to steadily increase due to continuing growth in existing applications and increased innovation and development of new end uses. For example, the integration of rare earth permanent magnet drives into wind power turbines has reduced the need for gearboxes, which increases overall efficiency and reliability. We believe that this anticipated market dynamic will underpin continued strong pricing. If Molycorp Mountain Pass and other rare earth projects do not commence production when anticipated, we expect there will continue to be a gap between current and forecasted demand and supply.

As a result of the global economic crisis, rare earth product prices declined by approximately 50% during between 2008 and through the end of the third quarter of 2009. According to Metal-Pages, from the beginning of the fourth quarter of 2009 through the end of 2011, average prices for rare earths have risen by approximately 1,100%. Furthermore, over the same period, average prices for some of

the most common rare earths (cerium oxide, lanthanum oxide, neodymium oxide, and praseodymium oxide) have risen by more than 1,000%. Average prices for lanthanum oxide and cerium oxide have decreased by approximately 50% during the second half of 2011 as compared to the average in the first half of 2011 due, in part, to a reduction in reported speculative buying of rare earth materials in China.

The following table illustrates the price changes in several REOs from October 2009 to December 2011:

	Prices (USD/Kg)*		
Rare Earth Oxides	**October 2009**	**December 2011**	**Change**
Lanthanum	4.65	51	997%
Cerium	3.75	43	1,033%
Praseodymium	14	165	1,079%
Neodymium	14.25	195	1,268%
Samarium	4.5	79	1,644%
Europium	480	3,790	690%
Gadolinium	5.25	103	1,852%
Terbium	350	2,810	703%
Dysprosium	107.5	1,410	1,212%
Yttrium	10.25	91	783%

* Average FOB China from Metal-Pages.com

Supply of Rare Earth Products

China has dominated the global supply of REOs for the last ten years and, according to IMCOA, a rare-earth market consultant, it is estimated that China accounted for approximately 94% of global REO production in 2011. Even with our planned production, global supply is expected to remain tight due to the combined effects of growing demand and actions taken by the Chinese government to restrict exports.

As a result of the internal industrial development, as well as economic, environmental and regulatory factors in China, there is uncertainty with respect to the availability of rare earth products from China. Although Chinese production of rare earth materials is increasing, export quotas imposed by the Chinese government have decreased, thus reducing the amount of rare earth materials that China may export to the Rest of World.

Factors Affecting Our Results

Modernization and Expansion of Molycorp Mountain Pass Facility

We anticipate a dramatic change in our business and results of operations upon the completion of Project Phoenix Phase 1 and Project Phoenix Phase 2 and the full execution of our "mine-to-magnets" strategy through which we expect to produce rare earth metals, alloys, and magnets in 2012. For example, we expect to increase our capacity and ability to produce and sell a significantly expanded slate of products, including specialty cerium products for water treatment, neodymium and praseodymium metal, NdFeB and SmCo alloys for magnets, europium, gadolinium, and terbium oxides for phosphors, and dysprosium and terbium for magnets.

We are utilizing the assets we acquired from Chevron Mining Inc. as a foundation to build an integrated rare earth products and technology company, which requires considerable additional capital investment. We believe the application of improved technologies, along with the capital investment, will allow us to create a sustainable business by cost effectively producing high purity rare earth products. Prior to the completion of Project Phoenix Phase 1, start-up of the new processing facility, we

anticipate further diversifying our product line through the production of samarium/europium/gadolinium concentrate from bastnasite concentrate stockpiles. Upon completion of Project Phoenix Phase 1 and Project Phoenix Phase 2, we expect to produce lanthanum, cerium, praseodymium, neodymium, samarium, europium, gadolinium, terbium, dysprosium and yttrium in various chemical compounds and/or metal forms, including alloys.

Sales

Since the commencement of our second pilot campaign in 2010, we are successfully producing cerium and lanthanum products as well as didymium oxide from bastnasite concentrate stockpiles. In the fourth quarter of 2010, we commenced production of didymium metal from our oxide through a third party processor. In the first quarter of 2011, AS Silmet commenced tolling for us of mixed rare earth carbonates into lanthanum oxide, cerium carbonate, neodymium and praseodymium. As a result of the Molycorp Sillamäe acquisition, we added the production of those rare earth products and two new rare metal products, tantalum and niobium, within the Molycorp organization. From our acquisition of Molycorp Tolleson, we added NdFeB alloy and SmCo alloy to our product mix. The addition of these new products has significantly increased the diversity of our product mix. The following is a summary of sales by product and product categories, net of intercompany transactions, for the years ended December 31, 2011 and 2010, in thousands:

	Year Ended December 31,	
	2011	2010
Rare earth products:		
Lanthanum products	$ 91,702	$13,758
Cerium products	$ 59,825	$10,143
Didymium products	$101,410	$ 9,020
Neodymium products	$ 27,426	$ 18
Praseodymium products	$ 7,557	$ 171
Other rare earth products	$ 5,108	$ 2,047
Rare metals	$ 46,280	—
Rare earth alloy products	$ 48,388	—
Other non-rare earth products	$ 9,135	—

Our prices and product mix are determined by a combination of global and regional supply and demand factors. Our sales increased significantly for the year ended December 31, 2011 as compared to the year ended December 31, 2010, primarily due to the combination of a general increase in the market prices of REOs, higher sales volumes of ceric products, didymium products, neodymium products and praseodymium products, which all have significantly higher values than the lanthanum products that comprised substantially all of our sales in 2010, and the increase in our product mix. Sales of rare earth products for the year ended December 31, 2011 included 3,369 metric tons of REOs at an average price of $87.00 per kilogram compared to sales of 1,830 metric tons of REOs at an average price of $19.20 per kilogram for the year ended December 31, 2010. Sales of rare metals for the year ended December 31, 2011 were 260 metric tons at an average price of $178.00 per kilogram. Sales of rare earth alloys for the year ended December 31, 2011 were 362 tons of alloys sold at an average price of $133.70 per kilogram and included 147 mt of REOs. The quantities we sell are determined by the production capabilities of our Molycorp Mountain Pass facility, and starting in April 2011, by the production capabilities of our Molycorp Sillamäe and Molycorp Tolleson facilities and by demand for our products, which is also influenced by the level of purity and consistency we are able to achieve. Our sales also include finished products acquired as part of our purchase of our Molycorp Mountain Pass facility.

Pursuant to a contract with one of our largest customers, we are supplying a significant amount of our REOs through mid-2012 at market-based prices subject to a ceiling based on market prices at June 1, 2010, and a floor. This contract was amended effective July 1, 2011 to increase the price ceiling. Under a second contract, we agreed to supply the same customer with approximately 75% of our phase one lanthanum product production per year at market based prices subject to a floor for a three-year period commencing upon the achievement of expected annual production rates under Project Phoenix Phase 1, which may be extended at the customer's option for an additional three-year period. In February 2012, this same customer exercised a volume reduction right that lowers its purchase obligation for lanthanum products from approximately 75% to approximately 58% of our lanthanum production per year, following completion of Project Phoenix Phase 1. Accordingly, we intend to secure other customer contracts for our lanthanum products in replacement of the volume reduction from our current customer. Although prices for REOs have generally increased since October 2009, this increase followed a period of generally lower prices corresponding with the global financial crisis beginning in 2008. Many factors influence the market prices for REOs and, in the absence of established pricing in customer contracts, our sales revenue will fluctuate based upon changes in the prevailing prices for REOs. We use various industry sources, including certain publications, in evaluating prevailing market prices and establishing prices for our products because there are no published indices for rare earth products, including alloys or magnets.

Substantially all of our lanthanum production at Molycorp Mountain Pass in 2011, which accounted for approximately 46% of our actual production in the year, was sold pursuant to the contract with one of our principal customers described above under which our pricing is subject to a price ceiling. We expect, however, that production of our remaining materials will generally be sold based on prevailing market prices. Accordingly, our ability to realize prevailing market prices in the near term is limited due to that sales contract with one of our principal customers for our lanthanum product, which reverts to prevailing market pricing upon the completion of Project Phoenix Phase 1.

Cost of Goods Sold

Our cost of goods sold reflects the cost allocated to the inventory we acquired as part of our purchase of the Molycorp Mountain Pass facility and, beginning in the second quarter of 2011, the cost allocated to the inventory we acquired as part of our purchase of the Molycorp Sillamäe and Molycorp Tolleson facilities. In addition, our cost of goods sold includes the processing costs and the cost of certain raw materials we purchased from outside vendors, which we allocated to the products we sold at our three operating facilities. Because many of our costs are fixed, as our production increases or decreases, our average cost per metric ton decreases or increases, respectively. Primary production costs include direct labor and benefits, maintenance, natural gas, electricity, operating supplies, chemicals, depreciation and amortization and other plant overhead expenses. Our cost of goods sold also reflects write-down of inventory, which could materially affect our consolidated net results of operations.

Our most significant variable costs are chemicals, raw materials for alloy production and electricity. In the future, we intend to produce more of our chemicals for our Molycorp Mountain Pass facility at a plant on-site, which we expect will reduce our variable chemical costs. We are building a co-generation facility to provide power to our Molycorp Mountain Pass facility. Following the start-up of the co-generation facility, which we expect to occur in the second quarter of 2012, natural gas will substantially replace third-party electricity costs and become one of the most significant variable costs at our Molycorp Mountain Pass facility.

We expect our labor and benefits costs to increase through at least 2012 due to the addition of personnel and contractors required to implement Project Phoenix Phase 1 and Project Phoenix Phase 2. In addition to volume fluctuations, our variable costs, such as electricity, operating supplies and chemicals, are influenced by general economic conditions that are beyond our control. Other events

outside our control, such as power outages, have in the past interrupted our operations and increased our total production costs, and we may experience similar events in the future.

Selling, General and Administrative Expenses

Our selling, general and administrative expenses consist primarily of personnel and related costs, including stock-based compensation; legal, accounting and other professional fees; occupancy costs; and information technology costs. We continue to experience increased selling, general and administrative expenses as we expand our business and operate as a publicly traded company. These expenses include additional personnel costs as we construct our new facilities and pursue other business development activities to execute our "mine-to-magnets" business plan. We have also experienced additional legal, compliance and corporate governance expenses, as well as additional accounting and audit expenses, stock exchange listing fees, transfer agent and other stockholder-related fees and increased premiums for certain insurance policies, among other expenses. Additionally, we incurred significant professional fees and other expenses in connection with the business acquisitions that we completed in April 2011, and our future selling, general and administrative expenses will be higher as a result of those acquisitions. We also invest significant resources to improve the efficiency of our REO processing operations and the development of new applications for individual REEs. For the period ending December 31, 2011, 2010 and 2009, we spent $8.3 million, $2.4 million and $1.5 million, respectively, in research and development. These costs consist primarily of salaries, outside labor, material and equipment.

Income Taxes

We account for income taxes in accordance with Accounting Standard Codification 740, *Income Taxes*. This guidance requires that deferred tax assets and liabilities be recognized for the tax effect of temporary differences between the financial statement and tax basis of recorded assets and liabilities at enacted statutory tax rates. This guidance also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax assets will not be realized. The recoverability of deferred tax assets is based on both our historical and anticipated earnings levels and is reviewed each reporting period to determine if any additional valuation allowance is necessary when it is more likely than not that amounts will not be recovered. We have concluded that no valuation allowance is required as of December 31, 2011 and a 100% valuation allowance was required as of December 31, 2010.

We are a Subchapter C corporation and, therefore, are subject to federal and state income taxes on our taxable income, whereas prior to our Corporate Reorganization, we operated entirely within limited liability companies, which were not directly liable for the payment of federal or state income taxes and our taxable income or loss was included in the state and federal tax returns of Molycorp, LLC's members. For the years ended December 31, 2011 and 2010, our effective income tax rate was 19.5% and 0%, respectively. Our effective income tax rate is impacted primarily by the 100% valuation allowance reversal on our deferred tax assets, permanent differences between book and tax income, including the benefit associated with the estimated effect of the domestic production activities deduction and federal tax credits.

The tax basis of the assets and liabilities transferred to us pursuant to the Contribution Agreement was, in the aggregate, equal to Molycorp, LLC's adjusted tax basis in the assets as of the date of the contribution. Therefore, the tax basis in the assets transferred to us is significantly higher than the book basis in the same assets, which resulted in a deferred tax asset. The majority of our deferred tax asset has been assigned to mineral resources, and the anticipated use of percentage depletion to reduce our taxable income, relative to book income, is expected to provide full realization of this asset over time.

We review our deferred tax assets and liabilities each reporting period using the enacted tax rate expected to apply to taxable income in which the deferred tax asset or liability is expected to be realized. The statutory income tax rates that are applied to our current and deferred income tax calculations are significantly impacted by the states in which we do business. Changes in state income tax rates and apportionment laws will result in changes in the calculation of our current and deferred income taxes. The effects of any changes are recorded in the period of enactment and can increase or decrease the net deferred tax assets and liabilities on the balance sheet.

Environmental

Our operations are subject to numerous and detailed federal, state and local environmental laws, regulations and permits, including those pertaining to employee health and safety, environmental permitting and licensing, air quality standards, greenhouse gases, or GHG, emissions, water usage and pollution, waste management, plant and wildlife protection, handling and disposal of radioactive substances, remediation of soil and groundwater contamination, land use, reclamation and restoration of properties, the discharge of materials into the environment and groundwater quality and availability.

We retain, both within Molycorp and outside Molycorp, the services of reclamation and environmental, health and safety, or EHS, professionals to review our operations and assist with environmental compliance, including with respect to product management, solid and hazardous waste management and disposal, water and air quality, asbestos abatement, drinking water quality, reclamation requirements, radiation control and other EHS issues.

We have spent, and anticipate that we will continue to spend, financial and managerial resources to comply with environmental requirements. For example, we have acquired enough air emission offset credits for both Project Phoenix Phase 1 and Project Phoenix Phase 2. In addition, at our Molycorp Mountain Pass facility during the years ended December 31, 2011 2010 and 2009, we incurred operating expenses of approximately $6.1 million, $2.1 million and $3.0 million, respectively, associated with environmental compliance requirements. We expect to spend approximately $238.0 million on environmentally-driven capital projects during 2012 on our modernization and expansion project.

The costs expected to be incurred as part of our on-going remediation, which is expected to continue throughout our Molycorp Mountain Pass facility's operating, closure and post-closure periods, are included as part of our asset retirement obligations. See Summary of Significant Accounting Policies *Asset Retirement Obligation* in the Notes to Consolidated Financial Statements, included in this Annual Report on Form 10-K. We anticipate the need to dispose of a portion of the wastewater in one of our evaporation ponds in order to repair lining tears detected earlier in 2011. We estimate the wastewater transportation and disposal costs associated with this repair to be approximately $17.0 million in 2012. In addition, while our chlor alkali plant is being constructed, we intend to remove and dispose of any wastewater generated in excess of our evaporation capability at an off-site location, as a result of which we may incur additional significant costs.

We cannot predict the impact of new or changed laws, regulations or permit requirements, including the matters discussed below, or changes in the way such laws, regulations or permit requirements are enforced, interpreted or administered. Environmental laws and regulations are complex, change frequently and have tended to become more stringent over time. It is possible that greater than anticipated environmental expenditures will be required in 2012 or in the future, including expenditures as a result of our acquisitions of Molycorp Tolleson and Molycorp Sillamäe. We expect continued government and public emphasis on environmental issues will result in increased future investment for environmental controls at our operations. Additionally, with increased attention paid to emissions of GHGs, including carbon dioxide, current and future regulations are expected to affect our operations. We will continue to monitor developments in these various programs and assess their potential impacts on our operations.

Violations of environmental laws, regulations and permits can result in substantial penalties, court orders to install pollution control equipment, civil and criminal sanctions, permit revocations, facility shutdowns and other sanctions. In addition, environmental laws and regulations may impose joint and several liability, without regard to fault, for costs relating to environmental contamination at our facilities or from wastes disposed of at third party waste facilities. The proposed expansion of our operations is also conditioned upon securing the necessary environmental and other permits and approvals. In certain cases, as a condition to procuring such permits and approvals, we are required to comply with financial assurance requirements. The purpose of these requirements is to assure the government that sufficient company funds will be available for the ultimate closure, post-closure care and/or reclamation at our facilities. We typically obtain bonds as financial assurance for these obligations and, as of December 31, 2011, we had placed a total of $27.6 million of surety bonds with California state and regional agencies. These bonds require annual payment and renewal. In the second quarter of each year, we are required to provide the State of California with an updated estimate of the costs associated with the mine reclamation. This estimate is reviewed and approved by the State of California, after which we are responsible for making any necessary changes to surety bonds placed with the State of California.

As a result of new construction activity at Molycorp Mountain Pass associated with our modernization and expansion project, additional lands have been disturbed since the last mine reclamation cost estimate in 2010, resulting in an increase in the mine reclamation obligation from $3.3 million to $4.1 million. The additional $0.8 million surety amount will be placed with the State of California following approval of the cost estimate by state agencies. The EPA has announced its intention to establish a new financial assurance program for hardrock mining, extraction and processing facilities under the Federal Comprehensive Environmental Response Compensation and Liability Act, known as CERCLA, or the "Superfund" law, which may require us to establish additional bonds or other sureties. We cannot predict the effect of any such requirements on our operations at this time.

Impact of Inflation

The cost estimates associated with the modernization and expansion of the Molycorp Mountain Pass facility described under the heading "Capital Investments" have not been adjusted for inflation. In the event of significant inflation, the funds required to execute our business plan over the next few years could increase proportionately. This could delay or preclude our business expansion efforts, or require us to raise additional capital. In addition, historical inflation rates have been used to estimate the future liability associated with our future remediation and reclamation obligations as reflected in the asset retirement obligations in our consolidated financial statements included elsewhere in this annual report. If inflation rates significantly exceed the historical inflation rates, our future obligations could significantly increase.

Foreign Currency Fluctuations

Substantially our entire sales originating from the U.S. are denominated in U.S. dollars, and substantially all third-party sales originating from Molycorp Sillamäe in Estonia are denominated in euro; therefore, we have minimal exposure to fluctuations in foreign currency exchange rates relative to our sales. However, as further described in the "Quantitative and Qualitative Disclosure About Market Risk" section of this Annual Report on Form 10-K, we are exposed to fluctuations of:

- the U.S. dollar (the Company's reporting currency) against the functional currency of Molycorp Sillamäe (the euro) when we translate Molycorp Sillamäe's financial statements into U.S. dollars for inclusion in our consolidated financial statements;
- the U.S. dollar against the Japanese Yen as it pertains to our investment in the joint venture with Mitsubishi and Daido; and

- the euro relative to a small portion of our purchases of equipment, for which we have entered into foreign currency forward contracts to hedge against such foreign currency risk.

Results of Operations

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

(In thousands)	Year Ended December 31 2011	2010	Change
Sales	$ 396,831	$ 35,157	$ 361,674
Cost of goods sold	(177,890)	(37,591)	(140,299)
Selling, general and administrative expenses (Includes stock-based compensation of $4,671 in 2011 and $28,739 in 2010)	(64,387)	(47,513)	(16,874)
Depreciation and amortization expense	(733)	(319)	(414)
Accretion expense	(955)	(912)	(43)
Operating income (loss)	152,866	(51,178)	204,044
Other (expense) income:			
Other (expense) income	(153)	155	(308)
Foreign currency transaction losses, net	(5,415)	—	(5,415)
Interest expense, net	(388)	249	(637)
Income (loss) before income taxes	146,910	(50,774)	197,684
Provision for income taxes	(28,576)	—	(28,576)
Net income (loss)	$ 118,334	$(50,774)	169,108

Segment Information

(In thousands)	Molycorp Mountain Pass Year Ended December 31, 2011	Molycorp Sillamäe April 1, 2011 - December 31, 2011	Molycorp Tolleson April 15, 2011 - December 31, 2011	Other	Eliminations	Total Molycorp, Inc.
Sales:						
External	$ 253,563	86,496	$ 56,772	$ —	$ —	$ 396,831
Intersegment	55,155	13,902	—		(69,057)	—
Total sales	308,718	100,398	56,772			
Cost of goods sold	(78,890)	(86,789)	(53,826)	—	41,615	(177,890)
Selling, general and administrative expenses	(61,535)	(2,499)	(615)	(530)	792	(64,387)
Depreciation, amortization and accretion expense	(1,378)	(279)	—	(31)	—	(1,688)
Operating income (loss)	166,915	10,831	2,331	(561)	(26,650)	152,866
Other (expense) income	(287)	(5,680)	11	—	—	(5,956)
Income (loss) before income taxes	$ 166,628	$ 5,151	$ 2,342	$(561)	$ (26,650)	$ 146,910
Total assets at December 31, 2011	$1,249,998	$118,001	$ 30,061	$ 794	$(143,729)	$1,255,125
Capital expenditures (accrual basis excluding capitalized interest)	$ 401,047	$ 8,170	$ —	$ —	$ —	$ 409,217

Sales

For the year ended December 31, 2011 and 2010, our consolidated sales were $396.8 million and $35.2 million, respectively. The significant increase in sales is due to the combination of a general increase in the prices of REO products, sales of metal and alloy products as a result of our acquisitions of Molycorp Tolleson and Molycorp Sillamäe in April 2011, and higher sales volumes of didymium products, which have much higher sale prices per kilogram than the lanthanum products that comprised a greater percentage of our sales in 2010.

The following analysis presents sales and cost of goods sold on a gross basis (i.e., before intercompany eliminations). Management believes this presentation provides a better understanding of the performance of each operating segment in terms of production volumes and costs.

Molycorp Mountain Pass

Molycorp Mountain Pass' sales were $308.7 million and $35.2 million for the years ended December 31, 2011 and 2010, respectively. Sales in 2011 consisted primarily of lanthanum products, didymium metal, ceric hydrate and neodymium oxide, which have relatively higher sales prices per kilogram compared to products sold in 2010, which primarily consisted of lanthanum chlorohydrate. In total, for the year ended December 31, 2011, Molycorp Mountain Pass sold 3,764 mt of products on a REO equivalent basis at an average sales price of $82.00 per kilogram compared to sales of 1,830 mt at an average sales price of $19.20 per kilogram for the year ended December 31, 2010. We anticipate cerium products, lanthanum products and didymium products to make up a significant percentage of our total sales until we complete Project Phoenix Phase 1. The following is a summary of sales at Molycorp Mountain Pass by product for the years ended December 31, 2011 and 2010, in thousands.

	Year Ended December 31,	
Molycorp Mountain Pass	**2011**	**2010**
Lanthanum products	$ 94,112	$13,758
Cerium products	$ 67,405	$10,143
Didymium products	$116,979	$ 9,020
Neodymium products	$ 19,092	$ 18
Praseodymium products	$ 5,580	$ 171
Other rare earth products	$ 5,550	$ 2,047

Other rare earth products include Yttrium, Misch Metal, Erbium, and other heavy rare earth products.

Molycorp Sillamäe

Sales from our Molycorp Sillamäe facility for the period from April 1, 2011 (the acquisition date) through December 31, 2011 totaled $100.4 million. Molycorp Sillamäe sold 1,177 mt of REO equivalent products at an average sales price of approximately $45.00 per kilogram, and 260 mt of rare metals at an average sales price of approximately $178.00 per kilogram. The following is a summary of sales by

product at Molycorp Sillamäe for the period from April 1, 2011 (the acquisition date) through December 31, 2011, in thousands.

Molycorp Sillamäe	April 1, 2011 through December 31, 2011
Rare earth products:	
Lanthanum products	$10,043
Cerium products	$20,492
Neodymium products	$15,204
Praseodymium products	$ 7,411
Rare metals:	
Tantalum	$23,426
Niobium	$22,854
Other products	$ 968

Other products include rare earth fluorides, samarium, europium, gadolinium and nitric fertilizer.

Molycorp Tolleson

For the period from April 15, 2011 (the acquisition date) through December 31, 2011, Molycorp Tolleson sold rare earth alloys, custom and specialty alloys, high purity rare earth metals, and resale of other non-REO material totaling approximately 578 mt, which contained an equivalent of 147 mt of REO, for a total of $56.8 million. As part of the acquisition of Molycorp Tolleson, we entered into a rare earth products purchase and supply agreement with Santoku through which Molycorp Tolleson will supply Santoku with certain rare earth alloys for a two-year period at prices equal to the feedstock cost plus the applicable product premium as such terms are defined in the purchase and supply agreement. Sales to Santoku under the terms of this agreement were $48.8 million from April 15, 2011 through December 31, 2011 and comprised 86% of total Molycorp Tolleson sales. The following is a summary of sales by product at Molycorp Tolleson for the period from April 15, 2011 (the acquisition date) through December 31, 2011, in thousands.

