

Tronox Ltd  
Form S-1/A  
July 06, 2012  
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As filed with the Securities and Exchange Commission on July 5, 2012

No. 333-181842

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Amendment No. 2**

**to**

**FORM S-1**

**REGISTRATION STATEMENT**

FOR THE QUARTERLY PERIOD ENDED March 31, 2012

*UNDER*

*THE SECURITIES ACT OF 1933*

**TRONOX LIMITED**

(ACN 153 348 111)

(Exact name of registrant as specified in its charter)

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**Western Australia, Australia**  
(State or other jurisdiction of  
incorporation or organization)

**2810**  
(Primary Standard Industrial  
Classification Code Number)  
**One Stamford Plaza**

**98-1026700**  
(I.R.S. Employer  
Identification No.)

**263 Tresser Boulevard, Suite 1100**  
**Stamford, Connecticut 06901**  
**(203) 705-3800**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Michael J. Foster**

**General Counsel**

**Tronox Limited**

**One Stamford Plaza**

**263 Tresser Boulevard, Suite 1100**  
**Stamford, Connecticut 06901**  
**(203) 705-3800**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

*Copies of all communications, including communications sent to agent for service, should be sent to:*

**Daniel E. Wolf**

**Christian O. Nagler**

**Kirkland & Ellis LLP**

**601 Lexington Avenue**

**New York, New York 10022**

**(212) 446-4800**

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**Approximate date of commencement of proposed sale to the public:** As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

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.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

### CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Class A ordinary shares Issuable upon exercise of warrants	841,302	Not Applicable	\$54,176,837.42	\$6,208.67(3)

(1) The class A ordinary shares that are being registered include up to 841,302 class A ordinary shares that may be issued upon exercise of warrants. Pursuant to Rule 416 under the Securities Act, such number of shares registered hereby shall include an indeterminate number of shares that may be issued in connection with the anti-dilution provisions or share splits, share dividends, recapitalizations or similar events.

(2) Pursuant to Rule 457(c) and Rule 457(f) under the Securities Act, and solely for the purpose of calculating the registration fee, the market value of the securities to be exchanged was calculated as (a) the product of (i) 841,302 shares of Tronox Incorporated common stock (which is the number of class A ordinary shares for which warrants to purchase shares were outstanding upon completion of the transaction) and (ii) the sum of (x) the average of the high and low sales prices of Class A ordinary shares of \$130.16 on the NYSE on June 26, 2012; less (b) the aggregate exercise price of the outstanding warrants of \$55,327,030.90.

(3) Previously paid.

**The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission acting pursuant to said section 8(a), may determine.**



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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

**PRELIMINARY, SUBJECT TO COMPLETION, DATED JULY 5, 2012**

**Prospectus**

# **Tronox Limited**

**841,302**

**Class A Shares**

**The Issuer:**

We are one of the world's leading producers and marketers of TiO<sub>2</sub>, the world's third-largest producer of titanium feedstock and second-largest producer of zircon. We are one of the leading integrated global producers and marketers of TiO<sub>2</sub> and mineral sands.

**The Offering:**

This prospectus applies to the Class A ordinary shares of Tronox Limited ( "Class A Shares" ) to be issued upon exercise of warrants pursuant to the terms of the Amended and Restated Warrant Agreement, a copy of which is included as an exhibit to the registration statement of which this prospectus forms a part.

On February 14, 2011, the effective date of Tronox Incorporated's reorganization plan, Tronox Incorporated issued to existing holders of its equity, warrants in two tranches, Series A Warrants and Series B Warrants (collectively, the "Warrants" ) to purchase up to 7.5% of the new common stock of Tronox Incorporated. On June 15, 2012, in connection with the completion of the Transaction, Tronox Limited entered into an amended and restated warrant agreement (the "New Warrant Agreement" ) with Tronox Incorporated and the Warrant Agent to assume the obligations of Tronox Incorporated to the holders of Warrants. Subject to the terms of the New Warrant Agreement, upon exercise of a Warrant, holders are entitled to receive one Class A Share and \$12.50 in cash at the initial exercise prices of \$62.13 for each Series A Warrant and \$68.56 for each Series B Warrant. The Warrants have a seven-year term from the date initially issued and will expire at 5:00 p.m., New York City time, on February 14, 2018.

Use of Proceeds: Any proceeds received from the exercise of Warrants will be used for general corporate purposes.

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Tronox Limited Class A Shares trade on the New York Stock Exchange under the symbol TROX.

**This investment involves risks. See Risk Factors beginning on page 15.**

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Tronox Limited expects to deliver the shares only through the facilities of The Depository Trust Company.

The date of this prospectus is \_\_\_\_\_, 2012.

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You should rely only on the information contained in this prospectus or in any free-writing prospectus we may specifically authorize to be delivered or made available to you. We have not authorized anyone to provide you with additional or different information. We are offering to sell, and seeking offers to buy, Class A Shares only in jurisdictions where such offers and sales are permitted. The information in this prospectus or any free-writing prospectus is accurate only as of its date, regardless of its time of delivery or the time of any sale of Class A Shares. Our business, financial condition, results of operations and prospects may have changed since that date.

Until July 24, 2012 (25 days after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the dealers' obligation to deliver a prospectus when acting as an underwriter and with respect to their unsold allotments or subscriptions.





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**DEFINED TERMS**

Unless otherwise specified or if the context so requires:

we, us, and our refer to Tronox Limited, a public limited company registered under the laws of the State of Western Australia, Australia;

\$ refers to United States dollars;

A\$ refers to Australian dollars;

Rand and R refer to South African Rand;

tonnes refers to metric tons;

Tronox Incorporated refers to Tronox Incorporated, a Delaware corporation, and unless the context requires otherwise, its business prior to the completion of the Transaction;

Constitution refers to the Constitution of Tronox Limited;

Exxaro refers to Exxaro Resources Limited, a public company organized under the laws of the Republic of South Africa;

Exxaro Mineral Sands refers to Exxaro's mineral sands business that will be contributed to Tronox Limited as part of the Transaction;

The Tiwest Joint Venture is a joint venture in Western Australia, Australia which operates a chloride process plant located in Kwinana, Western Australia, a mining venture in Cooljarloo, Western Australia, a mineral separation plant and a synthetic rutile processing facility, both in Chandala, Western Australia;

Exxaro Sands refers to Exxaro Sands Proprietary Limited, a company organized under the laws of the Republic of South Africa;

Exxaro TSA Sands refers to Exxaro TSA Sands Proprietary Limited, a company organized under the laws of the Republic of South Africa;

South African Acquired Companies means Exxaro Sands and Exxaro TSA Sands;

Class A Shares refers to the Class A ordinary shares of Tronox Limited;

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Class B Shares refers to the Class B ordinary shares of Tronox Limited;

Transaction Agreement refers to the Transaction Agreement dated as of September 25, 2011, as amended and restated on April 20, 2012, by and among Tronox Incorporated, Tronox Limited, Concordia Acquisition Corporation, Concordia Merger Corporation, Exxaro, Exxaro Holdings Sands Proprietary Limited, a company organized under the laws of the Republic of South Africa and wholly-owned subsidiary of Exxaro, and Exxaro International BV, a company organized under the laws of the Netherlands and wholly-owned subsidiary of Exxaro;

Solely for the convenience of the reader, this prospectus contains translations of certain Australian dollar amounts into U.S. dollars at specified rates. Except as otherwise stated in this prospectus, all translations from Australian dollars to U.S. dollars are based on the noon buying rate of A\$0.98 per \$1.00 in the City of New York for cable transfers of Australian dollars, as certified for customs purposes by the Federal Reserve Bank of New York on May 25, 2012. In addition, this prospectus also contains U.S. dollar equivalent amounts of certain Rand amounts. Except as otherwise stated in this prospectus, all translations from Rand to U.S. dollars are based on (i) the closing rate as reported on the last business day of the period, (ii) acquisitions,

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disposals, share issuances and specific items within equity at the closing rate at the date the transaction was recognized, and (iii) income statement items at the average closing rate for the period. Estimated capital expenditures and estimated lost revenue and costs associated with furnace shutdowns have been translated at the closing rate used for balance sheet items as of December 31, 2011.

<b>Period ended</b>	<b>Average(1)</b>	<b>Period End(1)</b>
December 31, 2011	7.26	8.09
December 31, 2010	7.33	6.62
December 31, 2009	8.42	7.38

(1) Factiva

No representation is made that the Australian dollar or Rand amounts referred to in this prospectus could have been or could be converted into U.S. dollars at such rates or any other rates. Any discrepancies in any table between totals and sums of the amounts listed are due to rounding.

**INDUSTRY AND MARKET DATA**

This prospectus includes market share, market position and industry data and forecasts. Industry publications, surveys and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable. Tronox Incorporated and Exxaro Mineral Sands participate in various trade associations, such as the Titanium Dioxide Manufacturers Association ( TDMA ), and subscribe to various industry research publications, such as those produced by TZ Minerals International Pty Ltd ( TZMI ). While we have taken reasonable actions to ensure that the information is extracted accurately and in its proper context, we have not independently verified the accuracy of any of the data from third party sources or ascertained the underlying economic assumptions relied upon therein. Statements as to our market share and market position are based on the most currently available market data obtained from such sources.

**Table of Contents****SUMMARY**

*This summary highlights selected information contained in this prospectus and does not contain all the information that may be important to you. We urge you to read carefully this prospectus in its entirety, as well as the exhibits to the registration statement of which this prospectus forms a part. Additional, important information is also contained in the documents incorporated by reference into this prospectus; see the section entitled *Where You Can Find More Information*.*

*Tronox Limited's unaudited pro forma condensed combined statements of operations for the three months ended March 31, 2012 and the year ended December 31, 2011, are presented as if the Transaction had been completed on January 1, 2011. The unaudited pro forma condensed combined balance sheet as of March 31, 2012 is presented as if the Transaction had been completed on March 31, 2012. For the purposes of this discussion, references to *we*, *us*, and *our* refer to Tronox Limited when discussing the business following completion of the Transaction and to Tronox Incorporated or Exxaro Mineral Sands, as the context requires, when discussing the business prior to completion of the Transaction.*

**Our Company****Overview**

We are one of the world's leading producers and marketers of TiO<sub>2</sub>, the world's third-largest producer of titanium feedstock and second-largest producer of zircon. We are one of the leading integrated global producers and marketers of TiO<sub>2</sub> and mineral sands. Our world-class, high-performance TiO<sub>2</sub> products are critical components of everyday consumer applications such as coatings, plastics, paper and other applications. Our mineral sands business will consist primarily of two product streams—titanium feedstock and zircon. Titanium feedstock is used primarily to manufacture TiO<sub>2</sub>. Zircon, a hard, glossy mineral, is used for the manufacture of ceramics, refractories, TV glass and a range of other industrial and chemical products. In addition, we produce electrolytic manganese dioxide (EMD), sodium chlorate, boron-based and other specialty chemicals.

**TiO<sub>2</sub> Operations**

We are the world's third-largest producer and marketer of TiO<sub>2</sub> manufactured via chloride technology. We have global operations in the Americas, Europe, Africa and the Asia-Pacific region. Our assured feedstock supply and global presence, combined with a focus on providing customers with world-class products, end-use market expertise and strong technical support, will allow us to continue to sell products to a diverse portfolio of customers in various regions of the world, with most of whom we have well-established relationships.

We supply and market TiO<sub>2</sub> under the brand name TRONOX® to more than 1,000 customers in approximately 90 countries, including market leaders in each of the key end-use markets for TiO<sub>2</sub> and have supplied each of our top ten customers with TiO<sub>2</sub> for more than 10 years. These top ten customers represented approximately 36.5% of our total TiO<sub>2</sub> sales volume in 2011. The tables below summarize our 2011 TiO<sub>2</sub> sales volume by geography and end-use market:

<b>2011 Sales Volume by Geography</b>		<b>2011 Sales Volume by End-Use Market</b>	
North America	38.5%	Paints and Coatings	77.1%
Latin America	7.5%	Plastics	19.9%
Europe	22.5%	Paper and Specialty	3.0%
Asia-Pacific	31.5%		

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We operate three TiO<sub>2</sub> facilities. They are located at Hamilton, Mississippi; Botlek, the Netherlands; and Kwinana, Australia, representing an aggregate of 465,000 tonnes of annual TiO<sub>2</sub> production capacity. We are one of a limited number of TiO<sub>2</sub> producers in the world with chloride production technology, which we believe is preferred for many of the largest end-use applications compared to TiO<sub>2</sub> manufactured by other TiO<sub>2</sub> production technologies. We hold more than 200 patents worldwide and have a highly skilled work force.

### **Mineral Sands Operations**

Our mineral sands operations consist of two product streams – titanium feedstock, which includes ilmenite, natural rutile, titanium slag and synthetic rutile, and zircon, which is contained in the mineral sands we extract to capture our natural titanium feedstock. Based on Exxaro's internal estimates and data reported by TZMI, in 2010 Exxaro Mineral Sands (including 100% of the Tiwest Joint Venture) was the third-largest titanium feedstock producer with approximately 10% of global titanium feedstock production and the second-largest zircon producer with approximately 20% of global zircon production. We operate three separate mining operations: KZN Sands and Namakwa Sands located in South Africa and Tiwest located in Australia, which have a combined production capacity of 723,000 tonnes of titanium feedstock and 265,000 tonnes of zircon.

Titanium feedstock is the most significant raw material used in the manufacture of TiO<sub>2</sub>. We believe annual production of titanium feedstock from our mineral sands operations will continue to exceed the raw material supply requirement for our TiO<sub>2</sub> operations. Zircon is primarily used as an additive in ceramic glazes, a market which has grown substantially during the previous decade and is favorably exposed to long-term development trends in the emerging markets, principally China.

The table set forth under The Businesses Description of Exxaro Mineral Sands Properties and Reserves Mineral Resources and Reserves summarizes Exxaro Mineral Sands's proven and probable ore reserves and estimated mineral resources as of December 31, 2011.

The mineral sands operations also produce high purity pig iron as a co-product. It is typically low in manganese, phosphorus and sulfur and is sold to foundries as a dilutant for trace elements and to steel producers for iron units.

### **Electrolytic and Other Chemical Products Operations**

Our electrolytic and other chemical products operations are primarily focused on advanced battery materials, sodium chlorate and specialty boron products. Battery material end-use applications include alkaline batteries for flashlights, electronic games, medical and industrial devices as well as lithium batteries for power tools, hybrid electric vehicles, laptops and power supplies. Sodium chlorate is used in the pulp and paper industry in pulp bleaching applications. Specialty boron product end-use applications include semiconductors, pharmaceuticals, high-performance fibers, specialty ceramics and epoxies as well as igniter formulations.

We operate two electrolytic and other chemical facilities in the United States: one in Hamilton, Mississippi producing sodium chlorate and one in Henderson, Nevada producing EMD and boron products.

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**Industry Background and Outlook**

**TiO<sub>2</sub> Industry Background and Outlook**

TiO<sub>2</sub> is used in a wide range of products due to its ability to impart whiteness, brightness and opacity. TiO<sub>2</sub> is used extensively in the manufacture of coatings, plastics and paper and in a wider range of other applications, including inks, fibers, rubber, food, cosmetics and pharmaceuticals. TiO<sub>2</sub> is a critical component of everyday consumer applications due to its superior ability to cover or mask other materials effectively and efficiently relative to alternative white pigments and extenders. We believe that, at present, TiO<sub>2</sub> has no effective substitute because no other white pigment has the physical properties for achieving comparable opacity and brightness or can be incorporated in as cost-effective a manner. In addition to us, there are only four other major global producers of TiO<sub>2</sub>: E.I. du Pont de Nemours & Co., or Dupont; Millennium Inorganic Chemicals, Inc. (a subsidiary of National Titanium Dioxide Company Ltd.), or Cristal; Huntsman Corporation; and Kronos Worldwide Inc. Collectively, these five producers accounted for more than 60% of the global market in 2010, according to TZMI.

Based on publicly reported industry sales by the leading TiO<sub>2</sub> producers, we estimate that global sales of TiO<sub>2</sub> in 2010 exceeded 5.3 million tonnes, generating approximately \$12 billion in industry-wide revenues. As a result of strong underlying demand and high TiO<sub>2</sub> capacity utilization, TiO<sub>2</sub> selling prices increased significantly in 2010 and have continued to increase in 2011. We believe average prices will continue to increase through the medium term due to the supply/demand dynamics and favorable outlook in the TiO<sub>2</sub> industry. We believe demand for TiO<sub>2</sub> from coatings, plastics and paper and specialty products manufacturers will continue to increase due to increasing per capita consumption in Asia and other emerging markets whereas we believe supply of TiO<sub>2</sub> is constrained due to already high capacity utilization, lack of publically announced new construction of additional greenfield production facilities and limited incremental titanium feedstock supply available even if new production plants were to be constructed. At present, publicly reported TiO<sub>2</sub> industry capacity expansions are almost exclusively through debottlenecking initiatives resulting in relatively modest industry-wide capacity additions.

TiO<sub>2</sub> is produced using one of two commercial production processes: the chloride process and the sulfate process. The chloride process is a newer technology, and we believe it has several advantages over the sulfate process: it generates less waste, uses less energy, is less labor intensive and permits the direct recycle of a major process chemical, chlorine, back into the production process. Commercial production of TiO<sub>2</sub> results in one of two different crystal forms, either rutile or anatase. Rutile TiO<sub>2</sub> is preferred over anatase TiO<sub>2</sub> for many of the largest end-use applications, such as coatings and plastics, because its higher refractive index imparts better hiding power at lower quantities than the anatase crystal form and it is more suitable for outdoor use because it is more durable. Although rutile TiO<sub>2</sub> can be produced using either the chloride process or the sulfate process, customers often prefer rutile produced using the chloride process. All of our global production capacity utilizes the chloride process to produce rutile TiO<sub>2</sub>.

The primary raw materials that are used to produce TiO<sub>2</sub> are various types of titanium feedstock, which include ilmenite, rutile, leucoxene, titanium slag (chloride slag and sulfate slag), upgraded slag and synthetic rutile. Based on TZMI titanium feedstock price forecasts and our own internal calculations, we estimate that global sales of titanium feedstock in 2010 exceeded 9.1 million tonnes, generating approximately \$2.3 billion in industry-wide revenues. Titanium feedstock supply is currently experiencing supply constraints due to the depletion of legacy ore bodies, lack of investment in mining new deposits, and high risk and long lead time (typically up to 5 years) in starting new projects. At present, titanium feedstock industry capacity expansions are extremely limited and are expected to remain so over the medium term. Titanium feedstock prices, which are typically determined by multi-year contracts, have been slower to respond to these market conditions due to contractual protections in legacy contracts. As these legacy contracts are negotiated and renewed, we believe the supply/demand outlook will remain tight in the titanium feedstock industry in the coming years. Although it is

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widely known that a number of new titanium feedstock projects are currently being evaluated, including Sheffield Resources Limited's Yandanooka heavy mineral sands project near Eneabba, Western Australia, which is currently in the exploration stage, and Image Resources NL's North Perth Basin mineral sands project in Western Australia, for which Image Resources began a feasibility study in November 2011, many of these projects remain at the investigation stage and it is not anticipated that all reported projects will ultimately come into commercial production.

### **Zircon Industry Background and Outlook**

Zircon is a mineral which is primarily used as an additive in ceramic glazes to provide whiteness, brightness and opacity as well as to add hardness which makes the ceramic glazes more water, chemical, and abrasion resistant. Zircon is also used for the production of zirconium and zirconium chemicals, in refractories, as a molding sand in foundries and for TV glass, where it is noted for its structural stability at high temperatures and resistance to abrasive and corrosive conditions. TZMI has estimated that approximately three-quarters of the total global zircon supply comes from South Africa and Australia. The top three zircon suppliers in 2010 were Iluka, Exxaro Mineral Sands (including 100% of the Tiwest Joint Venture) and Richards Bay Minerals, representing approximately 33%, 20% and 17%, respectively, of the total zircon production.

TZMI estimates that global sales of zircon in 2010 were approximately 1.3 million tonnes. As a result of strong underlying demand, zircon selling prices increased significantly both in 2010 and 2011. The value of zircon has increased primarily as a result of increasing demand for ceramic tiles, plates, dishes and industrial products in emerging markets, principally China. Although demand decreased in the three months ended December 31, 2011, we believe demand for zircon will continue to increase due to broad trends in urbanization and industrial development in emerging markets, principally China.

### **Our Competitive Strengths**

#### **Leading Global Market Positions**

We are among the world's largest producers and marketers of TiO<sub>2</sub> products with approximately 8% of reported industry capacity in 2010, and one of the world's largest integrated TiO<sub>2</sub> producers. We are the world's third-largest producer and supplier of TiO<sub>2</sub> manufactured via chloride technology, which we believe is preferred for many applications compared to TiO<sub>2</sub> manufactured by other TiO<sub>2</sub> production technologies. We are the third-largest titanium feedstock producer with approximately 10% of global titanium feedstock production and the second-largest zircon producer with approximately 20% of global zircon production. Additionally, our fully integrated and global production facilities and sales and marketing presence in the Americas, Europe, Africa and the Asia-Pacific region enables us to provide customers in over 90 countries with a reliable supply of our products. The diversity of the geographic regions we serve increases our exposure to faster growing geographies, such as the Asia-Pacific region, and also mitigates our exposure to regional economic downturns because we can shift supply from weaker to stronger regions. We believe our relative size and vertical integration will provide us with a competitive advantage in retaining existing customers and obtaining new business.

#### **Well Positioned to Capitalize on Trends in the TiO<sub>2</sub> and Zircon Industries**

We believe the markets in which we participate are, and will remain for the short and medium term, supply constrained, by which we mean that, into the medium term, we anticipate no extended periods during which the supply of higher grade titanium feedstock, TiO<sub>2</sub> and zircon will significantly exceed demand for each of these products. Moreover, we expect that these conditions will become more pronounced as demand continues to grow faster than supply. Because our production of titanium feedstock exceeds our required consumption, we believe that we will be well positioned to benefit from these market conditions. We will assure ourselves of the requisite supply for our TiO<sub>2</sub> operations and we expect to share in the financial benefits at both the mineral sands and TiO<sub>2</sub> levels of the supply chain.

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### **Vertically Integrated Platform with Security of Titanium Feedstock Supply**

The vertical integration of titanium feedstock and TiO<sub>2</sub> production provides us with a secure and cost competitive supply of high grade titanium feedstock over the long term. We believe that because we intend to continue to purchase feedstock from third party suppliers and sell feedstock to third party customers, both the financial impact of changes in the feedstock market and our assurance of feedstock supply will place us at an advantage relative to our competitors. This will provide the company with a competitive advantage in customer contracting and production reliability as well as create strategic opportunities to debottleneck and add new TiO<sub>2</sub> capacity at the appropriate times based on industry conditions.

### **Low Cost and Efficient Production Network**

We believe our TiO<sub>2</sub> operations, and specifically our plant in Hamilton, Mississippi, are among the lowest cost producers of TiO<sub>2</sub> globally. This is of particular importance as it positions us to be competitive through all facets of the TiO<sub>2</sub> cycle. Moreover, our three TiO<sub>2</sub> production facilities are strategically positioned in key geographies. The Hamilton facility is the third largest TiO<sub>2</sub> production facility in the world and has the size and scale to service customers in North America and around the globe. The Tiwest Joint Venture, located in Australia, is well positioned to service growing demand from Asia. Our Botlek facility, located in the Netherlands, services our European customers and certain specialized applications globally. Combined with Exxaro Mineral Sands' s titanium feedstock assets in South Africa and Australia, this network of TiO<sub>2</sub> and titanium feedstock facilities gives us the flexibility to optimize asset and feedstock utilization and generate operational, logistical and market efficiencies.

### **TiO<sub>2</sub> and Titanium Feedstock Production Technology**

We are one of a limited number of TiO<sub>2</sub> producers in the world with chloride production technology. Our production capacity exclusively uses this process technology, which is the subject of numerous patents worldwide. Although we do not operate sulfate process plants and therefore cannot make a direct comparison, we believe the chloride production process generates less waste, uses less energy and is less labor intensive than the alternative sulfate process. Additionally, our titanium feedstock operations in South Africa and Australia are one of a limited number of feedstock producers with the expertise and technology to produce upgraded titanium feedstock (i.e., synthetic rutile and chloride slag) for use in the chloride process.

### **Innovative, High-Performance Products**

We offer innovative, high-performance products for nearly every major TiO<sub>2</sub> end-use application. We seek to develop new products and enhance our current product portfolio to better serve our customers and respond to the increasingly stringent demands of their end-use sectors. Our new product development pipeline has yielded successful grade launches specifically targeting the plastics markets. In addition, we have completed mid-cycle improvement initiatives on our key coatings grades resulting in more robust products across a wide range of coatings formulations.

### **Experienced Management Team and Staff**

The diversity of our management team' s business experience provides a broad array of skills that contributes to the successful execution of our business strategy. Our TiO<sub>2</sub> operations team and plant managers, who have an average of approximately 31 years of manufacturing experience, participate in the development and execution of strategies that have resulted in production volume growth, production efficiency improvements and cost reductions. Our mineral sands operations team and plant managers have a deep reservoir of experience in mining, engineering and processing skills gained over many years in various geographies. Additionally, the experience, stability and leadership of our sales organization have been instrumental in growing sales, developing and expanding customer relationships.



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### **Business Strategy**

Our business strategy is to enhance our shareholder equity value by optimizing the beneficial effects of our present business attributes. More specifically, we will seek to manage our purchases (which we intend to continue) and sales of titanium feedstock in such a manner as to assure that we do not experience any material feedstock shortages that would require us to slow or interrupt our TiO<sub>2</sub> production. In addition, we intend to direct titanium feedstock to those markets (including, but not limited to, our three owned plants) in a manner that maximizes our returns over the longer term while maintaining our assured supply conditions.

We also believe that we can benefit from employing our substantial fixed cost base to produce additional TiO<sub>2</sub>. Therefore, enhancing the efficiency of our operations is important in achieving our vision.

We seek to be a significant participant in those markets that produce above average returns for our shareholders rather than be exclusively focused on becoming the largest TiO<sub>2</sub> or mineral sands producer.

Beyond this, our strategy includes the following components:

#### **Maintain Operational Excellence**

We are continually evaluating our business to identify opportunities to increase operational efficiency throughout our production network with a focus on maintaining operational excellence and maximizing asset efficiency. Our focus on enhancing operational excellence positions us to maximize yields, minimize operating costs and meet market growth over the short term without investing additional capital for capacity expansion. In addition, we intend to continue focusing on increasing manufacturing efficiencies through selected capital projects, process improvements and best practices in order to maximize yields, lower unit costs and improve our margins.

#### **Leverage Our Low-Cost Production Network and Vertical Integration to Deliver Profitability and Cash Flow**

We presently have TiO<sub>2</sub> manufacturing facilities designed to produce approximately 465,000 tonnes of TiO<sub>2</sub> annually. We expect that (assuming variable costs per tonne remain constant or decline) increased production from this fixed cost base should increase margins and profitability. In addition, by assuring ourselves of the availability of the supply of titanium feedstock that these production facilities require, and by participating in the profitability of the mineral sands market directly, we have several different means of optimizing profitability and cash flow generation.

#### **Ore-In Use Optimization**

We will take advantage of the integrated nature and scale of the combined business, which provides the opportunity to capitalize on a wide range of Exxaro Mineral Sands' s titanium feedstock grades due to the ability to optimize internal ore usage and pursue external titanium feedstock end-markets that provide superior profit margins.

#### **Expand Global Leadership**

We plan to continue to capitalize on our strong global market position to drive profitability and cash flow by enhancing existing customer relationships, providing high quality products and offering technical expertise to our customers. Furthermore, our vertically integrated global operations will provide us with a solid platform for future growth in the TiO<sub>2</sub>, titanium feedstock, zircon and pig iron markets. Our broad product offering will allow

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us to participate in a variety of end-use sectors and pursue those market segments that we believe have attractive growth prospects and profit margins. Our operations will position us to participate in developing regions such as Asia, Eastern Europe and Latin America, which we expect to provide attractive growth opportunities. We will also seek to increase margins by focusing our sales efforts on those end-use segments and geographic areas that we believe offer the most attractive growth prospects and where we believe we can realize relatively higher selling prices over the long-term than in alternate sectors. We believe our global operations network, distribution infrastructure and technology will enable us to continue to pursue global growth.

### **Maintain Strong Customer Focus**

We will target our key customer groups with innovative, high-performance products that provide enhanced value to our customers at competitive prices. A key component of our business strategy will be to continually enhance our product portfolio with high-quality, market-driven product development. We design our TiO<sub>2</sub> products to satisfy our customers' specific requirements for their end-use applications and align our business to respond quickly and efficiently to changes in market demands. In this regard, and in order to continue meeting our customers' needs, we recently commercialized a new TiO<sub>2</sub> grade for the durable plastics sector and developed several additional products for other strategic plastic applications in close cooperation with our customer base. We continue to execute on product improvement initiatives for our major coatings products. These improvement strategies will provide value in the form of better optical properties, stability, and durability to our coatings customers. Further, new and enhanced grades are in the pipeline for 2012 and 2013.

In addition, by assuring ourselves of titanium feedstock supply, we assume less risk if we enter into longer term supply contracts with our customers. We believe such contracts may be beneficial to our customers, by assuring a reliable source of supply of TiO<sub>2</sub> from a market in which availability may be threatened under certain foreseeable supply conditions, which could also affect price, and to us, by assuring predictable sales, revenue and margin performance for some of our sales. Because we are one of the few global TiO<sub>2</sub> producers that are integrated, we believe we can enter into such longer term agreements including specific economic terms with less risk than our competitors who do not have 100% assured supply. If our customers also see benefit to them in entering into such agreements, we will consider doing so.

### **Risk Factors**

We are subject to numerous risks as more fully described in the section entitled "Risk Factors" beginning on page 15. These risks include, among others:

market conditions, global and regional economic downturns and cyclical factors that adversely affect the demand for end use products that contain our products could adversely affect the prices at which we can sell its products;

that our customers may reduce their demand for our products due to, among other things, economic downturn, more competitive pricing from our competitors, or increased supply from our competitors;

fluctuations in currency exchange rates, in particular the volatility of the U.S. dollar, Australian dollar, or the Rand could have a negative impact on reported sales and operating margin; and

the regulatory environment in the countries in which we operate may have an adverse effect on our business, operating results and financial condition.

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**Summary Historical and Pro Forma Financial Data**

The following table sets forth summary historical financial data as of the dates and for the periods indicated. The balance sheet and statement of operations data, as of and for the eleven months ended December 31, 2011, the one month ended January 31, 2011 and years ended December 31, 2010 and 2009, have been derived from Tronox Incorporated's audited Consolidated Financial Statements included in this prospectus. The balance sheet and statement of operations data, as of and for the year ended December 31, 2008 have been derived from Tronox Incorporated's audited consolidated financial statements not included in this prospectus. The balance sheet and statement of operations data, as of and for the three and two months ended March 31, 2012 and 2011, respectively, have been derived from Tronox Incorporated's unaudited Consolidated Financial Statements included in this prospectus.

Tronox Limited's unaudited pro forma condensed combined statements of operations for the three months ended March 31, 2012 and the year ended December 31, 2011, are presented as if the Transaction had been completed on January 1, 2011. The unaudited pro forma condensed combined balance sheet as of March 31, 2012 is presented as if the Transaction had been completed on March 31, 2012.

The historical financial statements have been adjusted in the unaudited pro forma condensed Combined Financial Statements to give effect to pro forma events that are (i) directly attributable to the Transaction; (ii) factually supportable; and (iii) with respect to the unaudited pro forma condensed combined statements of operations, expected to have a continuing impact on the combined results. The unaudited pro forma condensed combined statements of operations exclude non-recurring items, including, but not limited to (i) a bargain purchase gain currently estimated to be realized on the Transaction; (ii) reorganization income associated with emergence from bankruptcy; and (iii) Transaction-related legal and advisory fees. Additionally, certain pro forma adjustments have been made to the historical Combined Financial Statements of Exxaro Mineral Sands in order to (i) convert them to accounting principles generally accepted in the United States ( "GAAP" ); (ii) conform their accounting policies to those applied by Tronox Incorporated; and (iii) present them in U.S. dollars.