Molycorp Tolleson	April 15, 2011 through December 31, 2011
Rare earth alloys:	
Neodymium alloys	$44,432
Samarium alloys	$ 3,956
Other products	$ 8,384

Other products include specialty alloys, small metals, metal foils and the resale of certain other materials.

Cost of Goods Sold

Molycorp Mountain Pass

Molycorp Mountain Pass' cost of goods sold was $78.9 million and $37.6 million for the years ended December 31, 2011 and 2010, respectively. The higher costs in 2011, as compared to 2010, were primarily due to higher sales volume and higher costs associated with purchases. These increased costs were partially offset by a decrease in our lower of cost or market inventory write-downs from approximately $2.5 million for the year ended December 31, 2010 to $0.6 million for the year ended December 31, 2011. Lower of cost or market write-downs decreased due to lower market prices for

certain products in 2010. In addition, we recognized a $2.3 million and $1.7 million write-down of WIP, or "work in process", inventory based on estimated REO quantities for the years ended December 31, 2011 and 2010, respectively. During the fourth quarter 2010, an additional write-down of inventory of $1.0 million was recognized due to Bastnasite density survey results. The weighted average cost of goods sold on an REO basis at Molycorp Mountain Pass was approximately $20.96 per kilogram in 2011, as compared to approximately $20.54 per kilogram in 2010.

Total production costs charged to inventory were $52.1 million and $16.9 million for the years ended December 31, 2011 and 2010, respectively. Inventory purchases and tolling costs were $22.8 million in 2011 and $9.3 million in 2010. The primary products we purchased during those periods were lanthanum oxide, cerium oxide, cerium carbonate, neodymium oxide, didymium metal and praseodymium oxide.

The following is a summary of rare earth products produced at the Molycorp Mountain Pass facility during 2011 and 2010, in metric tons.

	Year Ended December 31,	
Molycorp Mountain Pass	**2011**	**2010**
Lanthanum products	1,422	857
Cerium products	1,246	215
Didymium products	394	224

Production costs charged to inventory were higher during 2011 as compared to 2010 due to increased production levels. We expect to attain increased production levels throughout 2012.

Chemical costs allocated to production were $13.8 million and $4.2 million for the years ended December 31, 2011 and 2010, respectively. Chemical costs in 2011 were higher as compared to 2010 due to higher production levels, despite improved processing techniques that reduced chemical usage, and a general increase in prices for chemicals.

Labor costs, including related employee benefits, allocated to production were $15.5 million and $9.0 million the years ended December 31, 2011 and 2010, respectively. As of December 31, 2011, we had a total of 177 employees at Molycorp Mountain Pass and our corporate office (which together comprise our Molycorp Mountain Pass segment), as compared to 111 employees at December 31, 2010, which led to higher wage and employee-related benefit expenses. Higher labor costs were also due to the annual wage increase required under our union contract, which took effect in March 2011.

Maintenance costs, including maintenance labor and supplies, were $3.3 million and $2.2 million in 2011 and 2010, respectively. Utility charges, which primarily include electricity, were $3.3 million and $2.1 million for the years ended December 31, 2011 and 2010, respectively.

Other costs allocated to production, including depreciation, were $25.2 million and $10.5 million for years ended December 31, 2011 and 2010, respectively. These costs were higher in 2011 due to the significant increase in depreciation expense from the placement of assets into service related to the second pilot processing campaign. These assets are being depreciated over their remaining useful life and will be decommissioned with the full restart of the mine. During the fourth quarter of 2011, management determined that production equipment associated with the second pilot processing campaign will be used in conjunction with the installation of Project Phoenix Phase 1. Therefore, the useful life of these assets has been extended to the end of 2015. Additional increases are due to higher consulting and contracted service costs during 2011 as compared to 2010.

In March 2010, we began blending our existing didymium oxide inventory, which, prior to blending, contained varying percentages of neodymium and praseodymium, to create a more consistent content that better meets customer specifications. For the years ended December 31, 2011 and 2010, approximately 787 mt and 481 mt were blended, respectively. Blended inventory is reclassified from WIP to finished goods.

Molycorp Sillamäe

Cost of goods sold at Molycorp Sillamäe reflects costs that are incurred to acquire raw materials and processing costs incurred to obtain finished goods. Processing costs primarily include labor, materials and chemicals, energy and depreciation. In addition, for the period from April 1, 2011 (the acquisition date) through December 31, 2011 cost of goods sold included $10.2 million of purchase price in excess of the carrying value that was allocated to inventory at the time of the acquisition, and a lower of cost or market inventory write-down of $2.8 million, of which $0.7 million related to inventory that was purchased from Molycorp Mountain Pass and, as a result, was eliminated in consolidation. Molycorp Sillamäe's cost of goods sold from April 1, 2011 through December 31, 2011 was $86.8 million, with a weighted average cost of goods sold on an REO basis of approximately $34.00 per kilogram.

The following table provides volumes of rare earth products, rare metals and other products Molycorp Sillamäe produced from the acquisition date through December 31, 2011, in metric tons.

Molycorp Sillamäe	April 1, 2011 through December 31, 2011
Rare earth products:	
Lanthanum products	556
Cerium products	439
Neodymium products	196
Praseodymium products	77
Other products	44
Rare metals:	
Tantalum	100
Niobium	394
Other products	489

Labor, chemicals and energy costs that Molycorp Sillamäe allocated to production of rare earth products, rare metal and other products from April 1, 2011 through December 31, 2011 were $3.1 million, $5.6 million, and $3.3 million, respectively. Other costs allocated to all production, including depreciation, were $10.1 million for the same period.

Molycorp Tolleson

Molycorp Tolleson's cost of goods sold from April 15, 2011 (the acquisition date) through December 31, 2011 was $53.8 million, with a weighted average cost of goods sold of approximately $93.12 per kilogram. Cost of goods sold at Molycorp Tolleson reflects costs that are incurred to acquire raw materials and processing costs incurred to obtain finished goods. Processing costs primarily include labor, materials, energy and depreciation. In addition, during the fourth quarter, Molycorp Tolleson recognized a lower of cost or market inventory write-down of $0.7 million reported in cost of goods sold. This adjustment related to inventory that was purchased from Molycorp Mountain Pass and, as a result, was eliminated in consolidation.

The following table provides volumes of rare earth alloys, and other products Molycorp Tolleson produced from the acquisition date through December 31, 2011, in metric tons.

Molycorp Tolleson	April 15, 2011 through December 31, 2011
Rare earth alloys:	
Neodymium alloys	311
Samarium alloys	91
Other products	55

The total Molycorp Tolleson production of 457 mt in the period included approximately 163 mt of REO equivalent products. Other products include specialty alloys, small metals, metal foils and the resale of other non-REO based materials.

Molycorp Tolleson costs allocated to production were $60.1 million, which includes labor, materials, depreciation and energy costs from April 15, 2011 through December 31, 2011.

Selling, General and Administrative Expenses

Molycorp Mountain Pass

Selling, general and administrative expenses at Molycorp Mountain Pass, including stock-based compensation, were $61.5 million and $47.5 million for the years ended December 31, 2011 and 2010, respectively. Beginning in the first quarter of 2010, we experienced a significant increase in professional fees primarily due to increasing our staffing as we prepared to start construction of our new facilities in January 2011 and other business development activities to execute our "mine-to-magnets" business plan. Total start-up costs for the year ended December 31, 2011 totaled $6.5 million. We have also experienced increased spending for accounting, information technology consulting and engineering services. Selling, general and administrative expenses include $8.3 million of research and development costs.

Molycorp Sillamäe

Selling, general and administrative expenses at Molycorp Sillamäe from April 1, 2011 (the acquisition date) through December 31, 2011 were $2.5 million. Our selling, general and administrative expenses at Molycorp Sillamäe consist primarily of personnel and related costs, such as legal, accounting and other professional fees, occupancy costs and information technology costs.

Molycorp Tolleson

Selling, general and administrative expenses at Molycorp Tolleson from April 15, 2011 (the acquisition date) through December 31, 2011 were $0.6 million. Our selling, general and administrative expenses at Molycorp Tolleson consist primarily of personnel and related costs, such as legal, accounting and other professional fees, occupancy costs and information technology costs.

Stock-Based Compensation

We have stock-based compensation plans for executives, eligible employees and non-employee directors. Stock-based awards issued under these plans include stock options to purchase shares of our common stock, restricted stock awards, or RSAs, and restricted stock units, or RSUs. The fair value of each stock option award is estimated at the grant date using the Black-Scholes option pricing model, which we refer to as our common stock price on the date of grant. The Black-Scholes option pricing model requires the input of subjective assumptions, including the expected term of the option award

and stock price volatility, as further explained in the *Stock-Based Compensation* Note to Consolidated Financial Statements included in this Annual Report on Form 10-K. These estimates involve inherent uncertainties and the application of our judgment. In addition, we are required to estimate the expected forfeiture rate and only recognize expense for those stock options, RSAs and RSUs that are expected to vest. As a result, if other assumptions had been used, our recorded stock-based compensation expense would have been different from what we reported.

Our consolidated stock-based compensation expense, which are included in "Selling, general and administrative expenses" in our "Statement of Operations", was $4.7 million and $28.7 million for the years ended December 31, 2011 and 2010, respectively. Stock-based compensation for the year ended December 31, 2010 was primarily associated with incentive shares granted on November 1, 2009 which, on the grant date, were classified as a liability and valued at zero dollars using the intrinsic value method. In connection with the corporate reorganization and initial public offering on August 3, 2010, these shares were ultimately converted into 2,232,740 shares of restricted common stock with a total fair value of $31.3 million, the majority of which was recognized in 2010.

Capital Expenditures

Our consolidated capital expenditures, on an accrual basis and excluding capitalized interest, totaled $409.2 million and $38.6 million for the years ended December 31, 2011 and 2010, respectively. Most of the capitalized costs incurred during 2010 are related to our second pilot processing campaign, which commenced in April 2010. The majority of the capitalized costs for the year ended December 31, 2011 relate to Project Phoenix Phase 1 and Project Phoenix Phase 2 at our Molycorp Mountain Pass facility.

Related-Party Transactions

In June 2010, we entered into an inventory financing arrangement with Traxys North America LLC, or Traxys, the parent of one of our stockholders, TNA Moly Group, LLC, under which we borrowed approximately $5.0 million, secured by certain product inventories. Borrowings under this arrangement required an initial interest rate of 6% based on three month LIBOR plus a margin, which is subject to adjustment every three months. The interest rate was reset to 5.75% effective September 1, 2011. At December 31, 2011 and December 31, 2010, interest payable associated with the arrangement totaled $32,000 and $9,000, respectively. Principal under this arrangement is payable from revenue generated from sales of the product inventories. During the third quarter of 2010, we agreed that 50% of all didymium oxide sales will be subject to this arrangement. We made principal payments of $3.1 million and $1.0 million for the years ended December 31, 2011 and 2010, respectively. The outstanding amount payable to Traxys under this arrangement were $0.9 million and $3.1 million reported on the Consolidated Balance Sheet as of December 31, 2011 and 2010, respectively, under Short-term borrowing—related party, and $2.8 million and $1.3 million in Trade accounts payable related to the sales made, but not remitted to Traxys and affiliates as of December 31, 2011 and 2010, respectively.

We and Traxys and affiliates jointly market and sell certain lanthanum oxide, cerium oxide, misch metal and erbium oxide products. Per the terms of this arrangement, we and Traxys split gross margin equally once all costs associated with the sale are recovered by us and Traxys and affiliates. We recorded a related-party receivable from Traxys and affiliates of $190,000 and $116,000 as of December 31, 2011 and 2010, respectively. We also recorded an expense of $336,000 and $120,000 for the years ended December 31, 2011 and 2010, respectively, and had an outstanding related payable to Traxys and affiliates in the amount of $169,000 and $120,000 as of December 31, 2011 and 2010, respectively. Revenues and expenses related to these settlements are presented on a net basis in Other Income on the Statement of Operations. In addition, during 2011, we made purchases of lanthanum oxide from Traxys and affiliates in the amount of $6.2 million, and small purchases of yttrium and

bastnasite material for a total of approximately $0.7 million. For the year ended December 31, 2010, we made purchases of lanthanum oxide and cerium oxide from Traxys and affiliates in the amount of $2.5 million.

As of December 31, 2011, Molycorp Sillamäe had a balance receivable from Traxys and affiliates of $2.1 million related to sales of tantalum metal of $3.2 million for the period from April 1, 2011 to December 31, 2011.

Year Ended December 31, 2010 Compared to Year Ended December 31, 2009

(In thousands)	Year Ended December 31, 2010	2009	Change
Sales	$ 35,157	$ 7,093	$ 28,064
Cost of goods sold	(37,591)	(21,785)	(15,806)
Selling, general and administrative expenses (Includes stock-based compensation of $28,739 in 2010 and $241 in 2009)	(47,513)	(12,685)	(34,828)
Depreciation and amortization expense	(319)	(191)	(128)
Accretion expense	(912)	(1,006)	94
Operating loss	(51,178)	(28,574)	(22,604)
Other income (expense):			
Other income	155	181	(26)
Interest (expense) income	249	(194)	443
Net loss	$(50,774)	$(28,587)	$(22,187)

Sales

For the years ended December 31, 2010 and 2009, our sales were $35.2 million and $7.1 million, respectively. This significant increase in sales is due to the combination of a general increase in the prices of REO products and our diversification into new products, such as cerium hydrate and didymium oxide, which have much higher sales prices per kilogram than the lanthanum products we produced and sold in 2009. The following is a summary of sales by product for the years ended December 31, 2010 and 2009, in thousands.

Molycorp Mountain Pass	Year Ended December 31, 2010	2009
Lanthanum products	$13,758	$6,529
Cerium products	$10,143	$ 167
Didymium products	$ 9,020	—
Other rare earth products	$ 2,236	$ 397

Lanthanum sales in the year ended December 31, 2010 consisted primarily of lanthanum oxide and chlorohydrate, which has a relatively higher sales price per kilogram compared to sales in the year ended December 31, 2009, which consisted primarily of lanthanum concentrate that has a relatively lower sales price per kilogram. Both ceric hydrate and didymium oxide, which have a relatively higher sales price per kilogram as compared to our other products, accounted for 24% and 23%, respectively, of our total revenue for the year ended December 31, 2010 as compared to zero for the year ended December 31, 2009. With the commencement of our second pilot processing campaign, the production of lanthanum concentrate has been replaced by lanthanum chlorohydrate, which is a more marketable product. In total, for the year ended December 31, 2010, we sold 1,830 metric tons of REO products at

an average sales price of $19.20 per kilogram compared to sales of approximately 1,302 metric tons of REO products at an average sales price of $5.45 per kilogram for the year ended December 31, 2009.

Cost of Goods Sold

Our cost of goods sold was $37.6 million and $21.8 million for the years ended December 31, 2010 and 2009, respectively. The higher costs for the year ended December 31, 2010, compared to the year ended December 31, 2009, were due to higher sales and higher production costs, including costs associated with the transition to our second pilot processing campaign. These increased costs were partially offset by a decrease in our lower of cost or market inventory write-downs from approximately $9.0 million for the year ended December 31, 2009 to $2.5 million for the year ended December 31, 2010. Lower of cost or market write-downs were higher for the year ended December 31, 2009 as compared to the year ended December 31, 2010, due to lower market prices for certain products in 2009. During the fourth quarter 2010, we also recognized a $1.0 million write-down of bastnasite stockpile inventory and a $1.7 million write-down of WIP inventory based on estimated REO quantities. Our processing facility at Molycorp Mountain Pass was shut down during March 2010 due to high water levels in our evaporation ponds. In April and May 2010, operations were limited during the start-up phase of our second pilot processing campaign, which decreased production volumes during the first and second quarters of 2010. As a result of the shut-down, labor, maintenance and other costs, such as depreciation expense, normally charged to inventory were expensed as period costs and are reflected in our higher cost of goods sold for the year ended December 31, 2010 compared to the same period in 2009.

Total production costs charged to inventory were $16.9 million and $23.4 million for the year ended December 31, 2010 and 2009, respectively. Inventory purchases were $9.3 million and $0.2 million for year ended December 31, 2010 and 2009. The primary products we purchased during those periods were lanthanum oxide, cerium oxide, didymium oxide metal and praseodymium oxide.

The following is a summary of rare earth products manufactured at Molycorp Mountain Pass during 2010 and 2009, in metric tons.

	Year Ended December 31,	
Molycorp Mountain Pass	**2010**	**2009**
Lanthanum products	857	1,579
Cerium products	215	—
Didymium oxide	224	524

Production costs charged to inventory were lower during the year ended December 31, 2010 as compared to the year ended December 31, 2009, due to the plant shut-down and start-up of the second pilot processing campaign, as discussed above. We expensed $11.0 million of production-related costs that would have otherwise been charged to inventory if we maintained normal production levels during this time period. We expect to attain increased production levels during 2011.

Chemical costs allocated to production were $4.2 million and $6.7 million for the year ended December 31, 2010 and 2009, respectively. Chemical costs in the year ended December 31, 2010 were lower compared to the same period in 2009 due to lower production levels primarily during the first and second quarters and improved processing techniques that reduced chemical usage.

Labor costs, including related employee benefits, allocated to production were approximately $9.0 million and $9.2 million for the year ended December 31, 2010 and 2009, respectively. During the year ended December 31, 2009, labor costs include a bonus, which was granted to all union employees who worked on our neodymium from lanthanum, or NFL, pilot processing development project of $1.4 million. The bonus was paid in March 2010. In the third quarter of 2010, union workers and other employees at our Molycorp Mountain Pass facility received additional bonuses totaling approximately $0.2 million. Higher labor costs during the year ended December 31, 2009 were primarily attributable to the above mentioned bonus granted to all union employees on the NFL pilot processing development project.

Maintenance costs, including maintenance labor and supplies, were $2.2 million and $1.9 million for the year ended December 31, 2010 and 2009, respectively. Utility charges, which primarily include electricity, were $2.1 million and $2.0 million for the year ended December 31, 2010 and 2009, respectively.

Other costs allocated to production, including depreciation, were approximately $10.5 million and $5.2 million for the year ended December 31, 2010 and 2009, respectively. These costs were higher in 2010 due to the significant increase in depreciation expense from the placement of assets into service of over $7.0 million related to the second pilot processing campaign.

In March 2010, we also began blending our existing didymium oxide inventory, which, prior to blending, contained varying percentages of neodymium and praseodymium, to create a more consistent content which better meets customer specifications. As of December 31, 2010, approximately 500 mt were blended. Blended inventory is reclassified from work in process to finished goods. We began selling the blended didymium oxide inventory in August 2010. In addition, we began shipments of didymium oxide inventory to an off-site processing facility to be converted into metal. Sales of didymium metal, which is processed offsite, commenced in the fourth quarter of 2010.

Selling, General and Administrative Expenses

Selling, general and administrative expenses, including stock-based compensation, were $47.5 million and $12.7 million for the year ended December 31, 2010 and 2009, respectively. Beginning in the first quarter of 2010, we experienced a significant increase in professional fees primarily due to increasing our staffing as we prepared to start construction of our new facilities in January 2011 and other business development activities to execute our "mine-to-magnets" business plan. We have also experienced increased spending for accounting, information technology consulting and engineering services. Our consolidated stock-based compensation expense was $28.7 million and $0.2 million for the years ended December 31, 2010 and 2009, respectively. Stock-based compensation for the year ended December 31, 2010 was primarily associated with incentive shares granted on November 1, 2009 which, on the grant date, were classified as a liability and valued at zero dollars using the intrinsic value method. In connection with the corporate reorganization and initial public offering on August 3, 2010, these shares were ultimately converted into 2,232,740 shares of restricted common stock with a total fair value of $31.3 million, the majority of which was recognized in 2010.

Operating Losses

Operating losses for the years ended December 31, 2010 and 2009 were approximately $51.2 million and $28.6 million, respectively.

Capital Expenditures

Our capital expenditures, on an accrual basis, totaled $38.6 million and $7.1 million for the year ended December 31, 2010 and 2009, respectively. Most of the capitalized costs incurred during the year ended December 31, 2010 are related to our second pilot processing campaign, which commenced in

April 2010, and the startup of our modernization and expansion project at the Molycorp Mountain Pass facility. These costs were primarily associated with engineering and consulting fees.

Related-Party Transactions

In May and July 2009, we entered into transactions with a stockholder under which we borrowed an aggregate $6.6 million, secured by certain product inventories. Borrowings under this agreement required interest at a variable rate of LIBOR plus one percent. On November 15, 2009, the stockholder converted outstanding advances plus accrued interest totaling $6.8 million into 2,303,033 shares of Molycorp common stock (giving effect to the Corporate Reorganization and the conversion of Class A common stock into common stock in connection with the IPO) in settlement of the obligation.

In June 2010, we borrowed approximately $5.0 million from Traxys. This borrowing was secured by certain product inventories and it carries an initial annual interest rate of 6%. The interest rate is based on a three-month LIBOR plus a margin, which is subject to change every three months. Both parties have agreed that 50% of all didymium oxide sales will be subject to this agreement. As such, we have made principal and interest payments of $1.1 million and $0.2 million, respectively for the year ended December 31, 2010. As of December 31, 2010, the outstanding note payable to Traxys under this agreement was $3.1 million and $1.3 million in accounts payable related to the sales made, but not remitted to Traxys and affiliates as of December 31, 2010.

During 2010, we have jointly marketed and sold certain lanthanum oxide, cerium oxide and erbium oxide products with Traxys and its affiliates. Per the terms of the arrangement gross margin is split equally once all the costs associated with the sale are recovered by both parties. As a result of this arrangement, we recorded a related party receivable and a payable of $116,000 and $120,000 respectively. In addition, during 2010 we made purchases of lanthanum oxide and cerium oxide from Traxys and affiliates in the amount of $2.5 million. These products were subsequently sold to our customers. We recorded a payable to Traxys and affiliates associated with these product purchases of $0.3 million as of December 31, 2010.

2012 Outlook

We anticipate China based producers and suppliers will continue to limit the quantity of REOs available outside of China in 2012, supporting strong pricing for REOs despite a price decrease for certain REOs during the second half of 2011, which was partially driven by a temporary release of inventories by market speculators in and out of China. We believe this trend will create opportunities for us to increase sales volumes and improve pricing terms for our products. While we experienced a short-term decrease in market demand beginning in the third quarter of 2011 primarily from the aftermath of the earthquake/tsunami in Japan and the effects of rapid price escalation in the second quarter of 2011, we anticipate a rebound in demand during the first half of 2012, although there can be no assurance. While the volume of products we are currently able to produce remain limited by the capability of our existing production facilities, we anticipate further expanding our products and markets throughout 2012, including market penetrations of our XSORBX® technology into the water treatment industry. We will continue to supply Molycorp Sillamäe and Molycorp Tolleson with rare earth concentrates and REOs from our Molycorp Mountain Pass facility to utilize their production capabilities and maximize value from these acquisitions. We believe that our consolidated sales in 2012 will be sufficient to fund our operating activities throughout the year, including consolidated selling, general and administrative expenses, which we anticipate to be in the $50.0 - $60.0 million range in 2012. We expect our REO production in 2012 to be between 8,000 mt and 10,000 mt. Additionally, we expect to produce between 315 mt and 325 mt of rare metals at our Molycorp Sillamäe facility in 2012.

Capital Investments

We are incurring significant capital expenditures under our plans to modernize and expand our Molycorp Mountain Pass facility, as well as consistent expenditures to replace assets necessary to sustain safe and reliable production. Most of the facilities and equipment acquired in connection with the acquisition of the Molycorp Mountain Pass facility are at least 20 years old. We are executing an accelerated modernization plan that includes the refurbishment of the Molycorp Mountain Pass mine and related processing facilities through 2012 in order to increase REO production. We expect to incur total estimated capital expenditures of approximately $895 million, excluding capitalized interest, for property, plant and equipment additions in connection with Project Phoenix Phase 1 and Project Phoenix Phase 2. In October 2011, the Board of Directors, or Board, approved an acceleration of the Project Phoenix Phase 1 initial start-up by three months and authorized an additional investment of $114 million in acceleration costs, including contingency funds, which will be funded from current cash flow and existing cash balances. The $114 million incremental investment is included in the $895 million total estimate for Project Phoenix Phase 1 and Project Phoenix Phase 2. As a result of this acceleration, we anticipate our 2012 production will increase by approximately 3,500 mt of REO, with a total 2012 production expected to expand to between 8,000 and 10,000 mt of REO. We accelerated Project Phoenix Phase 1 start-up due to robust rare earth oxide markets and favorable project economics. This acceleration, if successful, will help to improve the diversity of global supply, which is an increasingly urgent matter for rare earth consumers. By accelerating Project Phoenix Phase 1 start-up, we also expect to reduce the overall project risk by allowing for a more orderly and sequential start-up of the various circuits of this complex plant. All of the amounts for future capital spending described above are initial estimates that are subject to change as the projects are further developed. Total capital spending for our Molycorp Mountain Pass facility, plant and modernization project in 2012 is expected to be approximately $475.0 million. We are encountering cost pressures on our project, and we are re-evaluating the impact on the budget.

We expect to incur $20.0 million to $24.0 million at our Molycorp Sillamäe facility in 2012 for the renovation of the premises, the upgrade of laboratory and production equipment, the extension of the warehouse, as well as the improvement of the information technology system.

At our Molycorp Tolleson facility, we expect to incur $11.0 million to $15.0 million in 2012 to increase the alloy production capacity by 2,000 metric tons per year with the addition of one new strip casting furnace, and to expand NdFeB alloy production.

Liquidity and Capital Resources

Under our current business plan, we intend to incur total estimated capital expenditures of approximately $895 million, excluding capitalized interest, to complete Project Phoenix Phase 1 and Project Phoenix Phase 2. Our total estimated capital expenditures of $895 million do not include corporate, selling, general and administrative expenses, which we estimate to be an additional $50 million to $60 million per year, and capitalized interest.

We expect to finance our remaining capital expenditures under Project Phoenix Phase 1 and Phase 2, as well as our working capital requirements, with our available cash balances as of December 31, 2011 and anticipated cash flow from operations. Additionally, we may elect to satisfy certain capital expenditure requirements through vendor financing, leasing or other financing arrangements.

The $895 million in the aggregate includes an additional $114 million that the Board approved in October 2011. We anticipate that the $114 million increase, which includes contingency funds and will be funded from current cash flow and existing cash balances, will allow us to accelerate Project Phoenix Phase 1 start-up by three months. As a result of this acceleration, we anticipate our 2012 production will increase by approximately 3,500 mt of REO, with a total 2012 production expected to expand to

between 8,000 to 10,000 mt of REO. We accelerated Project Phoenix Phase 1 start-up due to robust rare earth oxide markets and very favorable project economics. This acceleration, if successful, will help to improve the diversity of global supply, which is an increasingly urgent matter for rare earth consumers. By accelerating Project Phoenix Phase 1 start-up, we also expect to reduce the overall project risk by allowing for a more orderly and sequential start-up of the various circuits of this complex plant. Our estimated capital expenditures of $895 million do not include corporate, selling, general and administrative expenses, which we estimate to be an additional $50 million to $60 million per year, and capitalized interest. We expect to finance the remaining capital expenditures under Project Phoenix Phase 1 and 2 as well as working capital requirements, with Molycorp Minerals, LLC's available cash balances of $418.9 million as of December 31, 2011, and anticipated cash flow from operations. Additionally, we may elect to satisfy certain capital expenditure requirements through vendor financing, leasing or other financing arrangements.

In January 2012, we entered into an agreement with Molymet, pursuant to which Molymet has agreed to purchase 12.5 million shares of our common stock for $390 million, which amount was determined based on the average daily volume weighted average price of our common stock on The New York Stock Exchange for the 20 consecutive trading days immediately preceding the date of the agreement, plus a 10% premium. Pursuant to the agreement, we are obligated, at closing, to increase the size of our Board and have given Molymet the right to nominate a member of our Board for so long as Molymet owns a certain percentage of our common stock. Additionally, the agreement provides Molymet with three demand registration rights for the shares of common stock it is purchasing pursuant to the agreement.

The consummation of the offering, which we anticipate to occur in the second quarter of 2012, remains subject to the satisfaction of certain customary closing conditions, including the receipt of certain governmental regulatory approvals. Proceeds from the Molymet investment will be retained by us for general corporate purposes and are expected to be used to finance our future growth, including pursuant to our vertical supply chain integration business model.

Cash Provided from Operating Activities

Net cash provided from operations during the year ended December 31, 2011 was $43.0 million, an increase of $71.7 million as compared to 2010. This change was primarily driven by a higher net income, partially offset by a net increase in working capital requirements. Significant sales growth combined with larger production volume throughout 2011 contributed to much higher account receivable and inventory balances as compared to the same period in 2010.

Investing Activities

Net cash used in investing activities increased to $349.4 million during 2011 as compared to $59.4 million during 2010. This increase was due to higher capital expenditures as part our modernization and expansion plan at Molycorp Mountain Pass, the cash paid for the business acquisitions we completed in April 2011, the investment in Boulder Wind Power, Inc. we made in September 2011.

Financing Activities

Net cash provided from financing activities increased from $397.6 million in 2010 to $411.3 million in 2011, primarily due to the net proceeds from the sale of our Convertible Preferred Stock and from the sale of our Convertible Notes, partially offset by the $9.0 million preferred dividend that we paid through December 2011, and $2.4 million of net debt repayments.

Liquidity of Operating Subsidiaries

Our total $418.9 million of cash and cash equivalents as of December 31, 2011 is comprised of 1) $407.4 million held by Molycorp Minerals, LLC, which represents liquidity available at the corporate level to fund the remaining capital expenditures under Project Phoenix Phase 1 and Project Phoenix Phase 2 as well as the working capital needs at Molycorp Mountain Pass; 2) $0.5 million held by Molycorp Sillamäe; 3) $10.8 million held by Molycorp Tolleson; and 4) $0.2 million held by the sales office in Tokyo, Japan. In addition to cash and cash equivalents, the primary sources of liquidity of our operating subsidiaries are cash provided by operations and, in the case of Molycorp Sillamäe, borrowing under certain bank loans. From time to time, the sources of liquidity for Molycorp Sillamäe and Molycorp Tolleson may be supplemented by short-term loans from Molycorp Minerals, LLC.

As of December 31, 2011, Molycorp Minerals, LLC advanced funds, in the form of interest bearing unsecured promissory notes, to Molycorp Sillamäe for $12.0 million and to Molycorp Tolleson for $37.4 million. Principal repayments under these notes are due to Molycorp Minerals, LLC during the second and third quarter of 2012. Our operating subsidiaries' liquidity generally is used to fund their working capital requirements, capital expenditures and third-party debt service requirements.

Contractual Obligations

As of December 31, 2011, we had the following contractual obligations:

	Payments Due by Period				
Contractual Obligations	**Total**	**Less Than 1 Year**	**1 - 3 Years**	**4 - 5 Years**	**More Than 5 Years**
			(In thousands)		
Operating lease obligations(1)	$ 2,984	$ 962	$ 1,574	$ 448	$ —
Purchase obligations and other commitments(2)	294,252	279,205	15,047	—	—
Employee obligations(3)	4,993	4,953	40	—	—
Asset retirement obligations(4)	31,778	346	6,919	567	23,946
Debt , excluding interest	237,511	1,960	4,302	231,249	—
Total	$571,518	$287,426	$27,882	$232,264	$23,946

(1) Represents all operating lease payments for office space, land and office equipment.

(2) Represents contractual commitments for the purchase of materials and services from vendors. Amount includes $2.4 million of potential environmental obligations related to defects in pond liners.

(3) Represents primarily payments due to employees for awards under our annual incentive plan.

(4) Under applicable environmental laws and regulations, we are subject to reclamation and remediation obligations resulting from our operations. The amounts presented above represent our estimated future undiscounted cash flows required to satisfy the obligations currently known to us.

On September 30, 2010, we entered into a natural gas transportation lease agreement with Kern River Gas Transmission Company, or Kern River, under which we agreed, subject to certain conditions, to make payments totaling $5.2 million per year ($0.43 million per month) for 10 years beginning in April 2012 to Kern River in exchange for the designing, permitting, constructing, operating, and maintaining of facilities necessary to provide natural gas to the power generation facility to be constructed at our Molycorp Mountain Pass facility. However, the contractual obligation table above does not include any obligations under this natural gas transportation lease agreement with Kern River as the lease agreement is subject to certain conditions not yet met as of December 31, 2011, including

receipt by Kern River of all approvals required to construct the necessary Delivery Facilities (as defined in the agreement) and effectuate the proposed service at the specified rates. Such requirements include all necessary authorizations from federal, state, local and/or municipal agencies or other governmental authorities and all requirements of Kern River's FERC Gas Tariff.

Off-Balance Sheet Arrangements

As of the date of this Annual Report on Form 10-K, our only off-balance sheet arrangements are the operating leases and purchase obligations included in the contractual obligations table above.

Critical Accounting Estimates

Asset Retirement Obligations

Our asset retirement obligations, or AROs, arise from our San Bernardino County conditional use permit, approved mining plan and federal, state and local laws and regulations, which establish reclamation and closure standards for all aspects of our surface mining operation. Comprehensive environmental protection and reclamation standards require that we, upon closure of our Molycorp Mountain Pass facility, restore the property in accordance with an approved reclamation plan issued in conjunction with our conditional use permit.

Our AROs are recorded initially at fair value, or the amount at which we estimate we could transfer our future reclamation obligations to informed and willing third parties. We use estimates of future third party costs to arrive at the AROs because the fair value of such costs generally reflects a profit component. It has been our practice, and we anticipate it will continue to be our practice, to perform a substantial portion of the reclamation work using internal resources. Hence, the estimated costs used in determining the carrying amount of our AROs may exceed the amounts that are eventually paid for reclamation costs if the reclamation work were performed using internal resources.

To determine our AROs, we calculate the present value of the estimated future reclamation cash flows based upon our permit requirements, which is based upon the approved mining plan, estimates of future reclamation costs and assumptions regarding the useful life of the asset to be remediated. These cash flow estimates are discounted on a credit-adjusted, risk-free interest rate based on U.S. Treasury bonds with a maturity similar to the expected life of the asset.

The amount initially recorded as an ARO for our Molycorp Mountain Pass facility may change as a result of changes to the mine permit, and changes in the estimated costs or timing of reclamation activities. We periodically update estimates of cash expenditures associated with our ARO obligations in accordance with U.S. GAAP, which generally requires a measurement of the present value of any increase in estimated reclamation costs using the current credit-adjusted, risk-free interest rate. Adjustments to the ARO for decreases in the estimated amount of reclamation costs are measured using the credit-adjusted, risk-free interest rate as of the date of the initial recognition of the ARO.

Reserves, Mineral Properties and Development Costs

Mineral properties represent the estimated fair value of the mineral resources associated with the Molycorp Mountain Pass facility as of the acquisition date. As of February 6, 2010, SRK Consulting, an independent consulting firm that we retained to assess our reserves, estimated total proven reserves of 88.0 million pounds of REO contained in 0.480 million tons of ore, with an average ore grade of 9.38%, and probable reserves based on historic and estimated recoveries of 2.12 billion pounds of REO contained in 13.108 million tons of ore, with an average ore grade of 8.20%, in each case using a cut-off grade of 5.0% REO. As a result of increased REE prices during the three-year period ended December 31, 2011, the estimated economic cut-off grade for the deposit is less than the 5% cut-off grade initially applied by SRK Consulting. In addition to REE pricing, the cut-off grade calculation

includes other technical inputs such as process recovery and operating cost information. We continue to evaluate our operating cost and cost recovery information. Currently, we do not propose a change to the 5% cut-off grade that defines our reserve estimate. Accordingly, as of December 31, 2011, our estimated proven and probable reserves remain 88.0 million pounds of REO and 2.12 billion pounds of REO, respectively. As of December 31, 2011, we began mining of fresh ore for use in the new plant, below the de minimis amount that would require accounting for the depletion of our mineral reserve.

Income Taxes

We account for income taxes in accordance with Accounting Standard Codification 740, *Income Taxes*. This guidance requires that deferred tax assets and liabilities be recognized for the tax effect of temporary differences between the financial statement and tax basis of recorded assets and liabilities at enacted statutory tax rates. This guidance also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax assets will not be realized. The recoverability of deferred tax assets is based on both our historical and anticipated earnings levels, and is reviewed each reporting period to determine if any additional valuation allowance is necessary when it is more likely than not that amounts will not be recovered. We have concluded that no valuation allowance is required as of December 31, 2011 and a 100% valuation allowance was required as of December 31, 2010.

Inventory

Inventories consist of raw materials, work in process, finished goods, stockpiles of bastnasite concentrate and materials and supplies. Inventory cost is determined using the lower of weighted average cost or estimated net realizable value. Inventory expected to be sold in the next 12 months is classified as a current asset in the consolidated balance sheet. Cash flows related to the sale of inventory are classified as operating activities in the consolidated statements of cash flows.

Write-downs to estimated net realizable value are charged to cost of goods sold. Many factors influence the market prices for REOs and, in the absence of established prices contained in customer contracts, management uses Metal-Pages as an independent pricing source to evaluate market prices for REOs at the end of each quarter. Metal-Pages is a widely recognized pricing source within our industry, which collects and summarizes data from rare earth producers in China and Europe. We make appropriate modifications to the Metal-Pages prices, when applicable, to account for differences between the REO grade of our inventory and the REO grade assumed in the corresponding Metal-Pages price.

We evaluate the carrying value of finished goods and materials and supplies inventories each quarter giving consideration to slow-moving items, obsolescence, excessive levels and other factors and recognize related write-downs as necessary. Finished goods inventories that may not meet customer specifications or current market demand, and quantities that exceed a two year supply, generally require write-downs to estimated net realizable value.

We evaluate our stockpiled concentrates each quarter and recognize write-downs as necessary to adjust the carrying value to estimated net realizable value. Our analysis utilizes current market prices from Metal-Pages and Asian Metal and estimated costs to complete the processing of our concentrates to REOs. Costs associated with the processing of concentrates through our planned modernized facilities are based on internal and external engineering estimates and primarily include labor and benefits, utilities, chemicals, operating supplies, maintenance, depreciation and amortization and plant overhead expenses. Our estimated costs per kilogram of REO to be produced in our modernized facilities are significantly lower than our current production costs per kilogram, resulting in a higher carrying value for our stockpiled concentrates. The use of new and proprietary technologies will allow us to improve our process recoveries and substantially reduce our water consumption. We will reduce

our energy costs through the use of a natural gas powered co-generation power plant that we are installing as part of our modernization project. Additionally, we intend to produce our own hydrochloric acid and sodium hydroxide and recycle our acid and base, thereby reducing our cost of chemicals. We estimate, based upon our current business plan and estimated future demand for the component rare earth elements to be recovered, that our inventory of stockpiled concentrates will be fully utilized in the production of our rare earth products by March 31, 2013.

Asset Impairments

We account for asset impairment in accordance with ASC 360, *Property Plant and Equipment.* Long-lived assets such as property, plant and equipment, mineral properties and purchased intangible assets subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Impairment is considered to exist if the total estimated future cash flow on an undiscounted basis is less than the carrying amount of the related assets. An impairment loss is measured and recorded based on the discounted estimated future cash flows. Changes in significant assumptions underlying future cash flow estimates or fair values of assets may have a material effect on our financial position and results of operations.

Factors we generally consider important in our evaluation and that could trigger an impairment review of the carrying value of long-lived assets include the following:

- significant underperformance relative to expected operating results;
- significant changes in the way assets are used;
- underutilization of our tangible assets;
- discontinuance of certain products by us or by our customers;
- a decrease in estimated mineral reserves; and
- significant negative industry or economic trends.

The recoverability of the carrying value of our mineral properties is dependent upon the successful development, start-up and commercial production of our mineral deposit and the related processing facilities. Our evaluation of mineral properties for potential impairment primarily includes assessing the existence or availability of required permits and evaluating changes in our mineral reserves, or the underlying estimates and assumptions, including estimated production costs. The determination of our proven and probable reserves is based on extensive drilling, sampling, mine modeling, and the economic feasibility of accessing the reserves. Assessing the economic feasibility requires certain estimates, including the prices of REOs to be produced and processing recovery rates, as well as operating and capital costs. The estimates are based on information available at the time the reserves are calculated.

Although we believe the carrying values of our long-lived assets were realizable as of the relevant balance sheet date, future events could cause us to conclude otherwise.

Recent Accounting Pronouncements

In June 2011, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update (ASU) 2011-05: *Presentation of Comprehensive Income.* In this update, an entity has the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In both options, an entity is required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. Regardless of whether an entity chooses to present comprehensive income in a single continuous statement or in two separate but consecutive statements, the entity is required to present on the face of the financial statements reclassification adjustments for items that are reclassified from other comprehensive income to net income in the statement(s) where the components of net income and the components of other comprehensive income are presented. The amendments in this update do not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income. The amendments do not change the option for an entity to present components of other comprehensive income either net of related tax effects or before related tax effects, with one amount shown for the aggregate income tax expense or benefit related to the total of other comprehensive income items. In both cases, the tax effect for each component must be disclosed in the notes to the financial statements or presented in the statement in which other comprehensive income is presented. The amendments do not affect how earnings per share is calculated or presented. For public entities, the amendments, which should be applied retrospectively, are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. Early adoption is permitted.

We early adopted this update and elected, in the second quarter of 2011, to present comprehensive income in two separate, but consecutive statements. No retroactive application of this update was necessary as we did not have any items entering into the determination of comprehensive income (loss) other than net income (loss) for all periods prior to the second quarter of 2011.

In September 2011, the FASB issued ASU 2011-08, *Testing Goodwill for Impairment.* Under this updated guidance, an entity will have the option to first assess qualitatively whether it is necessary to perform the current two-step goodwill impairment test. If an entity believes, as a result of its qualitative assessment, that it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is necessary. The update does not change how an entity performs the two-step impairment test under the current guidance. This ASU is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. Early adoption is permitted. We do not expect the adoption of this updated guidance to have a significant impact on our financial statements.

In December 2011, the FASB issued ASU 2011-12, *Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in ASU 2011-05.* ASU 2011-12 defers the requirement that companies present reclassification adjustments for each component of Accumulated Other Comprehensive Income (AOCI) in both net income and other comprehensive income on the face of the financial statements. Companies will continue to be required to present amounts reclassified out of AOCI on the face of the financial statements or disclose those amounts in the notes to the financial statements. During the deferral period, there is no requirement to separately present or disclose the reclassification adjustments into net income.

For the period ended December 31, 2011 we did not have any reclassification adjustments for components of AOCI.

Special Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Securities Exchange Act of 1934 and the Securities Act of 1933. All statements in this Annual Report on Form 10-K, other than statements of historical fact, are forward-looking statements. These forward-looking statements are made pursuant to safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and represent our beliefs, projections and predictions about future events or our future performance. You can identify forward-looking statements by terminology such as "may," "will," "would," "could," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "potential," "continue" or the negative or plural of these terms or other similar expressions or phrases. These forward-looking statements are necessarily subjective and involve known and unknown risks, uncertainties and other important factors that could cause our actual results, performance or achievements or industry results to differ materially from any future results, performance or achievement described in or implied by such statements.

Factors that may cause actual results to differ materially from expected results described in forward-looking statements include, but are not limited to:

- the satisfaction of the closing conditions necessary to complete Molymet's investment in us, including our receipt of necessary government regulatory approvals;
- our ability to secure additional capital to implement our business plans;
- our ability to complete Project Phoenix Phase 1, as well as Project Phoenix Phase 2, and reach full planned production rates for rare earth oxides and other planned downstream products;
- the final costs of Project Phoenix Phase 1, including the accelerated start-up of our Molycorp Mountain Pass facility, and Project Phoenix Phase 2, which may differ from estimated costs;
- uncertainties associated with our reserve estimates and non-reserve deposit information;
- uncertainties regarding the results of our exploratory drilling programs;
- uncertainties regarding global supply and demand for rare earth materials;
- our ability to successfully integrate recently acquired businesses;
- our ability to enter into additional definitive agreements with our customers and our ability to maintain customer relationships;
- completion of the formation of the proposed sintered NdFeB rare earth magnet joint venture, which remains subject to the satisfaction of customary closing conditions;
- the proposed sintered NdFeB rare earth magnet joint venture's ability to successfully manufacture magnets within its expected timeframe;
- our ability to maintain appropriate relations with unions and employees;
- our ability to successfully implement our "mine-to-magnets" strategy;
- commercial acceptance of our new products, such as XSORBX®;
- environmental laws, regulations and permits affecting our business, directly and indirectly, including, among others, those relating to mine reclamation and restoration, climate change, emissions to the air and water and human exposure to hazardous substances used, released or disposed of by us; and
- uncertainties associated with unanticipated geological conditions related to mining.

See "Item 1A. Risk Factors" for a more complete discussion of these risks and uncertainties and for other risks and uncertainties. Any forward-looking statement you read in this Annual Report on Form 10-K reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, operating results, growth strategy and liquidity. You should not place undue reliance on these forward-looking statements because such statements speak only as to the date when made. We assume no obligation to publicly update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future, except as otherwise required by applicable law.

This Annual Report on Form 10-K also contains statistical data and estimates we obtained from industry publications and reports generated by third parties. Although we believe that the publications and reports are reliable, we have not independently verified their data.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Our operations may be impacted by commodity prices, geographic concentration, changes in interest rates and foreign currency exchange rates.

Commodity Price Risk

Our current principal product mix, including cerium, lanthanum, praseodymium, neodymium, tantalum and niobium are commodities but are not traded on any commodity exchange. As such, direct hedging of the prices for future production cannot be undertaken. A portion of our current business is conducted in the spot market; therefore, prices can vary with the transaction and individual bids received. Our products are primarily marketed to manufacturers as component materials. Prices will vary based on the demand for the end products being produced with the mineral resources we mine and process.

Our sales and profitability are determined principally by the price of the rare earth products, rare metals and magnet alloys that we produce and, to a lesser extent by the price of natural gas and other supplies used in the production process. The prices of our rare earth products are influenced by the price and demand of the end products that our products support, including clean energy technologies. A significant decrease in the global demand for these products may have a material adverse effect on our business. We currently have no hedging contracts for revenues and costs in place and intend to consider hedging strategies in the future.

Our costs and capital investments are subject to market movements in other commodities such as natural gas and chemicals. We may enter into derivative contracts for a portion of the expected usage of these products, but we do not currently have any derivative contracts on these commodities and we do not currently anticipate entering into derivative agreements on commodities.

Interest Rate Risk

Our total debt obligations, including our inventory financing arrangement with Traxys, were $238.5 million as of December 31, 2011. Our exposure to interest rate risk as a result of the variable interest debt included in these obligations would result in a roughly $0.1 million increase/decrease in interest rate expense for every 100 basis point increase/decrease in the underlying interest rate. We are not significantly impacted by variations in interest rates at this time. Our exposure to interest rate risk would increase if, for example, we obtain and utilize additional debt facilities in the future.

Foreign Currency Risk

We are exposed to fluctuations of the U.S. dollar (our reporting currency) against the functional currency (the euro) of Molycorp Sillamäe, our operating subsidiary in Estonia, when we translate Molycorp Sillamäe's financial statements into U.S. dollars for inclusion in our consolidated financial statements. Cumulative translation adjustments are recorded in accumulated other comprehensive income (loss) as a separate component of equity. Any increase (decrease) in the value of the U.S. dollar against the euro results into unrealized foreign currency translation losses (gains) with respect to assets acquired in, liabilities assumed from, intercompany balances with and results of operations from Molycorp Sillamäe. Therefore, we may experience a negative impact on our comprehensive income (loss) and stockholders' equity with respect to our holdings in Molycorp Sillamäe as a result of foreign currency translation. We generally do not hedge against the risk that we may incur non-cash losses upon the translation of the financial statements of our Estonian subsidiary into U.S. dollars.

We are exposed to fluctuations in foreign currency exchange rates relative to a small portion of our purchases of equipment and have entered into foreign currency forward contracts to hedge against such foreign currency risk.

We are also exposed to fluctuations of the U.S dollar against the Japanese Yen as it pertains to our investment in the joint venture with Mitsubishi and Daido. We will contribute, upon achievement of certain milestones and subject to our Board's approval, Japanese Yen (JPY) 2.5 billion in cash, or approximately $32.7 million based on the JPY/ U.S. dollar exchange rate as of January 31, 2012, in exchange of ordinary shares of the joint venture over a period of twelve months starting in January 2012.