This information should be read in conjunction with the Tronox Incorporated Consolidated Financial Statements (including the notes thereto), the Exxaro Mineral Sands Combined Financial Statements (including the notes thereto), Tronox Incorporated Management's Discussion and Analysis of Financial Condition and Results of Operations, Exxaro Mineral Sands Management's Discussion and Analysis of Financial Condition and Results of Operations and Unaudited Pro Forma Condensed Combined Financial Statements appearing elsewhere in this prospectus.

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	Successor Three Months Ended March 31, 2012	Successor Two Months Ended March 31, 2011	Tronox Limited Pro Forma Combined Three Months Ended March 31, 2012	Successor Eleven Months Ended December 31, 2011	Predecessor One Month Ended January 31, 2011	Tronox Limited Pro Forma Combined Year Ended December 31, 2011	2010	Predecessor Year Ended December 31, 2009	2008
<b>(Millions of dollars, except per share)</b>									
<b>Statement of Operations Data:</b>									
Net Sales	\$ 433.6	\$ 267.1	\$ 589.5	\$ 1,543.4	\$ 107.6	\$ 2,305.8	\$ 1,217.6	\$ 1,070.1	\$ 1,245.8
Cost of goods sold	(276.3)	(229.8)	(369.4)	(1,104.5)	(82.3)	(1,666.1)	(996.1)	(931.9)	(1,133.4)
Gross Margin	157.3	37.3	220.1	438.9	25.3	639.7	221.5	138.2	112.4
Selling, general and administrative expenses	(44.3)	(19.5)	(39.3)	(151.7)	(5.4)	(144.8)	(59.2)	(71.7)	(114.1)
Litigation/arbitration settlement				9.8		9.8			
Gain on land sales								1.0	25.2
Impairment of long-lived assets(1)								(0.4)	(24.9)
Restructuring charges(2)								(17.3)	(9.6)
Net loss on deconsolidation of subsidiary								(24.3)	
Provision for environmental remediation and restoration, net of reimbursements(3)			(0.3)	4.5		4.5	47.3		(72.9)
Income (Loss) from Operations	113.0	17.8	180.5	301.5	19.9	509.2	209.6	25.5	(83.9)
Interest and debt expense(4)	(7.9)	(5.3)	(10.6)	(30.0)	(2.9)	(42.5)	(49.9)	(35.9)	(53.9)
Gain on liquidation of subsidiary(5)							5.3		
Other income (expense)	(1.4)	1.0	1.0	(9.8)	1.6	1.3	(13.6)	(10.3)	(9.5)
Reorganization income (expense)					613.6		(144.8)	(9.5)	
Income (Loss) from Continuing Operations before Income tax (provision) benefit	103.7	13.5	170.9	261.7	632.2	468.0	6.6	(30.2)	(147.3)
Income tax benefit (provision)	(17.4)	(3.3)	(29.9)	(20.2)	(0.7)	33.2	(2.0)	1.5	1.8
Income (Loss) from Continuing Operations	86.3	10.2	141.0	241.5	631.5	501.2	4.6	(28.7)	(145.5)
Income (Loss) from Continuing Operations Attributable to Noncontrolling Interest			11.2			57.6			
Income (Loss) from Continuing Operations Attributable to Tronox Limited			\$ 129.8			\$ 443.6			
Income (Loss) from discontinued operations, net of income tax benefit (provision)(6)					(0.2)		1.2	(9.8)	(189.4)
Net Income (Loss)	\$ 86.3	\$ 10.2		\$ 241.5	\$ 631.3		\$ 5.8	\$ (38.5)	\$ (334.9)
<b>Earnings (Loss) from Continuing Operations per Common Share:</b>									
Basic	\$ 5.72	\$ 0.68	\$ 5.15	\$ 16.12	\$ 15.29	\$ 17.61	\$ 0.11	\$ (0.70)	\$ (3.55)
Diluted	\$ 5.48	\$ 0.65	\$ 5.04	\$ 15.46	\$ 15.25	\$ 17.21	\$ 0.11	\$ (0.70)	\$ (3.55)



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	Successor	Successor Two	Tronox Limited Pro Forma Combined	Successor	Predecessor	Tronox Limited Pro Forma Combined	Predecessor		
	Three Months Ended March 31, 2012	Three Months Ended March 31, 2011	Three Months Ended March 31, 2012	Eleven Months Ended December 31, 2011	One Month Ended January 31, 2011	Year Ended December 31, 2011	2010	2009	2008
(Millions of dollars, except per share)									
<b>Balance Sheet Data:</b>									
Working capital(7)	\$ 704.1	\$ 327.2	\$ 1,456.4	\$ 488.1	\$ 458.2	\$ 1,082.4	\$ 483.4	\$ 488.7	\$ (246.7)
Property, plant and equipment, net(1)	\$ 558.8	\$ 448.0	\$ 3,151.1	\$ 554.5	\$ 317.5	\$ 2,887.2	\$ 315.5	\$ 313.6	\$ 347.3
Total assets	\$ 1,903.0	\$ 1,447.3	\$ 5,286.7	\$ 1,657.4	\$ 1,090.5	\$ 4,672.7	\$ 1,097.9	\$ 1,117.8	\$ 1,044.5
Noncurrent liabilities:									
Long-term debt(7)	\$ 551.9	\$ 426.0	\$ 783.8	\$ 421.4	\$ 420.7	\$ 702.9	\$ 420.7	\$ 423.3	\$
Environmental remediation and/or restoration(8)	0.5	0.6		0.5	0.6		0.6	0.3	546.0
All other noncurrent liabilities	207.2	166.6	537.5	202.3	153.6	411.6	154.0	50.0	125.4
Total liabilities(10)	\$ 1,055.0	\$ 875.8	\$ 1,634.3	\$ 905.1	\$ 848.0	\$ 1,445.9	\$ 827.6	\$ 682.6	\$ 1,642.0
Liabilities subject to compromise									
Total stockholders' equity	\$ 848.0	\$ 571.5	\$ 3,652.4	\$ 752.3	\$ (654.2)	\$ 3,226.8	\$ (630.0)	\$ (613.2)	\$ (597.5)
<b>Supplemental Information:</b>									
Depreciation and amortization expense									
Capital expenditures	\$ (20.7)	\$ (8.3)	\$	\$ 132.9	\$ 5.5	\$	\$ 45.0	\$ 24.0	\$ 34.3
EBITDA(9)	\$ 133.7	\$ 31.9	\$ 241.3	\$ 370.8	\$ 639.0	\$ 755.0	\$ 107.8	\$ 49.0	\$ (207.1)
Adjusted EBITDA(9)	\$ 151.4	\$ 68.1	\$ 250.4	\$ 468.3	\$ 24.3	\$ 832.2	\$ 203.1	\$ 141.5	\$ 99.3

- (1) In 2008, Tronox Incorporated recorded impairment charges for long-lived assets of approximately \$3.3 million related to Savannah, Georgia, and approximately \$21.6 million related to Botlek, Netherlands. See Tronox Incorporated Management's Discussion and Analysis of Financial Condition and Operations Critical Accounting Policies for further discussion of Tronox Incorporated's impairment testing methodology.
- (2) Restructuring charges in 2009 were primarily the result of the idling of Tronox Incorporated's Savannah plant. Restructuring charges in 2008 resulted primarily from work force reduction programs, along with asset retirement obligation adjustments.
- (3) In 2010, Tronox Incorporated recorded receivables from its insurance carrier related to environmental clean-up obligations at the Henderson facility. Due to the accounting for the KM Legacy Liabilities, as described in Notes 1 and 5 to the annual Consolidated Financial Statements, the obligation for this clean-up work had been recorded in 2008 and prior years. For further details, see Notes 2 and 3 to the annual Consolidated Financial Statements.
- (4) Excludes \$2.8 million, \$33.3 million, \$32.1 million and \$0 in the one month ended January 31, 2011 and the years ended December 31, 2010, 2009 and 2008, respectively, that would have been payable under the terms of the 9.5% senior unsecured notes.
- (5) The liquidation of certain holding companies resulted in a non-cash net gain resulting from the realization of cumulative translation adjustments.
- (6) See Note 20 to the annual Consolidated Financial Statements included in this prospectus for further information on Income (loss) from discontinued operations.
- (7) Working capital is defined as the excess (deficit) of current assets over current liabilities. Due to Tronox Incorporated's financial condition, the entire balance of its outstanding debt of \$562.8 million was classified as current obligations as of December 31, 2008, resulting in long-term debt having a balance of \$0 and working capital being negative. In 2009, the \$350.0 million senior unsecured notes were reclassified to Liabilities Subject to Compromise.
- (8) As a result of the bankruptcy filing and the KM Legacy Liability accounting, as described in Note 1 to the annual Consolidated Financial Statements, environmental remediation and/or restoration liabilities were reclassified to Liabilities Subject to Compromise in 2009.
- (9) EBITDA represents net income (loss) before net interest expense, income tax benefit (provision), and depreciation and amortization expense. Adjusted EBITDA represents EBITDA as further adjusted to reflect the items set forth in the table below.
- (10) Represents total liabilities before liabilities subject to compromise.

EBITDA and Adjusted EBITDA, which are used by management to measure performance, are non-GAAP financial measures. Management believes that EBITDA and Adjusted EBITDA are useful to investors, as EBITDA is commonly used in the industry as a means of evaluating operating performance and Adjusted EBITDA is used in our debt instruments to determine compliance with financial covenants. Both EBITDA and Adjusted EBITDA are included as a supplemental measure of our operating performance because they eliminate items that have less bearing on operating performance and highlight trends in the core business that may not otherwise be apparent when relying solely on GAAP financial measures. In addition, Adjusted EBITDA is one of the primary measures



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management uses for planning and budgeting processes and to monitor and evaluate financial and operating results. EBITDA and Adjusted EBITDA are not recognized terms under GAAP and do not purport to be an alternative to measures of our financial performance as determined in accordance with GAAP, such as net income (loss). Because other companies may calculate EBITDA and Adjusted EBITDA differently than we do, EBITDA may not be, and Adjusted EBITDA as presented herein is not, comparable to similarly titled measures reported by other companies.

The following table reconciles net income (loss) to EBITDA and Adjusted EBITDA for the periods presented:

	Successor	Successor	Tronox Limited Pro Forma Combined	Successor	Predecessor	Tronox Limited Pro Forma Combined	Predecessor		
	Three Months Ended March 31,	Successor Two Months Ended March 31,	Three Months Ended March 31,	Eleven Months Ended December 31,	One Month Ended January 31,	Year Ended December 31,	Year Ended December 31,		
	2012	2011	2012	2011	2011	2011	2010	2009	2008
	(Millions of dollars, except per share)								
Net income (loss)	\$ 86.3	\$ 10.2	\$ 141.0	\$ 241.5	\$ 631.3	\$ 501.2	\$ 5.8	\$ (38.5)	\$ (334.9)
Interest and debt expense	7.9	5.3	10.6	30.0	2.9	42.5	49.9	35.9	53.9
Income tax provision (benefit)	17.4	3.3	29.9	20.2	0.7	(33.2)	2.0	(1.5)	(1.8)
Depreciation and amortization expense	22.1	13.1	59.8	79.1	4.1	244.5	50.1	53.1	75.7
<b>EBITDA</b>	<b>133.7</b>	<b>31.9</b>	<b>241.3</b>	<b>370.8</b>	<b>639.0</b>	<b>755.0</b>	<b>107.8</b>	<b>49.0</b>	<b>(207.1)</b>
Reorganization expense associated with bankruptcy(a)					45.5		144.8	9.5	
Gain on fresh-start accounting					(659.1)				
Noncash gain on liquidation of subsidiary				(0.2)		(0.2)	(5.3)		
Provision for environmental remediation and restoration, net of reimbursements(b)				(4.5)		(4.5)	(47.3)		72.9
(Income) loss from discontinued operations					0.2	0.2	(1.2)	9.8	189.4
Restructuring costs not associated with the bankruptcy(c)									13.5
Pension and postretirement settlement/curtailments								10.0	26.2
Loss on sale of assets			0.4			5.9		(1.0)	(25.2)
Impairment charges(d)								0.4	24.9
Unusual or non-recurring items(e)								24.3	
Litigation settlement				(9.8)		(9.8)			
Plant closure costs					0.1	0.1	1.3	24.5	
Fresh-start inventory mark-up		32.1		35.5		35.5			
Stock-based compensation	6.7	2.9	6.7	13.8		13.8	0.5	0.2	0.5
Foreign currency remeasurement	(0.8)	(0.1)	(0.8)	7.3	(1.3)	6.0	11.8	15.1	(6.8)
Transaction costs, registration rights penalty and financial statement restatement costs(f)	9.1		0.1	39.2		14.1			
Other items(g)	2.7	1.3	2.7	16.2	(0.1)	16.1	(9.3)	(0.3)	11.0
<b>Adjusted EBITDA</b>	<b>\$ 151.4</b>	<b>\$ 68.1</b>	<b>\$ 250.4</b>	<b>\$ 468.3</b>	<b>\$ 24.3</b>	<b>\$ 832.2</b>	<b>\$ 203.1</b>	<b>\$ 141.5</b>	<b>\$ 99.3</b>



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- (a) Tronox Incorporated incurred costs related to the Chapter 11 bankruptcy proceedings. These items include cash and non-cash charges related to contract terminations, prepetition obligations, debtor-in-possession financing costs, legal and professional fees.
- (b) In 2010, Tronox Incorporated recorded receivables from its insurance carrier related to environmental clean-up obligations at the Henderson facility. Due to the accounting for the KM Legacy Liabilities, as described in Notes 1 and 5 to the annual Consolidated Financial Statements, the obligation for this clean-up work had been recorded in 2008 and prior years.
- (c) Restructuring costs in 2008 resulted primarily from work force reduction programs along with asset retirement obligation adjustments.
- (d) In 2008, Tronox Incorporated recorded impairment charges for long-lived assets of approximately \$3.3 million related to Savannah, Georgia, and approximately \$21.6 million related to Botlek, the Netherlands. See Tronox Incorporated Management's Discussion and Analysis of Financial Condition and Operations Critical Accounting Policies for further discussion of our impairment testing methodology.
- (e) The 2009 amount represents the net loss on deconsolidation of Tronox Incorporated's German subsidiaries.
- (f) In the eleven months ended December 31, 2011, transaction costs and financial statement restatement costs include expenses related to the Transaction of \$20.2 million, the registration rights penalty of \$2.0 million, fresh-start accounting fees of \$2.5 million, costs associated with restating Tronox Incorporated's environmental reserves of \$5.1 million and the auditing of the historical financial statements of \$3.5 million. Costs associated with the Transaction include professional fees related to due diligence and transaction advice as well as investment banking fees. Additionally, Tronox Incorporated incurred legal fees associated with the exit from bankruptcy and the Transaction of \$5.9 million. In the three months ended March 31, 2012, transaction costs consist of costs associated with the acquisition of Exxaro Mineral Sands, including banker fees, legal and professional fees, as well as costs associated with the preparation and amending of the registration statement on Form S-4 filed with the SEC in connection with the Transaction and costs associated with the integration of Exxaro Mineral Sands that will occur after the closing of the Transaction.
- (g) Includes noncash pension and postretirement healthcare costs and accretion expense.

**The Warrants and the Offering**

On February 14, 2011, the effective date of Tronox Incorporated's reorganization plan (the Effective Date), Tronox Incorporated issued to existing holders of its equity, warrants in two tranches, Series A Warrants and Series B Warrants to purchase up to an aggregate of 1,216,216 shares, or 7.5%, of the new common stock of Tronox Incorporated, par value \$0.01 per share. In connection with the issuance of the Old Warrants, Tronox Incorporated entered into a warrant agreement, dated as of the Effective Date (the Old Warrant Agreement), with Computershare Inc. and its wholly-owned subsidiary, Computershare Trust Company, N.A. (collectively, the Warrant Agent). At the time of the Tronox Incorporated reorganization under Chapter 11 of the Bankruptcy Code, the issuance of the Warrants was exempt from registration under Section 1145 of the Bankruptcy Code. In connection with the completion of the Transaction, and pursuant to the terms of the Old Warrant Agreement, on June 15, 2012 Tronox Limited entered into an amended and restated warrant agreement with the Warrant Agent and Tronox Incorporated to assume the obligations of Tronox Incorporated to the holders of Warrants.

Subject to the terms of the New Warrant Agreement, the holders of Equity Interests (as defined in the New Warrant Agreement) are entitled to purchase one Class A Share and \$12.50 in cash (the Warrant Consideration) at the initial exercise prices of \$62.13 for each Series A Warrant and \$68.56 for each Series B Warrants. As of June 15, 2012 there were 841,302 Warrants outstanding which will each be exercisable for a Class A Share and \$12.50 in cash. The Warrants have a seven-year term from the date initially issued and will expire at 5:00 p.m., New York City time, on February 14, 2018. A holder may exercise the Warrants by paying the applicable exercise price in cash or on a cashless basis. The Warrants are freely transferable by the holder thereof.

The number of Class A Shares issuable upon exercise of the Warrants and the exercise prices of the Warrants will be adjusted in connection with any dividend or distribution, assets or cash, or any subdivision, reclassification or combination, as set forth in the Warrant Agreement. Additionally, in the case of any reclassification or reorganization of the outstanding shares in Tronox Limited, the holder of each Warrant outstanding immediately prior to the occurrence of such reclassification or reorganization shall have the right to receive upon exercise of the applicable Warrant, the kind and amount of stock, other securities, cash and/or assets that such holder would have received if such Warrant had been exercised.

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**Tax Considerations**

We provide a more complete description of the tax consequences of the ownership and disposition of the Class A Shares under the heading Tax Considerations.

**Corporate Information**

Tronox Limited's executive offices are located at One Stamford Plaza, 263 Tresser Boulevard, Suite 1100, Stamford, Connecticut 06901. Tronox Limited's telephone number is (203) 705-3800.

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**CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This prospectus contains forward-looking statements that are subject to risks and uncertainties. All statements other than statements of historical fact included in this prospectus are forward-looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as anticipate, estimate, expect, project, plan, intend, believe, may, will, should, can have, likely and other words and terms of similar meaning with any discussion of the timing or nature of future operating or financial performance or other events. For example, all statements we make relating to our estimated and projected costs, expenditures, cash flows, growth rates and financial results, our plans and objectives for future operations, growth or initiatives, or strategies or the expected outcome or impact of pending or threatened litigation are forward-looking statements. All forward-looking statements are subject to risks and uncertainties, including those set forth under Risk Factors beginning on page 15, that may cause actual results to differ materially from those that we expected, including but not limited to:

our customers potentially reducing their demand for our products due to, among other things, the economic downturn, more competitive pricing from our competitors, or increased supply from our competitors;

We may be unable to successfully integrate the existing business of Tronox Incorporated and Exxaro Mineral Sands;

the existing business may be subject to various uncertainties and contractual and strategic restrictions while the Transaction is pending that could cause business disruption;

We may not achieve the cost savings, operating efficiencies and other benefits expected;

We may be adversely affected by other economic, business and/or competitive factors; and

We may not get the required regulatory approvals or third party consents to expand the business, or new regulations may impact our operations or affect its profitability.

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**RISK FACTORS**

*In addition to the other information included and incorporated by reference into this prospectus, including the matters addressed in Cautionary Note Regarding Forward-Looking Statements, you should carefully consider the following risks before investing in the notes. You should also read and consider the other information in this prospectus and the other documents incorporated by reference into this prospectus. See Where You Can Find More Information.*

**Risks Related to Our Business**

*Our business is subject to various uncertainties with respect to the Transaction that may cause disruption and could adversely affect our financial results.*

Uncertainty about the Transaction's effect on employees, suppliers and customers may have an adverse effect on our existing businesses. These uncertainties may impair our ability to attract, retain and motivate key personnel for a period of time, as employees and prospective employees may experience uncertainty about their future roles. These uncertainties also could cause customers, suppliers and others who deal with us to seek to change their existing business relationships. The integration also is placing a significant burden on management and internal resources. Any significant diversion of management attention away from ongoing business concerns and any difficulties encountered in the transition and integration process could affect our financial results.

*The Transaction may not achieve its anticipated results, and we may be unable to integrate the existing businesses of Tronox Incorporated and Exxaro Mineral Sands in the manner expected.*

We expect the Transaction to provide various benefits, including, among other things, cost savings and operating efficiencies in the combined company, as further described under The Businesses Our Competitive Strengths and The Businesses Business Strategy. Achieving the Transaction's anticipated benefits is subject to a number of uncertainties, including whether the existing businesses of Tronox Incorporated and Exxaro Mineral Sands can be integrated in an efficient, effective and timely manner in line with current expectations.

The integration process may take longer or cost more than anticipated and could result in the loss of valuable employees, the disruption of the ongoing businesses, processes and systems or inconsistencies in standards, controls, procedures, practices, policies and compensation arrangements, any of which could adversely affect our ability to achieve the anticipated benefits of the Transaction as and when expected. Our results of operations could also be adversely affected by any issues attributable to the operations of Tronox Incorporated or Exxaro Mineral Sands that arise or are based on events or actions that occurred prior to completion of the Transaction. We may have difficulty addressing possible differences in corporate cultures and management philosophies. Failure to achieve these anticipated benefits could result in increased costs or decreased revenues and could adversely affect our future business, financial condition, operating results and prospects.

*The intended benefits of our corporate rationalization plan may not be realized.*

We are in the process of rationalization of our corporate and organizational structure in connection with the contribution of Tronox Incorporated's businesses and Exxaro Mineral Sands to Tronox Limited. Although we believe that the steps and strategies contained in our corporate rationalization plan are reasonable, we may not be able to fully implement the plan as currently anticipated and without delay and, when implemented, the corporate rationalization plan may not result in the benefits that we currently anticipate.

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*The transaction fees and transaction-related costs incurred may not be offset by the benefits realized in connection with the Transaction.*

We have incurred and expect to continue to incur a number of non-recurring expenses associated with the Transaction, as well as expenses related to our integration and rationalization plans. Although we expect that the elimination of many duplicative costs, as well as the realization of other efficiencies related to the integration of the two businesses, will offset the incremental Transaction and related costs over time, we may not achieve this net benefit in the near term, or at all.

*Tronox Incorporated's financial information following its emergence from bankruptcy is not comparable to Tronox Incorporated's financial information from prior periods.*

Effective as of January 31, 2011, as a result of its emergence from bankruptcy, Tronox Incorporated applied fresh-start accounting. As a result of fresh-start accounting, the accumulated deficit was eliminated and Tronox Incorporated's reorganization value, which represents estimates of the fair value of the entity before considering liabilities and approximates the amount a willing buyer would pay for the assets of the entity immediately after the reorganization, was allocated to the fair value of assets. In addition to fresh-start accounting, Tronox Incorporated's consolidated financial statements reflect all effects of the transactions contemplated by its reorganization plan. Thus, Tronox Incorporated's balance sheets and statements of operations data post-emergence are not comparable in many respects to its consolidated balance sheets and consolidated statements of operations data for periods prior to the application of fresh-start accounting and prior to accounting for the effects of the reorganization.

### **External Risks**

*Market conditions, global and regional economic downturns, cyclical factors and risks associated with TiO<sub>2</sub> that adversely affect the demand for the end-use products that contain TiO<sub>2</sub> or our other products could adversely affect the profitability of our operations and the prices at which we can sell our products, negatively impacting our financial results.*

The majority of Tronox Incorporated's revenue came from the sale of TiO<sub>2</sub> (85.5% in 2011, 82.3% in 2010 and 81.2% in 2009), while a majority of Exxaro Mineral Sands's revenue came from the sale of pigment, titanium feedstock and zircon (88.4% in 2011, 85.2% in 2010 and 82.9% in 2009). TiO<sub>2</sub> is a chemical used in many quality of life products for which demand historically has been linked to Global GDP and discretionary spending, which can be negatively impacted by regional and world events or economic conditions generally, such as terrorist attacks, the incidence or spread of contagious diseases or other economic, political or public health or safety conditions. Events such as these are likely to cause a decrease in demand for our products and, as a result, may have an adverse effect on our results of operations and financial condition. Historically, demand for TiO<sub>2</sub> and zircon decreased in 2008 and 2009 due to the worldwide financial crisis, following several years of increasing growth, resulting in lower prices and reduced production by the major producers. The increase in demand during 2010 and 2011 has resulted in increasing prices of TiO<sub>2</sub> and titanium feedstock, which have been further bolstered by the reduced availability of titanium feedstock.

The future profitability of our operations, and cash flows generated by those operations, also will be affected by the available supply of our products in the market, such as TiO<sub>2</sub> pigment, feedstock and zircon.

Additionally, the demand for TiO<sub>2</sub> during a given year is subject to seasonal fluctuations. TiO<sub>2</sub> sales are generally higher in the second and third quarters of the year primarily due to the increase in paint production to meet demand resulting from the spring and summer painting season in North America and Europe. We may be adversely affected by existing or future cyclical changes, and such conditions may be sustained or further aggravated by anticipated or unanticipated changes in regional weather conditions. For example, poor weather conditions in a region can lead to an abbreviated painting season, which can depress consumer sales of paint products that use TiO<sub>2</sub>.

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We do not currently enter into commodity derivatives or hedging arrangements on our future production, so we are exposed to the impact of any significant decrease in the price of our products.

***Our results of operations may be adversely affected by fluctuations in currency exchange rates.***

The financial condition and results of operations of Tronox Incorporated's operating entities in the Netherlands and Australia are reported in various foreign currencies and then converted into U.S. dollars at the applicable exchange rate for inclusion in Tronox Incorporated's financial statements, while the financial condition and results of operations of Exxaro Mineral Sands's operating entities in Australia and finance entities in the Netherlands currently are reported in Australian dollars and Euros, respectively, and then converted into Rand at the applicable exchange rate for inclusion into the Exxaro Mineral Sands Combined Financial Statements. As a result, any volatility of the U.S. dollar or the Rand against these foreign currencies creates uncertainty for and may have a negative impact on reported sales and operating margin. We have made a U.S. dollar functional currency election for both Australian financial reporting and federal income tax purposes. On this basis, our Australian entities account for transactions on a U.S. dollar basis.

In addition, our operating entities often need to convert currencies they receive for their products into currencies in which they purchase raw materials or pay for services, which could result in a gain or loss depending on fluctuations in exchange rates. Because we have significant operations in Europe, South Africa and Australia, we are exposed primarily to fluctuations in the Euro, the Rand and the Australian dollar. Exxaro Mineral Sands's primary products are priced throughout the world in U.S. dollars and, as a result, Exxaro Mineral Sands receives most of its revenue in U.S. dollars. However, during 2011, approximately 97% of KZN Sands's and 84% of Namakwa Sands's operating costs were incurred in Rand and approximately 95% of Australia Sands's operating costs were incurred in Australian dollars. Any significant and sustained appreciation of the Rand or the Australian dollar against the U.S. dollar without an offsetting increase in U.S. dollar denominated TiO<sub>2</sub> feedstock prices will materially reduce Exxaro Mineral Sands's Rand and Australian dollar reported revenue and overall net income.

Prior to completion of the Transaction, Tronox Incorporated and Exxaro Mineral Sands from time to time sought to minimize their foreign currency risk by engaging in hedging transactions. However, we may be unable to effectively manage our foreign currency risk, and any volatility in foreign currency exchange rates may have a material effect on our financial condition or results of operations.

***Our operations may be negatively impacted by inflation.***

Our operations have been materially affected by inflation in the countries in which they have operated in recent years, as shown by the average inflation rates over the periods indicated in the table below for the United States, South Africa and Australia.

	2008-2009	2009-2010	2010-2011
United States	(0.4)%	1.6%	3.2%
South Africa	7.1%	4.3%	5.0%
Australia	2.1%	2.7%	3.1%

Working costs and wages in South Africa, especially, have increased in recent years, resulting in significant cost pressures for the mining industry. Our profits and financial condition could be adversely affected when cost inflation is not offset by devaluation in operating currencies or an increase in the price of our products.

***Our industry and the end-use markets in which it competes are highly competitive. This competition may adversely affect our results of operations and operating cash flows.***

Each of the markets in which we compete is highly competitive. Competition is based on a number of factors such as price, product quality and service. We face significant competition from major international and

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smaller regional competitors. Our most significant competitors include major chemical and materials manufacturers and diversified companies, a number of which have substantially larger financial resources, greater personnel and larger facilities than we do. The additional resources, greater personnel and larger facilities of such competitors may give them a competitive advantage when responding to market conditions and capitalizing on operating efficiencies. Increased competition or an oversupply in the market could result in reduced sales, which could adversely affect our profitability and operating cash flows. An increased availability of supply, which results in a decrease in product prices below our cash cost of production for any sustained period, may lead to losses and require us to curtail or suspend certain operations.

In addition, within the end-use markets in which we compete, competition between products is intense. We face substantial risk that certain events, such as new product development by competitors, changing customer needs, production advances for competing products or price changes in raw materials, could cause our customers to switch to its competitors' products. If we are unable to develop and produce or market its products to compete effectively against its competitors following such events, our results of operations and operating cash flows may suffer.

### ***The socio-economic environment in South Africa may have an adverse effect on our business, operating results and financial condition.***

South Africa has been undergoing political and economic challenges. Changes to or instability in the economic or political environment in South Africa or neighboring countries, especially if such changes create political instability, actual or potential shortages of production materials or labor unrest, could result in production delays and production shortfalls and materially impact our production and results of operations.

South Africa has a highly developed financial and legal infrastructure, but it also has high levels of poverty, unemployment and crime, and faces challenges in building adequate physical infrastructure, such as for the supply of electricity and water, as further discussed below under "The cost of electricity in South Africa may adversely affect our results of operations and financial condition" and "We use significant amounts of water in our operations and are subject to water use licenses, which could impose significant costs." These problems may prompt the emigration of skilled workers, discourage fixed inward investment into South Africa and impede economic growth, all of which could negatively affect our business.

Further, there are significant differences in the levels of economic and social development within the South African population, with large parts of the population, particularly in rural areas, having limited access to adequate education, healthcare, housing and other basic services, including water and electricity. The South African government has implemented laws and policies aimed at alleviating and redressing the disadvantages suffered by the majority of citizens under previous governments, which may increase our costs and reduce its profitability. It is not possible to predict the extent to which the South African government will continue to introduce legislation or other measures designed to empower previously disadvantaged groups or the potential impact of such reforms.

### ***Our financial flexibility could be materially constrained by South African exchange control regulations.***

South Africa's exchange control regulations require resident companies to obtain the prior approval of the South African Reserve Bank to raise capital in any currency other than the Rand and restrict the export of capital from South Africa. In particular, South African companies:

are generally not permitted to export capital from South Africa or to hold foreign currency without the South African Reserve Bank's approval. In case of South African Reserve Bank approving the initial:

- (a) investment by a non-resident off-shore company in a South African company, profits from the South African company's operations can be freely remitted to such non-resident off-shore company subject to compliance with administrative formalities in connection with such payment;

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or

- (b) loan by a non-resident off-shore company to a South African company, repayment of the loan and the payment of any interest thereon can be freely remitted to such non-resident off-shore company subject to compliance with administrative formalities in connection with such payments;

are generally required to repatriate to South Africa profits of foreign operations; and

are limited in their ability to utilize profits of one foreign business to finance operations of a different foreign business.

While the South African government has relaxed exchange controls in recent years, it is difficult to predict whether or how it will further relax or abolish exchange control measures in the future. These exchange control restrictions could hinder our financial and strategic flexibility, particularly our ability to use South African capital to fund acquisitions, capital expenditures and new projects outside of South Africa.

***Third parties may develop new intellectual property rights for processes and/or products that we would want to use, but would be unable to do so; or, third parties may claim that the products we make or the processes that we use infringe their intellectual property rights, which may cause us to pay unexpected litigation costs or damages or prevent us from making, using or selling products we make or require alteration of the processes we use.***

Although there are currently no known pending or threatened proceedings or claims relating to alleged infringement, misappropriation or violation of the intellectual property rights of others, we may be subject to legal proceedings and claims in the future in which third parties allege that their patents or other intellectual property rights are infringed, misappropriated or otherwise violated by us or our products or processes. In the event that any such infringement, misappropriation or violation of the intellectual property rights of others is found, we may need to obtain licenses from those parties or substantially re-engineer its products or processes to avoid such infringement, misappropriation or violation. We might not be able to obtain the necessary licenses on acceptable terms or be able to re-engineer our products or processes successfully. Moreover, if we are found by a court of law to infringe, misappropriate or otherwise violate the intellectual property rights of others, it could be required to pay substantial damages or be enjoined from making, using or selling the infringing products or technology. We also could be enjoined from making, using or selling the allegedly infringing products or technology pending the final outcome of the suit. Any of the foregoing could adversely affect our financial condition and results of operations.