The actual remittance amounts will vary depending on the future exchange rate between the U.S. dollar and the Japanese Yen, and the achievement of certain milestones by the joint venture.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Molycorp, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations and comprehensive income, of stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Molycorp, Inc. and its subsidiaries (a development stage company) at December 31, 2011 and 2010, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2011 and cumulatively for the period from June 12, 2008 (Inception) through December 31, 2011 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these 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 Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our audits (which was an integrated audit in 2011). We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

As described in Management's Annual Report on Internal Control Over Financial Reporting, management has excluded Molycorp Sillamäe and Molycorp Tolleson from its assessment of internal control over financial reporting as of December 31, 2011 because they were acquired by the Company in two purchase business combinations during 2011. We have also excluded Molycorp Sillamäe and Molycorp Tolleson from our audit of internal control over financial reporting. Molycorp Sillamäe and Molycorp Tolleson are wholly-owned subsidiaries whose total assets and total revenues on a combined basis represent 10% and 36%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2011.

/s/ PricewaterhouseCoopers LLP
Denver, Colorado
February 27, 2012

MOLYCORP, INC.
(A Company in the Development Stage)
Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	December 31, 2011	December 31, 2010
ASSETS		
Current assets:		
Cash and cash equivalents	$ 418,855	$316,430
Trade accounts receivable	70,679	16,421
Inventory (Note 4e)	111,943	18,822
Deferred charges (Note 4p)	7,318	—
Prepaid income taxes	10,514	—
Prepaid expenses and other assets	19,735	1,759
Total current assets	639,044	353,432
Non-current assets:		
Deposits	23,286	26,200
Property, plant and equipment, net (Note 4g)	561,628	93,966
Inventory (Note 4e)	4,362	5,212
Intangible asset, net (Note 4j)	3,072	639
Investments (Note 4l)	20,000	—
Goodwill (Note 5)	3,432	—
Other assets	301	111
Total non-current assets	616,081	126,128
Total assets	$1,255,125	$479,560
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Trade accounts payable	$ 161,587	$ 13,009
Accrued expenses (Note 4m)	12,898	4,225
Deferred tax liabilities (Note 4p)	1,356	—
Debt (Note 4o)	1,516	—
Short-term borrowing—related party (Note 10)	870	3,085
Current portion of asset retirement obligation (Note 4n)	396	393
Total current liabilities	178,623	20,712
Non-current liabilities:		
Asset retirement obligation (Note 4n)	15,145	12,078
Deferred tax liabilities (Note 4p)	18,899	—
Debt (Note 4o)	196,545	—
Other non-current liabilities	683	257
Total non-current liabilities	231,272	12,335
Total liabilities	409,895	33,047
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Common stock, $0.001 par value; 350,000,000 shares authorized at December 31, 2011 (Note 4q)	84	82
Preferred stock, $0.001 par value; 5,000,000 shares authorized at December 31, 2011 (Note 4q)	2	—
Additional paid-in capital	838,547	539,866
Accumulated other comprehensive loss	(8,481)	—
Surplus (deficit) accumulated during the development stage	15,078	(93,435)
Total stockholders' equity	845,230	446,513
Total liabilities and stockholders' equity	$1,255,125	$479,560

See accompanying notes to the consolidated financial statements.

MOLYCORP, INC.
(A Company in the Development Stage)
Consolidated Statements of Operations and Comprehensive Income
(In thousands, except share and per share amounts)

	Year Ended December 31			Total from June 12, 2008 (Inception) Through December 31, 2011
	2011	2010	2009	
Sales	$ 396,831	$ 35,157	$ 7,093	$ 441,218
Operating costs and expenses:				
Cost of goods sold	(177,890)	(37,591)	(21,785)	(250,293)
Selling, general and administrative (Includes stock-based compensation of $4,508 in 2011, $28,739 in 2010, $241 in 2009, and $33,638 from inception through December 31, 2011)	(64,387)	(47,513)	(12,685)	(127,564)
Depreciation and amortization	(733)	(319)	(191)	(1,262)
Accretion expense	(955)	(912)	(1,006)	(3,123)
Operating income (loss)	152,866	(51,178)	(28,574)	58,976
Other income (expense):				
Other (expense) income	(153)	155	181	237
Foreign currency transaction losses, net	(5,415)	—	—	(5,415)
Interest (expense) income, net	(388)	249	(194)	(323)
	(5,956)	404	(13)	(5,501)
Income (loss) before income taxes	146,910	(50,774)	(28,587)	53,475
Income tax expense	(28,576)	—	—	(28,576)
Net income (loss)	118,334	(50,774)	(28,587)	24,899
Net income attributable to noncontrolling interest	(808)	—	—	(808)
Net income (loss) attributable to Molycorp stockholders	$ 117,526	$ (50,774)	$ (28,587)	$ 24,091
Net income (loss)	$ 118,334	$ (50,774)	$ (28,587)	$ 24,899
Other comprehensive income:				
Foreign currency translation adjustments	(8,481)	—	—	(8,481)
Comprehensive income (loss)	$ 109,853	$ (50,774)	$ (28,587)	$ 16,418
Comprehensive income (loss) attributable to:				
Molycorp stockholders	$ 109,468	$ (50,774)	$ (28,587)	$ 16,033
Noncontrolling interest	385	—	—	385
	$ 109,853	$ (50,774)	$ (28,587)	$ 16,418
Weighted average shares outstanding (Common shares)(1)				
Basic	83,454,221	62,332,054	39,526,568	58,197,912
Diluted	85,220,017	62,332,054	39,526,568	58,694,839
Income (loss) per share of common stock (Note 4r):				
Basic	$ 1.29	$ (0.81)	$ (0.72)	$ 0.24
Diluted	$ 1.27	$ (0.81)	$ (0.72)	$ 0.25

(1) Weighted average shares outstanding include the retroactive treatment of exchange ratios for conversion of Class A common shares and Class B common shares to common stock in conjunction with the initial public offering.

See accompanying notes to the consolidated financial statements.

MOLYCORP, INC.
(A Company in the Development Stage)
Consolidated Statement of Stockholders' Equity
(In thousands, except share and per share amounts)
MOLYCORP, INC

	Class A Common Stock		Common Stock		Series A Mandatory Convertible Preferred Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Surplus (Deficit) Accumulated During the Development Stage	Total Molycorp Stockholders	Noncontrolling interest	Total Equity
	Shares	Amount	Shares	Amount	Shares	Amount						
Balance at June 12, 2008 (Inception)	—	$ —	—	$—	—	$—	$ —	$ —	$ —	$ —	$ —	$ —
Issuance of shares for cash on various dates at $2.37 per share	38,762,268	39	—	—	—	—	91,961	—	—	92,000	—	92,000
Share-based compensation issued on November 6, 2008 at $2.24 per share based on a set dollar amount	66,957	—	—	—	—	—	150	—	—	150	—	150
Net loss	—	—	—	—	—	—	—	—	(14,074)	(14,074)	—	(14,074)
Balance at December 31, 2008	**38,829,225**	**$ 39**	—	**$—**	—	**$—**	**$ 92,111**	**$ —**	**$(14,074)**	**$ 78,076**	**$ —**	**$ 78,076**
Issuance of shares for cash on various dates at $4.68 per share	3,844,858	4	—	—	—	—	18,000	—	—	18,004	—	18,004
Conversion of short term borrowings from member plus related accrued interest in common shares on November 15, 2009 at $2.96 per share based on a contractual price	2,303,033	2	—	—	—	—	6,829	—	—	6,831	—	6,831
Exercise of employee options on September 4, 2009 at $2.37 per share (Note 8)	21,069	—	—	—	—	—	50	—	—	50	—	50
Share-based compensation	—	—	—	—	—	—	241	—	—	241	—	241
Net loss	—	—	—	—	—	—	—	—	(28,587)	(28,587)	—	(28,587)
Balance at December 31, 2009	**44,998,185**	**$ 45**	—	**$—**	—	**$—**	**$117,231**	**$ —**	**$(42,661)**	**$ 74,615**	**$ —**	**$ 74,615**
Issuance of shares for cash on various dates at $2.60 per share	5,767,670	6	—	—	—	—	14,994	—	—	15,000	—	15,000
Exercise of employee options on February 1, 2010 at $2.37 per share (Note 8)	126,405	—	—	—	—	—	300	—	—	300	—	300
Conversion of Class A common stock to common stock in conjunction with the initial public offering on August 3, 2010 (Note 4q)	(50,892,260)	(51)	50,892,260	51	—	—	—	—	—	—	—	—
Sale of shares of common stock at $14.00 per share in inititial public offering on August 3, 2010, net of underwriting fees and other offering costs of $29.2 million (Note 4q)	—	—	29,128,700	29	—	—	378,604	—	—	378,633	—	378,633
Conversion of Class B common stock to common stock in conjunction with the initial public offering on August 3, 2010 (Note 4q)	—	—	2,232,740	2	—	—	28,661	—	—	28,663	—	28,663
Stock-based compensation (Note 8)	—	—	37,500	—	—	—	76	—	—	76	—	76
Net loss	—	—	—	—	—	—	—	—	(50,774)	(50,774)	—	(50,774)
Balance at December 31, 2010	—	**$ —**	**82,291,200**	**$82**	—	**$—**	**$539,866**	**$ —**	**$(93,435)**	**$446,513**	**$ —**	**$446,513**
Sale of Series A mandatory convertible preferred stock on February 16, 2011 at $100.00 per share, net of underwriting fees and other offering costs	—	—	—	—	2,070,000	2	199,640	—	—	199,642	—	199,642
Stock-based compensation (Note 8)	—	—	11,424	—	—	—	4,671	—	—	4,671	—	4,671
Issuance of shares for interest in Molycorp Sillamäe on April 1, 2011 at $45.60 per share (Note 4q)	—	—	1,593,419	2	—	—	72,653	—	—	72,655	8,820	81,475
Component of convertible debt	—	—	—	—	—	—	36,227	—	—	36,227	—	36,227
Deferred taxes on component of convertible debt	—	—	—	—	—	—	(14,138)	—	—	(14,138)	—	(14,138)
Net income	—	—	—	—	—	—	—	—	117,526	117,526	808	118,334
Preferred dividends	—	—	—	—	—	—	—	—	(9,013)	(9,013)	—	(9,013)
Other comprehensive income	—	—	—	—	—	—	—	(8,058)	—	(8,058)	(423)	(8,481)
Acquisition of noncontrolling interest	—	—	—	—	—	—	(372)	(423)	—	(795)	(9,205)	(10,000)
Balance at December 31, 2011	—	**$ —**	**83,896,043**	**$84**	**2,070,000**	**$ 2**	**$838,547**	**$(8,481)**	**$ 15,078**	**$845,230**	**$ —**	**$845,230**

See accompanying notes to the consolidated financial statements.

MOLYCORP, INC.
(A Company in the Development Stage)
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,			Total from June 12, 2008 (Inception) through December 31, 2011
	2011	2010	2009	
Cash flows from operating activities:				
Net income (loss)	$ 118,334	$(50,774)	$(28,587)	$ 24,899
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:				
Depreciation and amortization	14,272	6,015	3,896	25,118
Amortization of convertible notes	674	—	—	674
Accretion of asset retirement obligation	955	912	1,006	3,123
Deferred income tax expense	2,924	—	—	2,924
Non-cash inventory write-downs	3,776	3,473	9,035	25,793
Non-cash share-based compensation expense	4,671	28,739	241	33,801
Impairment of fixed assets	—	3,114	—	3,114
Foreign currency transaction losses, net	5,415	—	—	5,415
Loss on disposal of fixed assets	1,296	—	—	1,296
Other operating adjustments	637	(59)	2	580
Net change in operating assets and liabilities (Note 13)	(109,989)	(20,137)	(7,964)	(142,200)
Net cash provided by (used in) operating activities	42,965	(28,717)	(22,371)	(15,463)
Cash flows from investing activities:				
Acquisition of the Mountain Pass facility	—	—	—	(82,150)
Cash paid in connection with acquisitions, net of cash acquired	(30,023)	—	—	(30,023)
Proceeds from sale of investment in joint venture	—	—	9,700	9,700
Cash paid to acquire non-marketable securities	(20,000)	—	—	(20,000)
Deposits	2,897	(26,200)	—	(23,303)
Capital expenditures	(302,180)	(33,129)	(7,285)	(342,915)
Other assets	(119)	(111)	—	(230)
Proceeds from sale of assets	35	9	5	49
Net cash used in investing activities	(349,390)	(59,431)	2,420	(488,872)
Cash flows provided by financing activities:				
Capital contributions from original stockholders	—	15,000	18,004	125,004
Repayments of short-term borrowings—related party	(3,150)	(1,107)	—	(4,257)
Repayments of debt	(4,428)	—	—	(4,428)
Net proceeds from sale of common stock in conjunction with the initial public offering	—	378,633	—	378,633
Net proceeds from sale of preferred stock	199,642	—	—	199,642
Net proceeds from sale of convertible notes	223,100	—	—	223,100
Payments of financing costs	—	(185)	—	(185)
Payments of preferred dividends	(9,015)	—	—	(9,015)
Proceeds from exercise of options	—	300	50	350
Proceeds from short-term borrowings—related party	—	5,008	6,637	11,645
Proceeds from debt	5,131	—	—	5,131
Net cash provided by financing activities	411,280	397,649	24,691	925,620
Effect of exchange rate changes on cash	(2,430)	—	—	(2,430)
Net change in cash and cash equivalents	102,425	309,501	4,740	418,855
Cash and cash equivalents at beginning of the period	316,430	6,929	2,189	—
Cash and cash equivalents at end of period	$ 418,855	$316,430	$ 6,929	$ 418,855

See accompanying notes to the consolidated financial statements.

(1) Company Background

Molycorp, Inc. was formed on March 4, 2010 for the purpose of continuing the business of Molycorp, LLC in corporate form. On April 15, 2010, the members of Molycorp, LLC contributed either (a) all of their member interests in Molycorp, LLC or (b) all of their equity interest in entities that held member interests in Molycorp, LLC (and no other assets or liabilities) to Molycorp, Inc. in exchange for Molycorp, Inc. Class A common stock. Accordingly, Molycorp, LLC and its wholly-owned subsidiary, Molycorp Minerals, LLC ("Molycorp Minerals") became subsidiaries of Molycorp, Inc. (the "Corporate Reorganization"). On June 15, 2010, Molycorp LLC was merged with and into Molycorp Minerals. Molycorp, Inc., together with its consolidated subsidiaries, is referred to herein as the "Company" or "Molycorp."

The Company acquired the Mountain Pass, California rare earth deposit and associated assets (the "Molycorp Mountain Pass facility") and assumed certain liabilities from Chevron Mining, Inc. ("Chevron") on September 30, 2008.

The Molycorp Mountain Pass facility is located in San Bernardino County, California and is the largest rare earth oxide producer outside of China. Rare earth elements ("REEs") are a group of specialty elements with unique properties that make them critical to many existing and emerging applications including:

- clean-energy technologies such as hybrid and electric vehicles, wind turbines and compact fluorescent lighting;
- high-technology applications including cell phones, personal digital assistant devices, digital music players, hard disk drives used in computers, computing devices, "ear bud" speakers and microphones, as well as fiber optics, lasers and optical temperature sensors;
- critical defense applications such as guidance and control systems, communications, global positioning systems, radar and sonar; and
- advanced water treatment applications, including those for industrial, military, homeland security, domestic and foreign aid use.

The REE group includes 17 elements, namely the 15 lanthanide elements, which are lanthanum, cerium, praseodymium, promethium (which does not occur naturally), neodymium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and lutetium, and two elements that have similar chemical properties to the lanthanide elements—yttrium and scandium. The oxides produced from processing REEs are collectively referred to as rare earth oxides ("REOs"). Bastnasite is a mineral that contains REEs.

Operations at the Molycorp Mountain Pass facility began in 1952 under Molybdenum Corporation of America ("MCA"). MCA was purchased by Union Oil of California ("Unocal") in 1977. In 2002, mining operations were suspended at the Molycorp Mountain Pass facility primarily due to softening prices for REOs and a lack of additional tailings disposal capacity. Chevron Corporation purchased Unocal in 2005.

Prior to the acquisition, operations at the Molycorp Mountain Pass facility had been suspended with the exception of a pilot processing project to recover neodymium from lanthanum stockpiles produced prior to Chevron's ownership of Mountain Pass. The neodymium from lanthanum ("NFL") pilot processing project was undertaken to improve the facility's REE processing techniques. From

(1) Company Background (Continued)

June 12, 2008 (Inception) through March 31, 2010, revenue was generated primarily from the sale of products associated with the NFL pilot processing project, which concluded in February 2010. In April 2010, the Company commenced the second pilot processing campaign to recover cerium, lanthanum, didymium (a combination of neodymium and praseodymium) and samarium/europium/gadolinium concentrate from bastnasite concentrate stockpiles.

On April 1, 2011, Molycorp completed the acquisition of a 90.023% controlling stake in AS Silmet located in Sillamäe, Estonia (now known as Molycorp Silmet AS or Molycorp Sillamäe), one of only two rare earth processing facilities in Europe. On October 24, 2011, the Company acquired the remaining 9.977% ownership interest in Molycorp Sillamäe for $10.0 million in cash (see Note 5).

On April 15, 2011, Molycorp completed the acquisition of Santoku America, Inc. based in Tolleson, Arizona (now known as Molycorp Metals and Alloys, Inc. or Molycorp Tolleson), the only producer of rare earth alloys in the United States (see Note 5).

On August 22, 2011, Molycorp opened an office in Tokyo, Japan to provide customer support as well as consulting and technical services to its customers in Japan. Total capital invested for the opening of the office in Tokyo was $0.7 million as of December 31, 2011.

(2) Basis of Presentation

The Company's acquisition of the Molycorp Mountain Pass facility was accounted for as an acquisition of net assets and not a business combination. As described below, the Company's current business plan includes investing substantial capital to restart mining operations, construct and refurbish processing facilities and other infrastructure, and to expand into metal and alloy production. Molycorp will continue as a development stage company until these activities have been completed which is currently expected to be by the fourth quarter of 2012.

The Company's acquisitions of Molycorp Tolleson and of Molycorp Sillamäe in April 2011 have been accounted for as business combinations.

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

(3) Capital Requirements

Most of the facilities and equipment acquired with the Molycorp Mountain Pass facility are at least 20 years old and must be modernized or replaced. Under the initial modernization and expansion plan ("Project Phoenix Phase 1") and the second phase capacity expansion plan ("Project Phoenix Phase 2") approved by the Company's Board of Directors ("Board") in January 2011, the Company intends to incur total estimated capital expenditures of approximately $895 million, excluding capitalized interest, to restart mining operations, construct and refurbish processing facilities and other infrastructure at the Molycorp Mountain Pass facility and expand into metal and alloy production. The $895 million includes an additional $114 million in acceleration costs approved by the Board in October 2011. The increases are due to the increased scope of the project, including the acceleration of construction and design changes to allow a faster conversion to a production rate of 19,050 mt of REO per year with Project Phoenix Phase 1. Following the completion of Project Phoenix Phase 2 construction, which is expected

(3) Capital Requirements (Continued)

to be by the end of the fourth quarter of 2012, Molycorp expects to have the ability to produce, if customer demand warrants, up to approximately 40,000 mt of REO per year by mid-2013 at its Molycorp Mountain Pass facility, or approximately double the expected production capacity upon completion of Project Phoenix Phase 1. Capital expenditures, on an accrual basis, under Project Phoenix Phase 1 and Project Phoenix Phase 2 totaled $388.5 million in 2011 and $31.4 million in 2010, excluding capitalized interest.

The Company expects to finance its remaining capital expenditures under Project Phoenix Phase 1 and Project Phoenix Phase 2, as well as its working capital requirements, with its available cash balances as of December 31, 2011, and anticipated revenue from operations. Additionally, the Company may elect to satisfy certain capital expenditure requirements through vendor financing, leasing or other financing arrangements.

(4) Summary of Significant Accounting Policies

(a) Use of Estimates

The preparation of the financial statements, in accordance with generally accepted accounting principles in the United States of America ("GAAP"), requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Management bases its estimates on the Company's historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ significantly from these estimates under different assumptions and conditions.

Significant estimates made by management in the accompanying financial statements include the collectability of accounts receivable, the recoverability of inventory, the useful lives and recoverability of long-lived assets such as property, plant and equipment, intangible assets and investments, the fair values of assets acquired and liabilities assumed, including business combinations, and the adequacy of the Company's asset retirement obligations.

(b) Sales and Cost of Goods Sold

Sales are recognized when persuasive evidence of an arrangement exists, the risks and rewards of ownership have been transferred to the customer, which is generally when title passes, the selling price is fixed or determinable, and collection is reasonably assured. Title generally passes upon shipment of product from the Company's production facilities. Prices are generally set at the time of, or prior to, shipment. Transportation and distribution costs are incurred only on sales for which the Company is responsible for delivering the product.

Cost of goods sold includes the cost of production as well as write downs to the extent of inventory costs in excess of market values. Primary production costs include labor, raw materials, supplies, maintenance costs, depreciation, and plant overhead.

(4) Summary of Significant Accounting Policies (Continued)

(c) Cash and Cash Equivalents

Cash and cash equivalents consist of cash and liquid investments with an original maturity of three months or less. At December 31, 2011 and 2010, cash and cash equivalents included of $423.4 million and $316.4 million, respectively, of funds held in money market accounts.

(d) Trade Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The Company reviews the need for an allowance for doubtful accounts on a quarterly basis. As of December 31, 2011 and 2010, an allowance for doubtful accounts was not required.

(e) Inventories

Inventories consist of raw materials, work in process ("WIP"), finished goods, stockpiles of bastnasite concentrate, and materials and supplies. Inventory cost is determined using the lower of weighted average cost or estimated net realizable value. Inventory expected to be sold in the next 12 months is classified as a current asset in the consolidated balance sheets. During the fourth quarter of 2011, the Company purchased certain chemical products that will be used at the Molycorp Mountain Pass facility. These chemicals have an estimated useful life of approximately 20 years due to recycling and reuse in the new plant following completion of Project Phoenix Phase 1; accordingly, these chemicals have been classified as long-term raw materials in the consolidated balance sheet as of December 31, 2011.

Molycorp evaluates its production levels and costs to determine if any should be deemed abnormal, and therefore excluded from inventory costs. For the years ended December 31, 2011, 2010 and 2009, and the period from June 12, 2008 (Inception) through December 31, 2011, Molycorp determined that approximately $4.3 million, $11.0 million, $2.5 million and $17.8 million, respectively, of production costs would have been allocated to additional tons produced, assuming Molycorp had been operating at normal production rates. As a result, these costs were excluded from inventory and instead expensed during the applicable periods. The assessment of normal production levels is judgmental and is unique to each quarter. Molycorp models normal production levels and evaluates historical ranges of production in assessing what is deemed to be normal.

Write-downs to estimated net realizable value are charged to cost of goods sold. Many factors influence the market prices for REOs and, in the absence of established prices contained in customer contracts, management uses an independent pricing source to evaluate market prices for REOs at the end of each quarter. For the years ended December 31, 2011, 2010 and 2009, and cumulatively for the period from June 12, 2008 (Inception) through December 31, 2011, the Company recognized write-downs of $2.8 million, $2.5 million, $9.0 million and $23.8 million, respectively, as a result of production costs in excess of certain REO market prices. In addition, during the year ended December 31, 2011 and in the fourth quarter of 2010 Molycorp recognized a $2.3 million and $1.7 million write-down of WIP inventory based on estimated REO quantities, respectively. Also in the fourth quarter of 2010, a $1.0 million write-down of bastnasite stockpile inventory was recognized based on estimated REO quantities.

(4) Summary of Significant Accounting Policies (Continued)

The level within the fair value hierarchy in which the write-downs of inventory are included is the significant other observable inputs—Level 2.

The Company evaluates the carrying value of materials and supply inventories each quarter giving consideration to slow-moving items, obsolescence, excessive levels, and other factors and recognizes related write-downs as necessary.