Results of our operations may also be negatively impacted if a competitor develops or has the right to use intellectual property rights for new processes or products and we cannot obtain similar rights on favorable terms and are unable to independently develop non-infringing competitive alternatives.

***If our intellectual property were compromised or copied by competitors, or if competitors were to develop similar intellectual property independently, our results of operations could be negatively affected.***

Our success depends to a significant degree upon our ability to protect and preserve our intellectual property rights. Although we own and have applied for numerous patents and trademarks throughout the world, we may have to rely on judicial enforcement of our patents and other proprietary rights. Our patents and other intellectual property rights may be challenged, invalidated, circumvented, and rendered unenforceable or otherwise compromised. A failure to protect, defend or enforce our intellectual property could have an adverse effect on our financial condition and results of operations.

We also rely upon unpatented proprietary technology, know-how and other trade secrets to maintain our competitive position. While we maintain policies to enter into confidentiality agreements with our employees and third parties to protect our proprietary expertise and other trade secrets, these agreements may not be enforceable



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or, even if legally enforceable, we may not have adequate remedies for breaches of such agreements. We also may not be able to readily detect breaches of such agreements. The failure of our patents or confidentiality agreements to protect our proprietary technology, know-how or trade secrets could result in significantly lower revenues, reduced profit margins or loss of market share.

In addition, we may be unable to determine when third parties are using our intellectual property rights without our authorization. We also have licensed certain of our intellectual property rights to third parties, and we cannot be certain that our licensees are using our intellectual property only as authorized by the applicable license agreement. The undetected or unremedied unauthorized use of our intellectual property rights or the legitimate development or acquisition of intellectual property related to our industry by third parties could reduce or eliminate any competitive advantage we have as a result of our intellectual property, adversely affecting our financial condition and results of operations. If we must take legal action to protect, defend or enforce our intellectual property rights, any suits or proceedings could result in significant costs and diversion of our resources and our management's attention, and we may not prevail in any such suits or proceedings. A failure to protect, defend or enforce our intellectual property rights could have an adverse effect on our financial condition and results of operations.

### **Operational Risks**

***Given the nature of our chemical, mining and smelting operations, we face a material risk of liability, delays and increased cash costs of production from environmental and industrial accidents and operational breakdowns.***

Our business involves significant risks and hazards, including environmental hazards, industrial accidents and breakdowns of equipment and machinery. Our business is exposed to hazards associated with chemical manufacturing and the related storage, handling and transportation of raw materials, products and wastes and our furnace operations that are subject to explosions, and our open pit (also called open-cut) and dredge mining operations that are subject to flooding and accidents associated with rock transportation equipment and conveyor belts. For example, as further discussed under Exxaro Mineral Sands Management's Discussion and Analysis of Financial Condition and Results of Operations Recent Developments Furnace Shutdowns, in September 2011, a furnace at KZN Sands was taken out of operation for repair and upgrade and resumed operations on February 25, 2012; however, during this period, operations at KZN Sands were impaired and the losses suffered may not be completely covered by business interruption insurance. Furthermore, during operational breakdowns such as the furnace shutdown at KZN Sands, the relevant facility may not be fully operational within the anticipated timeframe, which could result in further business losses. The occurrence of any of these or other hazards could delay production, suspend operations, increase repair, maintenance or medical costs and, due to the integration of our facilities, could have an adverse effect on the productivity and profitability of a particular manufacturing facility or on our business as a whole.

There is also a risk that our key raw materials or our products may be found to have currently unrecognized toxicological or health-related impact on the environment or on its customers or employees. Such hazards may cause personal injury and loss of life, damage to property and contamination of the environment, which could lead to government fines or work stoppage injunctions and lawsuits by injured persons. If such actions are determined to be adverse to us, we may have inadequate insurance to cover such claims, or insufficient cash flow to pay for such claims. Such outcomes could adversely affect our financial condition and results of operations.

***Our insurance coverage may prove inadequate to satisfy future claims.***

We maintain third-party property, business interruption, casualty and terrorism insurance, with deductibles that are believed to be in accordance with customary industry practices, but we are not fully insured against all potential hazards incident to our business, including losses resulting from natural disasters or terrorist acts and those related to past activities for which it may not have an adequate indemnification or contribution remedy. In

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addition, insurance may not be available in the future at economically acceptable premiums. As a result, if we were to incur a significant liability for which we are not fully insured, we might not be able to finance the amount of the uninsured liability on terms acceptable to us or at all, and might be obligated to divert a significant portion of our cash flow from normal business operations.

***Fluctuations in costs of our raw materials or its access to supplies of our raw materials could have an adverse effect on our results of operations and financial condition.***

In 2011, raw materials used in Tronox Incorporated's production of TiO<sub>2</sub> constituted approximately 34.9% of its operating expenses. Fuel and energy linked to commodities, such as diesel, heavy fuel oil, and coal, and other consumables, such as chlorine, illuminating paraffin, electrodes and anthracite, consumed in our manufacturing and mining operations form an important part of their operating costs. We have no control over the costs of these consumables, many of which are linked to some degree to the price of oil and coal, and the costs of many of these raw materials may fluctuate widely for a variety of reasons, including changes in availability, major capacity additions or reductions or significant facility operating problems. These fluctuations could negatively affect our operating margins and our profitability. As these costs rise, our operating expenses will increase and could adversely affect our business, especially if we are unable to pass price increases in raw materials through to our customers.

Over the last several years TiO<sub>2</sub> prices have risen dramatically while titanium feedstock prices have risen less. Therefore, our margins have expanded significantly. This may result in customers curtailing purchases, developing substitutes, or vertically integrating themselves.

Shortages or price increases by our single source suppliers, such as the suppliers of chlorine to the Tiwest Joint Venture operations or high-quality anthracite to Namakwa Sands, each of which are discussed under The Businesses Description of Exxaro Mineral Sands Mining and Processing Techniques Raw Materials, could decrease revenue or increase production costs, reducing the profitability of operations. Fluctuations in oil and coal prices impact our operating cost and capital expenditure estimates and, in the absence of other economic fluctuations, could result in significant changes in the total expenditure estimates for our operations or new expansion projects, and when taken into account with other production costs, such as wages, equipment and machinery costs, may render certain operations nonviable.

***The cost of electricity in South Africa may adversely affect our results of operations and financial condition.***

In South Africa, our mining and smelting operations depend on electrical power generated by Eskom, the state-owned sole energy supplier in South Africa. South African electricity prices rose by approximately 25% in 2010 and 2011. South African electricity prices will increase by 16% in 2012, and future increases likely will continue at rates higher than inflation. These increases have increased production costs. As these costs rise, our operating expenses will increase and could adversely affect our business, especially if we cannot pass through increases in our expenses to our customers. We are investing in a co-generation project at Namakwa Sands, as further described in The Businesses Description of Exxaro Mineral Sands Properties and Reserves Properties Namakwa Sands Power and Water Supply; and our management has reviewed its operating processes to control and reduce its electricity consumption. However, until Namakwa Sands's proposed co-generation plant is fully functional, future electricity supply interruptions or deficiencies and increased energy costs in all of our operations may affect our operational results and financial condition. See The Businesses Description of Exxaro Mineral Sands Properties and Reserves Properties Namakwa Sands Power and Water Supply.

***We use significant amounts of water in our operations and are subject to water use licenses, which could impose significant costs.***

National studies conducted by the South African Water Research Commission, released during September 2009, found that water resources in South Africa were approximately 4% lower than estimated in 1995, which

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may lead to the revision of water use strategies by several sectors in the South African economy, including electricity generation and municipalities. Our surface retreatment operations in South Africa use water to transport the slimes or sand from reclaimed areas to the processing plant and to the tailings facilities, and reduced water availability may result in rationing or increased water costs in the future due to our significant use of water in our mining operations. Our plants and piping infrastructure were designed to carry certain minimum throughputs, so any reductions in the volumes of available water may require us to adjust production at these operations. However, our South African operations can use sea water, which is readily available since both KZN Sands and Namakwa Sands are located in coastal regions, although using sea water instead of fresh water would increase operational costs due to the desalination process, which may not be offset against lower water operating costs.

In addition, under South African law, our South African mining operations are subject to water use licenses that govern each operation's water use, as further discussed under [The Businesses](#) [Description of Exxaro Mineral Sands](#) [Regulation of the Mining Industry in South Africa](#) and [Australia](#) [Regulation of the Mining Industry in South Africa](#) [The National Water Act](#). These licenses require, among other conditions, that mining operations achieve and maintain certain water quality limits for all water discharges, where applicable. Our South African operations that came into existence after the adoption of the National Water Act, No. 36 of 1998 have applied for and been issued the required water use licenses. Our South African operations that came into existence prior to the adoption of the National Water Act (Namakwa Sands's mining operations, mineral separation plant and smelter operations) have been granted permission to continue operating until water use licenses have been approved for those operations, subject to operating conditions set by the Department of Water Affairs. Those operations have applied for the required water use licenses, but have not yet been issued with provisional or final licenses due to the significant backlog of pending license applications. As a result of this backlog, it is not uncommon for South African mines to operate without the proper water use authorizations. The issue of mines operating without the requisite water use licenses recently has received parliamentary notice and enforcement action against illegal water use, particularly within the mining industry, has increased. Operating without the appropriate water use licenses exposes us to criminal liability as well as the risk that our operations may be halted or suspended, affected mining rights may be suspended or cancelled or the implementation of new projects may be delayed. In addition, the conditions of the licenses once issued may require us to implement alternate water management measures that may have significant cost implications. If we are not able to achieve or maintain compliance with the requirements of these licenses, the operations may be subject to penalties, fees and expenses or business interruption, which could have a material effect on our business, operating results and financial condition.

***The capacity and cost of transportation facilities, as well as transportation delays and interruptions, could adversely affect our ability to supply titanium feedstock to our pigment operations and our products to our customers.***

Our ability to sell TiO<sub>2</sub> pigment, zircon and other products depends primarily upon road transport, third-party rail systems, ports, storage and container shipping. Increases in transportation costs or a lack of sufficient trucking, rail or cargo vessel or container capacity could make our products less competitive than those produced by other companies. We have no control over those logistical factors which effect transport efficiency, such as the condition of the roads or the quality of ports from which our products are exported, and alternative transportation and delivery systems generally are inadequate or unsuitable to handle the quantity of our shipments and to ensure timely delivery. If we are unable to obtain road, rail, sea or other transportation services, or to do so on a cost-effective basis, our business and growth strategy would be adversely affected.

***If we are unable to innovate and successfully introduce new products, or new technologies or processes reduce the demand for our products or the price at which we can sell products, our profitability could be adversely affected.***

Our industries and the end-use markets into which we sell our products experience periodic technological change and product improvement. Our future growth will depend on our ability to gauge the direction of

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commercial and technological progress in key end-use markets and on our ability to fund and successfully develop, manufacture and market products in such changing end-use markets. We must continue to identify, develop and market innovative products or enhance existing products on a timely basis to maintain our profit margins and our competitive position. We may be unable to develop new products or technology, either alone or with third parties, or license intellectual property rights from third parties on a commercially competitive basis. If we fail to keep pace with the evolving technological innovations in our end-use markets on a competitive basis, our financial condition and results of operations could be adversely affected.

In addition, new technologies or processes have the potential to replace or provide lower-cost alternatives to our products, such as new processes that reduce TiO<sub>2</sub> in consumer products or the use of chloride slag in the production of TiO<sub>2</sub> pigment, which could result in TiO<sub>2</sub> pigment producers using less chloride slag, or to reduce the need for TiO<sub>2</sub> pigment in consumer products, which could depress the demand and pricing for TiO<sub>2</sub> pigment. We cannot predict whether technological innovations will, in the future, result in a lower demand for our products or affect the competitiveness of our business. We may be required to invest significant resources to adapt to changing technologies, markets and competitive environments.

***Estimations of our ore resources and reserve estimates are based on a number of assumptions, including mining and recovery factors, future cash costs of production and ore demand and pricing. As a result, ore resources and reserve quantities actually produced may differ from current estimates.***

The mineral resource and reserve estimates contained under The Businesses Description of Exxaro Mineral Sands Exxaro Mineral Sands Properties and Reserves Mineral Resources and Reserves are estimates of the quantity and ore grades in our mines based on Exxaro's interpretation of geological data obtained from drill holes and other sampling techniques, as well as from feasibility studies. The accuracy of these estimates is dependent on the assumptions and judgments that Exxaro makes in interpreting the geological data. Exxaro's assessment of geographical characteristics, such as location, quantity, quality, continuity of geology and grade, is made with varying degrees of confidence in accordance with established guidelines and standards. Exxaro uses various exploration techniques, including geophysical surveys and sampling through drilling and trenching, to investigate resources and implements applicable quality assurance and quality control criteria to ensure that data is representative. Exxaro Mineral Sands's mineral reserves represent the amount of ore that Exxaro believes can be successfully mined and processed, and are estimated based on a number of factors, which have been stated in accordance with the SAMREC and JORC codes (as defined and described under The Businesses Description of Exxaro Mineral Sands Properties and Reserves Mineral Resources and Reserves ).

There is significant uncertainty in any mineral reserve or mineral resource estimate. Factors that are beyond our control, such as the ability to secure mineral rights, the sufficiency of mineralization to support mining and beneficiation practices and the suitability of the market may significantly impact mineral resource and reserve estimates. The actual deposits encountered and the economic viability of mining a deposit may differ materially from Exxaro's estimates. Since these mineral resources and reserves are estimates based on assumptions related to factors discussed above, we may revise these estimates in the future as we becomes aware of new developments. To maintain TiO<sub>2</sub> feedstock production beyond the expected lives of our existing mines or to increase production materially above projected levels, we will need to access additional reserves through exploration or discovery.

***Implementing a new enterprise resource planning system could interfere with our business or operations and could adversely impact our financial position, results of operations and cash flows.***

We are in the process of implementing a new enterprise resource planning system. This project requires significant investment of capital and human resources, the re-engineering of many of our processes, and the attention of many employees who would otherwise be focused on other aspects of its business. Any disruptions, delays or deficiencies in the design and implementation of this new system could potentially result in higher

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costs than we had anticipated and could adversely affect our ability to provide services to our customers and vendors, file reports with regulatory agencies in a timely manner, manage our internal controls or otherwise operate our business. Any of these consequences could have an adverse effect on our results of operations and financial condition.

***We will compete with other mining and chemical businesses for key human resources in the countries in which we will operate, and our business will suffer if we are unable to hire highly skilled employees or if our key officers or employees discontinue employment with us.***

We compete with other chemical and mining companies, and other companies generally, in the countries in which we operate to attract and retain key human resources at all levels with the appropriate technical skills and operating and managerial experience necessary to continue operating and expand our businesses. These operations use modern techniques and equipment and accordingly require various types of skilled workers. The success of our business will be materially dependent upon the skills, experience and efforts of its key officers and skilled employees. The global shortage of key mining skills, including geologists, mining engineers, metallurgists and skilled artisans, has been exacerbated by increased mining activity across the globe. Despite various initiatives, we may not be able to attract and retain skilled and experienced employees. Should we lose any of our key personnel or fail to attract and retain key qualified personnel or other skilled employees, our business may be harmed and our operational results and financial condition could be affected.

***The labor and employment laws in many jurisdictions in which we operate are more onerous than in the United States; and some of our labor force has substantial works council or trade union participation, which creates a risk of disruption from labor disputes and new law affecting employment policies.***

A majority of our employees are located outside the United States. In most of those countries, labor and employment laws are more onerous than in the United States and, in many cases, grant significant job protection to employees, including rights on termination of employment.

Labor costs constituted 12.7% of Tronox Incorporated's production costs (excluding depreciation) and 24.3% of Exxaro Mineral Sands's production costs (excluding depreciation) in 2011. Some of our employees in the Netherlands are represented by a works council by law, which subjects us to employment arrangements very similar to collective bargaining agreements, and as of December 31, 2011, approximately 63% of Exxaro Mineral Sands's South African employees were members of trade unions or employee associations (the National Association of Mineworkers ( NUM ) and Solidarity).

Our South African operations have entered into various agreements regulating wages and working conditions at our mines. Despite a history of constructive engagement with labor unions, there have been periods when various stakeholders have been unable to agree on dispute resolution processes, leading to threats of disruptive labor disputes, although only two strikes have ever occurred in the history of these operations (including the period prior to Exxaro's acquisition of these operations). Due to the high level of employee union membership, our South African operations are at risk of production stoppages for indefinite periods due to strikes and other disputes. In the past five years, employees of KZN Sands went on strike once for a 22-day period, when NUM members went on strike from August 23 to September 13, 2010, in a dispute over wages and employment conditions, which resulted in an average daily production loss of 20,000 tonnes run of mine and 1,398 tonnes of heavy mineral concentrate, but had no significant impact on the smelter or furnace operations. Although we believe that we have good labor relations with our South African employees, we may experience labor disputes in the future.

South African employment law, which is based on the minimum standard set by the International Labour Organization, sets out minimum terms and conditions of employment for employees. Although these may be improved by agreements between an employer and the trade unions, prescribed minimum terms and conditions form the benchmark for all employment contracts. Our South African operations are required to submit a report

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to the South African Department of Labour under South African employment law detailing the progress made towards achieving employment equity in the workplace. Failing to submit this report in a timely manner could result in substantial penalties. In addition, future legislative developments that affect South African employment policies may increase production costs or negatively impact relationships with employees and trade unions, which may have an adverse effect on our business, operating results and financial condition.

We are required to consult with and seek the consent or advice of various employee groups or works councils that represent its employees for any changes to its activities or employee benefits. This requirement could have a significant impact on our flexibility in managing costs and responding to market changes.

## **Regulatory Risks**

*Violations or noncompliance with the extensive environmental, health and safety laws and regulations to which we are subject or changes in laws or regulations governing our operations could result in unanticipated loss or liability.*

Our operations and production facilities are subject to extensive environmental and health and safety laws and regulations at national, international and local levels in numerous jurisdictions relating to use of natural resources, pollution, protection of the environment, transporting and storing raw materials and finished products and storing and disposing of hazardous wastes, as discussed under *The Businesses Description of Tronox Incorporated Government Regulations and Environmental Matters* and *The Businesses Description of Exxaro Mineral Sands Regulation of the Mining Industry in South Africa and Australia*. The costs of compliance with the extensive environmental, health and safety laws and regulations to which we are subject or the inability to obtain, update or renew permits required for operation or expansion of its business could reduce our profitability or otherwise adversely affect our business. We may in the future incur substantial costs, including fines, damages, criminal or civil sanctions and remediation costs, or experience interruptions in our operations, for violations arising under these laws and regulations. In the event of a catastrophic incident involving any of the raw materials we use or chemicals or mineral products we produce, we could incur material costs as a result of addressing the consequences of such event.

Changes to existing laws governing operations, especially changes in laws relating to transportation of mineral resources, the treatment of land and infrastructure, contaminated land, the remediation of mines, tax royalties, exchange control restrictions, environmental remediation, mineral rights, ownership of mining assets or the rights to prospect and mine may have a material adverse effect on our future business, operations and financial performance. There is risk that onerous conditions may be attached to authorizations in the form of mining rights, water use licenses, miscellaneous licenses and environmental approvals or that the grant of these approvals may be delayed or not granted. See, for example, the discussion under *The Businesses Description of Exxaro Mineral Sands Regulation of the Mining Industry in South Africa and Australia Environmental, Health and Safety Matters Fairbreeze Environmental Impact Assessment*.

While Tronox Incorporated received a discharge and/or release for its significant legacy environmental and tort liabilities in relation to its United States based operations upon emergence from the Chapter 11 cases, from time to time we may be party to a number of legal and administrative proceedings involving environmental and other matters in various courts and before various agencies, which may include proceedings in relation to any Tronox operations acquired within the United States following the Chapter 11 cases. These could include proceedings associated with facilities owned, operated or used by us, and may include claims for personal injuries, property damages and injury to the environment, including natural resource damages and non-compliance with permits. Any determination that one or more of our key raw materials or products has, or is characterized as having, a toxicological or health-related impact on our environment, customers or employees could subject us to additional legal claims. These proceedings and any such additional claims may be costly and may require a substantial amount of management attention, which may have an adverse effect on our financial condition and results of operations.

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Our current operations involve the production and management of regulated materials that are subject to various environmental laws and regulations and are dependent on obtaining and the periodic renewal of permits from various governmental agencies. The inability to obtain, update or renew permits related to the operation of our businesses, or the costs required in order to comply with permit standards, could have a material adverse affect on us. No significant difficulties in obtaining such permits are anticipated at this time.

If we fail to comply with the conditions of our permits governing the production and management of regulated materials, mineral sands mining licenses or leases or the provisions of the applicable South African or Australian law, these permits, mining licenses or leases and mining rights could be cancelled or suspended, and we could be prevented from obtaining new mining and prospecting rights, which could materially and adversely affect our business, operating results and financial condition. In addition, if we are unable to obtain or maintain necessary permits, authorizations or agreements to prospect or mine or to implement planned projects or continue our operations under conditions or within timeframes that make such operations economically viable, our operational results and financial condition could be adversely affected.

### ***Changes to government policies in South Africa may adversely affect our business, operating results and financial condition.***

Since the end of apartheid in 1994, South African politics have been dominated by the African National Congress (the ANC). Jacob Zuma, a member of the ANC, was elected president of South Africa during national elections in 2009. Since that time, numerous public statements have been made by the ANC Youth League, an affiliate organization of the ANC, calling for the nationalization of the South African mining industry as a way to reduce poverty and inequality. Julius Malema, the former populist leader of the ANC Youth League who was expelled from the ANC on February 29, 2012 for sowing division in the ruling party and bringing it into disrepute, has been at the forefront of the calls for nationalization, as well as calls for the expropriation of white-owned land. Mr. Malema's expulsion has sparked clashes between his supporters and his rivals. Despite Mr. Malema's expulsion, the ANC Youth League may continue to call for the government to take a stake in South Africa's private mines without compensation, claiming that the policy would distribute wealth and create jobs.

Although senior government officials, including the Minister of the Department of Mineral Resources, have insisted that nationalization of the South African mining industry is not government policy, the ANC has appointed a task team to investigate the feasibility of, and potential policies for, nationalization and increased state intervention in the mining industry and is due to report its findings at the ANC's national policy conference at the end of June 2012.

On February 17, 2012 the task team released a draft report entitled "Maximizing the developmental impact of the people's mineral assets: State intervention in the Minerals Sector." The task team's findings are expected to be one of the key political issues at the ANC leadership elections in December 2012, where Mr. Zuma may face a leadership challenge, although Mr. Malema's proposals may not be as actively pursued by his successor.

The draft findings appear to dismiss the nationalization of all or a majority of private mineral companies at a market related price because it would be unaffordable for the government. Nationalization without compensation would require an amendment to the South African constitution. This would, according to the report, draw global criticism and would result in a withdrawal of foreign direct investment, loss of jobs and the institution of legal proceedings by investors domiciled in states that have entered into trade and investment protection agreements with South Africa. However, the report does include some salient proposals, including:

in respect of the resource rents to the South African government, the introduction of a 50% resource rent tax to attribute a greater share;

the establishment of a state minerals company;

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merging the ministries of Trade and Industry, Mineral Resources and Energy, Public Enterprises, Economic Development and Science and Technology to form a super ministry ;

the concessioning of all known mineral deposits by public tender;

the establishment of a professional minerals commission to grant, monitor and evaluate all mineral concessions and licenses;

the amendment of current mining legislation to maximize developmental impacts of the mineral and energy complex;

the establishment of a presidential mineral rights audit commission to carry out forensic audits on the granting of all new order mining rights under the Mineral and Petroleum Resources Development Act, 28 of 2002 ( MPRDA );

the imposition of a 50% capital gains tax on the transfer of any mineral rights before actual mining operations commence to discourage speculators in the mining industry;

the establishment of a mineral rights commission as an oversight body (regulator) whose consent would be required prior to transferring any mineral rights; and

the establishment of a minerals environmental monitoring and compliance agency.

One of the task team's main proposals is an amendment to the current system of mining royalties. The proposal contemplates significantly reducing mining royalties and largely replacing them with a tax on super profits. This concept of resource rent capture would result in a tax being imposed on the difference between the price at which a resource can be sold and its extraction costs (which includes normal returns). The resource rent tax would only be triggered once a reasonable return had been made by the mineral right holder. The putative goal of this proposed tax is to protect marginal mining operations.

The task team also proposes that a resource rent tax of 50% be imposed on all mining in South Africa. The tax would only be triggered after a normal return on investment had been achieved. A normal return on investment is defined in the draft policy document as the South African Treasury Long Bond Rate plus 7%. At current rates, a normal return on investment would be approximately 15%. According to the draft proposal, all proceeds of the resource rent tax should be held in an offshore sovereign wealth fund. If the taxes imposed on our South African mining operations were to increase as a result of South Africa's implementation of the proposed tax on super profits or adoption of a 50% resource rent tax on mining activity, the profitability of our South African mining operations would be negatively impacted. We may decide to cease our South African operations to the extent that those operations do not meet their return requirements, which would adversely affect our operational results and financial condition.

The draft policy document also contains several other proposals designed to apply a concept of a Democratic Developmental State to the governance of South African mineral assets.

Although the draft policy document appears to distance itself from a policy of nationalization per se, and although the South African government has repeatedly indicated that it does not currently have any formal plans to nationalize the country's mining sector, the controversy and political infighting surrounding the issue have exacerbated foreign investors' uncertainty about South Africa's mining industry as the country has been slowly recovering from the global economic crisis. If any of our South African mines are nationalized, it would adversely affect our South African mining operations, and any compensation paid for our mining operations may not fully compensate us at market value for the loss of those operations.



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***Our privately held and leased South African land and mineral rights could be subject to land restitution claims.***

Under South African legislation, any person who was dispossessed of land rights in South Africa as a result of past racially discriminatory laws or practices is granted certain remedies, including the restoration of the land. The initial deadline for such claims was December 31, 1998. Two of our South African operations are subject to land claims. As further discussed under The Businesses Description of Exxaro Mineral Sands Legal Proceedings South Africa, the Obanjeni Community has filed a land claim affecting the Fairbreeze mining surface area, and the Mkhwanazi Tribe has filed a claim affecting the Port Durnford prospecting rights area over which we have a pending prospecting rights application. Both of these claims are under review by the Land Claims Commissioner, and we are engaged in negotiations with the Mkhwanazi Tribe to secure access for prospecting and mining and also intends to enter into negotiations with the Obanjeni Community at the appropriate time. If we are not successful in our negotiations or are unable to secure access rights on commercially reasonable terms and conditions, our operations at Fairbreeze or Port Durnford may be adversely affected. In addition, if we expand our operations to areas that are subject to land claims, our rights to these properties may be adversely affected, and we may be prevented from using the property and exploiting any ore reserves located there in a commercially reasonable manner. This could have an adverse effect on our business, operating results and financial condition.

***Our South African operations may lose the benefit of Exxaro's Black Economic Empowerment ( BEE ) status under South African legislation, resulting in the need to implement a remedial solution or introduce a new minority shareholder, which could negatively impact our South African operations.***

Exxaro retains a 26.0% direct ownership interest in each of Exxaro Sands and Exxaro TSA Sands in order for these two entities to comply with the requirements of the MPRDA and the South African Mining Charter ownership requirements under the BEE legislation. Exxaro has agreed to maintain its direct ownership for a period of the shorter of: 10 years (unless it transfers the direct ownership interests to another qualified buyer under the BEE legislation) or the date on which the requirement to maintain a direct ownership stake in each of Exxaro Sands and Exxaro TSA Sands no longer applies, as determined by the DMR. If either Exxaro Sands or Exxaro TSA Sands ceases to qualify under the BEE legislation, Tronox Limited and Exxaro have agreed to jointly seek a remedial solution. If Tronox Limited and Exxaro cannot successfully implement a solution and the reason for this failure is due to anything other than a change in law, then we may dispose of Exxaro's shares in the non-qualifying company to another, BEE compliant, qualifying purchaser. During any period of any non-qualification, our South African operations may be in violation of their mining or prospecting rights, as well as the requirements of the MPRDA and the South African Mining Charter, which could result in a suspension or revocation of the non-qualifying company's mining and prospecting rights and could expose us to operating restrictions, lost business opportunities and delays in receiving further regulatory approvals for its South African operations and expansion activities. In addition, if Exxaro's direct ownership in Exxaro Sands and Exxaro TSA Sands is sold to another purchaser, we would be required to share ownership and control of its South African operations with a minority shareholder, which may impact its operational and financial flexibility and could impact profitability, expansion opportunities and its results of operations.

***The cost of occupational healthcare services and the potential liabilities related to occupational health diseases in South Africa may increase in the future.***

Our operations in South Africa are subject to health and safety regulations which could impose significant costs and burdens. South African legislation imposes various duties on mines and grants the authorities broad power to, among other things, close unsafe mines and order corrective action with respect to health and safety matters. There is a risk that the cost of providing healthcare services and implementing various health programs could increase in the future, depending on changes to underlying legislation and the profile of our employees in South Africa. The amount of the potential increase in cost is currently indeterminate.

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South African law governs the payment of compensation and medical costs to a compensation fund against which mining employees and other people at sites where ancillary mining activities are conducted can claim for mining activity-related illnesses. Should claims against the compensation fund rise significantly due to our mining activity or if claims against us are not covered by the compensation fund, the amount of our contribution or liability to claimants may increase, which could adversely impact our financial condition. In addition, the HIV/AIDS epidemic in South Africa poses risks to our South African operations in terms of potentially reduced productivity, and increased medical and other costs. If there is a significant increase in the incidence of HIV/AIDS infection and related diseases among the South African workforce over the next several years, our operations, projects and financial condition may be adversely affected.

***Mining companies are increasingly required to consider and ensure the sustainable development of, and provide benefits to, the communities in which they operate.***

Companies whose activities are perceived to have a high impact on their social and physical environment, such as our South African operations, face increasing public scrutiny of their activities. Our existing and proposed mining operations are often located at or near existing towns and villages, nature preserves, natural water courses and other infrastructure. We therefore carefully manage its impact on such communities and the environment. For example, we provide electrification and water supply projects to towns and villages near our Namakwa Sands operations and secondary education support to local schools near our existing operations. We also consider sustainable development when planning new operations. For example, during the construction phase of the Fairbreeze project (see The Businesses Description of Exxaro Mineral Sands Properties and Reserves Properties Fairbreeze Mine ), we plan to employ local contractors, thereby eliminating the need for temporary housing, and also plan to build a new on/off ramp linking the Fairbreeze mine to the main highway, so that heavy vehicle mine traffic does not have to go through the local town. This type of planning is aimed at addressing the concerns of local communities about the potential for increased traffic and construction of temporary housing as a result of new mining operations in the area.

The potential consequences of failing to effectively manage the social pressures related to sustainable development include reputational damage, legal action and increased social spending obligations. The cost of these measures can increase our capital expenditures and operating costs, which may affect its operational results and financial condition.

***Tronox Limited had no operating or financial history prior to completion of the Transaction and results of operations may differ significantly from the unaudited pro forma financial data included in this document.***

Tronox Limited has been recently incorporated and had no operating history or revenues before the Transaction. This document includes unaudited pro forma combined statements of operations for the three months ended March 31, 2012 and the year ended December 31, 2011, which are presented as if the Transaction had been completed on January 1, 2011 and an unaudited pro forma combined balance sheet as of March 31, 2012, presented as if the Transaction had been completed on March 31, 2012. The pro forma financial information is presented for illustrative purposes only, is based on certain assumptions, addresses a hypothetical situation and covers only a limited period. Therefore, it does not necessarily indicate the results of operations or the combined financial position that would have resulted had the combination been completed at the beginning of the periods presented, nor is it indicative of the results of operations in future periods or the future financial position of the combined businesses. In particular, it does not reflect benefits of expected cost savings or revenue opportunities with respect to Tronox Limited nor the costs to achieve such savings or opportunities. Accordingly, our results of operations and financial condition may differ significantly from those indicated by the unaudited pro forma financial data included in this document.