At December 31, 2011 and 2010, inventory consisted of the following (in thousands):

	December 31, 2011	December 31, 2010
Current:		
Concentrate stockpiles	$ 3,704	$ 4,206
Raw materials	44,770	400
Work in process	16,602	3,582
Finished goods	45,045	9,307
Materials and supplies	1,822	1,327
Total current	$111,943	$18,822
Long-term:		
Concentrate stockpiles	$ 1,144	$ 5,108
Raw materials	3,186	—
Finished goods	32	104
Total long-term	$ 4,362	$ 5,212

(f) Deposits

The Company had $23.3 million and $26.2 million in deposits reported as Non-current assets on the Consolidated Balance Sheets as of December 31, 2011 and 2010, respectively. The $23.3 million deposits as of December 31, 2011 consisted of $20.6 million under the escrow arrangement for the Company's facilities agreement with Kern River Gas Transmission Company, $1.5 million related to the Company's construction insurance program, and $1.2 million related primarily to other restricted cash requirements. During the second quarter of 2011, the Company collected an $18.2 million deposit which was no longer required to secure surety bonds obtained for the California state and regional agencies relating to the Molycorp Mountain Pass facility closure and reclamation obligations. The $26.2 million deposits as of December 31, 2010 consisted of $18.2 million collateral used to secure surety bonds obtained for the California state and regional agencies relating to our Molycorp Mountain Pass facility closure and reclamation obligations, and $8.0 million under the escrow arrangement for the Company's facilities agreement with Kern River Gas Transmission Company.

(g) Property, Plant and Equipment, net

Property, plant and equipment associated with the acquisitions of the Molycorp Mountain Pass facility, Molycorp Sillamäe and Molycorp Tolleson were recorded at estimated fair value as of the acquisition date. Expenditures for new property, plant and equipment and improvements that extend the useful life or functionality of the asset are capitalized. The Company capitalized $416.8 million and

(4) Summary of Significant Accounting Policies (Continued)

$38.6 million in plant modernization and other capital costs for the years ended December 31, 2011 and 2010, respectively. These amounts include capitalized interest of $7.5 million in 2011 and $0.1 million in 2010. Depreciation on plant and equipment is calculated using the straight-line method over the estimated useful lives of the assets. Depreciation expense for the years ended December 31, 2011, 2010 and 2009, and cumulatively for the period from June 12, 2008 (Inception) through December 31, 2011 was $14.0 million, $6.0 million, $3.9 million and $24.7 million, respectively. Maintenance costs are expensed as incurred.

Mineral properties at December 31, 2011 and 2010, represent the purchase price allocated to mineral resources associated with the Molycorp Mountain Pass facility and mineral property development costs (see Note 4(h) below).

At December 31, 2011 and 2010, property, plant and equipment and related useful lives were as follows (in thousands):

	December 31, 2011	December 31, 2010
Land	$ 11,059	$ 800
Land improvements (15 years)	15,748	15,415
Buildings and improvements (4 to 27 years)	23,677	6,892
Plant and equipment (2 to 12 years)	68,441	19,560
Vehicles (7 years)	1,235	1,049
Computer software (5 years)	3,002	1,563
Furniture and fixtures (5 years)	464	170
Construction in progress	436,547	34,809
Mineral properties	24,692	23,968
Property, plant and equipment at cost	584,865	104,226
Less accumulated depreciation	(23,237)	(10,260)
Property, plant and equipment, net	$561,628	$ 93,966

In accordance with Accounting Standard Codification ("ASC") 360, *Property Plant and Equipment*, long-lived assets such as property, plant, and equipment, mineral properties and purchased intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. There were no events or changes in circumstances indicating that the carrying amount of the Company's long-lived assets as of December 31, 2011 may not be recoverable. Molycorp recognized a $3.1 million, net of depreciation, impairment expense associated with the mill and crusher, including the associated asset retirement cost, which was included in cost of goods sold in the consolidated statement of operations for the year ended December 31, 2010, as a result of managements' decision to replace rather than refurbish these assets.

(h) Mineral Properties and Development Costs

Mineral properties and development costs, which are referred to collectively as mineral properties, include acquisition costs, drilling costs, and the cost of other development work, all of which are

(4) Summary of Significant Accounting Policies (Continued)

capitalized. The Company depletes mineral properties using the units of production method over estimated proven and probable reserves. Molycorp's proven and probable reserves are based on extensive drilling, sampling, mine modeling, and mineral recovery from which economic feasibility has been determined. The proven and probable reserves are estimated based on information available at the time the reserves are calculated. Proven and probable reserves are based on estimates, and no assurance can be given that the indicated levels of recovery of REOs will be realized or that production costs and estimated future development costs will not exceed the net realizable value of the products. Reserve estimates may require revisions based on actual production experience. Market price fluctuations of REOs, as well as increased production costs or reduced recovery rates, could render proven and probable reserves containing relatively lower grades of mineralization uneconomic to exploit and might result in a reduction of reserves.

(i) Research and Development

The Company has invested significant resources to improve the efficiency of its REO processing operations and the development of new applications for individual REEs. For the years ended December 31, 2011, 2010 and 2009, and cumulatively for the period from June 12, 2008 (Inception) through December 31, 2011, the Company spent $8.3 million, $2.4 million, $1.5 million and $12.6, respectively, on research and development. These costs are recognized under the "Selling, general and administrative" line on the consolidated statements of operations and consist primarily of salaries, outside labor, material and equipment.

(j) Intangible Asset

The Company acquired its trade name in connection with the Molycorp Mountain Pass facility acquisition. Amortization on the trade name is provided using the straight-line method based on an estimated useful life of 12 years. In connection with the acquisition of Molycorp Sillamäe, the Company acquired certain customer relationships, which are amortized using the straight-line method based on an estimated useful life of 15 years.

At December 31, 2011 and December 31, 2010, amortizable intangible assets consisted of the following (in thousands):

	December 31, 2011	December 31, 2010
Trade name	$ 786	$ 786
Customer relationships	2,153	—
Other	516	—
Gross carrying amount	3,455	786
Less accumulated amortization	(383)	(147)
Net carrying amount	$3,072	$ 639

(4) Summary of Significant Accounting Policies (Continued)

Amortization expense for the years ended December 30, 2011, 2010 and 2009, and cumulatively for the period from June 12, 2008 (Inception) through December 31, 2011 was $236,795, $65,000, $65,000 and $383,795, respectively. Amortization expense for the next five years and thereafter is expected to be as follows (in thousands):

2012	$ 265
2013	261
2014	260
2015	260
2016	260
Thereafter	1,766
Total	$3,072

(k) Investments in Joint Ventures

In connection with the Molycorp Mountain Pass facility acquisition, the Company acquired a one-third interest in a joint venture with Sumitomo Metals Industries, Ltd. of Japan ("Sumitomo Metals") called Sumikin Molycorp ("SMO"). The Company sold its interest in the joint venture to Sumitomo Metals on July 9, 2009 for cash consideration of $9.7 million and recognized no gain.

(l) Investments in non-marketable securities

The Company accounts for investments in non-marketable equity securities for which it does not have the ability to exercise significant influence over the investee's operations and financial policies under the cost method of accounting. Cost method investments are carried at cost and are subject to other-than-temporary impairment assessments. On September 13, 2011, the Company invested $20.0 million into Boulder Wind Power, Inc. Series B convertible preferred stock, which is accounted for at cost. As of December 31, 2011, the fair value of this investment was not estimated as there were no identified events or changes in circumstances that may have had a significant adverse effect on the fair value of the investment.

(4) Summary of Significant Accounting Policies (Continued)

(m) Accrued Expenses

Accrued expenses as of December 31, 2011 and 2010 consisted of the following (in thousands):

	December 31, 2011	December 31, 2010
Defined contribution plan	$ 1,088	$1,199
Accrued payroll and related benefits	3,024	1,185
Accrued tolling fees	—	404
Sales and use tax	1,367	532
Accrued bonus	4,845	554
Interest payable	345	9
Other accrued expenses	2,229	342
Total accrued expenses	$12,898	$4,225

(n) Asset Retirement Obligation

The Company accounts for reclamation costs, along with other costs related to the closure of the Molycorp Mountain Pass facility, in accordance with ASC 410-20, *Asset Retirement Obligations*. This standard requires the Company to recognize asset retirement obligations at estimated fair value in the period in which the obligation is incurred. The Company recognized an asset retirement obligation and corresponding asset retirement cost of $13.3 million in connection with the Molycorp Mountain Pass facility acquisition. The liability was initially measured at fair value and is subsequently adjusted for accretion expense and changes in the amount or timing of the estimated cash flows. The asset retirement cost was capitalized as part of the carrying amount of the related long-lived assets and is being depreciated over the assets' remaining useful lives.

In connection with an updated asset retirement obligation analysis prepared as of June 30, 2010, the Company determined that its asset retirement obligation was overstated by approximately $2.5 million as a result of not reducing its prior estimate for costs of soil remediation performed prior to the Company's acquisition of the Molycorp Mountain Pass facility. Because the depreciation of the overstated asset retirement costs and accretion of the asset retirement obligation had an immaterial impact on the Company's net loss for all periods previously presented and cumulatively since inception, the Company reduced its asset retirement cost asset and asset retirement obligation by approximately $2.5 million effective April 1, 2010. On November 4, 2010, the Board approved an expanded budget which accelerated the removal of the crusher and milling facility, which resulted in a $0.6 million increase in the asset retirement obligation. During 2011, the Company increased the asset retirement obligation by $2.5 million in connection with the construction of buildings and other infrastructures related to Project Phoenix Phase 1 and Project Phoenix Phase 2. Depreciation expense associated with the asset retirement cost was $1.0 million, $1.1 million, $1.2 million and $4.9 million for the years ended December 31, 2011, 2010 and 2009, and cumulatively for the period from June 12, 2008

(4) Summary of Significant Accounting Policies (Continued)

(Inception) through December 31, 2011, respectively. The following table presents the activity in the Company's asset retirement obligation (in thousands):

	Year Ended December 31, 2011	Year Ended December 31, 2010
Balance at beginning of period	$12,471	$14,202
Obligations settled	(1,030)	(632)
Accretion expense	955	912
Revisions in estimated cash flows	2,508	(1,939)
Loss (Gain) on settlement	637	(72)
Balance at end of period	$15,541	$12,471

The Company is required to provide the applicable governmental agencies with financial assurances relating to its closure and reclamation obligations. As of December 31, 2011 and 2010, the Company had financial assurance requirements of $27.6 million which were satisfied with surety bonds placed with the California state and regional agencies.

(o) Debt

On June 15, 2011, the Company completed the issuance and sale of $230.0 million aggregate principal amount (net proceeds of $223.1 million after deducting the initial purchasers' discounts and commissions) of its 3.25% Convertible Notes due 2016 (the "Notes") in an offering exempt from the registration requirements of the Securities Act of 1933 (the "Securities Act"). The Notes were offered only to qualified institutional buyers pursuant to Rule 144A under the Securities Act. The Notes are senior unsecured obligations of the Company and bear interest at a rate of 3.25% per annum, payable semi-annually in arrears on June 15 and December 15 of each year, commencing on December 15, 2011. The Notes are convertible at any time into shares of Molycorp's common stock, cash, or a combination thereof, at Molycorp's election. The initial conversion rate is 14.0056 shares of Molycorp common stock per $1,000 principal amount of the Notes (equivalent to an initial conversion price of approximately $71.40 per share of Molycorp's common stock), subject to customary adjustments. The Notes mature on June 15, 2016, unless repurchased or converted in accordance with their terms. Molycorp does not have the right to redeem the Notes prior to maturity.

The Company separately accounts for the liability and equity components of convertible debt instruments, such as the Notes, that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer's economic interest cost. The equity component of the Notes is included in the additional paid-in capital section of stockholders' equity on the consolidated balance sheet as of December 31, 2011, and the value of the equity component is treated as original issue discount for purposes of accounting for the debt component of the Notes. As of December 31, 2011, Molycorp recognized a liability component related to the Notes of $190.9 million, which includes accretion of $4.1 million of the original issue discount ($3.4 million capitalized and $0.7 million expensed), and an equity component of $36.2 million. Transaction costs related to the issuance of the Notes have been allocated to the liability and equity components in proportion to the allocation of proceeds to the components, and accounted for as debt issuance costs (recognized as interest expense over the life of the Notes using the effective interest method) and equity issuance costs (charged against equity),

(4) Summary of Significant Accounting Policies (Continued)

respectively. Total interest cost related to the Notes in 2011 was $8.1 million of which $7.4 million was capitalized at December 31, 2011.

Additional debt was assumed as part of the Molycorp Sillamäe acquisition.

The following table provides a summary of the current and non-current portions of the debt outstanding as of December 31, 2011 (in thousands):

	December 31, 2011	
	Current	Non-Current
Notes 3.25%, net of discount, due June 2016	$ —	$190,877
Bank loans 2.69% - 3.88% due February 2012 - September 2017	1,516	5,668
Total debt	$1,516	$196,545

Scheduled minimum debt repayments in thousands are $1,516 in 2012, $1,495 in 2013, $1,495 in 2014, $1,420 in 2015, $230,803 in 2016 and $455 thereafter.

(p) Income Taxes

We are a Subchapter C corporation and, therefore, are subject to federal and state income taxes on our taxable income, whereas prior to our Corporate Reorganization, we operated entirely within limited liability companies, which were not directly liable for the payment of federal or state income taxes and our taxable income or loss was included in the state and federal tax returns of Molycorp, LLC's members. We account for income taxes in accordance with Accounting Standard Codification 740, Income Taxes. This guidance requires that deferred tax assets and liabilities be recognized for the tax effect of temporary differences between the financial statement and tax basis of recorded assets and liabilities at enacted statutory tax rates. This guidance also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax assets will not be realized. The recoverability of deferred tax assets is based on both our historical and anticipated earnings levels, and is reviewed each reporting period to determine if any additional valuation allowance is necessary when it is more likely than not that amounts will not be recovered. As of December 31, 2011, the Company's net income of $75.4 million since the Corporate Reorganization included $31.1 million in certain stock based compensation expense, which is a permanent difference between its income for financial reporting and tax purposes. Other permanent differences include legal and due diligence fees related to the acquisitions that were completed in April 2011, as well as costs related to the registration of common stock sold by certain stockholders in secondary offerings completed during the first and second quarters of 2011. Molycorp had net deferred income tax liabilities of $20.3 million, as of December 31, 2011.

Prior to the second quarter of 2011, Molycorp had a history of losses and, as a result, it recognized a full valuation allowance against its net deferred tax assets. As of December 31, 2011, Molycorp determined that it, more likely than not, will realize its deferred tax assets and we have concluded that no valuation allowance is required. In making this determination, management analyzed, among other things, the Company's recent history of earnings and cash flows, forecasts of future earnings, and the

(4) Summary of Significant Accounting Policies (Continued)

nature and timing of future deductions and benefits represented by the deferred tax assets and liabilities.

We have undistributed earnings of our foreign subsidiary at December 31, 2011, for which deferred taxes have not been provided. Such earnings are considered indefinitely invested in the foreign subsidiary. If such earnings were repatriated, additional tax expense may result, although the calculation of such additional taxes is not practicable.

The net tax effect of the elimination in consolidation of intercompany balances and transactions resulted in a deferred charge and income tax payable of $7.3 million.

Income tax expense for the year ended December 31, 2010 and December 31, 2009 was zero, as a 100% valuation allowance was required for the period after our Corporate Reorganization and for the period prior, the taxable income and losses of Molycorp, LLC were reported on the income tax returns of its members. Income tax expense consisted of the following for the year ended December 31, 2011 (in thousands):

	Year Ended December 31, 2011
Current	
Federal	$18,721
State	6,952
Total current	25,673
Deferred	
Federal	3,687
State	(784)
Total deferred	2,903
Total tax provision	$28,576

The components of earnings before income taxes, by tax jurisdiction, are as follows for the years ended December 31, 2011, 2010 and 2009 (in thousands):

	December 31, 2011	December 31, 2010	December 31, 2009
United States	$141,801	$(50,774)	$(28,587)
Foreign	5,109	—	—
Total	$146,910	$(50,774)	$(28,587)

(4) Summary of Significant Accounting Policies (Continued)

A reconciliation of the statutory federal income tax rate of 35% to Molycorp's effective income tax rate is as follows for the year ended December 31, 2011 (in thousands):

	Year Ended December 31, 2011
Federal tax computed at the statutory rate	$ 51,419
State taxes, net of federal benefit	5,255
Change In valuation allowance	(22,730)
Federal tax credits	(2,627)
Domestic production activities deduction	(2,493)
Foreign income tax rate differential	(1,735)
Other items, net	1,487
Income tax expense	$ 28,576

The tax effect of temporary differences and net operating losses which give rise to deferred tax assets and liabilities consist of the following as of December 31, 2011 and 2010 (in thousands):

	December 31, 2011	December 31, 2010
Deferred tax assets:		
Current:		
Inventory	$ 0	$ 1,133
Other	806	106
Total current	806	1,239
Non-current:		
Asset retirement obligation	419	656
Mineral resources	16,975	16,516
Employee stock compensation benefits	835	—
Net operating losses	852	6,750
Other	116	62
Total non-current	19,197	23,984
Deferred tax liabilities:		
Current	0	—
Inventory	1,849	0
Other	313	0
Total current	2,162	0
Non-current:		
Development costs	217	96
Property, plant and equipment	3,647	2,397
Section 174 costs	20,094	—
Convertible debt (Notes)	14,138	
Other	0	—
Total non-current	38,096	2,493
Net deferred taxes, before valuation allowance	(20,255)	22,730
Valuation allowance	—	(22,730)
Total deferred tax	$(20,255)	$ —

(4) Summary of Significant Accounting Policies (Continued)

The Company's liability for uncertain tax positions totaled $0.5 million and zero at December 31, 2011 and 2010, respectively. These amounts also include the related accrued interest and penalties associated with the uncertain tax positions, if applicable. The Company does not expect that the liability for uncertain tax positions will change significantly during the twelve months ended December 31, 2012; however, actual changes in the liability for uncertain tax positions could be different than currently expected. A rollforward of the liability for uncertain tax positions follows (in thousands):

	Year Ended December 31, 2011
Balance, beginning of year	$ —
Tax position related to current year:	
Additions	519
Tax positions related to prior years:	
Additions	0
Settlements	—
Statute of limitations closures	—
Balance, end of year	$519

The Company operates and accordingly files income tax returns in the U.S. federal jurisdiction, and various state jurisdictions and foreign jurisdiction. With few exceptions, the Company is no longer subject to U.S. federal, state and non-U.S. income tax examinations by tax authorities for years prior to 2008.

The Company did not recognize accrued interest and penalties related to uncertain tax positions in income tax expense for the years ended December 31, 2011 and 2010, respectively.

(q) Stockholders' Equity

As of December 31, 2011 and 2010, the Company had 83,896,043 and 82,291,200 shares of common stock outstanding, respectively.

For the year ended December 31, 2010, the Company received contributions from its stockholders totaling $15.0 million in exchange for 5,767,670 shares of Class A common stock prior to the completion of its initial public offering ("IPO") of common stock. At the time of the IPO, an aggregate of 50,892,260 shares of Class A common stock were automatically converted into an aggregate of 50,892,260 shares of common stock. The Company also received net proceeds of $378.6 million after underwriter discounts and commissions and offering expenses paid by Molycorp, Inc. in exchange for the issuance of 29,128,700 shares of common stock. An additional 2,232,740 common shares were issued upon conversion of shares of Class B common stock held by certain employees and independent directors pursuant to incentive awards effective November 1, 2009. Also, On November 4, 2010, the Compensation Committee of the Board approved the grant of 37,500 shares of restricted stock with a fair value of 36.51 per share, with a three-year vesting period, to certain executive officers and a director of the Company.

(4) Summary of Significant Accounting Policies (Continued)

On February 16, 2011, Molycorp completed a public offering of its 5.50% Series A Mandatory Convertible Preferred Stock ("Convertible Preferred Stock"), $0.001 par value per share. In connection with this offering, the Company issued 1,800,000 shares of Convertible Preferred Stock for $100.00 per share. In addition, Molycorp granted the underwriters an option to purchase up to 270,000 additional shares of Convertible Preferred Stock to cover over-allotments. The underwriters exercised their option to purchase the additional shares of Convertible Preferred Stock on March 16, 2011. Each share of the Convertible Preferred Stock will automatically convert on March 1, 2014 into between 1.6667 and 2.0000 shares of Molycorp's common stock, subject to anti-dilution adjustments. At any time prior to March 1, 2014, holders may elect to convert each share of the Convertible Preferred Stock into shares of common stock at the minimum conversion rate of 1.6667 shares of common stock per share of Convertible Preferred Stock, subject to anti-dilution adjustments. Dividends on the Convertible Preferred Stock are payable on a cumulative basis when, as and if declared by the Board or an authorized committee of such Board, at an annual rate of 5.50% on the liquidation preference of $100.00 per share. The Company may pay declared dividends in cash, common stock or any combination of cash and common stock, subject to certain limitations, on March 1, June 1, September 1 and December 1 of each year, starting on June 1, 2011 and to, and including, March 1, 2014. The Convertible Preferred Stock is not redeemable. Molycorp received net proceeds from the Convertible Preferred Stock offering totaling $199.6 million after underwriter discounts and commissions and offering expenses paid by Molycorp.

During 2011, the Company declared and paid aggregate cash dividends of $9.0 million on the Convertible Preferred Stock.

On April 1, 2011, Molycorp acquired 80% of the outstanding shares of Molycorp Sillamäe (representing a 90.023% controlling interest) from AS Silmet Grupp in exchange for 1,593,419 shares of Molycorp common stock, which had a fair value of approximately $72.7 million based on the closing price of the Company's common stock on the acquisition date, net of an estimated discount that a market participant would require, given that the issuance of the shares Molycorp transferred in consideration to AS Silmet Grupp was not registered under the Securities Act, and such shares were subject to certain lock up provisions, which limited AS Silmet Grupp's ability to sell these shares. On October 24, 2011, the Company acquired the remaining 9.977% ownership interest in Molycorp Sillamäe for $10.0 million in cash, which resulted in an adjustment to Additional Paid-In Capital Equity of $0.4 million for the difference between the consideration paid and the carrying value of the noncontrolling interest on October 24, 2011.

(4) Summary of Significant Accounting Policies (Continued)

(r) Earnings (loss) per Share

Basic earnings per share is computed by dividing the Company's net income attributed to common stockholders by the weighted average number of shares of common stock outstanding during the period. For the year ended December 31, 2011, the cumulative undeclared and paid dividends on the Convertible Preferred Stock were subtracted from the net income in the period for the purpose of computing the basic earnings per share.

(In thousands, except share and per share amounts)	Year Ended December 31, 2011	Total from June 12, 2008 (Inception) Through December 31, 2011
Net income attributable to Molycorp stockholders	$ 117,526	$ 24,091
Cumulative undeclared and paid dividends on preferred stock	(9,962)	(9,962)
Net income attributable to common stockholders	107,564	14,129
Weighted average common shares outstanding—basic	83,454,221	58,197,912
Basic earnings per share	$ 1.29	$ 0.24
Net income attributable to common stockholders	$ 107,564	$ 14,129
Effect of dilutive Notes	413	413
Income attributable to common stockholders, adjusted for the effect of dilutive Notes	107,977	14,542
Weighted average common shares outstanding—dilutive	85,220,017	58,694,839
Dilutive earnings per share	$ 1.27	$ 0.25

Diluted earnings per share reflect the dilutive impact of potential common stock and unvested restricted shares of common stock in the weighted average number of common shares outstanding during the period, if dilutive. For this purpose, the "treasury stock method" and "if-converted method," as applicable, are used.

Under the treasury stock method, assumed proceeds upon the exercise of stock options are considered to be used to purchase common stock at the average market price of the shares during the period. Also under the treasury stock method, fixed awards and nonvested shares, such as restricted stock, are deemed options for purposes of computing diluted earnings per share. As of December 31, 2011 and December 31, 2010, all potential common stock under the treasury stock method were antidilutive in nature; consequently, the Company does not have any adjustments between earnings per share and diluted earnings per share related to stock options and restricted stock awards.

In applying the if-converted method, conversion is not assumed for purposes of computing diluted earnings per share if the effect would be antidilutive. Convertible preferred stock (such as the Convertible Preferred Stock) is antidilutive whenever the amount of the dividend declared in or accumulated for the current period including the deemed dividend in the period from a beneficial conversion feature per common share obtainable on conversion exceeds basic earnings per share. The Convertible Preferred Stock was antidilutive as of December 31, 2011. Also under the if-converted

(4) Summary of Significant Accounting Policies (Continued)

method, convertible debt (such as the Notes) is antidilutive whenever its interest including any deemed interest from a beneficial conversion feature and nondiscretionary adjustments, net of tax, per common share obtainable on conversion exceeds basic earnings per share. As of December 31, 2011, the Notes were dilutive under the if-converted method; therefore, the shares of common stock obtainable on the assumed conversion of the Notes, the interest expense and the amortization of discount on the Notes were included in the computation of diluted earnings per share.