***The agreements and instruments governing our debt will contain restrictions and limitations that could significantly affect our ability to operate our business, as well as significantly affect our liquidity.***

As of December 31, 2011, Tronox Incorporated's total principal amount of debt was approximately \$427.3 million. During 2012, Tronox Incorporated refinanced its debt to allow for the Transaction and to provide the

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financing needs for Tronox Limited following completion of the Transaction. Our credit facilities contain a number of significant covenants that could adversely affect our ability to operate our business, our liquidity, and our results of operations. These covenants restrict, among other things, our ability to:

incur or guarantee additional indebtedness;

complete asset sales, acquisitions or mergers;

make investments and capital expenditures;

prepay other indebtedness;

enter into transactions with affiliates; and

fund dividends or repurchase stock.

In addition, the terms of its credit facilities require us and our subsidiaries maintain certain minimum levels of EBITDA to interest expense and maximum levels of indebtedness to EBITDA. Our revolving credit facility also requires that it maintain a minimum level of EBITDA to fixed charges during periods when excess borrowing availability is below a certain minimum threshold. The breach of any covenants or obligations in our credit facilities, not otherwise waived or amended, could result in a default under the applicable debt obligations and could trigger acceleration of those obligations, which in turn could trigger cross defaults under other future agreements governing our long-term indebtedness. In addition, the secured lenders under the credit facilities could foreclose on their collateral, which includes equity interests in our subsidiaries, and exercise other rights of secured creditors. Any default under those credit facilities could adversely affect our growth, our financial condition, our results of operations and our ability to make payments on our credit facilities, and could force us to seek the protection of the bankruptcy laws.

***We depend on generating (and having available to the applicable obligor) sufficient cash flow to fund our debt obligations, capital expenditures, and ongoing operations.***

We are a holding company that is dependent on cash flows from our operating subsidiaries to fund our debt obligations, capital expenditures and ongoing operations.

All of our operations are conducted and all of our assets will be owned by our operating companies, which are our subsidiaries, and we intend to continue to conduct our operations at the operating companies and any future subsidiaries. Consequently, our cash flow and ability to meet our obligations or make cash distributions depend upon the cash flow of our operating companies and any future subsidiaries and the payment of funds by our operating companies and any future subsidiaries in the form of dividends or otherwise. The ability of our operating companies and any future subsidiaries to make any payments to us depend on their earnings, the terms of their indebtedness, including the terms of any credit facilities, and legal restrictions.

Our ability to service our debt and fund our planned capital expenditures and ongoing operations will depend on our ability to generate and grow cash flow and access to additional liquidity sources. Our ability to generate and grow cash flow is dependent on many factors, including:

our ability to sustain and grow revenues and cash flows from operating activities;

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the impact of competition from other chemical and materials manufacturers and diversified companies;

general world business conditions, economic uncertainty or downturn and the significant downturn in housing construction and overall economies;

our ability to obtain raw materials at reasonable prices or to raise prices to offset, in whole or in part, the effects of higher raw material costs;

our ability to adequately deliver customer service and competitive product quality; and

the effects of governmental regulation on our business.

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Some of these factors are beyond our control. It is also difficult to assess the impact that a continuing general economic downturn will have on future operations and financial results. A general economic downturn can result in reduced spending by customers, which will impact our revenues and cash flows from operating activities. At reduced performance, if we are unable to generate sufficient cash flow or to access additional liquidity sources, we may not be able to service and repay our existing debt, operate our business, respond to competitive challenges, or fund our other liquidity and capital needs.

*We may need additional capital in the future and may not be able to obtain it on favorable terms, if at all.*

Our industry is capital intensive and our success depends to a significant degree on our ability to develop and market innovative products and to update our facilities and process technology. We may require additional capital in the future to finance our future growth and development, implement further marketing and sales activities, fund ongoing research and development activities and meet general working capital needs. Our capital requirements will depend on many factors, including acceptance of and demand for our products, the extent to which we invest in new technology and research and development projects and the status and timing of these developments, as well as general availability of capital from debt and/or equity markets. Additional financing may not be available when needed on terms favorable to us or at all. Further, the terms of the debt we inherited from Tronox Incorporated in the Transaction may limit our ability to incur additional indebtedness or issue additional equity. If we are unable to obtain adequate funds on acceptable terms, we may be unable to develop or enhance our products, take advantage of future opportunities or respond to competitive pressures, which could harm our business.

*Requirements associated with being a public company will increase our costs, may consume our resources and management's focus, and may affect our ability to attract and retain qualified board members and executive officers.*

Prior to the Transaction neither Tronox Incorporated nor Exxaro Mineral Sands were subject to the reporting requirements of the Securities Exchange Act of 1934 (the "Exchange Act") or the other rules and regulations of the SEC or any securities exchange in the United States relating to public companies. We expect to comply with Section 404(a) (management's report on financial reporting) under the Sarbanes-Oxley Act of 2002 for the year ending December 31, 2013 and expect to comply with Section 404(b) (auditor's attestation) no later than the year ending December 31, 2013. We intend to work with our legal and independent accounting advisors to identify those areas in which changes or enhancements should be made to our financial and management control systems to manage our growth and obligations as a public company. Areas for special attention are anticipated to include corporate governance, corporate control, internal audit, disclosure controls and procedures, and financial reporting and accounting systems. The expenses that will be required in becoming a public company could be material. Compliance with the various reporting and other requirements applicable to public companies will also require further time and attention of management. In addition, the increased regulatory risks and reporting requirements as a result of being a public company may make it more difficult for us to retain and hire executive officers and identify directors who are willing to serve on our board.

*Our mineral resource and reserve estimates are presented in accordance with South African and the Australasian rules and regulations, as applicable. Accordingly, there may be material differences between our future disclosures of mineral reserves prepared in accordance with the SEC's Industry Guide 7 and the information set forth in this prospectus, which could have an adverse effect on our financial condition and results of operation.*

Our mineral resource and reserve estimates are presented in accordance with the SAMREC Code for the South African properties and the Australasian Joint Ore Reserves Committee Code (2004) (the "JORC Code") for the Australian properties. The standards in the SAMREC Code and the JORC Code differ in certain respects from those under the SEC's Industry Guide 7. For example, the mineral resource and reserve statement included in this prospectus contains disclosures relating to measured, indicated and inferred mineral resource estimates. Measured, indicated and inferred mineral resources, while recognized and required by South African and Australian regulations, are not defined terms under the SEC's Industry Guide 7. Accordingly, our future

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disclosures of mineral reserves prepared in accordance with the SEC's Industry Guide 7 may differ substantially from the information set forth in this prospectus and those differences, if material, could have an adverse effect on our financial condition and results of operation.

***The introduction of new taxes or taxation reform, such as mining royalties in South Africa or the Australian carbon tax legislation, may adversely impact the profitability of our operations.***

The South African mining industry currently is taxed under a taxation formula which recognizes the high level of capital expenditure required to sustain a mining operation over the life of the mine. The application of this formula results in mines getting an accelerated depreciation for taxation purposes. In addition, the Mineral and Petroleum Resources Royalty Act, 2008, effective from March 1, 2010, imposes a royalty on refined and unrefined minerals, which must be paid to the state. The royalty is calculated using a royalty rate formula (described further under "The Businesses Description of Exxaro Mineral Sands Regulation of the Mining Industry in South Africa and Australia Mining Regulation in South Africa The Royalty Act"), and is payable half yearly with a third and final payment thereafter. The royalty is tax deductible, and the cost after tax amounts to a rate of between 0.36% and 5.0% at the prevailing applicable marginal tax rates. The royalty for 2011 is approximately 1.34% of the average percentage of total turnover for our South African operations. In addition, a new Australian carbon tax law has been adopted beginning in 2012 that will impact the TiO<sub>2</sub> plant operated by the Tiwest Joint Venture. The estimated impact to the Tiwest Joint Venture is approximately A\$10 million (\$10.3 million) annually. Changes or increases in revenue-based royalties or any future tax reforms, such as the introduction of the proposed carbon tax in South Africa, could adversely impact our business, operating results and financial condition.

Under the draft policy document recently published by the ANC, a key proposal is the replacement of the current royalty regime with a super tax levied in the amount of 50% on all profits generated by a mineral rights holder after a normal return on investment has been achieved, as further discussed under "Regulatory Risks Changes to government policies in South Africa may adversely affect our business, operating results and financial condition."

***Exxaro may exert substantial influence over us and may exercise their influence in a manner adverse to your interests.***

Upon completion of the Transaction, Exxaro acquired all of our outstanding Class B shares and approximately 38.5% of our outstanding voting securities. In addition, in the future, Exxaro may exchange its retained interest in the South African Acquired Companies for additional Class B Shares, bringing its beneficial ownership to approximately 41.7% of our voting securities (based on the total number of issued voting shares outstanding on June 15, 2012).

In addition to Exxaro's significant ownership interest, Exxaro is entitled to certain rights under the Constitution and the Shareholder's Deed of Tronox Limited. For example, the Constitution provides that, for as long as the Class B Voting Interest is at least 10.0% of the total voting interest in Tronox Limited, there must be nine directors on our board; the holders of Class A Shares will be entitled to vote separately to elect a certain number of directors to our board (which we refer to as Class A Directors), and the holders of Class B Shares will be entitled to vote separately to elect a certain number of directors to our board (which we refer to as Class B Directors). If the Class B Voting Interest is greater than or equal to 30.0%, our board will consist of six Class A Directors and three Class B Directors. If the Class B Voting Interest is greater than or equal to 20.0% but less than 30.0%, our board of directors will consist of seven Class A Directors and two Class B Directors. If the Class B Voting Interest is greater than or equal to 10.0% but less than 20.0%, our board will consist of eight Class A Directors and one Class B Director.

Also, the Constitution provides that, subject to certain limitations, for as long as the Class B Voting Interest is at least 20.0%, a separate vote by holders of Class A Shares and Class B Shares is required to approve certain types of merger or similar transactions that will result in a change in control or a sale of all or substantially all of our assets or any reorganization or transaction that does not treat Class A and Class B Shares equally.

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As a result of Exxaro's significant ownership interest and its governance rights, Exxaro will be able to exert substantial influence over our management, our operations and potential significant corporate transactions, including a change in control or the sale of all or substantially all of our assets. Exxaro's influence may have an adverse effect on the trading price of the notes.

*If we fail to maintain an effective system of internal controls, we might be unable to report our financial results accurately or prevent fraud.*

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. In addition, as a result of becoming a public company, Section 404 of the Sarbanes-Oxley Act will require us and our independent registered public accounting firm to evaluate and report on our internal control over financial reporting beginning with our Annual Report on Form 10-K for the year ending December 31, 2013. The process of implementing our internal controls and complying with Section 404 will be expensive and time consuming, and will require significant attention of management. We cannot be certain that these measures will ensure that we implement and maintain adequate controls over our financial processes and reporting in the future. Even if we conclude, and our independent registered public accounting firm concurs, that our internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our reporting obligations. If we or our independent registered public accounting firm discovers a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our financial statements and harm the trading price of the notes. In addition, a delay in compliance with Section 404 could subject us to a variety of administrative sanctions, including SEC action, ineligibility for short form resale registration and the suspension or delisting of our shares from the stock exchange(s) on which our shares are then listed could harm our business.

*If we experience material weaknesses in internal controls in the future, as Tronox Incorporated has in the past, or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to accurately report our financial condition or results of operations.*

We will be required, under Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting beginning with the filing of our Annual Report on Form 10-K for fiscal year 2013. This assessment will need to include disclosure of any material weaknesses identified by our management in its internal control over financial reporting. A material weakness is a deficiency or combination of deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis.

We are in the early stages of further enhancing the computer systems processes and related documentation necessary to perform the evaluation needed to comply with Section 404. We may not be able to complete this evaluation, testing and any required remediation in a timely fashion. During the evaluation and testing process, if we identify one or more material weaknesses in our internal controls over financial reporting, we may be unable to assert that our internal controls are effective. If Tronox Limited is unable to conclude that our internal controls over financial reporting are effective, we could lose investor confidence in the accuracy and completeness of our financial reports, which would likely cause the trading price of the notes to decline.

In connection with Tronox Incorporated's fiscal year 2010 audit, its independent registered public accounting firm identified material weaknesses in Tronox Incorporated's internal control over financial reporting, which were due to identifying control deficiencies, which when aggregated, resulted in material weaknesses with respect to financial accounting and reporting resources, policies and procedures, internal controls and income taxes. These deficiencies related primarily to stagnant internal control policies and

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procedures including the lack of formal documentation and review of accounting information, which led to an inconsistent application of accounting policies and procedures, and a lack of segregation of duties due to a lack of personnel with an appropriate level of accounting knowledge, experience and training in the application of generally accepted accounting principles. Tronox Incorporated's independent auditor also identified significant deficiencies in information system controls.

Since then, Tronox Incorporated has taken steps to address the material weaknesses disclosed in the preceding paragraph, including hiring appropriately qualified accounting personnel to increase its staff to a more appropriate headcount level and has engaged external resources to enhance the overall design of Tronox Incorporated's internal controls. In addition, in connection with its fiscal year 2011 audit, Tronox Incorporated's independent registered public accounting firm did not identify any material weaknesses in Tronox Incorporated's internal control over financial reporting. As a result of these actions, we believe Tronox Incorporated's consolidated financial statements and related notes included elsewhere in this prospectus reflect the correct application of accounting guidance in accordance with GAAP.

***There may be difficulty in effecting service of legal process and enforcing judgments against us and our directors and management.***

We registered under the laws of Western Australia, Australia and substantial portions of our assets will be located outside of the United States. In addition, certain members of our board of directors, as well as certain experts named in this prospectus, will reside outside the United States. As a result, it may be difficult for investors to effect service of process within the United States upon us or such other persons residing outside the United States, or to enforce judgments outside the United States obtained against such persons in U.S. courts in any action, including actions predicated upon the civil liability provisions of the U.S. federal securities laws. In addition, it may be difficult for investors to enforce rights predicated upon the U.S. federal securities laws in original actions brought in courts in jurisdictions located outside the United States.

The United States and Australia currently do not have a treaty providing for the reciprocal recognition and enforcement of judgments (other than arbitral awards) in civil and commercial matters. A final judgment for the payment of money rendered by any federal or state court in the United States that is enforceable in the United States, whether or not predicated solely upon U.S. federal securities laws, would not automatically be recognized or enforceable in Australia. In order to obtain a judgment that is enforceable in Australia, the party in whose favor a final and conclusive judgment of the U.S. court has been rendered will be required to file its claim with a court of competent jurisdiction in Australia. Such party may submit to the Australian court the final judgment rendered by the U.S. court. If and to the extent that the Australian court finds that the judgment is final and conclusive, the jurisdiction of the U.S. court has been based on grounds which are internationally acceptable and the U.S. court had jurisdiction under its own law, the Australian court will, in principle, give binding effect to the judgment of the court of the United States without substantive re-examination or re-litigation on the merits of the subject matter thereof, unless certain circumstances apply including that the U.S. court process did not meet the requirements of natural justice or such judgment is not for a fixed or definite sum of money, is subject to a declaration under the Foreign Proceedings (Excess of Jurisdiction) Act 1984, contravenes principles of public policy of Australia, was obtained by fraud, or relates to a penal, revenue or other public law. There is doubt as to the enforceability in Australia of judgments of U.S. courts in relation to U.S. federal and state securities laws. Based on the foregoing, there can be no assurance that U.S. investors will be able to enforce any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws. In addition, there is doubt as to whether an Australian court would accept jurisdiction against us or members of our board of directors, officers or certain experts named in this prospectus who are residents of Australia or countries other than the United States and impose civil liability on us, the members of our board of directors, our officers or certain experts named in this prospectus in an original action predicated solely upon U.S. federal or state securities laws brought in a court of competent jurisdiction in Australia against us or such members, officers or experts, respectively.



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**USE OF PROCEEDS**

Any proceeds received from the exercise of Warrants will be used for general corporate purposes.

**Table of Contents****THE BUSINESSES**

*Our unaudited pro forma condensed combined statements of operations for the three months ended March 31, 2012 and the year ended December 31, 2011 are presented as if the Transaction had been completed on January 1, 2011. The unaudited pro forma condensed combined balance sheet as of March 31, 2012 is presented as if the Transaction had been completed on March 31, 2012. For the purposes of this discussion, references to we, us, and our refer to Tronox Limited when discussing the business following completion of the Transaction and to Tronox Incorporated or Exxaro Mineral Sands, as the context requires, when discussing the business prior to completion of the Transaction.*

**Our Company****Overview**

We are one of the leading producers and marketers of TiO<sub>2</sub>, the world's third-largest producer of titanium feedstock and second-largest producer of zircon. We are one of the leading integrated global producers and marketers of TiO<sub>2</sub> and mineral sands. Our world-class, high-performance TiO<sub>2</sub> products are critical components of everyday consumer applications such as coatings, plastics, paper and other applications. Our mineral sands business will consist primarily of two product streams: titanium feedstock and zircon. Titanium feedstock is used primarily to manufacture TiO<sub>2</sub>. Zircon, a hard, glossy mineral, is used for the manufacture of ceramics, refractories, TV glass and a range of other industrial and chemical products. In addition, we produce EMD, sodium chlorate, boron-based and other specialty chemicals.

For the three months ended March 31, 2012 and the year ended December 31, 2011, we had pro forma net sales of \$589.5 and \$2,305.8 million, pro forma adjusted EBITDA of \$250.4 and \$832.2 million and pro forma income from continuing operations attributable to Tronox Limited of \$129.8 and \$443.6 million, respectively. For the three months ended March 31, 2012 and the year ended December 31, 2011, we had pro forma adjusted EBITDA margin of 42.5% and 36.1%, respectively, representing pro forma adjusted EBITDA divided by pro forma net sales.

**TiO<sub>2</sub> Operations**

We are the world's third-largest producer and marketer of TiO<sub>2</sub> manufactured via chloride technology. We have global operations in the Americas, Europe, Africa and the Asia-Pacific region. Our assured feedstock supply and global presence, combined with a focus on providing customers with world-class products, end-use market expertise and strong technical support, will allow us to continue to sell products to a diverse portfolio of customers in various regions of the world, with most of whom we have well-established relationships.

We supply and market TiO<sub>2</sub> under the brand name TRONOX® to more than 1,000 customers in approximately 90 countries, including market leaders in each of the key end-use markets for TiO<sub>2</sub> and have supplied each of our top ten customers with TiO<sub>2</sub> for more than 10 years. These top ten customers represented approximately 36.5% of our total TiO<sub>2</sub> sales volume in 2011. The tables below summarize our 2011 TiO<sub>2</sub> sales volume by geography and end-use market:

<b>2011 Sales Volume by Geography</b>		<b>2011 Sales Volume by End-Use Market</b>	
North America	38.5%	Paints and Coatings	77.1%
Latin America	7.5%	Plastics	19.9%
Europe	22.5%	Paper and Specialty	3.0%
Asia-Pacific	31.5%		

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We operate three TiO<sub>2</sub> facilities located at Hamilton, Mississippi; Botlek, the Netherlands; and Kwinana, Australia, representing an aggregate of 465,000 tonnes of annual TiO<sub>2</sub> production capacity. We are one of a limited number of TiO<sub>2</sub> producers in the world with chloride production technology, which we believe is preferred for many of the largest end-use applications compared to TiO<sub>2</sub> manufactured by other TiO<sub>2</sub> production technologies. We hold more than 200 patents worldwide and have a highly skilled work force.

### **Mineral Sands Operations**

Our mineral sands operations consists of two product streams titanium feedstock, which includes ilmenite, natural rutile, titanium slag and synthetic rutile, and zircon, which is contained in the mineral sands we extract to capture our natural titanium feedstock. Based on our internal estimates and data reported by TZMI, Exxaro Mineral Sands (including 100% of the Tiwest Joint Venture) was the third-largest titanium feedstock producer with approximately 10% of global titanium feedstock production and the second-largest zircon producer with approximately 20% of global zircon production. We operate three separate mining operations: KZN Sands and Namakwa Sands located in South Africa and Tiwest located in Australia, which have a combined production capacity of 723,000 tonnes of titanium feedstock and 265,000 tonnes of zircon.

Titanium feedstock is the most significant raw material used in the manufacture of TiO<sub>2</sub>. We believe annual production of titanium feedstock from our mineral sands operations will continue to exceed the raw material supply requirement for our TiO<sub>2</sub> operations. Zircon is primarily used as an additive in ceramic glazes, a market which has grown substantially during the previous decade and is favorably exposed to long-term development trends in the emerging markets, principally China.

The table set forth under The Businesses Exxaro Mineral Sands Properties and Reserves Mineral Resources and Reserves summarizes Exxaro Mineral Sands's proven and probable ore reserves and estimated mineral resources as of December 31, 2011.

The mineral sands operations also produce high purity pig iron as a co-product. It is typically low in manganese, phosphorus and sulfur and is sold to foundries as a dilutant for trace elements and to steel producers for iron units.

### **Electrolytic and Other Chemical Products Operations**

Our electrolytic and other chemical products operations are primarily focused on advanced battery materials, sodium chlorate and specialty boron products. Battery material end-use applications include alkaline batteries for flashlights, electronic games, medical and industrial devices as well as lithium batteries for power tools, hybrid electric vehicles, laptops and power supplies. Sodium chlorate is used in the pulp and paper industry in pulp bleaching applications. Specialty boron product end-use applications include semiconductors, pharmaceuticals, high-performance fibers, specialty ceramics and epoxies as well as igniter formulations.

We operate two electrolytic and other chemical facilities in the United States: one in Hamilton, Mississippi producing sodium chlorate and one in Henderson, Nevada producing EMD and boron products.

## **Industry Background and Outlook**

### **TiO<sub>2</sub> Industry Background and Outlook**

TiO<sub>2</sub> is used in a wide range of products due to its ability to impart whiteness, brightness and opacity. TiO<sub>2</sub> is used extensively in the manufacture of coatings, plastics and paper and in a wider range of other applications, including inks, fibers, rubber, food, cosmetics and pharmaceuticals. TiO<sub>2</sub> is a critical component of everyday consumer applications due to its superior ability to cover or mask other materials effectively and efficiently relative to alternative white pigments and extenders. We believe that, at present, TiO<sub>2</sub> has no effective substitute

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because no other white pigment has the physical properties for achieving comparable opacity and brightness or can be incorporated in as cost-effective a manner. In addition to us, there are only four other major global producers of TiO<sub>2</sub>: E.I. du Pont de Nemours & Co., or Dupont; Millennium Inorganic Chemicals, Inc. (a subsidiary of National Titanium Dioxide Company Ltd.), or Cristal; Huntsman Corporation; and Kronos Worldwide Inc. Collectively, these five producers accounted for more than 60% of the global market in 2010, according to TZMI.

Based on publicly reported industry sales by the leading TiO<sub>2</sub> producers, we estimate that global sales of TiO<sub>2</sub> in 2010 exceeded 5.3 million tonnes, generating approximately \$12 billion in industry-wide revenues. As a result of strong underlying demand and high TiO<sub>2</sub> capacity utilization, TiO<sub>2</sub> selling prices increased significantly in 2010 and continued to increase throughout 2011. Although demand softened in the three months ended December 31, 2011, we believe average prices will continue to increase through the medium term due to the supply/demand dynamics and favorable outlook in the TiO<sub>2</sub> industry. During the last economic cycle, over 380,000 tonnes of capacity was taken out of the global market, which Tronox Incorporated's management estimates to be a 7-8% reduction. Bringing new capacity online requires significant capital expenditures, a long lead time and difficult to achieve permitting (in particular environmental permitting). As a result no new chloride TiO<sub>2</sub> facility has been built since 1994.

We believe demand for TiO<sub>2</sub> from coatings, plastics and paper and specialty products manufacturers will continue to increase due to increasing per capita consumption in Asia and other emerging markets whereas we believe supply of TiO<sub>2</sub> is constrained due to already high capacity utilization, and lack of publically announced new construction of additional greenfield production facilities, and limited incremental titanium feedstock supply available even if new production plants were to be constructed. The table below shows TiO<sub>2</sub> usage per capita in the major emerging markets, particularly in China and India, is significantly below that seen in most Western countries.

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At present, publicly reported TiO<sub>2</sub> industry capacity expansions are almost exclusively through debottlenecking initiatives resulting in relatively modest industry-wide capacity additions. TiO<sub>2</sub> is produced using one of two commercial production processes: the chloride process and the sulfate process. The chloride process is a newer technology, and we believe it has several advantages over the sulfate process: it generates less waste, uses less energy, is less labor intensive and permits the direct recycle of a major process chemical, chlorine, back into the production process. Commercial production of TiO<sub>2</sub> results in one of two different crystal forms, either rutile or anatase. Rutile TiO<sub>2</sub> is preferred over anatase TiO<sub>2</sub> for many of the largest end-use applications, such as coatings and plastics, because its higher refractive index imparts better hiding power at lower quantities than the anatase crystal form and it is more suitable for outdoor use because it is more durable. Although rutile TiO<sub>2</sub> can be produced using either the chloride process or the sulfate process, customers often prefer rutile produced using the chloride process. All of our global production capacity utilizes the chloride process to produce rutile TiO<sub>2</sub>.

The primary raw materials that are used to produce TiO<sub>2</sub> are various types of titanium feedstock, which include ilmenite, rutile, leucoxene, titanium slag (chloride slag and sulfate slag), upgraded slag and synthetic rutile. Based on TZMI titanium feedstock price forecasts and our own internal calculations, we estimate that global sales of titanium feedstock in 2010 exceeded 9.1 million tonnes, generating approximately \$2.3 billion in industry-wide revenues. Titanium feedstock supply is currently experiencing supply constraints due to the depletion of legacy ore bodies, lack of investment in mining new deposits, and high risk and long lead time (typically up to 5 years) in starting new projects. At present, the titanium feedstock industry capacity expansions are extremely limited and are expected to remain so over the medium term. Titanium feedstock prices, which are typically determined by multi-year contracts, have been slower to respond to these market conditions due to contractual protections in legacy contracts. As these legacy contracts are negotiated and renewed, we believe the supply/demand outlook will remain tight in the titanium feedstock industry in the coming years. Although it is widely known that a number of new titanium feedstock projects are currently being evaluated, many of these remain at the investigation stage, and it is not anticipated that all reported projects will ultimately come into commercial production.

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**Zircon Industry Background and Outlook**

Zircon is a mineral which is primarily used as an additive in ceramic glazes to provide whiteness, brightness and opacity as well as to add hardness which makes the ceramic glazes more water, chemical, and abrasion resistant. Zircon is also used for the production of zirconium and zirconium chemicals, in refractories, as a molding sand in foundries and for TV glass, where it is noted for its structural stability at high temperatures and resistance to abrasive and corrosive conditions. TZMI has estimated that approximately three-quarters of the total global zircon supply comes from South Africa and Australia. The top three zircon suppliers in 2010 were Iluka, Exxaro Mineral Sands and Richards Bay Minerals (including 100% of the Tiwest Joint Venture), representing approximately 33%, 20% and 17%, respectively, of the total zircon production.

TZMI estimates that global sales of zircon in 2010 were approximately 1.3 million tonnes. As a result of strong underlying demand, zircon selling prices increased significantly in both 2010 and 2011. The value of zircon has increased primarily as a result of increasing demand for ceramic tiles, plates, dishes and industrial products in emerging markets, principally China. Although demand decreased in the three months ended December 31, 2011, we believe demand for zircon will continue to increase due to broad trends in urbanization and industrial development in emerging markets, principally China.

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**Titanium Production Process**

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### **Our Competitive Strengths**

#### **Leading Global Market Positions**

We are among the world's largest producers and marketers of TiO<sub>2</sub> products with approximately 8% of reported industry capacity in 2010, and one of the world's largest integrated TiO<sub>2</sub> producers. We are the world's third-largest producer and supplier of TiO<sub>2</sub> manufactured via chloride technology, which we believe is preferred for many applications compared to TiO<sub>2</sub> manufactured by other TiO<sub>2</sub> production technologies. We are the third-largest titanium feedstock producer with approximately 10% of global titanium feedstock production and the second-largest zircon producer with approximately 20% of global zircon production. Additionally, our fully integrated and global production facilities and sales and marketing presence in the Americas, Europe, Africa and the Asia-Pacific region enables us to provide customers in over 90 countries with a reliable supply of our products. The diversity of the geographic regions we serve increases our exposure to faster growing geographies, such as the Asia-Pacific region, and also mitigates our exposure to regional economic downturns because we can shift supply from weaker to stronger regions. We believe our relative size and vertical integration will provide us with a competitive advantage in retaining existing customers and obtaining new business.

#### **Well Positioned to Capitalize on Trends in the TiO<sub>2</sub> and Zircon Industries**

We believe the markets in which we participate are, and will remain for the short and medium term, supply constrained, by which we mean that, into the medium term, we anticipate no extended periods during which the supply of higher grade titanium feedstock, TiO<sub>2</sub> and zircon will significantly exceed demand for each of these products. Moreover, we expect that these conditions will become more pronounced as demand continues to grow faster than supply. Because our production of titanium feedstock exceeds our required consumption, we believe that we will be well positioned to benefit from these market conditions. We will assure ourselves of the requisite supply for our TiO<sub>2</sub> operations and we expect to share in the financial benefits at both the mineral sands and TiO<sub>2</sub> levels of the supply chain.

#### **Vertically Integrated Platform with Security of Titanium Feedstock Supply**

The vertical integration of titanium feedstock and TiO<sub>2</sub> production provides us with a secure and cost competitive supply of high grade titanium feedstock over the long term. We believe that because we intend to continue to purchase feedstock from third party suppliers and sell feedstock to third party customers, both the financial impact of changes in the feedstock market and our assurance of feedstock supply will place us at an advantage relative to our competitors. This will provide the company with a competitive advantage in customer contracting and production reliability as well as create strategic opportunities to debottleneck and add new TiO<sub>2</sub> capacity at the appropriate times based on industry conditions.

#### **Low Cost and Efficient Production Network**

We believe our TiO<sub>2</sub> operations, and specifically our plant in Hamilton, Mississippi, are among the lowest cost producers of TiO<sub>2</sub> globally. This is of particular importance as it positions us to be competitive through all facets of the TiO<sub>2</sub> cycle. Moreover, our three TiO<sub>2</sub> production facilities are strategically positioned in key geographies. According to TZMI, the Hamilton facility is the third largest TiO<sub>2</sub> production facility in the world and has the size and scale to service customers in North America and around the globe. The Tiwest Joint Venture, located in Australia, is well positioned to service growing demand from Asia. Our Botlek facility, located in the Netherlands, services our European customers and certain specialized applications globally. Combined with Exxaro Mineral Sands's titanium feedstock assets in South Africa and Australia, this network of TiO<sub>2</sub> and titanium feedstock facilities gives us the flexibility to optimize asset and feedstock utilization and generate operational, logistical and market efficiencies.



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### **TiO<sub>2</sub> and Titanium Feedstock Production Technology**

We are one of a limited number of TiO<sub>2</sub> producers in the world with chloride production technology. Our production capacity exclusively uses this process technology, which is the subject of numerous patents worldwide. Although we do not operate sulfate process plants and therefore cannot make a direct comparison, we believe the chloride production process generates less waste, uses less energy and is less labor intensive than the alternative sulfate process. Additionally, our highly efficient titanium feedstock operations in South Africa and Australia are one of a limited number of feedstock producers with the expertise and technology to produce upgraded titanium feedstock (i.e., synthetic rutile and chloride slag) for use in the chloride process.

### **Innovative, High-Performance Products**

We offer innovative, high-performance products for nearly every major TiO<sub>2</sub> end-use application. We seek to develop new products and enhance our current product portfolio to better serve our customers and respond to the increasingly stringent demands of their end-use sectors. Our new product development pipeline has yielded successful grade launches specifically targeting the plastics markets. In addition, we have completed mid-cycle improvement initiatives on our key coatings grades resulting in more robust products across a wide range of coatings formulations.

### **Experienced Management Team and Staff**

The diversity of our management team's business experience provides a broad array of skills that contributes to the successful execution of our business strategy. Our TiO<sub>2</sub> operations team and plant managers, who have an average of approximately 31 years of manufacturing experience, participate in the development and execution of strategies that have resulted in production volume growth, production efficiency improvements and cost reductions. Our mineral sands operations team and plant managers have a deep reservoir of experience in mining, engineering and processing skills gained over many years in various geographies. Additionally, the experience, stability and leadership of our sales organization have been instrumental in growing sales, developing and expanding customer relationships.