(s) Comprehensive Income (Loss)

In the second quarter of 2011, the Company early adopted the Accounting Standards Update (ASU) 2011-05 as issued by the Financial Accounting Standards Board in June 2011. As a result of this update, the Company elected to present comprehensive income in two separate, but consecutive statements. No retroactive application of this update was necessary as the Company did not have any items entering into the determination of comprehensive income (loss) other than net income (loss) for all periods prior to the second quarter of 2011.

In addition to Net income (loss), Comprehensive income (loss) includes changes in equity for the year ended December 31, 2011 due to foreign currency translation adjustments. A loss of approximately $2.7 million from the translation of intercompany balances is included in the aggregate net foreign currency translation adjustment of $8.5 million for the period from April 1, 2011 to December 31, 2011.

(t) Foreign Currency

The reporting currency of the Company is the U.S. dollar. The functional currency of Molycorp, Inc., Molycorp Minerals, LLC and Molycorp Tolleson is also the U.S. dollar, whereas the functional currency of Molycorp Sillamäe is the euro. Assets and liabilities of Molycorp Sillamäe are translated at the spot rate in effect at the applicable reporting date; the results of operations of Molycorp Sillamäe are translated at actual exchange rates for significant transactions or at the average exchange rates in effect during the applicable period. The resulting unrealized cumulative translation adjustment, net of applicable income taxes, is recorded as a component of accumulated other comprehensive income (loss) in the consolidated statement of stockholders' equity. Cash flows from the operations of Molycorp Sillamäe are translated at actual exchange rates for significant transactions or at the average rate for the applicable period. The effect of exchange rates on cash balances held in foreign currencies are separately reported in the Company's consolidated statement of cash flows.

Transactions denominated in currencies other than the applicable functional currency are recorded based on exchange rates at the time such transactions occur. Changes in exchange rates associated with amounts recorded in the Company's consolidated balance sheet related to these non-functional currency transactions result in transaction gains and losses that are reflected in the Other income (expense) section of the consolidated statement of operations as unrealized (based on the applicable period end exchange rates) or realized upon settlement of the transactions.

(5) Acquisitions

The following table summarizes the purchase prices and opening balance sheets for the acquisition the 90.023% controlling interest in Molycorp Sillamäe on April 1, 2011 and of Molycorp Tolleson on April 15, 2011 (in thousands):

Effective acquisition date for financial reporting purposes:	Molycorp Sillamäe April 1, 2011	Molycorp Tolleson April 15, 2011
Purchase consideration:		
Cash consideration	$ 9,021	$17,500
Fair value of common stock	72,653	—
Total purchase consideration	$ 81,674	$17,500
The fair values of the assets and liabilities acquired:		
Cash	$ 105	$ 6,395
Accounts receivable and other current assets	8,626	5,474
Inventory	37,404	11,327
Property and equipment, net	63,393	4,512
Intangible assets subject to amortization	2,669	—
Goodwill	1,455	1,977
Liabilities	(19,974)	(8,989)
Deferred tax liabilities	—	(3,196)
Long-term debt	(3,184)	—
Noncontrolling interest	(8,820)	—
Total purchase consideration	$ 81,674	$17,500

The purchase price allocations above are based on preliminary assumptions and valuations for each acquisition. These valuations are subject to change as the Company obtains additional information on the assets acquired and liabilities assumed during each acquisition measurement period (up to one year from the acquisition date).

The fair value of the accounts receivable acquired includes trade receivables of $5.0 million for Molycorp Sillamäe and $4.9 million for Molycorp Tolleson. These trade receivables have been collected as of December 31, 2011. Molycorp Sillamäe's intangible assets subject to amortization relate primarily to customer relationships with a weighted average useful life of 15 years. Goodwill associated with the Molycorp Sillamäe acquisition arose primarily because of the acquired workforce. Goodwill associated with the Molycorp Tolleson acquisition arose primarily because of the requirement to record a deferred tax liability for the difference between the assigned values and the tax basis of assets acquired and liabilities assumed at amounts that do not reflect fair value. The goodwill is not amortized and is not deductible for tax purposes. The fair value of the noncontrolling interest in Molycorp Sillamäe as of April 1, 2011 was valued using a combination of the market approach and income approach.

The amounts of Molycorp Sillamäe's and Molycorp Tolleson's revenue, earnings and earnings per share included in the Company's consolidated statements of operations since the acquisition date, net

(5) Acquisitions (Continued)

of intercompany transactions, and the revenue, earnings and earnings per share of the combined entity had the acquisition date been January 1, 2011, and January 1, 2010, are as follows:

(In thousands, except per share amounts)	Revenue	Net Income (loss)	Net Income (loss) Attributable To Molycorp	EPS Basic
Actual April 1, 2011 to December 31, 2011 (Molycorp Sillamäe)	$ 86,496	$ 13,571	$ 12,763	$ 0.15
Actual April 1, 2011 to December 31, 2011 (Molycorp Tolleson)	$ 56,772	$ 7,877	$ 7,877	$ 0.09
Unaudited pro forma January 1, 2011 to December 31, 2011 (combined entity)	$430,305	$105,397	$104,590	$ 1.13
Unaudited pro forma January 1, 2010 to December 31, 2010 (combined entity)	$ 85,549	$(30,920)	$(31,329)	$(0.50)

The unaudited pro forma amounts are not necessarily indicative of the operating results that would have occurred if these acquisitions had taken place on January 1, 2011 and January 1, 2010, respectively.

The actual 2011 revenue of Molycorp Sillamäe excludes $13.9 million of intercompany sales and $8.4 million of intercompany earnings. The actual 2011 earnings of Molycorp Tolleson exclude $5.6 million of intercompany costs. The unaudited pro forma 2011 earnings of the combined entity were adjusted to exclude $69.1 million of intercompany sales, $28.0 million of intercompany earnings, $2.1 million of non-recurring acquisition related costs the Company incurred to acquire Molycorp Sillamäe and Molycorp Tolleson, and to reverse $1.1 million of purchase price variance Molycorp Tolleson capitalized during the first quarter of 2011. The unaudited pro forma 2010 earnings of the combined entity were adjusted to reverse $2.9 million of purchase price variance Molycorp Tolleson capitalized in 2010. These pro forma adjustments are based on currently available information and certain assumptions that management believes are reasonable.

Molycorp Sillamäe

On April 1, 2011, Molycorp acquired 80% of the outstanding shares of Molycorp Sillamäe from AS Silmet Grupp in exchange for 1,593,419 shares of Molycorp common stock contractually valued at $80 million based on the average closing price of the Company's common stock as reported by The New York Stock Exchange for the 20 consecutive trading days immediately preceding April 1, 2011, the acquisition date.

Generally, the acquisition-date fair value of shares of common stock transferred by the acquirer is the closing price of that stock on the same date adjusted by a discount that a market participant would require as a result of any restrictions on the sale or transferability of the stock. The fair value of common stock of $72.7 million disclosed in the table above is based on the closing price of the Company's common stock on the acquisition date, net of an estimated discount of 23% that a market participant would require given that issuance of the shares of common stock Molycorp transferred in consideration to AS Silmet Grupp was not registered under the Securities Act and such shares were subject to certain lock up provisions, which limited AS Silmet Grupp's ability to sell these shares.

(5) Acquisitions (Continued)

AS Silmet Grupp retained a 9.977% ownership interest in Molycorp Sillamäe on the acquisition date; Molycorp acquired the other 10.023% from Treibacher Industrie AG for $9.0 million in cash.

On October 24, 2011, the Company acquired the remaining 9.977% ownership interest in Molycorp Sillamäe for $10.0 million in cash, which resulted in an adjustment to Additional Paid-In Capital of $0.4 million for the difference between the consideration paid and the carrying value of the noncontrolling interest as of October 24, 2011. The following schedule shows the effect of this transaction with the noncontrolling interest on the equity attributable to the Company (in thousands):

Net income attributable to Molycorp, Inc.	$117,526
Decrease in equity for purchase of Molycorp Sillamäe's minority shares	(10,000)
Change from net income attributable to Molycorp, Inc. and transfer to the noncontrolling interest	$107,526

The Molycorp Sillamäe acquisition provides Molycorp with a European base of operations and significantly increases the Company's yearly REO production capacity by approximately 3,000 mt. Molycorp Sillamäe sources a portion of rare earth feed stocks for production of its products primarily from the Molycorp Mountain Pass facility. The main focus of this newly acquired business is on the production of rare earth oxides and metals, including didymium metal, a critical component in the manufacture of neodymium-iron-boron permanent rare earth magnets. Molycorp Sillamäe's manufacturing operation is located in Sillamäe, Estonia. In connection with the acquisition of Molycorp Sillamäe, the Company incurred $1.5 million of acquisition-related costs, which are included in selling, general and administrative expenses for the year ended December 31, 2011.

Molycorp Tolleson

On April 15, 2011, Molycorp completed the acquisition from Santoku Corporation ("Santoku") of all the issued and outstanding shares of capital stock of Santoku America, Inc., which is now known as Molycorp Tolleson, an Arizona based corporation, in an all-cash transaction for $17.5 million. The acquisition provides Molycorp with access to certain intellectual properties relative to the development, processing and manufacturing of neodymium and samarium magnet alloy products. As part of the stock purchase agreement, Santoku will provide consulting services to Molycorp for the purpose of maintaining and enhancing the quality of Molycorp Tolleson's products. On the same date, Molycorp and Santoku entered into five-year marketing and distribution agreements for the sale and distribution of neodymium and samarium magnet alloy products produced by each party. Additionally, the parties entered into a rare earth products purchase and supply agreement through which Molycorp Tolleson will supply Santoku with certain rare earth alloys for a two-year period at prices equal to the feedstock cost plus the applicable product premium as such terms are defined in the agreement. In connection with the acquisition, the Company incurred $0.6 million of acquisition related costs, which are included in selling, general and administrative expenses for the year ended December 31, 2011.

(6) Employee Benefit Plans

The Company maintains a defined contribution plan for all employees working at two of our domestic locations: Molycorp Mountain Pass, California and Greenwood Village, Colorado. On

(6) Employee Benefit Plans (Continued)

September 1, 2011, the Company amended the eligibility requirement from a completed 90 days of services with the Company to eligibility commencing on the first of the month following hire date. The Company currently makes a non-elective contribution equal to 4% of compensation for each employee who performed at least 1,000 hours of service and is employed on the last day of the year. In addition, the Company currently matches 100% of the first 3% contributed and 50% of the next 2% contributed by each eligible employee as well as an additional contribution of up to 4% which can be made at the Company's discretion. Employees vest in Company contributions after three years of service. Expenses related to this plan totaled $1.6 million, $1.2 million, $1.0 million and $4.0 million for the years ended December 31, 2011, 2010 and 2009, and cumulatively for the period from June 12, 2008 (Inception) through December 31, 2011, respectively. Additionally, accrued expenses at December 31, 2011 and 2010 included $1.1 million and $1.2 million related to this plan, respectively.

On April, 1 2009, the Company established the Management Incentive Plan ("MIP"), which is a nonqualified deferred compensation plan for the purpose of providing deferred compensation benefits for certain members of management. Under the MIP, participants can defer their base salary and other compensation that is supplemental to his or her base salary and is dependent upon achievement of individual or Company performance goals. It is intended that the MIP constitute an unfunded plan for purposes of the Employee Retirement Income Securities Act of 1974, as amended. The amount of compensation or awards deferred is deemed to be invested in a hypothetical investment as of the date of deferral. During the year ended December 31, 2011 and 2010, the Company funded discretionary contributions to the MIP totaling $271,000 and $47,000, respectively. In addition, total accrued amount including employee deferrals, discretionary contributions and related earnings was approximately $528,000 and $171,000 as of December 31, 2011 and 2010, respectively.

On November 4, 2010, the Compensation Committee established an annual incentive ("bonus plan") for all employees that is discretionary in nature. The bonus plan is performance based and includes both qualitative and quantitative criteria. For the year ended December 31, 2011 and 2010, the Company accrued $4.8 million $0.6 million, respectively.

Effective January 1, 2012, eligible employees at Molycorp Tolleson have transitioned to the Company's defined contribution plan.

(7) Commitments and Contingencies

(a) Future Operating Lease Commitments

The Company has certain operating leases for office space, trailers and certain equipment. Remaining annual minimum payments under these leases at December 31, 2011 were $1.0 million in 2012, $0.6 million in 2013, $0.5 million in 2014, $0.5 million in 2015, $0.4 million in 2016 and zero thereafter, totaling $3.0 million.

Rent expense for office space, trailers and certain equipment in 2011, 2010 and 2009 was $0.7 million, $0.5 million and $0.2 million, respectively.

On September 30, 2010, the Company entered into a natural gas transportation lease agreement with Kern River Gas Transmission Company ("Kern River") under which Molycorp agreed, subject to certain conditions, to make payments totaling $5.2 million per year ($0.43 million per month) for 10 years beginning April 2012 to Kern River in exchange for the designing, permitting, constructing,

(7) Commitments and Contingencies (Continued)

operating, and maintaining of facilities necessary to provide natural gas to the power generation facility to be constructed at the Molycorp Mountain Pass facility. Beginning on the date of commencement of the natural gas transportation service and continuing through the agreement termination, the Company will be entitled to receive a Transportation Maximum Daily Quantity of 24,270 Decatherm per day.

(b) Plant Modernization and Expansion Commitments

In connection with the Molycorp Mountain Pass facility modernization and expansion and future operations, the Company entered into contractual commitments for the purchase of materials and services from various vendors. Future payments for these commitments are estimated at $269.9 million due in 1 year and $15.0 million due in 2-3 years. Some of the agreements the Company entered into with these vendors contain cancellation clauses stating the amount and timing of termination charges to the Company. In total, these charges range from a minimum of $9.7 million to a maximum of $12.5 million depending on the timing of cancellation.

(c) Potential Environmental Obligations

As part of its ongoing remediation efforts at the Molycorp Mountain Pass facility, the Company identified liner defects in three of the onsite evaporation ponds in 2011. This led to minor groundwater contamination issues that are limited to a small area directly underneath the evaporation ponds. In order to remediate this issue, the Company will replace the primary lining system and might have to install a groundwater recovery system. The Company estimated the cost of these items to range between $2.4 million and $4.6 million, which will be treated as capital expenditures. The Company is in the process of finalizing the remediation plans with the Regional Water Quality board.

(d) Labor Contract

Certain Molycorp Mountain Pass facility employees are covered by a collective bargaining agreement with the United Steelworkers of America that expires on March 15, 2015. At December 31, 2011, 122 employees, or approximately 60% of the Company's workforce at Molycorp Mountain Pass, California, were covered by this collective bargaining agreement.

As of December 31, 2011, 186 employees or approximately 33% of the workforce at the Molycorp Sillamäe facility were unionized employees. The contract with the labor union in Estonia is renewed annually by the end of February.

(e) Reclamation Surety Bonds

At December 31, 2011 and 2010, Molycorp had placed $27.6 million of surety bonds with California state and regional agencies to secure its Molycorp Mountain Pass facility closure and reclamation obligations.

(f) Licenses and Permits

The Company is subject to numerous and detailed federal, state and local environmental laws, regulations and permits including health and safety, environmental, and air quality. The Company is subject to strict conditions, requirements and obligations relating to various environmental and health

(7) Commitments and Contingencies (Continued)

and safety matters in connection with the current permits, and the Company may be subject to additional conditions, requirements and obligations associated with its permits and future operations. Certain conditions could be imposed in order to maintain the required permits including requirements to conduct additional environmental studies and collect and present data to government authorities pertaining to the potential impact of current and future operations upon the environment. Accordingly, the required permits may not be maintained or renewed in a timely fashion if at all, or may be renewed upon conditions that restrict the Company's ability to conduct its operations economically. Any failure, significant delay or significant change in conditions that is required to maintain or renew permits, could have a material adverse effect on the Company's business, results of operations and financial condition.

(8) Stock-Based Compensation

Molycorp has stock-based compensation plans for executives, eligible employees and non-employee directors. Stock-based awards issued under these plans include stock options to purchase shares of the Company's common stock, restricted stock awards ("RSAs") and restricted stock units ("RSUs"). There are no performance conditions associated with any of the stock-based awards. The expense associated with all awards is measured based on the grant date fair value of each award, and is recognized straight-line over the vesting period associated with each grant, but only for awards that are expected to vest. The total annual compensation cost recognized for all stock-based awards was $4.7 million in 2011, $30.1 million in 2010 and $0.2 million in 2009; the total related income tax benefit recognized was $0.8 million in 2011 and zero in 2010 and 2009. The Company capitalized into inventory $0.1 million of the aggregate stock-based compensation associated with all equity awards in 2011, and zero in 2010 and 2009. The remaining number of shares authorized for awards of equity share options or other equity instruments was 3,930,686 at December 31, 2011. The following sections provide detail information on the stock-based awards Molycorp issued during the three-year period ended December 31, 2011.

Stock Options

Stock options vest in equal installments annually over a three-year period and have a ten-year contractual term from the grant date. The fair value of each stock option award is estimated at the grant date using the Black-Scholes option pricing model and the Company's common stock price on the date of grant. The significant assumptions used to estimate the fair value of stock option awards using the Black-Scholes model are as follows:

	Year ended December 31,		
	2011	2010	2009
Risk-free interest rate	2.21%	n/a	0.6%
Expected term	6.0 years	n/a	0.8 years*
Volatility	60.1%	n/a	145.5%
Expected dividend yield	none	n/a	none

* The Company issued an option to its Chief Executive Officer on April 10, 2009 for the purchase of 147,474 shares of the Company common stock (giving effect to the Corporate

(8) Stock-Based Compensation (Continued)

Reorganization and the conversion of Class A common stock into common stock in connection with the IPO). The option vested on the date of grant and had an expected term of 10 months.

The risk-free interest rate used is the yield of a zero-coupon U.S. Treasury bond with a term equal to the expected term of the option.

The expected term of options granted is usually derived from historical option exercise experience and expected post-vesting termination behavior. However, given that Molycorp does not have sufficient historical exercise and post-vesting data, management adopted the simplified method by reference to Staff Accounting Bulletin ("SAB") Topic 14, *Share-Based Payment*, whereby the expected term of options granted can be calculated by using an average of the midpoint between when options become exercisable and when they expire.

Expected volatility is generally based on a combination of 1) the historical volatility of an entity's stock at the grant date for a period equal to the average expected term of the entity's options, and 2) the volatility implied by the observed current market prices of an entity's traded options or other convertible securities, if available. Given that Molycorp has been a publicly traded company only since July 29, 2010, management computed volatility assumptions based on a peer group analysis by reference to SAB Topic 14.

The following table summarizes the activity and other information related to stock option awards during each of the three years ended December 31:

	2011		2010		2009	
	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price	*Number of Shares	Weighted Average Exercise Price
Outstanding at beginning of year	—	$ —	126,405	$2.37	—	$ —
Granted	52,819	$48.87	—	$ —	147,474	$2.37
Exercised	—	$ —	(126,405)	$2.37	(21,069)	$2.37
Forfeited and expired	—	$ —	—	$ —	—	$ —
Outstanding at end of year	52,819	$48.87	—	$ —	126,405	$2.37
Options exercisable at year-end	—	$ —	—	$ —	126,405	$2.37
Weighted-average fair value of options granted	$27.78		$ —		$ 63.41	
Cash received from exercise of options (in millions)	$ —		$ 0.3		$ 0.1	
Total intrinsic value of options exercised (in millions)	$ —		$ 14.3		$ 2.4	

At December 31, 2011, there was $1.2 million of unrecognized compensation cost related to stock options, which is expected to be recognized over a weighted-average period of approximately 2.03 years.

(8) Stock-Based Compensation (Continued)

RSAs and RSUs

RSAs and RSUs cliff vest over a period of three years from the grant date. The fair value of RSAs and RSUs is determined using the Company's stock price on the date of grant and is recognized straight-line over the three-year vesting period for the awards that are expected to vest. The following tables summarize the activity related to RSAs and RSUs in 2011:

RSAs	Number of Shares	Weighted Average Grant-Date Fair Value
Unvested at January 1, 2011	37,500	$36.51
Granted	11,717	$52.12
Forfeited	(293)	$48.87
Vested	—	$ —
Unvested at December 31, 2011	48,924	$40.20

RSUs	Number of Shares	Weighted Average Grant-Date Fair Value
Unvested at January 1, 2011	—	$ —
Granted	80,256	$56.43
Forfeited	—	$ —
Vested*	(1,712)	$50.69
Unvested at December 31, 2011	78,544	$56.55

* Represents deferral and conversion of all or a portion of fees payable to certain non-employee directors of the Company into RSUs, based on the Company's common stock price when the fees are due. These RSUs vested immediately because they relate to services already rendered by the non-employee directors.

The total fair value of the RSAs and RSUs granted in 2011 and 2010 was $5.1 million and $1.4 million, respectively. None of these awards were issued prior to November 2010. At December 31, 2011, there was $4.8 million of aggregate unrecognized compensation cost related to the unvested shares of RSAs and RSUs. This cost is expected to be recognized over a weighted-average period of approximately 2.13 years.

Other Stock-Based Awards

Effective November 1, 2009, Molycorp LLC issued 5,880,000 incentive shares to certain employees and independent directors of the Company. At the time of issuance, due to Molycorp Minerals, LLC's option to repurchase vested shares of terminated participants at a price other than fair value, these incentive shares were classified as liabilities and were valued at zero using the intrinsic value method.

On April 15, 2010, all holders of incentive shares contributed their incentive shares to Molycorp, Inc. in exchange for 3,012,420 shares of Class B common stock of Molycorp, Inc., 1,004,140 shares of which vested immediately with an additional 1,004,140 shares scheduled to vest on

(8) Stock-Based Compensation (Continued)

September 30, 2010 and the remaining 1,004,140 shares on September 30, 2011. The shares of Class B common stock were non-transferable and the Company had the right to repurchase vested shares upon the termination of employment for any reason.

The shares of Class B common stock automatically converted into shares of common stock, based on a conversion factor, immediately prior to completion of the IPO. On August 3, 2010, Molycorp completed an IPO of common stock at an offering price of $14.00 per share. At that time, the shares of Class B common stock were converted into 2,232,740 shares of common stock, 744,247 of which remained vested and the other 1,488,493 vested over a period of six months following the IPO.

Stock-based compensation associated with these shares was $2.6 million and $28.7 million for the years ended December 31, 2011 and 2010, respectively.

(9) Concentrations

(a) Limited Number of Products

The Company's operations at the Molycorp Mountain Pass facility in 2011 were limited to the production and sale of REOs from stockpiled concentrates, and purchasing and reselling REOs from other producers as well as tolling didymium metal at a third party processing facility. The Company does not have and will not have the capability to significantly alter its product mix from its Molycorp Mountain Pass facility prior to completing Project Phoenix Phase 1 in 2012. Percentages of Molycorp Mountain Pass' revenue, net of intercompany sales, by product that accounted for more than ten percent of consolidated sales in 2011, 2010 and 2009, were approximately as follows:

	2011	2010	2009
Lanthanum products	23%	39%	92%
Cerium products	11%	29%	2%
Didymium products	26%	26%	n/a

The majority of sales from the Molycorp Sillamäe facility for the period from April 1, 2011 to December 31, 2011 consisted of lanthanum, cerium, neodymium and praseodymium rare earth products, and two rare metal products, tantalum and niobium.

The Molycorp Tolleson facility sold primarily neodymium-iron-boron, or NdFeB, alloys and samarium-cobalt, or SmCo, alloys from April 15, 2011 to December 31, 2011. Molycorp Tolleson's sales of NdFeB alloys for the period from April 15, 2011 (the acquisition date) to December 31, 2011, were approximately 11% of consolidated sales.

(b) Limited Number of Customers

There is a limited market for the products currently produced and purchased, and the Company depends on a limited number of customers for a significant portion of its consolidated annual sales.

Molycorp Mountain Pass

Molycorp Mountain Pass' sales to Hitachi Metals. Ltd. in 2011 were $92.2 million and accounted for approximately 23% of consolidated sales. Molycorp Mountain Pass' sales to four of its customers,

(9) Concentrations (Continued)

net of intercompany sales, represented in total approximately 77% of Molycorp Mountain Pass's sales in 2011.