### **Business Strategy**

Our business strategy is to enhance our shareholder equity value by optimizing the beneficial effects of our business attributes. More specifically, we will seek to manage our purchases (which we intend to continue) and sales of titanium feedstock and zircon in such a manner as to assure that we do not experience any material feedstock shortages that would require us to slow or interrupt our pigment production. In addition, we intend to direct feedstock to those markets (including, but not limited to, our three owned plants) in a manner that maximizes our returns over the longer term while maintaining our assured supply conditions.

We also believe that we can benefit from employing our substantial fixed cost base to produce additional TiO<sub>2</sub> in our existing facilities. Therefore, enhancing the efficiency of our operations is important in achieving our vision.

We seek to be a significant participant in those markets that produce above average returns for our shareholders rather than be exclusively focused on becoming the largest TiO<sub>2</sub> or mineral sands producer.

Beyond this, our strategy includes the following components:

#### **Maintain Operational Excellence**

We are continually evaluating our business to identify opportunities to increase operational efficiency throughout our production network with a focus on maintaining operational excellence and maximizing asset efficiency. Our focus on enhancing operational excellence positions us to maximize yields, minimize operating

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costs and meet market growth over the short term without investing additional capital for capacity expansion. In addition, we intend to continue focusing on increasing manufacturing efficiencies through selected capital projects, process improvements and best practices in order to maximize yields, lower unit costs and improve our margins.

### **Leverage Our Low-Cost Production Network and Vertical Integration to Deliver Profitability and Cash Flow**

We presently have TiO<sub>2</sub> manufacturing facilities designed to produce approximately 465,000 tonnes of TiO<sub>2</sub> annually. We expect that (assuming variable costs per tonne remain constant or decline) increased production from this fixed cost base should increase margins and profitability. In addition, by assuring ourselves of the availability of the supply of titanium feedstock that these production facilities require, and by participating in the profitability of the mineral sands market directly, we have several different means of optimizing profitability and cash flow generation.

### **Ore-In Use Optimization**

We will take advantage of the integrated nature and scale of the combined company, which provides the opportunity to capitalize on a wide range of titanium feedstock grades of Exxaro Mineral Sands due to the ability to (i) optimize internal ore usage and (ii) pursue external titanium feedstock end-markets that provide superior profit margins.

### **Expand Global Leadership**

We plan to continue to capitalize on our strong global market position to drive profitability and cash flow by enhancing existing customer relationships, providing high quality products and offering technical expertise to our customers. Furthermore, our vertically integrated global operations will provide us with a solid platform for future growth in the TiO<sub>2</sub>, titanium feedstock, zircon and pig iron markets. Our broad product offering will allow us to participate in a variety of end-use sectors, and pursue those market segments that we believe have attractive growth prospects and profit margins. Our operations will position us to participate in developing regions such as Asia, Eastern Europe and Latin America, which we expect to provide attractive growth opportunities. We will also seek to increase margins by focusing our sales efforts on those end-use sectors and geographic areas that we believe offer the most attractive growth prospects and where we believe we can realize relatively higher selling prices over the long-term than in alternate sectors. We believe our global operations network, distribution infrastructure and technology will enable us to continue to pursue global growth.

### **Maintain Strong Customer Focus**

We will target our key customer groups with innovative, high-performance products that provide enhanced value to our customers at competitive prices. A key component of our business strategy will be to continually enhance our product portfolio with high-quality, market-driven product development. We design our TiO<sub>2</sub> products to satisfy our customers' specific requirements for their end-use applications and align our business to respond quickly and efficiently to changes in market demands. In this regard, and in order to continue meeting our customers' needs, we recently commercialized a new TiO<sub>2</sub> grade for the durable plastics sector and developed several additional products for other strategic plastic applications in close cooperation with our customer base. We continue to execute on product improvement initiatives for our major coatings products. These improvement strategies will provide value in the form of better optical properties, stability, and durability to our coatings customers. Further, new and enhanced grades are in the pipeline for 2012 and 2013.

In addition, by assuring ourselves of feedstock supply, we assume less risk if we enter into longer term supply contracts with our customers. We believe such contracts may be beneficial to our customers, by assuring a reliable source of supply of TiO<sub>2</sub> from a market in which availability may be threatened under certain foreseeable

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supply conditions, which could also affect price, and to us, by assuring a predictable sales, revenue and margin performance for some of our sales. Because we are one of the few global TiO<sub>2</sub> producers that is integrated, we believe we can enter into such longer term agreements including specific economic terms with less risk than our competitors who do not have 100% assured supply. If our customers also see benefit to them in entering into such agreements, we will consider doing so.

### **Tronox Limited**

Tronox Limited is a public company incorporated under the Australian Corporations Act and registered in Western Australia, Australia. Tronox Limited was formed in connection with the Transaction and had no operating assets or operations prior to completion of the Transaction. As of June 15, 2012 Tronox Limited had 15,413,083 Class A Shares and 9,950,856 Class B Shares. Pursuant to the terms of the Transaction, Exxaro and its subsidiaries will retain a 26.0% ownership interest in each of Exxaro Sands and Exxaro TSA Sands in order to comply with the ownership requirements of BEE legislation in South Africa.

### **Description of Tronox Incorporated**

#### **Company Background**

Tronox Incorporated, a Delaware corporation, was formed on May 17, 2005, and upon an initial public offering, became a publicly traded company in November 2005. Prior to the initial public offering, Tronox Incorporated was a wholly-owned subsidiary of Kerr-McGee Corporation comprising substantially all of its chemical business. Concurrent with the initial public offering, Tronox Incorporated, through its wholly-owned subsidiaries, entered into borrowings of \$550.0 million from senior unsecured notes and a senior secured credit facility. Tronox Incorporated distributed substantially all of the proceeds from the initial public offering and borrowings to Kerr-McGee. Following the initial public offering, Kerr-McGee retained 56.7% of Tronox Incorporated's total outstanding stock which it distributed as a dividend (the *Distribution*) to Kerr-McGee shareholders on March 30, 2006, resulting in Kerr-McGee having no voting ownership interest in Tronox Incorporated. Through its past affiliation with Kerr-McGee, Tronox Incorporated has more than 40 years of experience operating in the chemical industry. In 2006, Kerr-McGee was acquired by Anadarko Petroleum Corporation.

#### ***Bankruptcy Proceedings and Emergence from Chapter 11***

On January 12, 2009 (the *Petition Date*), Tronox Incorporated and certain of its subsidiaries (collectively, the *Debtors*) filed voluntary petitions in the United States Bankruptcy Court for the Southern District of New York (the *Bankruptcy Court*) seeking reorganization relief under the provisions of Chapter 11 of Title 11 of the United States Code (the *Bankruptcy Code*). On November 30, 2010 (the *Confirmation Date*), the Bankruptcy Court entered an order [Docket No. 2567] (the *Confirmation Order*) confirming the Debtors' First Amended Joint Plan of Reorganization Pursuant to Chapter 11 of the Bankruptcy Code, dated November 5, 2010 (as amended and confirmed, the *Plan*). Material conditions to the Plan, most notably the approval under U.S. federal and applicable state environmental law of the settlement of the significant legacy environmental liabilities (the *Legacy Environmental Liabilities*) and legacy tort liabilities ( *Legacy Tort Liabilities* and collectively, with the Legacy Environmental Liabilities, the *KM Legacy Liabilities*), were resolved during the period from the Confirmation Order until January 26, 2011, and subsequently on February 14, 2011 (the *Effective Date*), on which date the Debtors consummated their reorganization under the Bankruptcy Code and the Plan became effective. Upon emergence from bankruptcy, Tronox Incorporated retained a U.S. net operating loss carryforward of approximately \$143 million. The distributions of securities under the Plan commenced on the Effective Date. In connection with the bankruptcy, Tronox Incorporated ceased to be listed on the NYSE. For further discussion of Tronox Incorporated's emergence from Chapter 11 see *Legal Proceedings Chapter 11 Proceedings*.

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### General Development of Business

#### Overview

Tronox Incorporated is one of the leading producers and marketers of TiO<sub>2</sub>, which is used in consumer products such as paint, plastics and certain specialty products. Tronox Incorporated is one of the few TiO<sub>2</sub> manufacturers with global operations, having production facilities and sales and marketing presence in the Americas, Europe and the Asia-Pacific regions.

Tronox Incorporated operates chloride process TiO<sub>2</sub> production facilities in Hamilton, Mississippi, Botlek, the Netherlands and Kwinana, Western Australia. According to TZMI, the Hamilton, Mississippi facility is the third largest plant of its kind in the world by nameplate capacity. The plant located in Kwinana, Western Australia (the Kwinana Facility) is part of the Tiwest Joint Venture, and in connection with the Transaction, the Tiwest Joint Venture became a wholly-owned business of Tronox Limited. The Tiwest Joint Venture is an integral aspect of our operations due to its backward integration into titanium feedstock raw materials. See the discussion below under The Tiwest Joint Venture.

Tronox Incorporated's global presence enables it to sell its products to a diverse portfolio of customers with whom it has well-established relationships. Tronox Incorporated's customer base consists of more than 1,000 customers in approximately 90 countries, including market leaders in each of the major end-use markets for TiO<sub>2</sub>. In addition, Tronox Incorporated has supplied each of its top ten customers with TiO<sub>2</sub> for more than ten years.

Tronox Incorporated's business has one reportable segment, pigment, and other businesses, which include electrolytic and other chemical products. We believe Tronox Incorporated's pigment segment is one of the leading global producers and marketers of TiO<sub>2</sub> pigment. Tronox Incorporated's electrolytic and other chemical products business produces EMD, sodium chlorate, boron-based and other specialty chemicals and is focused on three end-use markets: advanced battery materials, sodium chlorate for pulp and paper manufacture and specialty boron products serving the semi-conductor, pharmaceutical and igniter industries.

Tronox Incorporated is one of a limited number of producers in the TiO<sub>2</sub> industry to hold rights to its own proprietary chloride process for the production of TiO<sub>2</sub>. All of Tronox Incorporated's current production capacity uses this process technology, which is the subject of numerous patents worldwide. TiO<sub>2</sub> produced using chloride process technology is preferred for some of the largest end-use applications because it generates less waste, uses less energy and is less labor intensive than the sulfate process. The complexity of developing and operating the chloride process technology presents challenges for new entrants.

In the past, Tronox Incorporated has operated, inherited, or held businesses or properties that did not relate to the current chemical business, including businesses involving the treatment of forest products, the refining and marketing of petroleum products, offshore contract drilling, coal mining and the mining, milling and processing of nuclear materials. Most of these businesses or properties were accounted for as discontinued operations.

Based on the country of production, the geographic distribution of Tronox Incorporated's net sales during the three months ended March 31, 2012, the two months ended March 31, 2011, the eleven months ended December 31, 2011, one month ended January 31, 2011 and the years ended December 31, 2010 and 2009 were as follows:

	Successor	Successor	Successor	One	Predecessor	
	Three Months	Two Months	Eleven Months	month	Year Ended	
	Ended	Ended	Ended	Ended	December 31,	
	March 31,	March 31,	December 31,	January 31,	2010	2009
	2012	2011	2011	2011		
	(Millions of dollars)					
U.S. operations	\$ 230.1	\$ 137.9	\$ 793.4	\$ 60.1	\$ 692.1	\$ 619.8
International operations						
The Netherlands	78.7	46.9	274.7	15.1	209.0	175.4
Australia	124.8	82.3	475.3	32.4	316.5	274.9
Total	\$ 433.6	\$ 267.1	\$ 1,543.4	\$ 107.6	\$ 1,217.6	\$ 1,070.1



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### **Pigment Segment**

#### ***Background***

TiO<sub>2</sub> is used in a wide range of products for its ability to impart whiteness, brightness and opacity. TiO<sub>2</sub> is a critical component of everyday consumer applications, such as coatings, plastics and paper, as well as many specialty products such as inks, food and cosmetics. TiO<sub>2</sub> is widely considered to be superior to alternative white pigments in large part due to its ability to cover or mask other materials effectively and efficiently, which we refer to as its hiding power. For example, TiO<sub>2</sub>'s hiding power helps prevent show-through on printed paper materials (making the materials easier to read) and a higher concentration of TiO<sub>2</sub> within paints reduces the number of coats needed to cover a surface effectively. TiO<sub>2</sub> is designed, marketed and sold based on specific end-use applications.

The global TiO<sub>2</sub> market is characterized by a small number of large global producers. In addition to Tronox Incorporated, there are four other major global producers: E.I. du Pont de Nemours and Company, National Titanium Cristal, Huntsman and Kronos. These five major producers, along with Tronox Incorporated, accounted for more than 60% of the global market in 2010, according to reports by these producers.

Based on publicly reported industry sales by the leading TiO<sub>2</sub> producers, we estimate that global sales of TiO<sub>2</sub> in 2010 exceeded 5.3 million tonnes, generating approximately \$12 billion in industry-wide revenues. Because TiO<sub>2</sub> is a quality of life product, its consumption growth in a region is closely tied to that region's economic health and correlates over time to the growth in its average GDP. According to publicly reported industry estimates, global TiO<sub>2</sub> consumption has been growing at a compounded annual growth rate of approximately 3.3% since 1990.

Although there are other white pigments on the market, we believe that TiO<sub>2</sub> has no effective substitute because no other white pigment has the physical properties for achieving comparable opacity and brightness or can be incorporated in as cost-effective a manner. In an effort to optimize TiO<sub>2</sub>'s cost-to-performance ratio in certain applications, some customers also use pigment extenders, such as synthetic pigments, kaolin clays and calcium carbonate. We estimate that the impact on Tronox Incorporated's total sales from the use of such extenders is minimal.

Tronox Incorporated markets TiO<sub>2</sub> under the brand name TRONOX<sup>®</sup>, and Tronox Incorporated's pigment segment represented approximately 92.8%, 91.4%, 92.0% and 86.5%, respectively, of Tronox Incorporated's net sales during the three months ended March 31, 2012, two months ended March 31, 2011, the eleven months ended December 31, 2011 and one month ended January 31, 2011. Tronox Incorporated's world-class, high-performance pigment products are critical components of everyday consumer applications, such as coatings, plastics and paper, as well as specialty products, such as inks, foods and cosmetics.

Globally, including all of the production capacity of the facility operated under the Tiwest Joint Venture (discussed below), we have 465,000 gross tonnes of annual chloride TiO<sub>2</sub> production capacity. Tronox Incorporated holds more than 200 patents worldwide, as well as other intellectual property, and employs a highly skilled and technologically sophisticated work force.

#### ***Facilities***

Tronox Incorporated has one facility located in each of the United States, Australia, and the Netherlands. Tronox Incorporated owns its facility in the Netherlands, and the land under this facility is held pursuant to long-term leases. Tronox Incorporated owns its facility and land in the United States and holds a 50% interest in its Australian facility and land (with another subsidiary of Tronox Limited owning the other 50% interest pursuant to the terms of the Tiwest Joint Venture).

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The following table summarizes Tronox Incorporated's TiO<sub>2</sub> production capacity (in gross tonnes per year) as of December 31, 2011, by location and process:

Facility	Capacity	Process
Hamilton, Mississippi	225,000	Chloride
Kwinana, Western Australia	150,000	Chloride
Botlek, The Netherlands	90,000	Chloride

Total	465,000	
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After giving pro forma effect to the Transaction in which we became the sole indirect owner of the Tiwest Joint Venture, Tronox Incorporated produced approximately 434,000 tonnes of TiO<sub>2</sub> in 2011. Tronox Incorporated's average production rates for the facilities shown in the table above, as a percentage of capacity, were 93.3%, 91.8% and 90.4%, in 2011, 2010 and 2009, respectively. Over the past five years production at Tronox Incorporated's current facilities increased by approximately 8%, primarily due to low-cost process improvements, improved uptime and debottlenecking. We believe that Tronox Incorporated's global manufacturing presence, coupled with its partial vertical integration, makes Tronox Incorporated a stable supplier for many of the largest TiO<sub>2</sub> consumers.

**Manufacturing Process**

*Production Process.* TiO<sub>2</sub> is produced using a combination of processes involving the manufacture of base pigment particles followed by surface treatment, drying and milling (collectively known as finishing). There are two commercial production processes in use by manufacturers: the chloride process and the sulfate process. The chloride process is a newer technology, and we believe it has several advantages over the sulfate process: it generates less waste, uses less energy, is less labor intensive and permits the direct recycle of a major process chemical, chlorine, back into the production process. In addition, as described below under *Types of TiO<sub>2</sub>* TiO<sub>2</sub> produced using the chloride process is preferred for some of the largest end-use applications. As a result of these advantages, the chloride process currently accounts for substantially all of the industry-wide TiO<sub>2</sub> production capacity in North America and approximately 55% of industry-wide capacity globally. The chloride process accounts for all of Tronox Incorporated's capacity globally.

In the chloride process, feedstock ores (titanium slag, synthetic rutile, natural rutile or ilmenite ores) are reacted with chlorine (the chlorination step) and carbon to form titanium tetrachloride (TiCl<sub>4</sub>) in a continuous fluid bed reactor. Purification of TiCl<sub>4</sub> to remove other chlorinated products is accomplished using a distillation process. The purified TiCl<sub>4</sub> is then oxidized in a vapor phase form to produce base pigment particles and chlorine gas. The latter is recycled back to the chlorination step for reuse. Base pigment is then typically slurried with water and dispersants prior to entering the finishing step.

In the sulfate process, batch digestion of ilmenite ore or titanium slag is carried out with concentrated sulfuric acid to form soluble titanyl sulfate. After treatment to remove soluble and insoluble impurities and concentration of the titanyl sulfate, hydrolysis of the liquor forms an insoluble hydrous titanium oxide. This precipitate is filtered, bleached, washed and calcined to produce a base pigment that is then forwarded to the finishing step.

*Types of TiO<sub>2</sub>.* Commercial production of TiO<sub>2</sub> results in one of two different crystal forms, either rutile or anatase. Rutile TiO<sub>2</sub> is preferred over anatase TiO<sub>2</sub> for many of the largest end-use applications, such as coatings and plastics, because its higher refractive index imparts better hiding power at lower quantities than the anatase crystal form and it is more suitable for outdoor use because it is more durable. Although rutile TiO<sub>2</sub> can be produced using either the chloride process or the sulfate process, customers often prefer rutile produced using the chloride process because it typically has a bluer undertone and greater durability. Anatase TiO<sub>2</sub> can only be produced using the sulfate process and has applications in paper, rubber, fibers, ceramics, food and cosmetics.

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*Raw Materials.* The primary raw materials that Tronox Incorporated uses to produce TiO<sub>2</sub> are various types of titanium feedstock, including ilmenite, natural rutile, synthetic rutile, titanium-bearing slag and leucoxene. Tronox Incorporated generally purchases feedstock from a variety of suppliers in Australia, Canada and South Africa under multi-year agreements through 2014. In 2011, Tronox Incorporated purchased approximately 16% of its requirements for titanium feedstock from Exxaro (including Exxaro's former 50.0% interest in the Tiwest Joint Venture) and approximately 58% of the synthetic and natural rutile used by Tronox Incorporated's facilities is obtained from the operations under the Tiwest Joint Venture arrangement purchased at open market prices (discussed below).

The Tiwest Joint Venture produces TiO<sub>2</sub> using the chloride process. The Tiwest Joint Venture purchases chlorine from a single supplier, and the loss of this supply source would result in a stoppage because large volumes of chlorine cannot be sourced locally or transported economically over significant distances. The Tiwest Joint Venture uses oxygen and nitrogen in the TiO<sub>2</sub> pigment production process. The Tiwest Joint Venture purchases oxygen and nitrogen from a single supplier, and the loss of this supply source would result in a stoppage because large volumes of oxygen or nitrogen cannot be sourced locally or transported economically over significant distances. The Tiwest Joint Venture uses calcined petroleum coke in the TiO<sub>2</sub> pigment production process. The loss of any one supplier would be unlikely to have a significant adverse effect on the production or operating cost of the Tiwest Joint Venture pigment production operation.

### **The Tiwest Joint Venture**

Prior to completion of the Transaction, a subsidiary of Tronox Incorporated held a 50.0% undivided interest in all of the assets that comprise the operations conducted in Australia under the Tiwest Joint Venture and is severally liable for the associated liabilities. The remaining undivided interest was held by a subsidiary of Exxaro. In connection with the Transaction, we acquired Exxaro's entire interest in the Tiwest Joint Venture and now operate the business. The Tiwest Joint Venture operates the Kwinana Facility, a chloride process TiO<sub>2</sub> plant, a mining venture in Cooljarloo, Western Australia, and a mineral separation plant and a synthetic rutile processing facility, both in Chandala, Western Australia.

*Heavy Minerals.* For a description of mining operations related to the Tiwest Joint Venture, see Description of Exxaro Mineral Sands The Tiwest Joint Venture.

### ***End-Use Markets and Applications***

The major end-use markets for TiO<sub>2</sub> products, which Tronox Incorporated sells in the Americas, Europe and the Asia-Pacific region, are coatings, plastics and paper and specialty products. The tables below summarize Tronox Incorporated's 2011 sales volume by geography and end-use market:

<b>2011 Sales Volume by Geography</b>		<b>2011 Sales Volume by End-Use Market</b>	
North America	38.5%	Paints and Coatings	77.1%
Latin America	7.5%	Plastics	19.9%
Europe	22.5%	Paper and Specialty	3.0%
Asia-Pacific	31.5%		



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*Paints and Coatings End-Use Market.* The paints and coatings end-use market is the largest end-use market for TiO<sub>2</sub> products and accounted for approximately 56% of overall industry demand, based on publicly reported industry sales volumes in 2010. Customers in the paints and coatings end-use market demand exceptionally high quality standards for TiO<sub>2</sub>, especially with regard to opacity, durability, tinting strength and brightness. Tronox Incorporated recognizes four sub-markets within the paints and coatings end-use market based on application, each of which requires different TiO<sub>2</sub> formulations. The table below summarizes the sub-markets within paints and coatings, as well as their applications:

<b>Sub-Market</b>	<b>Applications</b>
Architectural	Residential and commercial paints
Industrial	Appliances, coil coatings, furniture and maintenance applications
Automotive	Original equipment manufacturer, refinish and electro-coating
Specialty	Marine and can coatings, packaging and traffic paint

*Plastics End-Use Market.* The plastics end-use market accounts for approximately 25% of overall industry demand for TiO<sub>2</sub>, based on reported industry sales volumes in 2010. Plastics producers focus on TiO<sub>2</sub>'s opacity, durability, color stability and thermal stability. Tronox Incorporated recognizes four sub-markets within the plastics market based on application, each of which requires different TiO<sub>2</sub> formulations. The table below summarizes the sub-markets within plastics, as well as their applications:

<b>Sub-Market</b>	<b>Applications</b>
Polyolefins	Food packaging, plastic films and agricultural films
PVC	Vinyl windows, siding, fencing, vinyl leather, roofing
Engineering plastics	Computer housing, cell phone cases, washing machines and refrigerators
Other plastics	Roofing and flooring

*Paper and Specialty End-Use Market.* The paper and specialty end-use market accounts for approximately 15% of overall industry demand for TiO<sub>2</sub> based on publicly reported industry sales volumes in 2010. Tronox Incorporated recognizes four sub-markets within the paper and specialty end-use market based on application, each of which requires different TiO<sub>2</sub> formulations. The table below summarizes the sub-markets within paper and specialty, as well as their applications:

<b>Sub-Market</b>	<b>Applications</b>
Paper and paper laminate	Filled paper, coated paper for print media, coated board for beverage container packaging, wallboard, flooring, cabinets and furniture
Inks and rubber	Packaging, beverage cans, container printing and rubber flooring
Food and pharmaceuticals	Creams, sauces, capsules, sunscreen, and face and body care products
Catalysts and electroceramics	Anti-pollution equipment (catalysts) for automobiles and power-generators and production of capacitors and resistors

### ***Sales and Marketing***

Tronox Incorporated supplies TiO<sub>2</sub> to a diverse customer base of more than 1,000 customers in approximately 90 countries, including market leaders in each of the major end-use markets for TiO<sub>2</sub>. Tronox Incorporated has supplied each of its top ten customers with TiO<sub>2</sub> for more than 10 years. In 2011, Tronox Incorporated's ten largest customers represented approximately 36.5% of its total sales volume; however, no single customer accounted for more than 10% of its total sales volume.

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In addition to price and product quality, Tronox Incorporated competes on the basis of technical support and customer service. Tronox Incorporated's direct sales and technical service organizations carry out its sales and marketing strategy and work together to provide quality customer service. Tronox Incorporated's direct sales staff is trained in all of its products and applications. Due to the technical requirements of TiO<sub>2</sub> applications, Tronox Incorporated's technical service organization and direct sales offices are supported by a regional customer service staff located in each of its major geographic markets.

Tronox Incorporated's sales and marketing strategy focuses on effective customer management through the development of strong relationships throughout the company with its customers. Tronox Incorporated develops customer relationships and manages customer contact through its sales team, technical service organization, research and development team, customer service team, plant operations personnel, supply chain specialists and senior management. We believe that multiple points of customer contact facilitate efficient problem-solving, supply chain support, formula optimization and product co-development.

### ***Competitive Conditions***

The global market in which Tronox Incorporated's TiO<sub>2</sub> business operates is competitive. Competition is based on a number of factors such as price, product quality and service. Tronox Incorporated faces competition from major international producers, including DuPont, Cristal, Kronos and Huntsman, as well as smaller regional competitors. Worldwide, we believe that Tronox Incorporated and the other major producers mentioned above are the only companies that have perfected and successfully commercialized the proprietary chloride process technology for the production of TiO<sub>2</sub>. TiO<sub>2</sub> produced using chloride process technology is preferred for some of the largest TiO<sub>2</sub> end-use applications; however, TiO<sub>2</sub> produced using sulfate process technology may also be used for many end-use applications and is preferred for certain specialty applications. We estimate that, based on gross sales volumes, these companies accounted for more than 60% of the global market share in 2010.

As of December 31, 2011, including the total production capacity of the Tiwest Joint Venture, Tronox Incorporated had global TiO<sub>2</sub> production capacity of 465,000 tonnes per year and an approximate 8% share of the global TiO<sub>2</sub> market based on capacity, according to TZMI. In addition to the major competitors discussed above, Tronox Incorporated competes with numerous smaller, regional producers, including producers in China that have expanded their sulfate production capacity during the previous five years.

Tronox Incorporated has global operations with production facilities and sales and marketing presence in the Americas, Europe and the Asia-Pacific regions. Tronox Incorporated's global presence enables it to sell its products to a diverse portfolio of customers with whom Tronox Incorporated has well-established relationships.

Over the years, the industry has increased capacity through debottlenecking, brownfield projects (locations where the company has an existing infrastructure and is adding to it) and greenfield projects (locations where the company does not have an existing infrastructure). Tronox Incorporated and Exxaro recently completed a brownfield expansion of the Kwinana Facility. As a result of the projected limited availability of feedstocks, we do not foresee significant capacity increases in the near term future. DuPont is the only major producer to have announced plans to evaluate future brownfield expansion of a plant in North America and their continued pursuit of a greenfield in China.

### ***TiO<sub>2</sub> Outlook***

We consider TiO<sub>2</sub> to be a quality-of-life product, with demand affected by GDP and overall economic conditions in markets located in various regions of the world. Over the long-term, we believe global demand for TiO<sub>2</sub> will grow by approximately 3% to 4% per year. This is consistent with our expectations for the long-term growth in GDP. However, demand for TiO<sub>2</sub> in any interim or annual period may not change in the same proportion as the change in GDP. This is due in part to relative changes in the TiO<sub>2</sub> inventory levels of Tronox Incorporated's customers. We believe that our customers' inventory levels are partly influenced by their expectation for future changes in TiO<sub>2</sub> selling prices.

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Looking forward, we believe that the global market for TiO<sub>2</sub> will remain healthy primarily due to support from the ongoing growth in emerging economies such as China and India. We expect moderate growth in the overall demand for TiO<sub>2</sub> in 2012 versus 2011 and expect that our sales volume will reflect a similar trend. As a result of current supply demand imbalance, we believe that the industry will focus resources on increasing available capacity through debottlenecking projects in the near term. Debottlenecking projects will be influenced by the amount of titanium feedstock that is available in the market. We believe the industry is currently experiencing a shortfall in the supply of titanium bearing ore due to a lack of reinvestment in that business during the last several years. As a result of the projected limited availability of titanium bearing ore, we do not foresee significant capacity additions coming on line in the near term, which should continue to support a favorable pricing environment for the titanium industry and our business.

### **Electrolytic and Other Chemical Products**

#### ***Background***

The electrolytic and other chemical products businesses are primarily focused on three end-use markets: advanced battery materials, sodium chlorate for pulp and paper manufacture and specialty boron products serving the semi-conductor, pharmaceutical and igniter industries.

*Battery Materials.* The battery industry is comprised of two application areas: primary (non-rechargeable) and secondary (rechargeable) with the former representing the majority of battery shipments. The primary battery market is dominated by alkaline battery technologies, which are designed to address the various power delivery requirements for consumer and industrial battery-powered devices. We believe that alkaline batteries are higher performing and more costly than batteries using the older zinc carbon technology, and represent the majority of primary battery market demand in the United States. Demand for domestic alkaline batteries in the United States is estimated to be slightly positive to flat driven by the continued growth of electronic devices partly offset by increased use of rechargeable and imported batteries.

EMD is the active cathode material for alkaline batteries. We believe that we are one of the largest producers of EMD for the global alkaline battery industry. EMD quality requirements for alkaline technology are much more demanding than for zinc carbon technology and, as a result, alkaline-grade EMD commands a higher price than zinc carbon-grade EMD. The older zinc carbon technology remains in developing countries such as China and India. As the economies of China and India continue to mature, and the need for more efficient energy sources develops, we anticipate that the demand for alkaline-grade EMD will increase. We expect demand for alkaline-grade EMD to be sustained by the continued growth of consumer electronics devices partly offset by the trend toward smaller battery sizes, rechargeable batteries, and imported batteries.

The market application for rechargeable lithium batteries includes consumer electronics such as cell phones, computers, digital cameras, and increasingly for high-power applications that include power tools, hybrid electric vehicles ( HEVs / EVs ), and interruptible power supplies. There are several competing cathode materials for this fast growing lithium battery segment, with lithium manganese oxide ( LMO ) being one of the leading technologies as utilized in the several electric vehicles.

The main raw material that we use to produce battery materials is manganese ore, which is historically purchased under both multi-year agreements and spot contracts.

*Sodium Chlorate.* The pulp and paper industry accounts for more than 95% of the market demand for sodium chlorate, which uses it to bleach pulp. Although there are other methods for bleaching pulp, we believe the chlorine dioxide process is preferred for environmental reasons. The majority of North American sodium chlorate production capacity is located in Canada due to the availability of lower cost hydroelectric power, which reduces manufacturing costs and ultimately, product prices. However, we believe that the proximity of domestic sodium chlorate producers to the major domestic pulp and paper producers helps offset the lower-cost power advantage enjoyed by some Canadian sodium chlorate producers, through lower transportation costs.

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The primary raw material that Tronox Incorporated uses to produce sodium chlorate is salt, which it purchases under multi-year agreements and spot contracts.

*Boron.* According to publicly reported industry reports, Tronox Incorporated is one of the leading suppliers of boron trichloride, along with Aviabor, Sigma Aldrich, and several Asian manufacturers. We anticipate demand for boron trichloride will remain positive driven primarily by the growth of the semiconductor industry. We believe Tronox Incorporated owns a similar leading position in the elemental boron market. We expect demand for elemental boron will continue to be largely flat following the trends in the defense and automotive industries in the United States.

*Manganese Specialty Products.* Tronox Incorporated also produces several manganese-based specialty products for the primary lithium battery market used in defense, industrial, and medical applications, and has the capability to produce battery materials for the rechargeable lithium ion battery market. We anticipate that demand for Tronox Incorporated's manganese-based specialty materials will develop in-line with general industrial production.

### ***Facilities***

Tronox Incorporated produces electrolytic and other chemical products at three United States facilities, each of which it owns. The following table summarizes Tronox Incorporated's production capacity (in gross tonnes per year) as of December 31, 2011, by location and product.