Molycorp Mountain Pass' sales to four of its largest customers in 2010, were approximately as follows, in thousands:

	Year Ended December 31, 2010
Mitsubishi Unimetals USA	$8,479
W.R. Grace & Co.—Conn.	$7,438
Chuden Rare Earth Co. Ltd.	$5,389
Shin-Etsu Chemical Co.	$4,020

Molycorp Sillamäe

Sales to three of Molycorp Sillamäe's customers from the acquisition date to December 31, 2011, represented in aggregate approximately 45% of Molycorp Sillamäe's sales for that period.

Molycorp Tolleson

Molycorp Tolleson's sales to Santoku Corporation for the period from April 15, 2011 to December 31, 2011, were $48.8 million, or approximately 12% of the Company's consolidated sales and approximately 86% of Molycorp Tolleson's sales for that period.

(c) Geographic Locations

Currently, the Company's only mining facility is the Molycorp Mountain Pass, California facility, and the Company's viability is based on the successful modernization and expansion of its Molycorp Mountain Pass operations. The deterioration or destruction of any part of the Molycorp Mountain Pass facility, or legal restrictions related to current or anticipated operations at the Molycorp Mountain Pass facility, may significantly hinder the Company's ability to reach or maintain full planned production rates within the expected time frame, if at all.

Through the acquisition of Molycorp Sillamäe, the Company added a rare earth oxides and metals processing facility in Sillamäe, Estonia. In addition, the Company acquired Molycorp Tolleson, based in Arizona, which processes and manufactures neodymium and samarium alloy products.

On August 22, 2011, Molycorp opened an office in Tokyo, Japan to provide customer support as well as consulting and technical services to its customers in Japan. Total capital invested for the opening of the office in Tokyo was $0.7 million as of December 31, 2011.

(10) Related-Party Transactions

In February 2009, certain of the Company's stockholders incurred certain costs in providing letters of credit and/or cash collateral to secure the surety bonds issued for the benefit of certain regulatory agencies related to the Company's Molycorp Mountain Pass facility closure and reclamation obligations. The total amount of collateral provided by stockholders was $18.2 million. Under the terms of the agreement with its stockholders, the Company agreed to pay each such stockholder a 5% annual return

(10) Related-Party Transactions (Continued)

on the amount of collateral provided, and the stockholders were entitled to receive quarterly payments, delay payments, or receive payments-in-kind.

In September 2010, the Company issued its own collateral in the amount of $18.2 million in replacement of the letters of credit and cash collateral provided by the stockholders, which has been subsequently collected by the Company. The Company paid fees due to stockholders in the amount of $0.8 million in September 2010.

In June 2010, the Company entered into an inventory financing arrangement with Traxys North America LLC ("Traxys"), the parent of one of its stockholders, TNA Moly Group, LLC, under which it borrowed approximately $5.0 million, secured by certain product inventories. Borrowings under this arrangement required an initial interest rate of 6% based on three month LIBOR plus a margin, which is subject to adjustment every three months. The interest rate was reset to 5.75% effective September 1, 2011. At December 31, 2011 and 2010, interest payable associated with the arrangement totaled $32,000 and $9,000, respectively. Principal under this arrangement is payable from revenue generated from sales of the product inventories. During the third quarter of 2010, both parties agreed that 50% of all didymium oxide sales will be subject to this arrangement. The Company made principal payments of $3.1 million and $1.0 million for the years ended December 31, 2011 and 2010, respectively. The outstanding amounts payable to Traxys under this arrangement were $0.9 million and $3.1 million reported on the Consolidated Balance Sheet as of December 31, 2011 and 2010, respectively, under Short-term borrowing—related party, and $2.8 million and $1.3 million in Trade accounts payable related to the sales made, but not remitted to Traxys and affiliates as of December 31, 2011 and 2010, respectively.

The Company and Traxys and affiliates jointly market and sell certain lanthanum oxide, cerium oxide, misch metal and erbium oxide products. Per the terms of this arrangement, the Company and Traxys split gross margin equally once all costs associated with the sale are recovered by both parties. The Company has recorded a related party receivable from Traxys and affiliates of $190,000 and $116,000 as of December 31, 2011 and 2010, respectively. The Company also recorded an expense of $336,000 and $120,000 for the years ended December 31, 2011 and 2010, respectively, and had an outstanding related payable to Traxys and affiliates in the amount of $169,000 and $120,000 as of December 31, 2011 and 2010, respectively. Revenues and expenses related to these settlements are presented on a net basis in Other Income on the Statement of Operations. In addition, during 2011 the Company made purchases of lanthanum oxide from Traxys and affiliates in the amount of $6.2 million, and small purchases of yttrium and bastnasite material for a total of approximately $0.7 million. For the year ended December 31, 2010, the Company made purchases of lanthanum oxide and cerium oxide from Traxys and affiliates in the amount of $2.5 million.

As of December 31, 2011, Molycorp Sillamäe had a balance receivable from Traxys and affiliates of $2.1 million related to sales of tantalum metal of $3.2 million for the period from April 1, 2011 to December 31, 2011.

(11) Segment Information

The Company is currently organized into three primary divisions or operating segments: Molycorp Mountain Pass, Molycorp Sillamäe and Molycorp Tolleson. Molycorp Mountain Pass owns and operates the rare earth mine and processing facilities in Mountain Pass, California. Molycorp Sillamäe produces

(11) Segment Information (Continued)

rare earth oxides and rare metals at the manufacturing facility located in Sillamäe, Estonia. Molycorp Tolleson manufactures neodymium and samarium magnet alloy and other specialty alloy products in Tolleson, Arizona. In 2010, the Company consisted of the Molycorp Mountain Pass operating segment.

The accounting policies of these segments are the same as those described in the summary of significant accounting policies except that asset retirement obligations are recognized only for Molycorp Mountain Pass, certain government grants are recognized only for Molycorp Sillamäe, and annual profit earned by Molycorp Sillamäe is not taxed. In accordance with the Estonian Income Tax Act, only distribution of annual profit is subject to income tax. Intersegment sales and transfers are based on similar arms-length transactions with third parties at the time of the sale.

Molycorp's reportable segments are strategic business units that fit into the Company's "mine-to-magnet" strategy to be the world's most integrated producer of rare earth products, including oxides, metals, alloys and magnets. Each of the three segments was acquired as a unit and management at the time of the acquisition was retained.

(In thousands)	Molycorp Mountain Pass Year Ended December 31, 2011	Molycorp Sillamäe April 1, 2011 - December 31, 2011	Molycorp Tolleson April 15, 2011 - December 31, 2011	Other(a)	Eliminations(b)	Total Molycorp, Inc.
Sales:						
External	$ 253,563	86,496	$ 56,772	$ —	$ —	$ 396,831
Intersegment	55,155	13,902	—		(69,057)	—
Total sales	308,718	100,398	56,772			
Cost of goods sold	(78,890)	(86,789)	(53,826)	—	41,615	(177,890)
Selling, general and administrative expenses	(61,535)	(2,499)	(615)	(530)	792	(64,387)
Depreciation, amortization and accretion expense	(1,378)	(279)	—	(31)	—	(1,688)
Operating income (loss)	166,915	10,831	2,331	(561)	(26,650)	152,866
Other (expense) income	(287)	(5,680)	11	—	—	(5,956)
Income (loss) before income taxes	$ 166,628	$ 5,151	$ 2,342	$(561)	$ (26,650)	$ 146,910
Total assets at December 31, 2011	$1,249,998	$118,001	$ 30,061	$ 794	$(143,729)	$1,255,125
Capital expenditures (accrual basis excluding capitalized interest)	$ 401,047	$ 8,170	$ —	$ —	$ —	$ 409,217

(a) Includes expenses incurred by and capital invested in the sales office in Tokyo, Japan.

(b) The $143,729 of total assets eliminations is comprised of $4,250 of intercompany accounts receivable, $28,345 of intercompany inventory and $111,134 of intercompany investments.

Each of the segments has only one production and shipping location. Sales to external customers by geographic area are based on the location in which the sale originated. As of December 31, 2011, net long-lived assets by geographic areas were as follows: U.S. $495.9 million, Estonia $64.8 million,

(11) Segment Information (Continued)

Japan $0.4 million. Net long-lived assets primarily consist of property, plant and equipment, goodwill and other intangible assets.

(12) Derivative Instruments

During the third quarter of 2011, the Company, through its subsidiary Molycorp Minerals, LLC, entered into derivative contracts to manage its foreign currency exposure with respect to euro denominated purchases of certain equipment. The Company did not apply hedge accounting to the foreign currency forward contracts; therefore, the change in the fair value of these derivative instruments, which resulted in an unrealized loss of $0.3 million for the year ended December 31, 2011, was recorded in Other (expense) income in the consolidated statements of operations. These derivative contracts have maturities of less than one year and the total fair value of $0.3 million as of December 31, 2011 was recorded in Accrued expenses in the consolidated balance sheet. The following table provides the outstanding foreign currency forward contracts at December 31, 2011, in millions:

Entity	Currency purchased forward	Currency sold forward	Maturity dates
Molycorp Minerals, LLC	€0.5	USD 0.6	January 2012
Molycorp Minerals, LLC	€1.4	USD 1.9	February 2012
Molycorp Minerals, LLC	€0.5	USD 0.6	March 2012

These derivative instruments are reported using the fair value method. GAAP provides for a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. Level 1 inputs are quoted market prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 inputs are inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability.

The fair value measurement of these foreign currency forward contracts is determined using internally developed discounted cash flow models. The inputs to these models consist of, or are derived from, observable Level 2 data for substantially the full term of these derivative instruments. The internally determined fair value is then compared to the fair value assessment from the counterparty to these contracts; large or unexpected differences between the Company's internal valuation and the fair value assessment from the counterparty are investigated.

The Company expects that the values realized on these foreign currency forward contracts will be based on market conditions at the time of settlement, which will occur at the maturity of these instruments.

(13) Net Change in Operating Assets and Liabilities

Net cash provided by (used in) operating activities related to changes in operating assets and liabilities, net of the effects of acquisitions and dispositions, consist of the following:

(In thousands)	Year Ended December 31, 2011	2010	2009	Total from June 12, 2008 (Inception) through December 31, 2011
Decrease (increase) in operating assets:				
Accounts receivable	$ (52,805)	$(15,200)	$ 125	$ (69,776)
Inventory	(54,343)	(6,872)	(13,557)	(78,212)
Prepaid expenses and other assets	(6,363)	251	360	(7,386)
Increase (decrease) in operating liabilities:				
Accounts payable	16,233	3,797	(254)	20,418
Prepaid income taxes	(17,832)	—	—	(17,832)
Asset retirement obligation	(1,030)	(632)	(387)	(2,049)
Accrued expenses	6,151	(1,481)	5,749	12,637
	$(109,989)	$(20,137)	$ (7,964)	$(142,200)

(14) Supplemental Cash Flow Information

(In thousands)	Year Ended December 31, 2011	2010	2009	Total from June 12, 2008 (Inception) through December 31, 2011
Net cash paid for:				
Income taxes	$ 43,505	$ —	$ —	$ 43,505
Interest	$ 4,192	$ —	$ —	$ 4,192
Non-cash financing activities and investing activities:				
Conversion of short-term borrowings from member plus accrued interest, into common shares	$ —	$ —	$6,831	$ 6,831
Change in accrued capital expenditures	$112,606	$5,510	$ (150)	$112,606

(15) Unaudited Supplementary Data

The following is a summary of the selected quarterly financial information (unaudited):

	2011			
	Three Months Ended			
	March 31	June 30	September 30(2)	December 31
	(In thousands, except share and per share data)			
Sales	$ 26,261	$ 99,615	$ 138,050	$ 132,905
Cost of goods sold	(16,677)	(42,923)	(55,657)	(62,633)
Selling, general and administrative expense (Includes stock-based compensation of $2,899 in March, $412 in June, $611 in September and $586 in December)	(11,238)	(14,229)	(14,901)	(24,019)
Depreciation and amortization expense	(83)	(283)	(305)	(62)
Accretion expense	(234)	(240)	(240)	(241)
Operating income (loss)	(1,971)	41,940	66,947	45,950
Other income (expense):				
Other income (expense)	(168)	133	(117)	(1)
Foreign currency transaction losses, net	—	—	(2,000)	(3,415)
Interest income (expense), net	140	70	(671)	73
Income (loss) before income taxes	(1,999)	42,143	64,159	42,607
Income tax (expense) benefit	(199)	6,612	(19,056)	(15,933)
Net income (loss)	(2,198)	48,755	45,103	26,674
Net loss (income) attributable to noncontrolling interest	—	(968)	255	(95)
Net income (loss) attributable to Molycorp stockholders	$ (2,198)	$ 47,787	$ 45,358	$ 26,579
Weighted average shares outstanding (Common shares)(1)				
Basic	82,253,700	83,847,119	83,847,119	83,847,119
Diluted	82,253,700	84,413,499	87,069,256	87,069,711
Income (loss) per share of common stock:				
Basic	$ (0.04)	$ 0.52	$ 0.50	$ 0.27
Diluted	$ (0.04)	$ 0.52	$ 0.48	$ 0.26

(15) Unaudited Supplementary Data (Continued)

	2010			
	Three Months Ended			
	March 31	June 30	September 30	December 31
	(In thousands, except share and per share data)			
Sales	$ 3,018	$ 1,904	$ 8,533	$ 21,702
Cost of goods sold	(5,950)	(5,576)	(7,742)	(18,323)
Selling, general and administrative expense (Includes stock-based compensation of $0 in March, $15,133 in June, $6,527 in September and $7,079 in December)	(4,480)	(19,387)	(10,644)	(13,002)
Depreciation and amortization expense	(95)	(61)	(83)	(80)
Accretion expense	(263)	(216)	(216)	(217)
Operating loss	(7,770)	(23,336)	(10,152)	(9,920)
Other income (expense):				
Other income	21	45	14	75
Interest income (expense), net of capitalized amount	—	—	(7)	256
Net loss	$ (7,749)	$ (23,291)	$ (10,145)	$ (9,589)
Weighted average shares outstanding (Common shares)(1)				
Basic	48,155,533	49,666,732	69,550,649	81,509,452
Diluted	48,155,533	49,666,732	69,550,649	81,509,452
Loss per share of common stock:				
Basic	$ (0.16)	$ (0.47)	$ (0.15)	$ (0.12)
Diluted	$ (0.16)	$ (0.47)	$ (0.15)	$ (0.12)

(1) Weighted average shares outstanding include the retroactive treatment of exchange ratios for conversion of Class A common stock and Class B common stock to common stock in conjunction with the initial public offering.

(2) During the fourth quarter of 2011, we identified an error in the elimination of intercompany sales in the third quarter of 2011. We have concluded that this error is not material to our previously issued consolidated financial statements for the third quarter of 2011, or to our consolidated financial statements for the 9 months ended September 30, 2011 or the fourth quarter of 2011. We revised our previously reported results for the third quarter of 2011 to correct this error in the appropriate quarterly period. This revision resulted in an increase to cost of sales of $5.1 million, a decrease in operating income of $5.1 million and a decrease in net income of $3.3 million, net of income tax benefit in the third quarter of 2011 of $1.8 million for the three months ended September 30, 2011. For the nine months ended September 30, 2011, this revision resulted in an increase to cost of sales of $5.1 million, a decrease in operating income of $5.1 million and a decrease in net income of $3.3 million, net of income tax benefit of $1.8 million We will appropriately revise the results in the quarterly filing on Form 10-Q for the three and nine months ended September 30, 2011, when next presented in the third quarter of 2012.

(15) Unaudited Supplementary Data (Continued)

We revised our previously reported third quarter of 2011 basic and diluted earnings per share in the fourth quarter of 2011 to reflect the adjustments described in the note above, in the appropriate quarterly period. These adjustments resulted in a net decrease to basic and diluted earnings per share in the amounts of $0.04 for the three months ended September 30, 2011. For the nine months ended September 30, 2011, these adjustments resulted in a net decrease to basic and diluted earnings per share in the amounts of $0.04 and $0.03, respectively. We will appropriately revise the third quarter of 2011 earnings per share in our quarterly filing on Form 10-Q for the three and nine months ended September 30, 2011, when next presented in the third quarter of 2012.

(16) Subsequent Events

Intermetallics Japan Joint Venture

On November 28, 2011 Molycorp, Daido Steel Co., Ltd ("Daido") and Mitsubishi Corporation ("Mitsubishi") entered into a preliminary shareholders agreement for the purpose of establishing a new private company, Intermetallics Japan Joint Venture or IJJV to manufacture sintered NdFeB permanent rare earth magnets. The capital contribution ratio of the newly formed company is 30.0% by Molycorp, 35.5% by Daido, and 34.5% by Mitsubishi. According to the final shareholders agreement, which was signed in January 2012, Molycorp will contribute, upon achievement of certain milestones and subject to Molycorp's Board of Directors' approval, Japanese Yen (JPY) 2.5 billion in cash (or approximately $32.7 million based on the JPY/ U.S. dollar exchange rate as of January 31, 2012), in exchange of ordinary shares of IJJV over a period of twelve months starting in January 2012.

The actual remittance amounts will vary depending on the future exchange rate between the U.S. dollar and the Japanese Yen, and the achievement of certain milestones by the joint venture. The Company will account for its investment in IJJV under the equity method because it has the ability to exercise significant influence over the operating and financial policies of IJJV, as evidenced by Molycorp's ownership share and its proportional voting rights and representation on the Board of Directors of IJJV.

Preferred dividend

In February 2012, the Company declared a cash dividend of $1.375 per share on the Convertible Preferred Stock. The aggregate dividend of $2.8 million will be paid on March 1, 2012 to holders of record at the close of business on February 15, 2012.

Investment from Molymet

In January 2012, the Company entered into an agreement with Molibdenos y Metales S.A., the world's largest processor of the strategic metals molybdenum and rhenium headquartered in Santiago, Chile, pursuant to which Molymet has agreed to purchase 12.5 million shares of the Company's common stock for $390 million at a purchase price of $31.218 per share, which price was determined based on the average daily volume weighted average price of the Company's common stock on The New York Stock Exchange for the 20 consecutive trading days immediately preceding the date of the agreement, plus a 10% premium. Pursuant to the agreement, the Company is obligated, at closing, to increase the size of its Board and has given Molymet the right to nominate a member of its Board for

(16) Subsequent Events (Continued)

so long as Molymet owns a certain percentage of the Company's common stock. Additionally, the agreement provides Molymet with three demand registration rights for the shares of common stock it is purchasing pursuant to the agreement.

The consummation of the offering, which the Company anticipate to occur in the second quarter of 2012, remains subject to the satisfaction of certain customary closing conditions, including the receipt of certain governmental regulatory approvals. Proceeds from the Molymet investment will be retained by the Company for general corporate purposes and are expected to be used to finance the Company's future growth, including pursuant to its vertical supply chain integration business model.

Purported class action and derivative lawsuits

In February 2012, a purported class action lawsuit captioned, *Angelo Albano, Individually and on Behalf of All Others Similarly Situated v. Molycorp, Inc., et al.*, was filed against the Company and certain of its executive officers in the U.S. District Court for the District of Colorado. This federal court action alleges, among other things, that the Company and those officers violated Section 10(b) of the Securities Act of 1933 and Rule 10b-5 under the Securities Exchange Act of 1934 in connection with statements relating to its third quarter fiscal 2011 financial results and fourth quarter 2011 production guidance that the Company had filed with or furnished to the SEC, or otherwise made available to the public. The plaintiffs seek damages, including interest, equitable relief and reimbursement of the costs and expenses they incur in the lawsuit. The Company believes the allegations are without merit and that it has valid defenses to such allegations. The Company intends to defend this action vigorously. The Company is unable to provide meaningful quantification of how the final resolution of these claims may impact its future consolidated financial position or results of operations.

In addition, in February 2012, two stockholder derivative lawsuits captioned, *Thomas B. Wells, Derivatively on Behalf of Molycorp, Inc. v. Mark A. Smith, et al.* and *Ira Gaines, Individually and as Trustee of Paradise Wire & Cable Defined Benefit Plan Dated 11/1/84, Derivatively on behalf of Molycorp, Inc. v. Mark A. Smith, et al.*, were filed against the Company (as a nominal defendant) and certain of its directors, executive officers and stockholders in the U.S. District Court for the District of Colorado and The Court of Chancery of the State of Delaware, respectively. These actions allege, among other things, breach of fiduciary duty, waste of corporate assets and unjust enrichment by such directors and executive officers, and insider selling and misappropriation of information by such stockholders, in connection with sales of the Company's common stock by such directors, officers and stockholders during 2011. The complaints in the lawsuits seek, among other things, awards to the Company and against the defendants of damages, restitution and disgorgement of profits in an unspecified amount.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Evaluation of disclosure controls and procedures

In accordance with Rule 13a-15(b) of the Exchange Act, the Company's management, with the participation of the Chief Executive Officer and the Chief Financial Officer, carried out an evaluation of the effectiveness of the Company's "disclosure controls and procedures", as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act, as of the end of the period covered by this Annual Report on Form 10-K. Based on their evaluation as of December 31, 2011, the Chief Executive Officer and the Chief Financial Officer of the Company have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) were effective.

Management's annual report on internal control over financial reporting

The Company's management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of the Company's internal control over financial reporting based on the framework in "Internal Control—Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its evaluation under the framework in "Internal Control—Integrated Framework," the Company's management concluded that the Company's internal control over financial reporting was effective as of December 31, 2011.

The Company's management excluded from its assessment of internal control over financial reporting the operations of Molycorp Sillamäe, which was acquired on and consolidated by the Company as of April 1, 2011, and the operations of Molycorp Tolleson, which was acquired on and consolidated by the Company as of April 15, 2011. The acquired operations had combined total assets and combined sales representing 10% and 36%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2011.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2011, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which is included in Item 8, "Financial Statements and Supplementary Data" of this Annual report on Form 10-K.

Changes in internal control over financial reporting

There have been no changes in the Company's internal control over financial reporting that occurred during the fourth quarter covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION.

Not applicable

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information required by this Item, other than the information regarding our executive officers, is incorporated herein by reference to the information provided in our definitive proxy statement for the 2012 annual meeting of stockholders to be filed within 120 days from December 31, 2011.

Information regarding our executive officers is included in Part I of this Form 10-K under the heading "Executive Officers of the Registrant," as permitted by Instruction 3 to Item 401(b) of Regulation S-K.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this Item is incorporated herein by reference to the information provided in our definitive proxy statement for the 2012 annual meeting of stockholders to be filed within 120 days from December 31, 2011.

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

The information required by this Item is incorporated herein by reference to the information provided in our definitive proxy statement for the 2012 annual meeting of stockholders to be filed within 120 days from December 31, 2011.

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

The information required by this Item is incorporated herein by reference to the information provided in our definitive proxy statement for the 2012 annual meeting of stockholders to be filed within 120 days from December 31, 2011.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information required by this Item is incorporated herein by reference to the information provided in our definitive proxy statement for the 2012 annual meeting of stockholders to be filed within 120 days from December 31, 2011.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

List of Consolidated Financial Statements and Financial Statement Schedules

(a)(1) The following consolidated financial statements of Molycorp, Inc. and subsidiaries are included in Item 8:

(a)(2) Financial Statement Schedules:

All schedules for which provision is made in the applicable accounting regulation of the SEC are not required under the related instructions or are inapplicable and, therefore, have been omitted.

(a)(3) Exhibits:

2.1 Stock Purchase Agreement, dated as of April 1, 2011, by and among Molycorp, Inc., Molycorp Minerals, LLC and Aktsiaselts Silmet Grupp (incorporated by reference to Exhibit 2.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on April 7, 2011.

2.2 Stock Purchase Agreement, dated as of April 1, 2011, by and between Molycorp Minerals, LLC and Treibacher Industrie AG (incorporated by reference to Exhibit 2.2 to Molycorp's Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on April 7, 2011.

3.1 Amended and Restated Certificate of Incorporation of Molycorp, Inc. (incorporated by reference to Exhibit 3.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on August 6, 2010).

3.2 Bylaws of Molycorp, Inc. (incorporated by reference to Exhibit 3.2 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on August 6, 2010).

3.3 Form of Certificate of Designations of Series A Mandatory Convertible Preferred Stock of Molycorp, Inc. (including Form of Certificate of Molycorp, Inc. Series A Mandatory Convertible Preferred Stock) (incorporated by reference to Exhibit 3.3 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on February 7, 2011).

4.1 Form of Certificate of Molycorp, Inc. Common Stock (incorporated by reference to Exhibit 4.1 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on July 13, 2010).

4.2 Indenture, dated as of June 15, 2011, between Molycorp, Inc., and Wells Fargo Bank, National Association, as trustee (including the Form of Note) (incorporated by reference to Exhibit 4.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on June 16, 2011.

10.1 Letter Agreement dated April 16, 2010, between Molycorp Minerals, LLC and Traxys North America, LLC (incorporated by reference to Exhibit 10.2 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).

10.2 Contribution Agreement, dated April 15, 2010, by and among Molycorp, Inc., Molycorp, LLC, Molycorp Minerals, LLC and the parties listed therein (incorporated by reference to Exhibit 10.4 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).

10.3 Stockholders Agreement, dated April 15, 2010, by and among Molycorp, Inc. and the parties listed therein (incorporated by reference to Exhibit 10.5 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).

10.4 Registration Rights Agreement, dated April 15, 2010, by and among Molycorp, Inc. and the parties listed therein (incorporated by reference to Exhibit 10.6 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).

10.5* Form of Restricted Stock Agreement (incorporated by reference to Exhibit 10.7 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).

10.6* Molycorp, Inc. Amended and Restated Management Incentive Compensation Plan, effective as of December 20, 2010 (incorporated by reference to Exhibit 10.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on December 21, 2010).

10.7 Sales/Buy-Back Agreement, dated June 1, 2010, between Molycorp Minerals, LLC and Traxys North America, LLC (incorporated by reference to Exhibit 10.10 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.8 Purchase Agreement, dated as of December 15, 2010, between Molycorp Minerals, LLC and Quinn Process Equipment Co. (incorporated by reference to Exhibit 10.22 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on January 24, 2011).

10.9* Executive Employment Agreement, dated May 21, 2010, between Molycorp, Inc. and Mark A. Smith (incorporated by reference to Exhibit 10.11 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.10* Executive Employment Agreement, dated May 21, 2010, between Molycorp, Inc. and James S. Allen (incorporated by reference to Exhibit 10.12 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.11* Executive Employment Agreement, dated May 21, 2010, between Molycorp, Inc. and John F. Ashburn, Jr. (incorporated by reference to Exhibit 10.13 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.12* Executive Employment Agreement, dated May 21, 2010, between Molycorp, Inc. and John L. Burba (incorporated by reference to Exhibit 10.14 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.13* Molycorp, Inc. 2010 Equity and Performance Incentive Plan (incorporated by reference to Exhibit 10.15 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.14 Letter Agreement, dated April 15, 2010, among Resource Capital Fund IV, L.P., Resource Capital Fund V, L.P., PP IV Mountain Pass II, LLC, PP IV MP AIV 1, LLC, PP IV MP AIV 2, LLC, PP IV MP AIV 3, LLC, TNA Moly Group, LLC, MP Rare Company, LLC and KMSmith, LLC (incorporated by reference to Exhibit 10.16 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.15 Summary of Collateral Arrangement for Surety Bonds (incorporated by reference to Exhibit 10.17 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on July 13, 2010).

10.16* Form of Director and Officer Indemnification Agreement (incorporated by reference to Exhibit 10.18 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on July 13, 2010).

10.17* Form of Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 10.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on November 8, 2010).

10.18* Form of Restricted Stock Agreement (incorporated by reference to Exhibit 10.2 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on November 8, 2010).

10.19* Form of Restricted Stock Units Agreement (incorporated by reference to Exhibit 10.3 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on November 8, 2010).

10.20* Executive Employment Agreement, dated November 1, 2010, between Molycorp, Inc. and Douglas J. Jackson (incorporated by reference to Exhibit 10.22 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on January 24, 2011).

10.21* Molycorp, Inc. Nonemployee Director Deferred Compensation Plan (incorporated by reference to Exhibit 10.23 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on January 24, 2011).

10.22* Molycorp, Inc. Amended and Restated Management Incentive Plan (incorporated by reference to Exhibit 10.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on December 21, 2010).

10.23* Summary of Molycorp, Inc. 2011 Annual Incentive Plan (incorporated by reference to Exhibit 10.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on January 19, 2011).

10.24* Executive Employment Agreement, dated January 24, 2011, between Molycorp, Inc. and John K. Bassett (incorporated by reference to Exhibit 10.26 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on February 7, 2011).

10.25 Change Order to Purchase Agreement, dated as of February 28, 2011, between Molycorp Minerals, LLC and Quinn Process Equipment Co (incorporated by reference to Exhibit 10.27 to Molycorp, Inc.'s Annual Report on Form 10-K (File No. 001-34827) filed with the Securities and Exchange Commission on March 9, 2011).

10.26* Form of Restricted Stock Units Agreement for Non-employee Directors (incorporated by reference to Exhibit 10.1 to Molycorp Inc.'s Quarterly Report on Form 10-Q (File No. 001-34827) file with the Securities and Exchange Commission on August 11, 2011).

10.27* Amendment No. 1 to Molycorp Inc. Amended and Restated Management Incentive and Compensation Plan, effective as of December 20, 2010 (incorporated by reference to Exhibit 10.1 to Molycorp Inc.'s Quarterly Report on Form 10-Q (File No. 001-34827) filed with the Securities and Exchange Commission on November 10, 2011).

10.28* Form of Restricted Stock Units Agreement for Non-employee Directors Deferred Compensation Plan Participants (incorporated by reference to Exhibit 10.2 to Molycorp Inc.'s Quarterly Report on Form 10-Q (File No. 001-34827) filed with the Securities and Exchange Commission on November 10, 2011).

10.29* Form of MICP Restricted Stock Units Agreement.

10.30* Molycorp, Inc. Severance Pay Plan for Management Employees, effective as of December 7, 2011.

21.1 List of Subsidiaries.

23.1 Consent of PricewaterhouseCoopers LLP.

23.2 Consent of SRK Consulting (U.S.), Inc.

24.1 Power of Attorney.

31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

32.1 Certification pursuant to U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

95.1 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.

101.INS XBRL Instance Document

101.SCH XBRL Taxonomy Extension Schema Document

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF XBRL Taxonomy Extension Definition Linkbase Document

101.LAB XBRL Taxonomy Extension Label Linkbase Document

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

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* Management contracts and compensatory plans and arrangements required to be filed as exhibits pursuant to Item 15(b).

(b) Exhibits

The response to this portion of Item 15 is included under (a)(3) of this Item 15.

(c) Financial Statement Schedules

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.

MOLYCORP, INC.

By: /s/ MARK A. SMITH
Mark A. Smith
President and Chief Executive Officer

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

Signature	Title	Date
/s/ MARK A. SMITH Mark A. Smith	President and Chief Executive Officer and Director (Principal Executive Officer)	February 27, 2012
* James S. Allen	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 27, 2012
* Ross R. Bhappu	Chairman of the Board	February 27, 2012
* Russell D. Ball	Director	February 27, 2012
* Brian T. Dolan	Director	February 27, 2012
* Charles R. Henry	Director	February 27, 2012
* Mark S. Kristoff	Director	February 27, 2012

Signature	Title	Date
*		
Alec Machiels	Director	February 27, 2012
*		
Jack E. Thompson	Director	February 27, 2012

* The undersigned, by signing his name hereto, does sign and execute this Annual Report on Form 10-K pursuant to the Power of Attorney executed by the above-named directors and officers of the registrant, which is being filed herewith on behalf of such directors and officers.

By: /s/ MARK A. SMITH
Attorney-in-fact

GLOSSARY OF SELECTED MINING TERMS

The following is a glossary of selected mining terms used in this annual report on Form 10-K that may be technical in nature:

Assay	The analysis of the proportions of metals in ore, or the testing of an ore or mineral for composition, purity, weight, or other properties of commercial interest.
Bastnasite	Bastnasite is a mixed-lanthanide fluoro-carbonate mineral (Ln F CO3) that currently provides the bulk of the world's supply of the light REEs. Bastnasite and monazite are the two most common sources of cerium and other REEs. Bastnasite is found in carbonatites, igneous carbonate rocks that melt at unusually low temperatures.
Cerium	Cerium (Ce) is a soft, silvery, ductile metal which easily oxidizes in air. Cerium is the most abundant of the REEs, and is found in a number of minerals, including monazite and bastnasite. Cerium has two relatively stable oxidation states, enabling both the storage of oxygen and its widespread use in catalytic converters. Cerium is also widely used in glass polish.
Concentrate	A mineral processing product that generally describes the material that is produced after crushing and grinding ore, effecting significant separation of gangue (waste) minerals from the desired metal and/or metal minerals, and discarding the waste minerals. The resulting "concentrate" of minerals typically has an order of magnitude higher content of minerals than the beginning ore material.
Cut-off grade	The lowest grade of mineralized material that qualifies as ore in a given deposit. The grade above which minerals are considered economically mineable considering the following parameters: estimates over the relevant period of mining costs, ore treatment costs, general and administrative costs, refining costs, royalty expenses, by-product credits, process and refining recovery rates and price.
Didymium	Didymium is a natural and unseparated combination of neodymium and praseodymium, which is approximately 75% neodymium and 25% praseodymium, depending on the ore.
Dysprosium	A few percent of Dysprosium (Dy) is often added to high power neodymium iron boron magnets to increase their resistance to demagnetization. A minor use of dysprosium is in the magnetostrictive alloy, based on DyTbFe called terfenol-D.
Europium	Europium (Eu) is desirable due to its photon emission. Excitation of the europium atom, by absorption of electrons or by UV radiation, results in changes in energy levels that create a visible emission. Almost all practical uses of europium utilize this luminescent behavior.

Gadolinium	Gadolinium (Gd) absorbs neutrons and therefore is used for shielding and controlling neutron radiography and in nuclear reactors. Because of its paramagnetic properties, solutions of organic gadolinium complexes and gadolinium compounds are popular intravenous contrast enhancing agents for medical Magnetic Resonance Imaging contrast agents in (MRI). Gadolinium is sometimes added to samarium cobalt magnets to make their magnetic properties less temperature dependent.
Grade	The average REE content, as determined by assay of a metric ton of ore.
Ingot cast alloy	The alloy produced by pouring molten alloy into stationary molds. After casting the alloy into the molds, the alloy solidifies and the molds are allowed to cool before removing them from the vacuum induction melting furnace. Once removed, the molds are taken apart to remove the alloy, which is then further processed to meet customer quality and size specifications.
Lanthanum	Lanthanum (La) is the first member of the Lanthanide series. Lanthanum is a strategically important rare earth element due to its use in fluid bed cracking catalysts, FCCs, which are used in the production of transportation and aircraft fuel. Lanthanum is also used in fuel cells and batteries.
Mill	A processing plant that produces a concentrate of the valuable minerals contained in an ore.
Mineralization	The process or processes by which a mineral or minerals are introduced into a rock, resulting in a valuable or potentially valuable deposit.
Monazite	Monazite is a reddish-brown phosphate mineral. Monazite minerals are typically accompanied by concentrations of uranium and thorium. This has historically limited the processing of monazite, however this mineral is becoming more attractive because it typically has elevated concentrations of mid-to heavy rare earths.
Niobium	Niobium is a rare, soft, grey, ductile transition metal found in the minerals pyrochlore, the main commercial source for niobium, and columbite. Niobium is used mostly in alloys, the largest part in special steel such as that used in gas pipelines. Although alloys contain only a maximum of 0.1%, that small percentage of niobium improves the strength of the steel. The temperature stability of niobium-containing superalloys is important for its use in jet and rocket engines. Niobium is used in various superconducting materials.
Neodymium	Neodymium (Nd) has two major uses. It is key constituent of NdFeB permanent magnets and it is an additive to capacitor dielectrics. NdFeB magnets maximize the power/weight ratio, and are found in a large variety of motors, generators, sensors and hard disk drives. Capacitors containing neodymium are found in cellular telephones, computers and nearly all other electronic devices. A minor application of neodymium is in lasers.
Ore	That part of a mineral deposit which could be economically and legally extracted or produced at the time of reserve determination.
Overburden	In surface mining, overburden is the material that overlays an ore deposit. Overburden is removed prior to mining.

Praseodymium ..... Praseodymium (Pr) comprises about 4% of the lanthanide content of bastnasite and has a few specific applications, based mainly on its optical properties. It is a common coloring pigment, and is used in photographic filters, airport signal lenses, and welder's glasses. Because it chemically and magnetically is so similar to its neighbors neodymium and lanthanum, it is typically found in small amounts in applications where neodymium and lanthanum are popular, such as NdFeB magnets and catalysts. These latter applications are actually the largest uses for praseodymium because the magnet and catalyst markets are so large. Thus praseodymium plays an important role, in extending the availability of the more popular neodymium and lanthanum.

Probable reserves ..... Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

Proven reserves ..... Reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling; and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well established.

Recovery ..... The percentage of contained metal actually extracted from ore in the course of processing such ore.

Reserves ..... That part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. Same definition as 'ore'

Samarium ..... Samarium (Sm) is predominantly used to produce samarium cobalt magnets. Although these magnets are slightly less powerful than NdFeB magnets at room temperature, samarium cobalt magnets can be used over a wider range of temperatures and are less susceptible to corrosion.

Strike..... The direction of the line of intersection of a mineral deposit with the horizontal plane of the ground. The strike of a deposit is the direction of a straight line that connects two points of equal elevation on the deposit.

Strip cast alloy ..... The alloy produced by pouring molten alloy onto a rotating, water-cooled surface. After contacting the rotating water-cooled surface, the alloy solidifies as a thin strip and drops into an alloy collection pot. The pot is sealed before removal from the vacuum induction melting furnace to keep the warm strip cast alloy from contacting air or moisture before it reaches room temperature.

Tailings ..... That portion of the mined material that remains after the valuable minerals have been extracted.

Tantalum	Tantalum is a rare, hard, blue-gray, lustrous transition metal that is highly corrosion resistant. It is part of the refractory metals group, which are widely used as minor component in alloys. The chemical inertness of tantalum makes it a valuable substance for laboratory equipment and a substitute for platinum, but its main use today is in tantalum capacitors in electronic equipment such as mobile phones, DVD players, video game systems and computers.
Terbium	Terbium (Tb) is used primarily as a phosphor, either in fluorescent lamps or x-ray screens. It can replace dysprosium in NdFeB magnets but usually does not because of its cost. A minor use of terbium is in the magnetostrictive alloy, based on DyTbFe called terfenol-D.
Yttrium	Yttrium (Y), although not a lanthanide series element, is often considered to be a rare earth element and its behavior is similar to heavy rare earth elements. It is predominantly utilized in lighting applications and ceramics. Other uses include resonators, lasers, microwave communication devices and other electronic devices.

EXHIBIT INDEX

2.1	Stock Purchase Agreement, dated as of April 1, 2011, by and among Molycorp, Inc., Molycorp Minerals, LLC and Aktsiaselts Silmet Grupp (incorporated by reference to Exhibit 2.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on April 7, 2011.
2.2	Stock Purchase Agreement, dated as of April 1, 2011, by and between Molycorp Minerals, LLC and Treibacher Industrie AG (incorporated by reference to Exhibit 2.2 to Molycorp's Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on April 7, 2011.
3.1	Amended and Restated Certificate of Incorporation of Molycorp, Inc. (incorporated by reference to Exhibit 3.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on August 6, 2010).
3.2	Bylaws of Molycorp, Inc. (incorporated by reference to Exhibit 3.2 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on August 6, 2010).
3.3	Form of Certificate of Designations of Series A Mandatory Convertible Preferred Stock of Molycorp, Inc. (including Form of Certificate of Molycorp, Inc. Series A Mandatory Convertible Preferred Stock) (incorporated by reference to Exhibit 3.3 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on February 7, 2011).
4.1	Form of Certificate of Molycorp, Inc. Common Stock (incorporated by reference to Exhibit 4.1 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on July 13, 2010).
4.2	Indenture, dated as of June 15, 2011, between Molycorp, Inc., and Wells Fargo Bank, National Association, as trustee (including the Form of Note) (incorporated by reference to Exhibit 4.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on June 16, 2011.
10.1	Letter Agreement, dated April 16, 2010, between Molycorp Minerals, LLC and Traxys North America, LLC (incorporated by reference to Exhibit 10.2 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).
10.2	Contribution Agreement, dated April 15, 2010, by and among Molycorp, Inc., Molycorp, LLC, Molycorp Minerals, LLC and the parties listed therein (incorporated by reference to Exhibit 10.4 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).
10.3	Stockholders Agreement, dated April 15, 2010, by and among Molycorp, Inc. and the parties listed therein (incorporated by reference to Exhibit 10.5 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).
10.4	Registration Rights Agreement, dated April 15, 2010, by and among Molycorp, Inc. and the parties listed therein (incorporated by reference to Exhibit 10.6 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).

10.5* Form of Restricted Stock Agreement (incorporated by reference to Exhibit 10.7 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on May 25, 2010).

10.6* Molycorp, Inc. Amended and Restated Management Incentive Compensation Plan, effective as of December 20, 2010 (incorporated by reference to Exhibit 10.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on December 21, 2010).

10.7 Sales/Buy-Back Agreement, dated June 1, 2010, between Molycorp Minerals, LLC and Traxys North America, LLC (incorporated by reference to Exhibit 10.10 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.8 Purchase Agreement, dated as of December 15, 2010, between Molycorp Minerals, LLC and Quinn Process Equipment Co. (incorporated by reference to Exhibit 10.22 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on January 24, 2011).

10.9* Executive Employment Agreement, dated May 21, 2010, between Molycorp, Inc. and Mark A. Smith (incorporated by reference to Exhibit 10.11 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.10* Executive Employment Agreement, dated May 21, 2010, between Molycorp, Inc. and James S. Allen (incorporated by reference to Exhibit 10.12 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.11* Executive Employment Agreement, dated May 21, 2010, between Molycorp, Inc. and John F. Ashburn, Jr. (incorporated by reference to Exhibit 10.13 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.12* Executive Employment Agreement, dated May 21, 2010, between Molycorp, Inc. and John L. Burba (incorporated by reference to Exhibit 10.14 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.13* Molycorp, Inc. 2010 Equity and Performance Incentive Plan (incorporated by reference to Exhibit 10.15 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.14 Letter Agreement, dated April 15, 2010, among Resource Capital Fund IV, L.P., Resource Capital Fund V, L.P., PP IV Mountain Pass II, LLC, PP IV MP AIV 1, LLC, PP IV MP AIV 2, LLC, PP IV MP AIV 3, LLC, TNA Moly Group, LLC, MP Rare Company, LLC and KMSmith, LLC (incorporated by reference to Exhibit 10.16 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on June 21, 2010).

10.15 Summary of Collateral Arrangement for Surety Bonds (incorporated by reference to Exhibit 10.17 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on July 13, 2010).

10.16* Form of Director and Officer Indemnification Agreement (incorporated by reference to Exhibit 10.18 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-166129) filed with the Securities and Exchange Commission on July 13, 2010).

10.17* Form of Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 10.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on November 8, 2010).

10.18* Form of Restricted Stock Agreement (incorporated by reference to Exhibit 10.2 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on November 8, 2010).

10.19* Form of Restricted Stock Units Agreement (incorporated by reference to Exhibit 10.3 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on November 8, 2010).

10.20* Executive Employment Agreement, dated November 1, 2010, between Molycorp, Inc. and Douglas J. Jackson (incorporated by reference to Exhibit 10.22 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on January 24, 2011).

10.21* Molycorp, Inc. Nonemployee Director Deferred Compensation Plan (incorporated by reference to Exhibit 10.23 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on January 24, 2011).

10.22* Molycorp, Inc. Amended and Restated Management Incentive Plan (incorporated by reference to Exhibit 10.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on December 21, 2010).

10.23* Summary of Molycorp, Inc. 2011 Annual Incentive Plan (incorporated by reference to Exhibit 10.1 to Molycorp, Inc.'s Current Report on Form 8-K (File No. 001-34827) filed with the Securities and Exchange Commission on January 19, 2011).

10.24* Executive Employment Agreement, dated January 24, 2011, between Molycorp, Inc. and John K. Bassett (incorporated by reference to Exhibit 10.26 to Molycorp, Inc.'s Registration Statement on Form S-1 (Registration No. 333-171827) filed with the Securities and Exchange Commission on February 7, 2011).

10.25 Change Order to Purchase Agreement, dated as of February 28, 2011, between Molycorp Minerals, LLC and Quinn Process Equipment Co (incorporated by reference to Exhibit 10.27 to Molycorp, Inc.'s Annual Report on Form 10-K (File No. 001-34827) filed with the Securities and Exchange Commission on March 9, 2011).

10.26* Form of Restricted Stock Units Agreement for Non-employee Directors (incorporated by reference to Exhibit 10.1 to Molycorp Inc.'s Quarterly Report on Form 10-Q (File No. 001-34827) file with the Securities and Exchange Commission on August 11, 2011).

10.27* Amendment No. 1 to Molycorp Inc. Amended and Restated Management Incentive and Compensation Plan, effective as of December 20, 2010 (incorporated by reference to Exhibit 10.1 to Molycorp Inc.'s Quarterly Report on Form 10-Q (File No. 001-34827) filed with the Securities and Exchange Commission on November 10, 2011).

10.28* Form of Restricted Stock Units Agreement for Non-employee Directors Deferred Compensation Plan Participants (incorporated by reference to Exhibit 10.2 to Molycorp Inc.'s Quarterly Report on Form 10-Q (File No. 001-34827) filed with the Securities and Exchange Commission on November 10, 2011).

10.29*	Form of MICP Restricted Stock Units Agreement.
10.30*	Molycorp, Inc. Severance Pay Plan for Management Employees, effective as of December 7, 2011
21.1	List of Subsidiaries.
23.1	Consent of PricewaterhouseCoopers LLP.
23.2	Consent of SRK Consulting (U.S.), Inc.
24.1	Power of Attorney.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification pursuant to U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
95.1	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.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Management contracts and compensatory plans and arrangements required to be filed as exhibits pursuant to Item 15(b).

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MOLYCORP, INC. BOARD OF DIRECTORS

ROSS R. BHAPPU, BOARD CHAIR[3,5]
Partner, Resource Capital Funds

RUSSELL BALL[1]
Executive Vice President & Chief Financial Officer, Newmont Mining Corporation

BRIAN T. DOLAN[2,4]
Former Partner, Resource Capital Funds (Retired)

JOHN GRAELL
Chief Executive Officer, Molibdenos y Metales S.A.

CHARLES R. HENRY[1,4]
U.S. Army Major General (Retired)

MARK KRISTOFF[2,3,5]
President & Chief Executive Officer, Traxys S.A.

ALEC MACHIELS[3]
Partner, Pegasus Capital Advisors

MARK A. SMITH[4,5]
President, Chief Executive Officer & Director, Molycorp, Inc.

JACK E. THOMPSON[1,2]
Management Consultant; Corporate Director & former Chief Executive Officer of Homestake Mining Company

CORPORATE OFFICERS

MARK A. SMITH
President & Chief Executive Officer

JAMES S. ALLEN
Chief Financial Officer & Treasurer

JOHN L. BURBA, PH.D
Executive Vice President & Chief Technology Officer

JOHN F. ASHBURN, JR.
Executive Vice President & General Counsel

DOUGLAS J. JACKSON
Senior Vice President, Business Development & Sales/Marketing

JOHN K. BASSETT
Senior Vice President, Operations

KSENIA A. ADAMS
Corporate Controller

Board Committees:

1. AUDIT & ETHICS COMMITTEE
2. COMPENSATION COMMITTEE
3. NOMINATING & CORPORATE GOVERNANCE COMMITTEE
4. HEALTH, ENVIRONMENT, SAFETY & SUSTAINABILITY COMMITTEE
5. EXECUTIVE COMMITTEE

CORPORATE INFORMATION

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www.molycorp.com

Stock Listing
Molycorp, Inc. is listed on the NYSE under the ticker symbol **MCP**.

Transfer Agent
Questions about shareholder accounts, address changes, lost stock certificates, stock transfers and related matters should be directed to the transfer agent:

Computershare
P.O. Box 43070
Providence, RI 02940
Phone: +1 (800) 962-4284
Fax: +1 (312) 601-2312
www.computershare.com

Annual Meeting
The 2012 Annual Meeting of Stockholders will be held on Thursday, May 31, 2012 at 10:00 a.m., Mountain Daylight Time.

Inverness Hotel and Conference Center, 200 Inverness Drive West
Englewood, CO 80112

Stockholder Inquiries/Shareholder Services
Copies of Molycorp's 2011 Annual Report on Form 10-K, quarterly reports on Form 10-Q, proxy statement, all news releases, and other corporate information are available by:

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Denver, CO

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