<b>Facility</b>	<b>Capacity</b>	<b>Product</b>
Hamilton, Mississippi	150,000	Sodium chlorate
Henderson, Nevada	27,000	EMD
Henderson, Nevada	525	Boron products

### ***End-Use Markets and Applications***

The various markets for the electrolytic and other chemical products are as follows:

<b>Business Application</b>	<b>Sub-Market</b>	<b>Applications</b>
Battery Materials: EMD	Non-rechargeable battery materials	Alkaline batteries for use in flashlights, electronic games, medical and industrial devices
Battery Materials: LMO	Rechargeable battery materials	Lithium batteries used in power tools, HEVs/EVs, laptops and power supplies
Sodium Chlorate	Pulp and paper industry	Pulp bleaching
Boron Trichloride	Specialty gas	Semiconductors, pharmaceuticals, high-performance fibers, specialty ceramics and epoxies
Boron Elemental	Defense, pyrotechnic and air bag industries	Igniter formulations

### ***Competitive Conditions and Outlook***

*Battery Materials.* The United States primary battery market is the largest in the world, accounting for over one-third of global demand for EMD, and is based on alkaline grade EMD. According to TZMI, Tronox Incorporated is the largest supplier of EMD to the U.S. market. Other significant producers include Tosoh, Erachem and Delta. The remainder of global capacity is represented by various Chinese producers. The global EMD market is challenged by excess supply that has resulted in successful antidumping determinations in Europe, Japan and the United States that has contributed to improved economics for the industry.

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For rechargeable batteries, LMO remains one of the leading cathode materials for electric vehicles, power tools and other high-power applications. We project the demand for LMO to significantly increase driven by electric vehicles that is expected to be supplied by Nippon Denko, Mitsui, Toda, and other leading Asian LMO materials producers.

*Sodium Chlorate.* According to TZMI, Tronox Incorporated accounts for an estimated 7.0% share of North American sodium chlorate capacity, and we believe it has the third largest plant in North America. Our significant competitors include ERCO, Eka Chemicals, Canexus and Kemira Chemicals. We expect the North American market will remain balanced as the continued rationalization of smaller, less efficient chlorate producers will continue to offset flat to declining demand in pulp and paper manufacturing.

*Boron Products.* We believe that Tronox Incorporated has a substantial share of the installed global capacity for boron trichloride followed by Aviabor, Sigma Aldrich, and several Asian manufacturers. We anticipate the market for boron trichloride will remain positive underpinned by the semiconductor market with new liquid crystal display and 3D TV plants coming online in Asia combined with continued growth of new pharmaceutical drug deliveries. We believe Tronox Incorporated owns a similar leading capacity share in elemental boron. We expect demand will continue to follow the trends in the United States automotive and defense industries.

## **Research and Development**

Tronox Incorporated employs scientists, chemists, engineers and skilled technicians to provide the technology (products and processes) for its businesses. Tronox Incorporated's product development personnel have a high level of expertise in the plastics industry and polymer additives, the coatings industry and formulations, surface chemistry, material science, analytical chemistry and particle physics. Among the process technology development group's highly developed skills are computational fluid dynamics, process modeling, particle growth physics, extractive metallurgy, corrosion engineering and thermodynamics. The majority of scientists supporting Tronox Incorporated's research and development efforts are located in Oklahoma City, Oklahoma. Tronox Incorporated's expenditures for research and development were approximately \$8.7 million, \$0.4 million, \$6.1 million and \$5.0 million for the eleven months ended December 31, 2011, one month ended January 31, 2011 and years ended December 31, 2010 and 2009, respectively.

New process developments are focused on increased throughput, control of particle physical properties and general processing equipment-related issues. Ongoing development of process technology contributes to cost reduction, enhanced production flexibility, increased capacity and improved consistency of product quality.

In 2010, Tronox Incorporated completed development of incremental improvements to two existing coatings grades of TiO<sub>2</sub>. Additionally, progress towards next generation coatings grades was significantly advanced. Further work to optimize organic treatments on TiO<sub>2</sub> grades for plastic applications was carried out. Several plant trials involving process technology modifications have successfully demonstrated increased throughput of product from existing assets.

In 2010, Tronox Incorporated continued development of several new electrolytic and specialty products with the major focus on advanced battery materials. This includes new LMO and lithium manganese grades specially engineered for HEV applications and for advanced rechargeable battery systems.

In 2012, development and commercialization efforts of Tronox Incorporated will be focused on several TiO<sub>2</sub> products that deliver added value to customers by way of enhanced properties of the pigment.

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### **Patents and Other Intellectual Property**

Patents held for Tronox Incorporated's products and production processes are important to its long-term success. Tronox Incorporated seeks patent protection for its technology where competitive advantage may be obtained by patenting, and files for broad geographic protection given the global nature of its business. Tronox Incorporated's proprietary TiQ technology is the subject of over 200 patents worldwide, the substantial majority of which relate to its chloride products and production technology.

As of December 31, 2011, Tronox Incorporated held approximately 216 patents, of which approximately 135 were considered significant to its business. Tronox Incorporated defines significant to its business as patents that are either (1) presently employed in its process or to produce products to its advantage, (2) may not be presently employed by Tronox Incorporated but are defensive to prevent competitors from using the technology to their advantage or (3) patents that are likely to be utilized by Tronox Incorporated in future process or product advancements. Tronox Incorporated's significant patents have expiration dates ranging from 2013 through 2032.

Tronox Incorporated also relies upon and has taken steps to secure its unpatented proprietary technology, know-how and other trade secrets. Tronox Incorporated's proprietary chloride production technology is an important part of its overall technology position. Tronox Incorporated is committed to pursuing technological innovations in order to maintain its competitive position.

### **Employees**

As of December 31, 2011, Tronox Incorporated had 925 employees, with 650 in the United States, 247 in Europe, 21 in Australia and 7 in other international locations. None of Tronox Incorporated's employees in the United States are represented by collective bargaining agreements, and substantially all of its employees in Europe are represented by works councils. We consider relations with Tronox Incorporated's employees to be good. In addition, as of December 31, 2011, the Tiwest Joint Venture had 657 employees, all of whom were located in Australia. Approximately 48% of those employees are represented by collective bargaining agreements. We consider relations with the employees of the Tiwest Joint Venture to be good.

### **Seasonality**

Because TiO<sub>2</sub> is widely used in paint and other coatings, TiO<sub>2</sub> is in higher demand prior to the painting season (spring and summer in the Northern Hemisphere).

### **Government Regulations and Environmental Matters**

#### ***General***

Tronox Incorporated is subject to extensive regulation by federal, state, local and foreign governments. Governmental authorities regulate the generation and treatment of waste and air emissions at Tronox Incorporated's operations and facilities. At many of our operations, we also comply with worldwide, voluntary standards developed by the International Organization for Standardization (ISO) a nongovernmental organization that promotes the development of standards and serves as a bridging organization for quality and environmental standards, such as ISO 9002 for quality management and ISO 14001 for environmental management.

#### ***Chemical Registration***

The European Union adopted a new regulatory framework for chemicals in 2006 known as Registration, Evaluation and Authorization of Chemicals (REACH). Manufacturers and importers of chemical substances must register information regarding the properties of their existing chemical substances with the European Chemicals Agency (ECHA). The timeline for existing chemical substances to be registered is based on volume and toxicity. The first group of chemical substances was required to be registered in 2010 and the remainder is

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due to be registered in 2013 and 2018. Tronox Incorporated has registered those products requiring registration by the 2010 deadline. The REACH regulations also require chemical substances which are newly imported or manufactured in the European Union to be registered before being placed on the market. These substances are referred to as non-phase-in substances. Tronox Incorporated is currently working on registration for the non-phase-in substances. Products containing greater than 0.1% of substances determined to be very high concern will be placed on a candidate list for authorization. If safer alternatives for any of these chemical substances on the candidate list exist, then those chemical substances may not be authorized. Tronox Incorporated currently does not have any products that would be placed on the candidate list. We do not expect REACH costs of compliance to be material to our operations at this time.

The United States has chemical regulation under the Environmental Protection Agency (the EPA) through the Toxic Substances Control Act (TSCA). TSCA requires various reporting mechanisms for new and existing chemicals. The EPA announced in 2009 a comprehensive approach to improve the chemicals management program under TSCA. This may result in additional data requirements, testing, restrictions or bans on a chemical substance depending on the risk a chemical may pose. We do not anticipate any costs or actions material to its operation at this time due to these actions. Tronox Incorporated is currently monitoring proposed legislation regarding TSCA and assessing any potential impacts.

***Greenhouse Gas ( GHG ) Regulation***

Tronox Incorporated currently reports and manages GHG emissions as required by law for sites located in areas (European Union/Australia) requiring such managing and reporting. While the United States has not adopted any federal climate change legislation, the EPA has introduced some GHG programs. For example, under the EPA's GHG Tailoring Rule, expansions or new construction could be subject to the Clean Air Act's Prevention of Significant Deterioration (PSD) requirements. Some of Tronox Incorporated's facilities are currently subject to GHG emissions monitoring and reporting. Changes or additional requirements due to GHG regulations could impact Tronox Incorporated's capital and operating costs. However, it is not possible at the present time to estimate any financial impacts to these U.S. operating sites. Also, some in the scientific community believe that increasing concentrations of GHGs in the atmosphere may result in climatic changes. Depending on the severity of climatic changes, our operations could be adversely affected. The Tiwest Joint Venture will be subject to a new Australian carbon tax law beginning in 2012, resulting in an estimated \$10.0 million Australian dollar impact annually.

***Environmental Matters***

A variety of laws and regulations relating to environmental protection affect almost all of Tronox Incorporated's operations. Under these laws, Tronox Incorporated is or may be required to obtain or maintain permits or licenses in connection with its operations. In addition, these laws may require Tronox Incorporated to remove or mitigate the effects on the environment of the disposal or release of chemical, petroleum, low-level radioactive and other substances at its facilities. Operation of pollution-control equipment usually entails additional expense. Some expenditures to reduce the occurrence of releases into the environment may result in increased efficiency; however, most of these expenditures produce no significant increase in production capacity, efficiency or revenue.

Tronox Incorporated is in substantial compliance with applicable environmental rules and regulations. Currently, Tronox Incorporated does not have any outstanding notices of violation or orders from regulatory agencies.

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The table below presents environmental related expenditures Tronox Incorporated incurred for the year ended December 31, 2011 and projections of expenditures for the next two years. While it is difficult to estimate the total direct and indirect costs of government environmental regulations, the table below includes our current estimate of Tronox Incorporated's expenditures for 2012 and 2013.

	Year Ending December 31,		
	2011	Estimate 2012	Estimate 2013
	(Millions of dollars)		
Cash expenditures of environmental reserves	\$ 0.2	\$ 0.1	\$ 0.1
Recurring operating expenses	30.0	32.1	33.0
Environmental capital expenditures associated with ongoing operations	3.6	6.5	7.1

Recurring operating expenses are expenditures related to the maintenance and operation of environmental equipment such as incinerators, waste treatment systems and pollution control equipment, as well as the cost of materials, energy and outside services needed to neutralize, process, handle and dispose of current waste streams at Tronox Incorporated's operating facilities. These operating and capital expenditures are necessary to ensure that ongoing operations are handled in an environmentally safe and effective manner.

From time to time, Tronox Incorporated may be party to a number of legal and administrative proceedings involving environmental matters or other matters in various courts or agencies. These could include proceedings associated with businesses and facilities operated or used by Tronox Incorporated's affiliates and may include claims for personal injuries, property damages, breach of contract, injury to the environment, including natural resource damages, and non-compliance with, or lack of properly updated or renewed, permits. Tronox Incorporated's current operations also involve management of regulated materials and are subject to various environmental laws and regulations.

In accordance with ASC 450, *Contingencies*, and ASC 410, *Asset Retirement and Environmental Obligations*, Tronox Incorporated recognizes a loss and records an undiscounted liability when litigation has commenced or a claim or an assessment has been asserted, or, based on available information, commencement of litigation or assertion of a claim or assessment is probable, and the associated costs can be estimated. It is not possible for Tronox Incorporated to reliably estimate the amount and timing of all future expenditures related to environmental matters because, among other reasons, environmental laws and regulations, as well as enforcement policies and clean up levels, are continually changing, and the outcome of court proceedings, alternative dispute resolution proceedings (including mediation) and discussions with regulatory agencies is inherently uncertain.

We believe that Tronox Incorporated has reserved adequately for the probable and reasonably estimable costs of known contingencies. There is no environmental litigation, claim or assessment that has been asserted nor is there a significant level of probability of an assessment or a claim for which Tronox Incorporated has not recorded a liability. However, additions to the reserves may be required as additional information is obtained that enables us to better estimate our liabilities. We cannot reliably estimate the amount of future additions to the reserves at this time. In certain situations, reserves may be probable but may not be estimable. Additionally, sites may be identified in the future where we could have potential liability for environmental related matters. We would not establish reserves for any such sites. For additional discussion of environmental matters, see Tronox Incorporated Management's Discussion and Analysis of Financial Condition and Results of Operations.

**Properties**

Tronox Incorporated's properties consist of the physical assets necessary and appropriate to produce, distribute and supply its TiQ electrolytic manganese dioxide, sodium chlorate, boron-based and other specialty chemicals and consist mainly of manufacturing and distribution facilities and mining tenements. We believe Tronox Incorporated's properties are in good operating condition and are well maintained. Pursuant to separate



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financing agreements, substantially all of Tronox Incorporated's U.S. properties are pledged or encumbered to support or otherwise provide the security for our indebtedness, as further discussed under Tronox Incorporated Management's Discussion and Analysis of Financial Condition and Results of Operations.

### **Legal Proceedings**

#### ***Chapter 11 Proceedings***

On the Petition Date, the Debtors, including Tronox Incorporated, filed voluntary petitions in the Bankruptcy Court seeking reorganization relief under Bankruptcy Code. The Debtors' Chapter 11 cases were consolidated for procedural purposes and were jointly administered under the caption *In re Tronox Incorporated, et al.*, Case No. 09-10156 (ALG) (the Chapter 11 Cases), and the Debtors operated their businesses and managed their properties as debtors in possession under the jurisdiction of the Bankruptcy Court and in accordance with the applicable provisions of the Bankruptcy Code and orders of the Bankruptcy Court.

Subsequent to its Chapter 11 filing, Tronox Incorporated recorded its financial position and results of operations in accordance with ASC 852, *Reorganizations*. The financial statements for periods in which Tronox Incorporated was operating under Chapter 11 distinguished transactions and events directly associated with the reorganization from the ongoing operations of the business. Tronox Incorporated recorded reorganization items separately within the operating, investing, and financing categories of the statement of cash flows and disclosed prepetition liabilities subject to compromise separately from those not subject to compromise (such as fully secured liabilities that were expected not to be compromised) and post-petition liabilities on its balance sheet.

On the Confirmation Date, the Bankruptcy Court entered the Confirmation Order confirming the Plan. Material conditions to the Plan, most notably the approval under U.S. federal and applicable state environmental law of the settlement of the Legacy Environmental Liabilities, were resolved during the period from the Confirmation Order through the Effective Date, on which date the Debtors completed their reorganization under the Bankruptcy Code and the Plan became effective. The distribution of securities under the Plan commenced on the Effective Date.

Having resolved the material contingencies related to implementing the Plan, most notably the approval of the settlement of the KM Legacy Liabilities on January 26, 2011 and due to the proximity to Tronox Incorporated's subsequent accounting period, which closed on January 31, 2011, Tronox Incorporated began applying fresh-start accounting and reporting effective as of January 31, 2011. Fresh-start accounting and reporting provisions were applied pursuant to ASC 852, and the financial statements as of February 1, 2011 and for subsequent periods report the results of Tronox Incorporated with no beginning retained earnings or accumulated deficit. Any presentation of Tronox Incorporated after February 1, 2011 represents the financial position and results of operations of the new reporting entity and is not comparable to prior periods presented.

#### ***Reorganization Plan***

Tronox Incorporated reorganized under Chapter 11 of the Bankruptcy Code, which is the principal business reorganization chapter of the Bankruptcy Code. Under Chapter 11 of the Bankruptcy Code, a debtor may reorganize its business for the benefit of its stakeholders. Completion of a plan of reorganization is the principal objective of a Chapter 11 case. Among other things, the Confirmation Order discharges Tronox Incorporated from any debt arising before the Petition Date, eliminates all of the rights and interests of pre-bankruptcy equity security holders and substitutes the obligations set forth in the Plan for those pre-bankruptcy claims and equity interests.

The reorganization plan was designed to resolve Tronox Incorporated's KM Legacy Liabilities and ensure that Tronox Incorporated emerged from Chapter 11 free of its significant legacy liabilities, sufficiently capitalized and poised for growth. With respect to environmental claims, in exchange for an overall package of value allocated on the Effective Date to certain environmental response trusts and environmental agencies, the

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holders of environmental claims provided Tronox Incorporated with a release and/or discharge from Legacy Environmental Liabilities from and after the Effective Date. The bankruptcy environmental settlement included covenants protecting Tronox Incorporated from enforcement action by key U.S. governmental agencies and several state and local agencies for owned and many non-owned legacy sites specifically identified by the environmental settlement agreement. With respect to tort claims, in exchange for an overall package of value allocated on the Effective Date to a tort claims trust, the holders of tort claims provided Tronox Incorporated with a release and discharge from legacy tort liability from and after the Effective Date.

As a result of the discharge and/or release of legacy liabilities via the environmental and tort settlements, the Plan preserved the going-concern value of Tronox Incorporated, which was reorganized around its existing operating locations, including: (i) its headquarters facility at Oklahoma City, Oklahoma; (ii) the TiO<sub>2</sub> facilities at Hamilton, Mississippi and Botlek, Netherlands; (iii) the electrolytic chemical operations at Henderson, Nevada (except that the real property and buildings associated with such business were transferred to an environmental response trust, and Tronox Incorporated is not responsible for environmental remediation related to historic contamination at such site), and Hamilton, Mississippi; and (iv) its interest in the Tiwest Joint Venture in Australia.

To fund cash payments required by the Plan and meet the going-forward operating and working capital needs of the business, Tronox Incorporated relied on a combination of debt financing and new equity investments from certain of its pre-Effective Date creditors. Specifically, Tronox Incorporated completed the following reorganization transactions:

the settlement of government claims related to Tronox Incorporated's pre-bankruptcy Legacy Environmental Liabilities at legacy sites (both owned and non-owned) through the creation of certain environmental response trusts and a litigation trust;

the settlement of private party pre-bankruptcy claims related to Tronox Incorporated's tort liabilities related to legacy sites (both owned and non-owned) through the creation of a tort claims trust and a litigation trust;

total funded first lien debt of approximately \$470 million at the time of emergence from bankruptcy;

\$185.0 million in new equity investment in Tronox Incorporated raised through a rights offering to certain of Tronox Incorporated's unsecured creditors for an aggregate of 49.1% of the shares of Tronox Incorporated common stock issued on the Effective Date;

the issuance of shares of Tronox Incorporated common stock such that holders of certain allowed unsecured claims received their pro rata share of 50.9% of the shares of Tronox Incorporated common stock issued on the Effective Date; and

the issuance of a package of warrants to existing holders of equity, consisting of two tranches, to purchase their pro rata share of a combined total of 7.5% of the shares of Tronox Incorporated common stock issued on the Effective Date, together with all shares of Tronox Incorporated common stock issuable upon exercise of such warrants.

***Germany Insolvency Petition***

On March 13, 2009, Tronox Pigments GmbH, Tronox Incorporated's holding subsidiary for a pigment facility in Uerdingen, Germany, filed an application with the insolvency court in Krefeld, Germany, to commence insolvency proceedings. The German Insolvency Court appointed a trustee to administer the insolvency proceedings, which resulted in Tronox Incorporated losing management control over these subsidiaries. As a result, the German subsidiaries were deconsolidated from Tronox Incorporated's consolidated financial statements as of March 13, 2009. Management determined that the operations and cash flows of its insolvent German subsidiaries qualified as a discontinued operation. Accordingly, all amounts associated with these operations have been included in discontinued operations in Tronox Incorporated's consolidated financial statements.

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### ***Hamilton Plant***

The EPA and the Mississippi Department of Environmental Quality ( MDEQ ) conducted a Resource Conservation and Recovery Act Compliance Evaluation Inspection ( RCRA CEI ) at the Hamilton facility during April 2006. In November 2006, the EPA transmitted to the facility a copy of its RCRA CEI Report and Sampling Report, which identified a number of alleged violations of the Mississippi Hazardous Waste Management Regulations. In March 2007, the facility provided a written response to the EPA concerning the alleged violations. In November 2007, the U.S. Department of Justice (the DOJ ) informed Tronox Incorporated that the EPA, Region 4, had referred the alleged violations to the DOJ for civil enforcement. The DOJ filed a proof of claim on behalf of EPA in the bankruptcy seeking civil penalties for the alleged RCRA violations. The claim was settled as a part of the Environmental Settlement and pursuant to the Plan, Tronox Incorporated has no ongoing liabilities for this location regarding that claim from and after the Effective Date.

### ***Anadarko Litigation***

In May 2009, Tronox Incorporated and certain of its affiliates filed a lawsuit against Anadarko Petroleum and Kerr-McGee (a predecessor to Anadarko) asserting a number of claims, including claims for actual and constructive fraudulent conveyance (the Anadarko Claim ). In connection with the Chapter 11 proceedings of Tronox Incorporated, Tronox Incorporated assigned all of the Anadarko Claim to a litigation trust on behalf of the holders of environmental claims and tort claims against Tronox Incorporated, pursuant to a full satisfaction of such claims. Tronox Incorporated has no economic interest in the litigation trust. However, pursuant to the terms of the litigation trust, Tronox Incorporated could continue to be treated as the owner of the Anadarko Claim solely for purposes of federal and state income taxes. Depending on the outcome of the Anadarko Claim, it is possible that Tronox Incorporated will receive the benefit of certain tax deductions that would result if the Anadarko Claim is resolved successfully and the proceeds of such Claim are used as contemplated under the terms of the litigation trust.

## **Description of Exxaro Mineral Sands**

### **Overview**

Tronox Limited and Tronox Incorporated acquired the Exxaro Mineral Sands Operations from Exxaro on June 15, 2012. The Transaction is expected to close in June 2012. Exxaro Mineral Sands's operations comprise KZN Sands and Namakwa Sands, both located in South Africa, and the Tiwest Joint Venture. The KZN Sands operations involve the exploration, mining and beneficiation of mineral sands deposits in the KwaZulu-Natal province of South Africa, and the Namakwa Sands operations involve the exploration, mining and beneficiation of mineral sands deposits in the Western Cape province of South Africa. These operations produce titanium feedstock, including ilmenite, chloride slag, slag fines and rutile, as well as the co-products pig iron and zircon. The Tiwest Joint Venture conducts the exploration, mining and processing of mineral sands deposits and the production of titanium dioxide pigment in Australia. In 2011, Exxaro Mineral Sands produced 277,000 metric tons of titanium slag, 195,000 tonnes of zircon, 110,000 tonnes of synthetic rutile and 76,000 tonnes of titanium dioxide pigment, resulting in combined revenue of R6,586 million (\$907 million).

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### ***KZN Sands***

KZN Sands is involved in the exploration, mining and beneficiation of mineral sands deposits in the KwaZulu-Natal province of South Africa, as indicated in the map above, which can be accessed by public roads or roads for which KZN Sands has a right of way and over which Exxaro Sands and Exxaro TSA Sands have surface rights. KZN Sands operates facilities at two sites: mining operations at Hillendale and mineral processing plants wholly owned by Exxaro Sands and a smelter (wholly owned by Exxaro TSA Sands) at the central processing complex at Empangeni. KZN Sands's products include rutile, titanium slag (chloride slag and sulfate slag) and the co-products zircon, pig iron and scrap iron.

### **Hillendale Mine**

KZN Sands operates an open mine at Hillendale, located 20 kilometers southwest of Richards Bay in the KwaZulu-Natal province of South Africa, as shown on the map above. Hillendale employs hydraulic mining techniques to extract ilmenite, rutile and the co-product zircon. Hillendale has an on-site concentration plant with the operating capacity to produce 931,000 tonnes per year of heavy mineral concentrate for further processing. The mine has been in operation since 2001 and is expected to end production and be decommissioned at the end of 2012. When Hillendale is decommissioned, there will be a period during which KZN Sands intends to source an alternate supply of ilmenite from Namakwa Sands and other third party suppliers before the Fairbreeze mine commences operations, as further described under Properties and Reserves Properties Hillendale Mining Operations Description of Property and Exxaro Mineral Sands Management's Discussion and Analysis of Financial Condition and Results of Operations Recent Developments Fairbreeze Mining Project. Namakwa Sands is currently increasing its ilmenite supply capacity in order to meet the anticipated demand from KZN Sands.

### **Empangeni**

KZN Sands operates a central processing complex at Empangeni, located 20 kilometers west of Richards Bay. The Empangeni complex processes heavy mineral concentrate produced at the Hillendale mining operations, including by smelting ilmenite to produce titanium slag. Empangeni employs a mineral separation plant and a dual-furnace smelter to produce titanium feedstock, including ilmenite, chloride slag, slag fines, rutile and leucoxene, as well as the co-products pig iron and zircon.

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### **Fairbreeze**

In February 2011, Exxaro approved the development of a new mine at Fairbreeze, located 40 kilometers south of Richards Bay, subject to receiving the necessary regulatory and environmental approvals. We expect the mining of mineral sands and the production of titanium feedstock at Fairbreeze to begin in 2014, replacing Hillendale as the main source of raw material for KZN Sands's operations. Fairbreeze is expected to employ the same hydraulic mining techniques used at Hillendale, and Exxaro Mineral Sands plans to relocate the mining infrastructure and concentration plant from Hillendale to Fairbreeze. The anticipated life expectancy of the Fairbreeze mine is approximately 15 years.

### ***Namakwa Sands***

Namakwa Sands is involved in the mining and beneficiation of heavy minerals in the Western Cape province of South Africa, as indicated on the map above, which can be accessed by public roads or roads for which Namakwa Sands has a right of way. Namakwa Sands conducts operations at three separate sites over 20,477 hectares of land over which Exxaro TSA Sands wholly owns all of the surface rights: mining and concentration at Brand se Baai, located approximately 350 kilometers north of Cape Town, mineral separation at Koekenaap, located 60 kilometers from Brand se Baai and 320 kilometers north of Cape Town, and smelting near Saldanha Bay, located 150 kilometers from Cape Town. Together, Koekenaap and Saldanha produce titanium feedstock including ilmenite, chloride slag, slag fines and rutile, as well as the co-products pig iron and zircon.

The Brand se Baai operations employ dry mining techniques, excavating in two separate areas. Shallow sands mining takes place in the East Mine and deeper more compacted sand in the West Mine. The mine at Brand se Baai has been in operation since 1994 and is expected to end production and be decommissioned in 2032. Brand se Baai has three on-site concentration plants that produce heavy mineral concentrate for further processing. Concentrate produced at Brand se Baai is transported by truck to the mineral separation plant at Koekenaap. Ilmenite, zircon and rutile are recovered from the concentrate at the mineral separation plant, and are then transported by rail to the smelter operations near Saldanha Bay, where ilmenite is smelted to produce titanium slag and pig iron. Namakwa Sands currently is upgrading its ilmenite supply capacity to allow it to supply titanium feedstock to KZN Sands when the Hillendale mine is decommissioned.

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***The Tiwest Joint Venture***

The Tiwest Joint Venture conducts the mining and processing of mineral sands and the production of TiO<sub>2</sub> pigment in Australia. The TiO<sub>2</sub> pigment production operations are discussed separately under *The Businesses Description of Tronox Incorporated Manufacturing Processes* and are not discussed in detail here despite their significance to Australia Sands's operations and revenue.

As discussed under *The Businesses Description of Tronox Incorporated The Tiwest Joint Venture*, prior to completion of the Transaction, a subsidiary of Tronox Incorporated held a 50.0% undivided interest in all of the assets that comprise the operations conducted in Australia under the Tiwest Joint Venture and is severally liable for the associated liabilities. The remaining undivided interest was held by a subsidiary of Exxaro. In connection with the Transaction, we acquired Exxaro's entire interest in the Tiwest Joint Venture and now operate the business. The Tiwest Joint Venture operates the Kwinana Facility, a mining venture in Cooljarloo, Western Australia, a mineral separation plant and a synthetic rutile processing facility, both in Chandala, Western Australia.

The Tiwest Joint Venture is an integrated mineral sands and TiO<sub>2</sub> pigment producer. The Tiwest Joint Venture's products include ilmenite, rutile, synthetic rutile, leucoxene, zircon, activated carbon and staurolite, as well as TiO<sub>2</sub> pigment.

The Tiwest Joint Venture operates from six locations in Western Australia, including the Cooljarloo mine near Cataby, the Chandala mineral separation and synthetic rutile plants near Muchea and the Kwinana pigment facility near Perth, as indicated on the map above, all of which can be accessed by public roads or roads for which Australia Sands has a right of way.

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The Cooljarloo mine, located 170 kilometers north of Perth in Western Australia, employs both dredging and dry mining techniques to extract approximately 20 million tonnes of ore per year, producing approximately 700,000 tonnes per year of heavy mineral concentrate for further processing.

The Chandala processing complex, located 60 kilometers north of Perth in Western Australia, includes three major plants: a dry mill to separate the minerals, a synthetic rutile plant to process ilmenite into synthetic rutile, and a residue management plant. Chandala produces TiO<sub>2</sub> feedstock and other heavy minerals including ilmenite, rutile, synthetic rutile, leucoxene, zircon, activated carbon and staurolite. The Chandala synthetic rutile plant's current annual capacity is 225,000 tonnes.

The Kwinana TiO<sub>2</sub> pigment manufacturing facility is located 30 kilometers south of Perth in Western Australia. At the Kwinana Facility, synthetic rutile is reacted with petroleum coke and chlorine to produce TiCl<sub>4</sub>, which is subsequently processed into TiO<sub>2</sub> pigment for distribution. Kwinana has an annual production capacity of approximately 150,000 tonnes, and has been in operation since 1991.

## **Exxaro Mineral Sands Products and Raw Materials**

Mineral sands refers to concentrations of heavy minerals in an alluvial environment (sandy or sedimentary deposits near a river or other water source), and the mineral sands industry encompasses producers of titanium raw materials based on the mining and processing of rutile from primary hard rock deposits and the mining and processing of ilmenite and mineral sands. Exxaro Mineral Sands engages in mineral sands mining, and titanium feedstock production, in the form of titanium slag (chloride slag and sulfate slag), rutile and synthetic rutile. Secondary products include zircon and high purity pig iron.

### ***Titanium Feedstock***

Titanium occurs naturally in a number of minerals. The titanium minerals with the greatest commercial importance are ilmenite, rutile and leucoxene.

Titanium minerals (ilmenite, rutile and leucoxene), titanium slag (chloride slag and sulfate slag), upgraded slag and synthetic rutile are all used primarily as feedstock for the production of TiO<sub>2</sub> pigment. TiO<sub>2</sub> pigment is used predominantly in the production of high-quality surface finishes to impart opacity, brightness and whiteness, and is widely used in paints, plastics, paper, inks and rubber as well as in various specialty applications. According to TZMI data, in 2010, approximately 90% of the world's consumption of titanium feedstock was used for the production of TiO<sub>2</sub> pigment, with the remainder being used for the production of titanium sponge for titanium metal manufacturing and other uses, such as the production of fluxes for welding rods and as a metallurgical flux in iron and steel making. Titanium metal, manufactured from titanium sponge (formed from processed feedstock) is used for products such as aircraft frames, jet engines, structural components of transport equipment, sporting goods, and in highly corrosive environments in chemical process and desalination plants. Titanium minerals are used as a component of fluxes for coating welding electrodes. The preferred feedstock for such applications is rutile, although high-grade leucoxene is also widely used.

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The chart below shows the total titanium feedstock demand by final application during 2010.

Source: TZMI Mineral Sands Annual Review (June 2011).

### ***Titanium Minerals***

#### **Ilmenite**

Ilmenite is the most abundant titanium mineral in the world. Naturally occurring ilmenite may have a titanium content ranging from approximately 35% to 65%, depending on its geological history; weathering of ilmenite in its natural environment may cause a portion of the iron to be leached from the mineral grain, resulting in enriched titanium content.

#### **Rutile**

Rutile is essentially composed of crystalline titanium and, in its pure state, would contain close to 100% titanium. Naturally occurring rutile, however, contains minor impurities and commercial concentrates of the mineral typically contain approximately 94% to 96% titanium.

#### **Leucoxene**

Leucoxene is a natural alteration product of ilmenite with a titanium content ranging from approximately 70% to more than 90%. The weathering process responsible for the alteration of ilmenite to leucoxene results in the removal of iron, leading to an upgrade in titanium content. Circulating groundwater can also redeposit impurity elements within and around the weathered ilmenite grain. Leucoxene minerals can also be formed by the natural weathering of sphene (calcium titanite), in which case calcium and silica are removed from the grain, leaving residual levels of silica.

### ***Upgraded Titanium Products***

The naturally occurring high-grade titanium minerals required for the production of TiO<sub>2</sub> pigment are limited in supply. This limited supply has prompted the mineral sands industry to develop beneficiated products that can be used as substitutes for, or in conjunction with, naturally occurring titanium minerals. Two



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processes have been developed commercially: one for the production of titanium slag and the other for the production of synthetic rutile. Both processes use ilmenite as a raw material and are essentially processes for the removal of iron oxides.

### **Titanium Slag**

The production of titanium slag involves smelting ilmenite in an electric furnace under reducing conditions, normally with anthracite used as a reducing agent. The slag, containing the bulk of the titanium and impurities other than iron, is tapped off the top of the furnace while a high purity pig iron is recovered from the bottom of the furnace. The final quality of the slag is highly dependent on the quality of the original ilmenite and the ash composition of the anthracite used in the furnace.

In 1997, Canada-based Fer et Titane Inc, also known as QIT (which is owned by Rio Tinto) commissioned its heat treatment and chemical leaching process to upgrade its standard sulfate grade slag by removal of iron and alkali oxides, resulting in an increase in titanium content to approximately 95%. The resulting product is referred to as upgraded slag and is marketed as a rutile-equivalent product.

### **Synthetic Rutile**

A number of processes have been developed for the beneficiation of ilmenite into products containing between approximately 90% and 95% titanium. These products are known as synthetic rutile or upgraded ilmenite. The processes employed vary in terms of the extent to which the ilmenite grain is reduced and the precise nature of the reducing reaction and the conditions used in the subsequent removal of iron. All of the existing commercial processes are based on the reduction of ilmenite in a rotary kiln, followed by leaching under various conditions to remove the iron from the reduced ilmenite grains.

### ***Feedstock Grades***

The titanium feedstocks used to produce TiO<sub>2</sub> pigment can be graded as follows:

Natural rutile (typically approximately 95% titanium);

Upgraded slag (typically approximately 95% titanium);

Synthetic rutile (typically approximately 90% to 93% titanium);

Chloride slag (typically approximately 86% titanium);

Chloride fines (typically approximately 83% to 86% titanium);

Sulfate slag (typically approximately 75% to 80% titanium);

Leucoxene (typically approximately 70% to 91% titanium);

Chloride ilmenite (typically approximately 58% titanium or above); and

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Sulfate ilmenite (typically approximately 44% to 57% titanium).

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The chart below shows the total titanium feedstock production grades during 2010:

Source: TZMI Mineral Sands Annual Review (2011)

### ***Co-products***

The primary co-products of heavy mineral sands mining and titanium slag production are zircon and high purity iron.

### **Zircon**

Zircon is extracted, alongside ilmenite and rutile, as part of the initial mineral sands beneficiation process. Zircon typically makes up a relatively low proportion of heavy mineral sands mining but has a high value comparable to other heavy mineral products, resulting in it contributing a significant portion to total revenue. The major application of zircon is as an opacifier in ceramic glazes for tiles, plates, dishes and industrial products. Zircon is also used for the production of zirconium and zirconium chemicals, in refractories, as a molding sand in foundries and for TV glass, where it is noted for its structural stability at high temperatures and resistance to abrasive and corrosive conditions. Refractories containing zircon are expensive and are only used in demanding, high-wear and corrosive applications in the glass, steel and cement industries. Foundry applications use zircon when casting articles of high quality and value where accurate sizing is crucial, such as aerospace, automotive, medical and other high-end applications. Zircon is not used as feedstock for the production of TiO<sub>2</sub> pigment. Historically, zircon has constituted a relatively minor part of the total product suite produced as a result of the mining and processing of titanium minerals. From the early 2000s, however, zircon has increased its value as a co-product, although it remains dependent on the mining of titanium minerals for its supply.

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The chart below shows the total zircon demand by final application in 2010:

Source: TZMI Mineral Sands Annual Review (2011).

### **High Purity Pig Iron**

In producing titanium slag, ilmenite smelters can recover iron in the form of high purity pig iron containing low levels of manganese. When pig iron is produced in this manner, the molten iron is tapped from the ilmenite furnace during the smelting process, alloyed by adding carbon and silicon and treated to reduce the sulfur content, and is then cast into ingots, or pigs.

The pig iron produced as a co-product of titanium slag production is known as nodular pig iron, ductile pig iron, low manganese pig iron or high purity pig iron. It is typically low in manganese, phosphorus and sulfur and is sold to foundries as a dilutant for trace elements and to steel producers for iron units.

### **Mining and Processing Techniques**

This section describes the mineral sands mining and production process by which  $TiO_2$  pigment is ultimately derived and how its primary input, titanium feedstock, and the co-products zircon and pig iron, are obtained from deposits of mineral sands.

The diagrams below provide an overview of the process used to obtain titanium feedstock, as well as the co-products zircon and pig iron, all of which are ultimately derived from the mining of titanium minerals contained in sand or hard rock deposits. The South African and Australian diagrams are slightly different due to different feedstock characteristics.

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**Generic process for titanium feedstock production for South African operations**

**Generic process for titanium feedstock production for Australian operations**

***Mining***

The mining of mineral sands deposits is conducted either wet, by dredging, or dry, using earth-moving equipment to excavate and transport the sands. Dredging, as used by the Tiwest Joint Venture at the Cooljarloo mine, is generally the favored method of mining mineral sands, provided that the ground conditions are suitable and water is readily available. In situations involving hard ground, discontinuous ore bodies, small tonnage or very high grades, dry mining techniques are generally preferred.

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### **Dredge Mining**

Dredge mining, or wet mining, is best suited to ore reserves located below the water table. A floating dredge removes the ore from the bottom of an artificial pond through a large suction pipe. The bulk sand material is fed as slurry through a primary, or wet, concentrator that is typically towed behind the dredge unit. The dredge slowly advances across the pond and deposits clean sand tailings behind the pond for subsequent revegetation and rehabilitation. Because of the capital cost involved in manufacture and location, dredge mining is most suitable for large, long life deposits, often of a lower grade. The dredging operations at Cooljarloo use two large floating dredges in a purpose-built pond. The slurry is pumped to a floating concentrator which recovers heavy minerals from the sand and clay.

### **Dry Mining**

Dry mining is suitable where mineral deposits are shallow, contain hard bands of rock, or are in a series of unconnected ore bodies. Dry mining is performed at Namakwa Sands, which is located in an arid region on the west coast of South Africa. The unconsolidated types of ore are mined with front end loaders in a load and carry operation, dumping the mineral bearing sands onto a conveyor belt system that follows behind the mining face. The more competent layers are mined using hydraulic excavators in a backhoe configuration or by trackdozer. Namakwa Sands does not use blasting in its operations. The mined material is transported by trucks to the mineral sizers where primary reduction takes place.

### **Hydraulic Mining**

KZN Sands uses a unique hydraulic mining method for mineral sands due to the topography of the ore body and the ore characteristics. A jet of high-pressure water (approximately 2,500 kilopascals) is aimed at a mining face, thereby cutting into and loosening the in situ sand so that it collapses on the floor. The water acts as a carrier medium for the sand, due to the high slimes content contained in the ore body. The slurry generated by the hydraulic monitors flows to a collection sump where oversize is removed and the slurry is then pumped to the primary concentration plant.

### ***Processing***

#### **Concentration**

Both wet and dry mining techniques utilize wet concentrator plants to produce a high grade of heavy mineral concentrate (typically approximately 90% to 98% heavy mineral content). Screened ore is first deslimed, a process by which slimes (mineral particles that are too fine to be economically extracted and other materials that are left over after the valuable fraction of an ore has been separated from the uneconomic fraction) are separated from larger particles of minerals, and then washed through a series of spiral separators that use gravity to separate the heavy mineral sands from lighter materials, such as quartz. Residue from the concentration process is pumped back into either the open pits or slimes dams for rehabilitation and water recovery. Water used in the process is recycled into a clean water dam with any additional water requirements made up from pit dewatering or rainfall.

#### **Mineral Separation**

The non-magnetic (zircon and rutile) and magnetic (ilmenite) concentrates are passed through a dry mill to separate out the minerals. Electrostatic and dry magnetic methods are used to further separate the ilmenite, rutile and zircon. Electrostatic separation relies on the difference in surface conductivity of the materials to be separated. Conductive minerals (such as ilmenite, rutile and leucoxene) behave differently from non-conductive minerals (such as zircon and quartz) when subjected to electrical forces. Magnetic separation is dependent on the iron content of a mineral. Magnetic minerals (such as ilmenite) will easily separate from non-magnetic minerals (such as rutile and leucoxene) when subjected to a magnetic field. A combination of gravity and magnetic separation is used to separate out zircon from the non-magnetic portion of the heavy mineral concentrate.

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The heavy mineral concentrate at KZN Sands and Namakwa Sands is passed through wet high-intensity magnetic separation to produce a non-magnetic fraction and a magnetic fraction. This step is not required for the Tiwest Joint Venture material.

### **Smelting**

Ilmenite at KZN Sands and Namakwa Sands is processed further through direct current arc furnaces to produce titanium slag with a titanium content of approximately 87%. The smelting process comprises the carbonaceous reduction of ilmenite to produce titanium slag and nodular pig iron. Ilmenite and as-received anthracite (dried to remove the fines before smelting) are fed in a tightly controlled ratio through a hollow electrode into an operating furnace where the endothermic reduction of ilmenite occurs. The resultant titanium slag has a lower density than the iron, and separation of the two liquid products occurs inside the furnace. The slag and iron are tapped periodically from separate sets of tapholes located around the circumference of the furnace. The tapholes for slag are on a higher elevation than those for iron. Slag is tapped into steel pots and cooled for several hours in the pots before the slag blocks are tipped out. The blocks are subsequently transported to the blockyard where they are cooled under water sprays for a number of days. They are then crushed, milled and separated according to size fractions, as required by the customers. The tapped pig iron is re-carburized and de-sulfurized, and cast into pigs.

### **Synthetic Rutile Production**

Ilmenite may also be upgraded into synthetic rutile. Synthetic rutile, or upgraded ilmenite, is a chemically modified form of ilmenite that has had most of the ferrous, non-titanium components removed, and is suitable for use in the production of titanium metal or TiO<sub>2</sub> pigment using the chloride process. Ilmenite is converted to synthetic rutile in a two-stage pyrometallurgical and chemical process. The pyrometallurgical stage involves heating ilmenite in a large rotary kiln. Coal is used as a heat source and, when burned in a limited air environment, it produces carbon monoxide, which promotes a reducing environment that converts the iron oxide contained in the ilmenite to metallic iron. The intermediate product, called reduced ilmenite, is a highly magnetic sand grain due to the presence of the metallic iron. The second stage involves the conversion of reduced ilmenite to synthetic rutile by removing the metallic iron from the reduced ilmenite grain. This is achieved through aeration (oxidation), accelerated through the use of ammonium chloride as a catalyst, and acid leaching of the iron to dissolve it out of the reduced ilmenite. Activated carbon is also produced as a co-product of the synthetic rutile production process.

### **Raw Materials**

The smelters at KZN Sands and Namakwa Sands use anthracite as a reducing agent, which is available from a variety of suppliers. Namakwa Sands imports high quality anthracite for its smelter from Vietnam. Vietnam has a large anthracite resource, however, the Vietnamese government regulates both the price and sales volumes of anthracite. If the sales volume or price regulations were to become restrictive, it could negatively impact KZN Sands' and Namakwa Sands' production. Both of the KZN Sands smelters use anthracite from two local suppliers. Low ash and sulfur content are the main quality considerations. Anthracite suppliers with similar cost and availability to the Vietnamese supplier are available in Russia and Ukraine, as well as locally to Exxaro Mineral Sands' South African operations in Swaziland. Alternatively, char may be used as a substitute reducing agent for anthracite.

The KZN Sands and Namakwa Sands operations currently use Sasol gas, which is available only from Sasol Limited. However, Sasol gas could be replaced with carbon monoxide gas produced by KZN Sands and Namakwa Sands, if necessary. KZN Sands is currently in the process of increasing its use of carbon monoxide gas.

Other raw materials used at the KZN Sands and Namakwa Sands operations include: electrodes, sulphuric acid, flocculant, ferrosilicon, nitrogen and oxygen. Multiple suppliers provide these raw materials.

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The Tiwest Joint Venture's synthetic rutile operation uses coal as a reducing agent, which is available locally from two suppliers, both of which have extensive coal resources. The synthetic rutile process relies on the quality of coal from southwest Western Australia for the efficient production of quality synthetic rutile and activated carbon from the synthetic rutile kiln. Other types of coal could likely be used if both of the current coal suppliers were unavailable, but some temporary adverse impact on the production and cost of synthetic rutile at the Tiwest Joint Venture would be likely.

***TiO<sub>2</sub> Pigment Production***

Exxaro Mineral Sands's business includes revenue from TiO<sub>2</sub> pigment produced by the Tiwest Joint Venture, as discussed under Overview Exxaro Mineral Sands. For a discussion of the TiO<sub>2</sub> pigment production process, see Description of Tronox Incorporated Pigment Segment Manufacturing Process.

**Properties and Reserves**

We estimate that, as of December 31, 2011 and December 31, 2010, the total book value of the South African mineral sands operations and its associated facilities and equipment was R3,888.1 million (\$480.6 million) and R2,863.7 million (\$432.6 million), respectively, and the total amount of capital expenditures for the South African mineral sands operations during 2011 and 2010 was R1,009.1 million (\$139.0 million) and R269.0 million (\$36.7 million), respectively.

***Properties***

**Hillendale Mining Operations**

***Description of Property***

The Hillendale heavy minerals deposit is located in northern KwaZulu-Natal, approximately 20 kilometers southwest of Richards Bay. Hillendale is bordered by the Mhlathuze River on the northwestern side and by eSikhawini Township on the southeastern side. The topography at Hillendale is characterized by a 3.8 kilometer long dune ridge, which runs parallel to the Mhlathuze River. The ridge, approximately 8 kilometers from the present coastline, is approximately 600 meters wide and reaches a maximum height of 75 meters above the river's flood plain, although the average height of the dune throughout the Hillendale area is approximately 50 meters. Slopes to the southeast are relatively uniform and moderate, with gradients between 1:10 and 1:15, while the slopes facing the river tend to be steeper (1:2 to 1:5) and are dissected by several drainage lines. The Mhlathuze flood plain at the foot of the dune is approximately 15 meters above mean sea level, and varies in width from 300 to 700 meters. Mineral sands are extracted from a single open-cast mining area at Hillendale, the littoral marine and Aeolian coastal plain deposit, which stretches from south of Mtunzini and past Hillendale (as discussed below under Fairbreeze Mine Description of Property) in the north. Mining of the Hillendale ore body began in 2001. The Hillendale mine spans an area of approximately 1,206 hectares, comprising four properties referred to individually as Hillendale, Reserve 10, Braeburn and Braeburn Extension.

The Hillendale mining operations consist of a mining area, a primary wet plant, a residue dam and a return water dam. The mining area consists of mineralized dunes that are mined by means of hydraulic monitors. The ore body is shallow (30 to 40 meters), so drilling and blasting are not required as part of the mining process. The hydraulic monitors transport the ore in a slurry form via sluices to pump stations, from where the slurry is pumped to the primary wet plant. The primary wet plant uses a wet gravity separation process to produce heavy mineral concentrate, which is then transported to KZN Sands's central processing complex at Empangeni for further processing. The residue dam at the mining operations is used for the sub-aerial deposition of slimes (fine clay material) extracted at the primary wet plant. Underneath the dam are several subterranean drains, which drain water to the return water dam. The drains are intended to lower the high water table underneath the residue dam and are expected to remain in place after the mine has been closed, draining into the agricultural drainage channels which run along the base of the dunes. Some water from the residue dam drains to the return water dam, where it is recycled for reuse in the mining operations, and the remainder is evaporated.



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In 2011, the Hillendale mine produced approximately 7 million tonnes of ore. The design capacity of the mine is approximately 12 million tonnes per year. In 2011, the Hillendale primary wet plant produced approximately 370,322 tonnes of heavy mineral concentrate. The design capacity of the plant is approximately 931,000 tonnes per year. In 2011, the mineral separation plant at Empangeni produced approximately 212,868 tonnes of final mineral products, including approximately 167,578 tonnes of ilmenite, 28,374 tonnes of zircon and 16,916 tonnes of rutile. The design capacity of the mineral separation plant is approximately 596,000 tonnes of ilmenite per year, 60,000 tonnes of zircon per year and 30,000 tonnes of rutile per year. In 2011, the smelter at Empangeni produced approximately 91,782 tonnes of titanium slag (129,479 tonnes of chloride process slag and 22,184 tonnes of sulphate process slag, including 95,424 tonnes processed from the stockpile of slag blocks from 2010) and 57,727 tonnes of pig iron. The design capacity of the smelter is approximately 220,000 tonnes of titanium slag per year (186,000 tonnes of chloride process slag per year and 30,000 tonnes of sulphate process slag per year) and 124,000 tonnes of pig iron per year.

In August 2011, a scheduled inspection of Furnace 1 at KZN Sands revealed a water ingress into Furnace 1. The furnace was taken out of operation on September 8, 2011, after confirming that it was unsafe to operate it with the water ingress. Furnace 1 was out of operation for 168 days to completely re-line the furnace and to upgrade the hearth to a copper plate conductive hearth and resumed operation on February 25, 2012, as further discussed under *Exxaro Mineral Sands Management's Discussion and Analysis of Financial Condition and Results of Operations - Recent Developments - Furnace Shutdowns*.

When the Hillendale mine is decommissioned, which is expected to occur at the end of 2012, there will be a period during which KZN Sands intends to source an alternate supply of ilmenite from Namakwa Sands and other third party suppliers before the Fairbreeze mine commences operations, which is expected in 2014. We estimate that approximately 861,416 tonnes of smelter grade ilmenite will be required in order for titanium slag to continue being produced at KZN Sands during this period. We anticipate that Exxaro Mineral Sands will be able to acquire the required smelter grade ilmenite from a number of alternative sources during this period, including from the UMM Plant at Namakwa Sands, in order to meet the anticipated demand (for a further discussion of the alternate supplies of ilmenite, see *Exxaro Mineral Sands Management's Discussion and Analysis of Financial Condition and Results of Operations - Recent Developments - Fairbreeze Mining Project* and *Namakwa Sands - Description of Property* ).

### *Power and Water Supply*

The Hillendale mining operations have an independent electrical distribution system. Power is supplied by Eskom Holdings Limited, the South African electricity public utility, through a single overhead transmission line dedicated to the mine.

Raw water is supplied to the Hillendale mining operations from a dam on the Mhlathuze River. The dam, and related pump station and supply line, are owned by the municipality. Roughly 50% of the water used at the primary wet plant is recycled.

### *Exploration*

KZN Sands's strategy for future exploration is to commence with an airborne geophysical survey that includes magnetic susceptibility and radiometric emission measurements. A survey of this nature has the potential to highlight ilmenite-rich zones from the magnetic information and zircon-rich zones from the radiometric data. Once prospective zones have been identified, the geophysical information can be interpreted in combination with the topography (i.e., dune forms) to delineate areas of potentially heavy mineral enrichment that can then be investigated in more detail.

Once resources have been identified, drilling is expected to begin with a spacing determined by the width and length of the ore body. As sample data becomes available, the spacing will be reduced accordingly, normally by halving the ore body length spacing.

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### **Fairbreeze Mine**

#### *Description of Property*

The Fairbreeze mineral sands deposits in northern KwaZulu-Natal are situated approximately 45 kilometers southwest of Richards Bay. The Fairbreeze area starts just south of the coastal town of Mtunzini and extends southward for about 12 kilometers in a strip approximately 2 kilometers wide which ends near the Fairbreeze off-ramp on the N2, the main highway along the Indian Ocean coast of South Africa. The Hillendale mine, as described above under Hillendale Mining Operations, is currently the sole producer of heavy mineral concentrate for KZN Sands and is expected to reach the end of its economic life in 2012. The Fairbreeze area was identified as a successor to Hillendale during initial feasibility studies in 1999, which were updated in 2005 and 2010. Mining of the Fairbreeze ore bodies is planned to begin after the Hillendale mineral reserves have been exhausted. When Hillendale is decommissioned, there will be a period during which KZN Sands intends to source an alternative supply of titanium ore from Namakwa Sands and other third party suppliers before the Fairbreeze mine commences operation. The Fairbreeze mine is expected to provide ilmenite feed for the smelter operations located at KZN Sands' central processing plant in Empangeni, where titanium slag is produced. The Fairbreeze project spans an area of approximately 4,140 hectares, comprising twenty-two properties. The five Fairbreeze deposits (A, B, C, D and C Extension) are arranged in an echelon pattern parallel to the coast. The Block P area, which comprises two farms spanning an area of approximately 487 hectares, is located 9 kilometers northeast of Empangeni and also forms part of the Fairbreeze mining right, although we do not currently have any plans to mine Block P. Most of the land on which Exxaro Sands has mining rights for the Fairbreeze project is owned by Mondi Ltd, which is currently subject to land claims by the Obanjani Community, as further discussed below under Legal Proceedings South Africa Obanjani Land Claims. Exxaro Sands has not been denied access to the property, but further ownership disputes may arise, as further discussed under Risk Factors Exxaro Mineral Sands' privately held South African land and mineral rights could be subject to land restitution claims.

The Fairbreeze area is characterized by a ridge, 2 to 2.5 kilometers inland from the present coastline, comprised of ancient dune cordons of Berea-type red sands. The cordons have been dissected by rivers and streams, including Siyaya and Manzamnyama, leaving a smaller number of freestanding dunes along the entire length of the ridge. Slope gradients vary from 1:17 to 1:2, with the steeper slopes situated on the seaward side of the dunes. The maximum elevation of the ancient dunes in the Fairbreeze area is 109 meters above mean sea level. More recently formed dunes, which run parallel and closer to the present coastline than the ancient dunes, peak at 28 meters above mean sea level.

The Fairbreeze mining project is expected to be executed in two phases, as follows. During the first phase, the Hillendale primary wet plant and all reusable Hillendale mining equipment (e.g., pipes, pumping systems, cyclones for backfilling) will be relocated to a central position at Fairbreeze. The primary wet plant will be upgraded to treat the higher slimes throughput and a new residue storage facility, the Mega Sebeka dam, will be constructed. A second residue storage facility, the Valley dam, will be developed at a later date. A temporary retaining wall will be constructed within the Valley dam containment area so that it can be used as a return water dam until it is necessary to use the Valley dam as a residue storage facility. Due to the higher heavy mineral concentrate grade, the Fairbreeze C deposit and C Extension deposit are intended to be mined first. Mining of the Fairbreeze C deposit and C Extension deposit is expected to take five years to complete. The second phase of the Fairbreeze mining project will commence after the Fairbreeze C deposit and C Extension deposit have been mined out. The primary wet plant and mining infrastructure will be upgraded to a throughput of 2,200 tonnes per hour and the Valley dam will be built.

The planned mining method for Fairbreeze is similar to the one currently used at the Hillendale mine, where the ore body is mined using high-pressure hydraulic monitor guns to create a slurry that is gravitated in launders to satellite pump stations from where it is pumped to a main holding tank. It is then pumped to the primary wet plant to produce heavy mineral concentrate.

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### *Power and Water Supply*

We plan to reuse most of the existing electrical and instrumentation equipment from the Hillendale primary wet plant at the Fairbreeze mine. In addition, a new Eskom substation will be positioned approximately in the center of the total Fairbreeze mining ore body.

The only viable water supply option for the Fairbreeze project is the Mhlathuze River, which is currently used to supply water for the Hillendale mining operations. The availability of sufficient water has been confirmed by the water supply authority, Mhlathuze Water. Raw water is expected to be supplied by the pipeline operated by Mhlathuze Water, as per the existing Hillendale system, sourced at the present Hillendale pump station, but is expected to be upgraded to account for the additional demand.

### *Exploration*

Natal Mineral Sands conducted an exploration program over the Fairbreeze area between 1988 and 1992. The initial phase comprised a shallow (approximately 5 meters) reconnaissance hand auger drilling program over much of the Fairbreeze A deposit and part of the Fairbreeze D deposit. The results indicated several zones of heavy mineral enrichment and subsequent deep drilling activities were targeted on those areas, mainly the Fairbreeze A deposit and the southern end of the Fairbreeze D deposit.

The Severin Development Corporation acquired surface and prospecting rights to the Fairbreeze C Extension deposit in November 1987 and conducted exploration and feasibility studies until 1994. Severin conducted a drilling program and metallurgical sampling to prove recoveries, finalize flow sheets and obtain marketing samples.

Iscor Limited purchased Natal Mineral Sands in 1994 and subsequently formed Iscor Heavy Minerals, which initiated a second phase of exploration to further define and delineate the known heavy mineral occurrences (Fairbreeze A and D deposits), to locate and delineate additional resources (Fairbreeze B and C deposits) and to classify the deposits according to internationally accepted standards.

In 2002, Exxaro Mineral Sands drilled the area which would have been covered by the first three years of mining on Fairbreeze C. Exxaro Mineral Sands conducted physical analyses, as well as x-ray fluorescence and mineralogy on the drilling samples. In December 2002, Exxaro Mineral Sands performed bulk sampling on a near surface site at Fairbreeze C primarily to assess the mining characteristics of the Fairbreeze material and to measure the performance of the Hillendale primary wet plant while it was being fed with Fairbreeze material.

Exxaro Mineral Sands obtained the prospecting rights for the Fairbreeze C Extension properties from Severin in April 2003, and began exploration using the Wallis Aircore method. Exxaro Mineral Sands conducted physical analyses, as well as x-ray fluorescence and mineralogy on the drilling samples. Exxaro Mineral Sands did not include Severin's borehole data in its resource estimates, because the data was deemed unreliable. In May 2003, Exxaro Mineral Sands conducted a large diameter auger drilling program on the Fairbreeze A, C and C Extension deposits with the primary purpose of providing bulk samples for pilot plant test work.

In 2006, Exxaro Mineral Sands conducted further drilling on Fairbreeze C in order to improve drilling data, as well as to close the spacing between the existing drill holes.

## **Port Durnford Prospecting Project**

### *Description of Property*

Exxaro Sands has entered into a joint venture agreement with the Imbiza Consortium, a BEE group, in order to conduct exploration and development of the Port Durnford State Forest, which is located immediately south of the Hillendale mine and extends about 13 kilometers south towards the town of Mtunzini. The Port Durnford area

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lies between the Mhlathuze and Umlalazi rivers and is bordered by the R102 road to the west and by the coastal railway line to Durban and the township of eSikhawini to the east. The Port Durnford property ends near the Forest Inn on the R102 to Mtunzini and is transected by the N2. On June 11, 2010, Exxaro Sands submitted a new prospecting rights application to the DMR. To date, the DMR has not provided a final reply. The land subject to the Port Durnford prospecting rights application is currently owned by the South African state, but the Mkhwanazi Tribe has made land claims in respect of the land which have been accepted, although the land has not yet been transferred to the Mkhwanazi Tribe.

Port Durnford could be a source of ilmenite feed for the smelter operations at Hillendale's central processing complex in Empangeni. We expect that primary beneficiation of the Port Durnford ore body will be conducted by the primary wet plant to be used at the Fairbreeze mine, which we plan to relocate to Port Durnford once Port Durnford's mining operations have commenced. The ex-Fairbreeze plant is expected to have an hourly production rate of 2,200 tonnes run of mine and the hourly production rate at Port Durnford is ultimately expected to reach 2,800 tonnes run of mine (22 million tonnes run of mine per year) due to dropping ilmenite grades.

The Port Durnford deposit is high in silt content, which makes dredging an unsuitable mining method, therefore Port Durnford is expected to use hydraulic mining (see Mining and Processing Techniques Mining Hydraulic Mining ). Slimes dams will be used at Port Durnford and, based on the current performance at the Hillendale mining operations, about 80% of all slimes generated at Port Durnford are expected to be disposed of in the slimes dams. The remainder of the slimes are expected to be returned to the open mine pit. The Hillendale slimes dam will not be available for the disposal of slimes from Port Durnford, therefore a slimes dam will need to be constructed from the outset of production at Port Durnford. Once the hourly production rate at Port Durnford reaches 2,800 tonnes run of mine, two slimes dams will be required. The life of mine is expected to be approximately 15 years.

The capital expenditure estimate based on the 2009 prefeasibility study for the Port Durnford project is approximately R2,200 million (\$303.0 million), and Exxaro Mineral Sands has incurred R0.9 million (\$0.1 million) in capital expenditure in the two years since the study.

*Power and Water Supply*

Power is expected to be supplied to the Port Durnford mining operations by the same Eskom transmission line that currently feeds the Hillendale and Fairbreeze mining areas, and we plan to reuse the existing Fairbreeze electrical equipment (i.e., motor control centers, switchgear and transformers) at Port Durnford. Eskom has acknowledged the request for a relocation of the existing power supplies to accommodate the power required for Port Durnford's mining operations. Eskom considers the power supply to Port Durnford to be both a new connection and a relocation of reserved network loads, and Eskom has indicated that the risk of non-approval is low due to the advantage of relocating the existing Fairbreeze load on the same network.

Water is expected to be supplied to Port Durnford from the same pipeline to be used for Fairbreeze, which will pass approximately 1.5 kilometers from the Port Durnford site. The raw water is expected to be sourced at the present Hillendale pump station, but be upgraded to account for additional demand. The water requirement for Port Durnford is expected to be only marginally higher than the total water requirement for Hillendale and Fairbreeze combined. The water supply authority, Mhlathuze Water, has confirmed the availability of sufficient water for the Port Durnford mining operations. Upon completion of mining activities at Hillendale and Fairbreeze, the water rights for those operations are expected to be transferred to Port Durnford.

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### *Exploration*

Between 1979 and 1980, Richards Bay Minerals carried out limited exploration activities on Port Durnford. The Industrial Development Corporation of South Africa Limited, a state-owned organization, conducted additional exploration of the property in 1984. Between 1988 and 1989, Richards Bay revised its prior exploratory work, indicating the presence of a low-grade heavy minerals deposit in the Port Durnford area with high silt content, but noting that it was uneconomic to exploit it at that time.

In 2003, Exxaro conducted aerial radiometric and magnetic geophysical surveys of an area including Port Durnford, which revealed patchy anomalies in the Port Durnford area with a good potential for heavy mineral concentrations. Exxaro began an initial exploratory drilling program in February 2006. Exxaro used the results of the initial phase to plan the location of the next set of boreholes, targeting areas with more than 3.0% total heavy minerals. Exxaro began an infill drilling program between November 2007 and July 2008, basing the borehole spacing on the observed variability from the initial drilling program. All drilling of the Port Durnford area was done with the Wallis Aircore method, complemented by a sonic coring system to better understand the geology of the area.

### **Centane Prospecting Project**

#### *Description of Property*

Exxaro Mineral Sands obtained the Centane prospecting project when Iscor Limited purchased Natal Mineral Sands in 1994 (see Fairbreeze Mine Exploration ). Centane's heavy mineral deposits occur along the southern part of the former Transkei coast, in the Eastern Cape province. The three Centane deposits, Ngcizele, Nombanjana and Sandy Point, are located about 65 kilometers southeast of Butterworth and about 80 kilometers northeast of East London, as shown on the map above. The three deposits are subdivided by two perennial rivers.

The inland heavy mineral bearing dune cordons of Centane's east coast were deposited during marine regression in the late Tertiary to early Quaternary periods. Except for the Sandy Point dune, the Centane dunes have undergone intense weathering and decomposition of ferromagnesian minerals, resulting in the deep red color of the Berea-type red sands. The sand is medium grained and moderately sorted. Valuable heavy minerals comprising ilmenite, zircon, rutile and leucoxene are distributed throughout the thickness of the Centane deposit.

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Exxaro Mineral Sands conducted exploration activities on Centane as part of its studies to evaluate the development of the Centane deposit as a potential long-term supply of ilmenite feed for KZN Sands' smelter operation at Empangeni, where titanium slag is produced. Centane is an important mineral resource for Exxaro Mineral Sands' future growth or mine replacement projects.

### *Power and Water Supply*

There is currently no infrastructure in place to supply power or water to the Centane project.

### *Exploration*

A number of companies have evaluated the Centane deposits since early 1970, including King Resources, B Locke of Rhodes University in 1972, Wavecrest Titanium (Pty) Ltd in 1973, Cape Morgan Titanium in 1984, Anglo American Prospecting Services in 1987, Rhombus Exploration in 1988 and Rand Mines in 1990. Rhombus Exploration conducted detailed exploration work, including drilling and seismic studies, in the late 1980s, as part of their pre-feasibility studies on Centane. The majority of the boreholes drilled by Rhombus Exploration were spaced on a 400 meter by 100 meter grid.

In October 2006, Exxaro Mineral Sands converted an older order prospecting permit, covering 1,972 hectares of the Centane property, into a new order prospecting right, in compliance with the MPRDA. Although the DMR granted Exxaro Mineral Sands the prospecting right with respect to the Centane property, an embargo on prospecting activities in the Eastern Cape remained in force until the DMR issued a clarification in February 2008 to proceed with prospecting activities.

In 2008, under the new order prospecting right, Exxaro Mineral Sands drilled 66 boreholes on the Ngcizele orebody using the Wallis Aircore method, with the goal of evaluating the exploration work performed by Rhombus Exploration. Drilling on the Nombanjana orebody has not been completed because local communities prevented Exxaro Mineral Sands from accessing the site.

The new order prospecting right over the Centane property lapsed on October 8, 2011. Exxaro Mineral Sands lodged an application with the DMR for a renewal of the prospecting right in July 2011, and is currently awaiting an outcome on the application from the DMR. We plan to conduct additional drilling on Centane if the prospecting right is renewed.

Exxaro Mineral Sands undertook mineral resources modelling on Nombanjana and Sandy Point in the late 1990s. The mineral resources on Ngcizele are based on the drilling work conducted by Exxaro Mineral Sands in 2008. The classification of Centane's mineral resources is largely based on the drilling density.

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**Namakwa Sands**

*Description of Property*

The Namakwa Sands operations were constructed in 1993-1994 by Anglo American Corporation and were fully commissioned and operational by 1995. Exxaro acquired Namakwa Sands from Anglo American in 2008. Namakwa Sands conducts mining activities at its Northern Operations in Brand se Baai, located approximately 350 kilometers north of Cape Town. The Namakwa Sands mine site is situated approximately 92 kilometers northwest of Vredendal, in the West Coast Municipal Area, and 220 kilometers from the port of Saldanha. Exxaro TSA Sands owns the surface rights over 25,089 hectares of land, of which 17,111 hectares are situated in and around the mine site and 6,354 hectares are in remote prospecting areas. An additional 832 hectares of agricultural land are held at the mineral separation plant and Lutzville areas plus a further 792 hectares at the Southern Operations. Exxaro TSA Sands also holds 56 kilometers of servitude rights in the area adjacent to the road between the mineral separation plant and the mine, on which the pipeline that delivers fresh water to the mine and fiber optic communication cables are located. Exxaro TSA Sands owns numerous residential properties in the towns of Lutzville, Vredendal, Saldanha and Vredenburg, which provide housing for Namakwa Sands' employees and their families at a nominal cost.

The general topography of the mine site is characterized by deflation dunes along coastal plains, which are intermittently dissected by dry riverbeds to form an undulating landscape. Brand se Baai is one of many bays along this stretch of coast. The Namakwa Sands mine is constrained between two hills, Graauwduin-se-kop in the northeast and Skimmelkop in the southwest, and is truncated by the Groot Goerap and Sout Rivers in the north. The elevation rises from west to east, reaching an elevation of just over 200 meters above mean sea level in the northeast. Minerals are transported approximately 52 kilometers from the mines to the mineral separation plant by purpose-built trailers and trucks, which travel on a tar road constructed for this purpose. A railway line connects the mineral separation plant and the smelter, with minerals transported in specially-designed closed container rail trucks, to prevent mineral loss and contamination.

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Namakwa Sands extracts heavy mineral sands using open-cast methods at two locations within the mining authorization area at its Northern Operations: the East Mine (3,370 hectares) and the West Mine (1,400 hectares). The East Mine primarily uses a shallow mineral sands stripping process with sequential rehabilitation taking place behind the active mining window. Operations at the West Mine entail shallow stripping of the mineral sands followed by a deep mining operation to recover hardened materials. Namakwa Sands has installed additional capacity to crush the hard material from the deep mining operation and improve the recovery process.

In 2011, the East Mine produced approximately 7.2 million tonnes of ore and the West Mine produced approximately 12.8 million tonnes of ore. The capacity of the East Mine is highly dependent on the underfoot conditions and the soil thickness; however, the East Mine typically has sufficient capacity to keep the East Mine primary concentration plant running at full capacity. The capacity of the West Mine is limited by its ability to supply a consistent grade of feed to the West Mine primary concentration plant. The West Mine's capacity is approximately 25% more than that of the West Mine primary concentration plant. In 2011, the East Mine primary concentration plant produced approximately 625,423 tonnes of heavy mineral concentrate. The East Mine primary concentration plant currently has spare capacity of approximately 8% at a 93% utilization to treat run of mine. In 2011, the West Mine primary concentration plant produced approximately 1.1 million tonnes of heavy mineral concentrate. Due to the slimes content of the feed, the West Mine primary concentration plant only has approximately 2% spare capacity at a 92% utilization to treat run of mine. In 2011, the secondary concentration plant produced approximately 808,377 tonnes of heavy mineral concentrate (magnetic and non-magnetic material) and has spare capacity of approximately 4.7% at a 94% utilization to treat heavy mineral concentrate. In 2011, the mineral separation plant produced approximately 542,271 tonnes of mineral products, including approximately 376,623 tonnes of ilmenite, 30,727 tonnes of rutile and 134,921 tonnes of zircon. The mineral separation plant has spare capacity of approximately 16% at a 95% utilization to treat magnetic material and spare capacity of approximately 6% at a 91% utilization to treat non-magnetic material. In 2011, the smelter plant produced approximately 151,604 tonnes of chloride slag, 27,525 tonnes of sulphate slag and 108,928 tonnes of pig iron. The furnaces at the smelter plant are approximately 22% over the design capacity due to the implementation of side feed technology (where some of the ilmenite is fed from the side of the furnace instead of all through the single electrode) and better management of the chemical balance between the reductant and ilmenite used and the energy input.

Namakwa Sands is estimated to have production reserves through 2030. Exxaro TSA Sands submitted an application to extend its mining activities outside of the border line established by the Namakwa Sands Environmental Management Program Report (described below under Regulation of the Mining Industry in South Africa and Australia Mining Regulation in South Africa ), except for an environmentally sensitive area of The Kom, on July 15, 2011. On March 28, 2012, Exxaro TSA Sands received approval from the DMR, subject to a number of conditions. Exxaro TSA Sands now expects to proceed with a resource definition drilling program as part of the Namakwa Sands mine expansion. If the DMR had not approved Exxaro TSA Sands's application, mining activity at Namakwa Sands might have been limited and the mine's reserves might have been depleted in 2027.

As described above under Hillendale Mining Operations Description of Property, when the Hillendale mine is decommissioned, which is expected to occur at the end of 2012, there will be a period during which KZN Sands intends to source an alternate supply of ilmenite from Namakwa Sands and other third party suppliers before the Fairbreeze mine commences operations, which is expected in 2014. One of the expected alternate sources of ilmenite is a 3.0 million tonne stockpile of excess ilmenite that was mined primarily from the West Mine at Namakwa Sands, and stockpiled prior to final processing. This stockpile comprises approximately 30% garnet minerals that will need to be removed before the material can be used as furnace feed. We expect to construct a dedicated plant at Namakwa Sands (the UMM Plant ) that would use magnetic separation to separate the garnet minerals from the ilmenite. The ilmenite would then be transported to KZN Sands for smelting. A detailed design of the plant has been completed, long lead items have been ordered and the necessary capital of approximately \$11.5 million for the project has been approved. We expect the UMM Plant to begin producing ilmenite dedicated to the KZN Sands operations in November 2012. In the event that there are any



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delays in transporting ilmenite from the UMM Plant to the KZN Sands smelter or the UMM Plant is not operational in time to provide an alternate supply of ilmenite to KZN Sands, we expect to be able to import sufficient ilmenite from third party suppliers in order to meet the demand (as discussed under Exxaro Mineral Sands Management's Discussion and Analysis of Financial Condition and Results of Operations Recent Developments Fairbreeze Mining Project ).

### *Power and Water Supply*

Power is supplied to the Namakwa Sands mine by Eskom through a single overhead transmission line dedicated to the mine. The mining operations also have an emergency generator that is periodically tested under load and regularly tested off load.

In 2007, Exxaro began developing a cogeneration project to generate electricity from furnace off-gas produced as a by-product of the smelting process at the Namakwa Sands operations. The gas is rich in carbon monoxide and hydrogen and is currently flared. The cogeneration project would condition and combust the furnace off-gas in internal combustion engines to produce electricity. The project was further refined following Eskom's introduction of its Power Conservation Program, which requires large industrial companies to decrease their energy consumption or face punitive tariffs for exceeding Eskom's allowed quota. In September 2009, the National Energy Regulator of South Africa approved three 25.0% electricity tariff increases, which are expected to result in the cost of power from the cogeneration plant being cheaper than Eskom power by the end of 2013, soon after we anticipate commissioning the cogeneration plant. The possibility of Eskom implementing a Power Conservation Program or power-rationing regime in the event of power shortages and the added security of an independent supply of energy from the cogeneration plant would bring significant upside value to the cogeneration project. In addition, we believe that the project would contribute to energy efficiency and a lower carbon footprint for us, resulting in the mitigation of possible carbon taxes.

Sea water is supplied to Namakwa Sands from a sea water intake plant on the shore. The two pumps at the plant feed a sea water dam via a 4 kilometer pipeline. The dam has a capacity of 23,000 cubic meters, or 2 to 3 days, at full capacity. Sea water is used in the primary and secondary separation processes and is pumped via the sea water pump station installation close to the West Mine.

Fresh water is supplied to Namakwa Sands from the public irrigation canal system. The fresh water intake is from Koekenaap via a pipeline that runs to the mineral separation plant and mine. There are three pumps that feed the mining operations via a pipeline. Fresh water is stored in a 150,000 cubic meter dam.

### *Exploration*

Heavy mineral sands were discovered along the west coast of South Africa around the turn of the 19th century. There are seven narrow coastal concentrations in the area, the largest of which lies adjacent to Namakwa Sands's current mining area. In the late 1960s, the Geological Survey of South Africa (now the Council for Geoscience) mapped three airborne magnetic and radiometric anomalies, the weakest of which coincided with the Namakwa Sands mine site. In 1986, Anglo American Prospecting Services conducted a soil geochemical survey, and reinterpreted the government's airborne-radiometric data, which led to the discovery and delineation of the Namakwa Sands ore body.

Since 2009, Namakwa Sands has used an annual drilling program to enable better long-term planning. The first half of each year is spent on mine resource definition drilling, and the latter half is spent on regional exploration activities. The update of the geological model is completed in the first part of the year to support the update of the life of mine and budget allocations in July of the following year. This gives Namakwa Sands's mineral resource manager sufficient time to conduct resource modeling and classification. All drilling is done with the Wallis Aircore method. Exxaro Mineral Sands began an 18,000 meter drilling program on the East Mine area in 2010, which is expected to be completed in 2012. We intend to then focus drilling on the West Mine area

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on a 125 meter by 50 meter grid until 2014. Thereafter, we intend to focus drilling on areas outside the border line established by the Namakwa Sands Environmental Management Program Report but within the expanded mining right area recently approved by the DMR (as discussed above under Description of Property ).

The Southern Anomaly and Houtkraal prospecting permits, which relate to small deposits adjacent to the current ore body, are expected to be converted to mining rights and applications are expected to be submitted in the first half of 2012. This is expected to add approximately 30 million tonnes of resources over the life of mine. The Northern Anomaly (Groenrivier deposit) is still being evaluated. We expect to make a decision regarding the most suitable method of extraction by December 2012.

### **The Tiwest Joint Venture Cooljarloo Mine**

The Cooljarloo mine is located approximately 17 kilometers north of Cataby and approximately 170 kilometers north of Perth in Western Australia. Operations began at the Cooljarloo mine in 1989 and the mine is expected to be decommissioned around 2025 to 2030. The mine employs both dredge mining and dry mining methods. Initial heavy mineral concentrate reserves at Cooljarloo were 14 million tonnes, with approximately 7 million tonnes estimated to currently be remaining and about 14 million tonnes produced to date. The mining lease covers 9,744 hectares of land, of which 1,034 hectares are owned by the Tiwest Joint Venture, 42 hectares are owned by third parties and 8,668 hectares are Crown Land (which refers to land owned by the Australian state). The south mine dredge mining operations consist of two floating dredges that mine approximately 16 to 17 million tonnes of ore and produce 400,000 to 500,000 tonnes of heavy mineral concentrate annually. The Tiwest Joint Venture is currently implementing an expansion of the dredge mining operation that is anticipated to increase mining capacity to an estimated 23 to 24 million tonnes of ore per year. This expansion is expected to be commissioned in the second half of 2012, and is expected to allow the Tiwest Joint Venture to maintain heavy mineral concentrate production from the dredge mining operation at around current levels as grades decline along the future mine path. In 2011, the concentrator plants at the Cooljarloo mine produced approximately 769,000 tonnes of heavy mineral concentrate. Capacity at the concentrator plants depends on the grade of the mine head. The north mine is a dry mining operation that utilizes contract dozers, mining approximately 4 to 5 million tonnes of high grade ore annually and produces 200,000 to 300,000 tonnes of heavy mineral concentrate annually. The capacity of the north mine and south mine mining operations is highly dependent on the digging conditions within the mines (digging is easier when the sand is loose than when it is compacted or contains layers of clay). The current north mining operations have been extended to December 2013, after which they are intended to be closed and the plant relocated to Dongara in 2014, as discussed below under The Tiwest Joint Venture Dongara Project.

Heavy mineral concentrate from the Cooljarloo mine is transported to the Chandala dry mill and synthetic rutile plant by purpose-built trailers and trucks, which principally travel on a public highway between the two sites. The Chandala dry mill produces rutile, leucoxene, ilmenite, zircon and staurolite. The Chandala dry mill's annual feed capacity is approximately 780,000 tonnes, and it produced approximately 601,000 tonnes of mineral products in 2011 at a utilization rate of 97.6% (utilization rate refers to the hours per year for which a given facility was operational).

The Chandala synthetic rutile plant uses a reduction kiln, physical separation, aeration, acid leach and drying to upgrade  $TiO_2$  ilmenite to  $TiO_2$  synthetic rutile by removing contaminants. The Chandala synthetic rutile plant's current annual capacity is 225,000 tonnes. The plant produced approximately 219,000 tonnes of synthetic rutile in 2011 at a utilization rate of 96.2%. The Tiwest Joint Venture is currently conducting feasibility studies into brownfield expansion of the synthetic rutile plant that could expand annual capacity to approximately 300,000 tonnes per year. The goal of the proposed expansion would be to allow full utilization of internal ilmenite production from the expanded dredge operation and the proposed Dongara operation.

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**The Tiwest Joint Venture Cooljarloo West Project**

The Cooljarloo West project is an exploration project immediately to the west of the existing Cooljarloo mine. If the project proves sufficient reserves, it could allow for the extension of the mine life for the existing south mine dredging operation to beyond 2030. The Cooljarloo West project is in the initial stages, with a reported resource, but further drilling is required to extend the resource and prove out reserves. Operations in the Cooljarloo West area are forecast to begin in 2016 with the goal of optimizing the overall mine life dredge path.

**The Tiwest Joint Venture Dongara Project**

The Tiwest Joint Venture is currently conducting feasibility studies into the relocation of the Cooljarloo north mine plant to Dongara, which is located about 150 kilometers north of Cooljarloo. The preferred mining method for the Dongara operation is dredging, which has a lower unit cost than dry mining and is expected to extend the life of the mine and defray fixed capital over a longer time period. Six mining leases have been granted over the Dongara site, with the relevant environmental approvals for the project expected in mid-2012. There are also 14 mining lease applications currently pending over one deposit at Dongara. We presently estimate that construction will begin in the first quarter of 2013, that dry mining will commence in the second quarter of 2014 and that dredging operations will commence in the fourth quarter of 2015.

**The Tiwest Joint Venture Jurien Project**

The Tiwest Joint Venture holds the mineral rights to property in Jurien, Western Australia. The rights were originally used for operations conducted by Australia's Western Mining Corporation in the mid-1970s, but no exploration or mining has been undertaken since that time. The Tiwest Joint Venture does not have any plans to commence activities on this project in the near future.

***Mineral Resources and Reserves***

Exxaro prepared the summary of the mineral resource and ore reserve estimates below as of December 31, 2011. Ore reserves in the context of this summary have the same meaning as mineral reserves as defined by the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves, effective July 2007 (the SAMREC Code). Exxaro preferred the term ore reserves because it clarifies the difference between ore reserves and mineral resources.

The estimates presented below are derived from the detailed mineral resource and reserve statements compiled per operation or project, each representing a comprehensive estimation process conducted by or executed under the supervision of duly appointed resource and reserve competent persons, in accordance with the SAMREC Code for the South African properties and the Australasian Joint Ore Reserves Committee Code (2004) (the JORC Code) for the Australian properties. The standards in the SAMREC Code and the JORC Code differ in certain respects from those under the SEC's Industry Guide 7. For example, the mineral resource and reserve statement below contains disclosures relating to measured, indicated and inferred mineral resource estimates. Measured, indicated and inferred mineral resources, while recognized and required by South African and Australian regulations, are not defined terms under the SEC's Industry Guide 7. Accordingly, our future disclosures of mineral reserves prepared in accordance with the SEC's Industry Guide 7 may differ substantially from the information set forth below.

All competent persons have sufficient relevant experience in the style of mineralization, type of deposit, mining method and activity for which they are responsible. The competent persons who prepared the Exxaro Mineral Sands resource and reserve estimates are as follows: Noxolo Zwane was the resource competent person and the reserves competent person for the Hillendale mine and the reserves competent person for Fairbreeze; Dumi Sibiyi was the resource competent person for Fairbreeze, Block P and the Port Durnford project; Carel van Vuuren was the resource competent person and Marthina Alchin was the reserves competent person for the Namakwa Sands mine; and Paul Stevenson was the resource competent person and the reserves competent

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person for the Cooljarloo mine, the Jurien project and the Dongara project. All of the competent persons who prepared the Exxaro Mineral Sands resource and reserve estimates were employees of Exxaro or the Tiwest Joint Venture prior to the Transaction, and all of the information included in the Exxaro Mineral Sands resource and reserve estimates is attributed to Exxaro.

The mineral resources that fall within Exxaro Mineral Sands's mining and prospecting rights areas are based on models which incorporate all new validated geological information and, if applicable, revised resource definitions and classifications. The Exxaro Mineral Sands resources were reviewed during 2011 to comply with the reasonable and realistic prospects for eventual economic extraction in accordance with the SAMREC Code. This definition implies that the competent person made a preliminary judgment regarding technical and economic factors likely to influence the property in terms of eventual and economic extraction. The mineral resources are classified in the inferred, indicated and measured categories according to the degree of geological confidence. Mineral resources are reported inclusive of those that have been converted to ore reserves and are presented as if they are wholly-owned, irrespective of the percentage attributable to Exxaro Mineral Sands.

Exxaro estimates ore reserves using the relevant modifying factors at the time of reporting, which include mining, metallurgical, economic, marketing, legal, environmental and social factors as well as governmental regulatory requirements. Measured mineral resources are converted to proven ore reserves and indicated mineral resources are converted to probable ore reserves, although the competent person may, after due consideration of one or more of the modifying factors, downgrade the classification. For example, the SAMREC Code provides that measured resources may be converted to probable ore reserves in the event that uncertainties associated with any of the modifying factors considered when converting mineral resources to mineral reserves resulted in a lower degree of confidence in the mineral reserves than in the corresponding mineral resources.

Because ore reserves are only estimates, they cannot be audited for the purpose of verifying exactness. Instead, estimated ore reserve information is reviewed in sufficient detail to determine if, in the aggregate, the data provided by Exxaro is reasonable and sufficient to estimate reserves in conformity with the practices and standards generally employed by and within the mining industry and that are consistent with the requirements of the SAMREC Code, for South African operations, and the JORC Code, for Australian operations. The process and calculations associated with the estimates have been audited by an internal competent person and are externally audited when deemed essential.

The Exxaro Mineral Sands mining rights are all of sufficient duration (or convey a legal right to convert or renew for a sufficient duration) to enable all reserves to be mined in accordance with current production schedules.

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The following table summarizes the Exxaro Mineral Sands proven and probable ore reserves and estimated mineral resources as of December 31, 2011.

Operation <sup>1</sup>	Date Mine Opened	LoMP (years) <sup>2</sup>	Resource Category <sup>3</sup>	Tonnes <sup>4</sup>	Grade		Reserve Category	ROM <sup>8</sup>	Grade		Composition of THM		
					% Ilmenite	% other <sup>5</sup>			% THM	% Ilmenite	% Zircon	% Rutile	% Leucoxene
Hillendale	2001	1.5	Measured	24.2	2.76								
			Indicated				Proven <sup>6</sup>	7.3	5.88	56.12	7.14	3.91	2.04
			Inferred				Probable <sup>7</sup>						
			Total	24.2	2.76	Total	7.3	5.88	56.12	7.14	3.91	2.04	
Fairbreeze	2014 (expected)	15	Measured	156.1	4.29								
			Indicated	55.7	2.56	Proven	114.3	7.74	62.73	8.52	3.46	1.71	
			Inferred	9.0	1.92	Probable	25.4	5.02	56.19	7.81	3.29	1.50	
			Total	220.9	3.76	Total	139.6	7.24	61.90	8.43	3.44	1.69	
Block P <sup>10</sup>			Measured										
			Indicated	40.6	3.05								
			Inferred										
			Total	40.6	3.05								
Port Durnford prospecting project <sup>9,11</sup>			Measured	142.5	3.04								
			Indicated	340.1	2.75								
			Inferred	466.0	2.52								
			Total	948.6	2.68								
Centane prospecting project <sup>10,11</sup>			Measured	226.2	4.60								
			Indicated	9.9	3.30								
			Inferred	19.8	3.90								
			Total	255.9	4.50								
Namakwa Sands	1995	20	Measured	434.7	2.90	0.61							
			Indicated	360.712	2.72	0.72	Proven	185.5	9.68	33.78	9.71	2.58	7.23
			Inferred	82.0	2.59	0.58	Probable	272.412	7.82	36.83	9.46	2.43	6.01
			Total	877.4	2.79	0.64	Total	457.913	8.57	35.47	9.57	2.57	6.53
Tiwest-Cooljarloo	1989	15	Measured	207.3	2.10								
			Indicated	192.8	1.90	Proven	207	2.20	59.30	9.30	5.00	2.70	
			Inferred			Probable	57.7	2.10	56.10	9.50	4.70	3.00	
			Total	399.9	2.10	Total	264.7	2.20	58.60	9.40	5.00	2.80	
Tiwest-Cooljarloo West prospecting project <sup>11</sup>			Measured										
			Indicated	111.0	1.80								
			Inferred	86.0	1.80								
			Total	197.0	1.80								

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Tiwest-Jurien project	5.2	Measured	25.6	3.20	6.02	Proven	15.7	7.90	53.64	10.41	6.84	2.26
		Indicated Inferred										
		Total	25.6	3.20	6.02	Total	15.7	7.90	53.64	10.41	6.84	2.26
Tiwest-Dongara project	9.8	Measured	55.2	2.21	4.54	Proven	29.5	7.32	48.60	6.95	1.98	10.05
		Indicated Inferred										
		Total	83.1	2.18	4.48	Total	29.5	7.32	48.60	6.95	1.98	10.05

- 1 All extraction methods are open-cut mining operations.
- 2 LoMP stands for Life of Mine Plan, which means either the total number of years needed to extract reserves from a designed mine pit, or a design and costing study of an existing operation in which appropriate assessments have been made of realistic assumed modifying factors to demonstrate at the time of reporting that extracting is reasonably justified.
- 3 Mineral resources are quoted inclusive of mineral resources that have been modified to ore reserves.
- 4 Tonnages are quoted in metric million tonnes. The Tiwest Joint Venture is indirectly owned and operated by us following the consummation of the Transaction.
- 5 Other refers to zircon for Namakwa Sands and percentage of total heavy minerals ( THM ) for the Tiwest Joint Venture operations.
- 6 Proven reserves means the economically mineable material derived from a measured resource. Proven reserves are estimated with a high level of confidence, include contaminating materials and allow for losses that are expected to occur when the material is mined.

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- 7 Probable reserves means the economically mineable material derived from a measured or indicated resource, or both. Probable reserves are estimated at a lower level of confidence than proven reserves, include contaminating materials and allow for losses that are expected to occur when the material is mined.
- 8 ROM stands for Run of Mine, which is a mining term that means a stockpile of ore that has been created without any blending or processing, meaning that the ore has been mined and transported to the stockpile location in its original condition. ROM is quoted in millions of tonnes.
- 9 A renewal for the Port Durnford prospecting right has been submitted. The outcome is still pending.
- 10 A renewal for the Centane prospecting right has been submitted. The outcome is still pending.
- 11 Block P, Port Durnford, Centane and Cooljarloo West are exploratory programs without known reserves.
- 12 A portion of the measured resources within Namakwa Sands's mining right, but falling outside the boundary of the approved environmental management plan (EMP), was converted to probable reserves pending approval from the DMR to extend Namakwa Sands's EMP boundary. Exxaro Mineral Sands submitted an application to the DMR to extend the Namakwa Sands's EMP boundary, which was approved on March 28, 2012.
- 13 In 2011, the Namakwa Sands proven and probable reserves amount decreased by approximately 130 million tonnes from the 2010 amount due to mining of the reserves and the exclusion in 2011 of the east orange feldspathic sand (EOFS) material from Namakwa Sands's life of mine and mineral reserves following a pre-feasibility study conducted in 2011, which concluded that building a proposed new plant to process the EOFS material was not currently economically feasible. The EOFS material, however, still remains part of Namakwa Sands's mineral resources, and Exxaro Mineral Sands is investigating alternative technologies for processing the EOFS material.

The following table summarizes the material factors Exxaro used to modify the Exxaro Mineral Sands estimated mineral resources as of December 31, 2011 to ore reserves, as shown in the table above.

Factor	KZN Sands <sup>1</sup>	Namakwa Sands	Tiwist
<b>Mining parameters</b>			
Geological loss	0%	RAS <sup>2</sup> : 2%, OFS <sup>3</sup> : 0%	0%
Dilution	n/a	n/a	6%
Mining loss	n/a	RAS: West Mine, 0%, East Mine, 3%, OFS: All, 0%	1%
Planned averaged slope angles (degrees)	30	45	South Mine: 30 North Mine: 45
Cut-off grade	Hillendale: 1.5% Ilmenite Fairbreeze: 2.0% Ilmenite	0.2% Zircon	1.3% THM
<b>Reconciliation factor<sup>4</sup></b>			
Ilmenite	1	1	1
Zircon	1	1	1
Rutile	1	1	1
Leucoxene	1	1	1
VHM <sup>5</sup>	n/a	n/a	1.06
<b>Primary wet/processing</b>			
<b>plant recoveries</b>			
HMC <sup>6</sup> grade <sup>7</sup>	87% > HMC < 92%	90%	95%
Ilmenite	91.2%	n/a	92%
Zircon	93.2%	92%	96%
Rutile	90.2%	n/a	94%
Leucoxene	n/a	n/a	85%
<b>Secondary processing</b>			
<b>plant recoveries</b>			
Ilmenite	n/a	n/a	94%
Zircon	n/a	86%	98%
Rutile	n/a	78%	96%
Leucoxene	n/a	n/a	91%

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Factor	KZN Sands <sup>1</sup>	Namakwa Sands	Tiwest
<b>Mineral separation plant recoveries</b>			
Ilmenite	80%	86%	97%
Ilmenite (URIC <sup>8</sup> )	85%	n/a	n/a
Zircon	83%	69%	81%
Rutile <sup>9</sup>	98%	75%	109% <sup>9</sup>
Leucoxene <sup>9</sup>	n/a	n/a	114% <sup>9</sup>
<b>Yield smelter/kiln</b>			
Titanium slag	55	52	n/a
Pig iron	32	32	n/a
Synthetic rutile	n/a	n/a	n/a
<b>Financials</b>			
Exchange rate <sup>10</sup>	7.08 (R/US\$)	7.15 (R/US\$)	0.90 (A\$/US\$)
<b>Price per tonne (in U.S. dollars)</b>			
Ilmenite	300	n/a	319.53
Zircon	2,450	2,403	Bulk: 1,885.47; Bagged: 2,055.03
Rutile	1,690	599	Bulk: 834.69; Bagged: 884.84
Leucoxene	n/a	n/a	Leu 85: 595.74; Leu 92: 672.53
Slag (chloride process)	760	788	n/a
Slag (sulphate process)	857	824	n/a
Slag fines	n/a	n/a	n/a
Pig iron	503	481	n/a
Synthetic rutile	n/a	n/a	n/a
Staurolite	n/a	n/a	79
<b>Other</b>			
Mining/prospecting rights/permits/titles	Approvals	Approvals	Approvals
Environmental approvals	Approvals	Approvals	Approvals
Water use licenses	Approvals	Approvals	Approvals

1 KZN Sands comprises the Hillendale and Fairbreeze operations.

2 RAS stands for Namakwa Sands' s red aeolian sand unit.

3 OFS stands for Namakwa Sands' s orange feldspathic sand unit.

4 The reconciliation factor represents the geological model to run of mine (ROM)

5 VHM stands for valuable heavy minerals.

6 HMC stands for heavy mineral concentrate.

7 The HMC grade represents the percentage of total heavy minerals (THM) in the HMC.

8 URIC stands for unroasted ilmenite circuit.

9 Tiwest uses a magnetic/electrostatic process combined with x-ray fluorescence to determine mineral assemblage using its proprietary MA98 process. The MA98 process has not yet been modified to match the configuration of the mineral separation plant; therefore, recoveries of greater than 100% are reported.

10 Prices are forward-looking average estimates over future periods.



**Table of Contents****Competitive Conditions*****The Titanium Feedstock Market***

Titanium feedstock is considered to be one product, although it can be segmented based on the level of titanium contained within the feedstock, with substantial overlap between each segment. Different grades of titanium feedstock have similar characteristics and are generally suitable substitutes for one another, therefore, TiO<sub>2</sub> producers source a variety of feedstock grades, and each of the main titanium feedstock producers supply a wide variety of feedstock grades to the TiO<sub>2</sub> producers. At the high end of the scale, synthetic rutile and upgraded slag have been developed as direct substitutes for naturally occurring rutile. Each of these feedstock grades has a titanium content of more than 90.0%. Naturally occurring leucoxene has a titanium content that ranges from approximately 70% to 91% and may also be substituted for naturally occurring rutile. Chloride ilmenite is either used directly in the pigment production process or, more commonly, is upgraded to synthetic rutile. Sulfate ilmenite may also be used directly in the production of sulfate process pigment. Sulfate ilmenite is commonly upgraded to upgraded slag, chloride slag, chloride fines and sulfate slag.

Chloride process pigment producers primarily use naturally occurring rutile, leucoxene and ilmenite, upgraded slag, synthetic rutile and chloride slag. Sulfate process pigment producers primarily use naturally occurring ilmenite, sulfate slag and chloride fines. Ilmenite with a titanium content greater than 50.0% can be used in both the chloride and sulfate pigment production processes.

The majority of titanium feedstock producers supply several different grades of feedstock to the market. The global resources company Rio Tinto plc, for example, offers a comprehensive range of feedstock grades, including natural rutile, upgraded slag, chloride slag, chloride fines and sulfate slag. Iluka Resources Limited has a large presence for the supply of ilmenite, natural rutile and synthetic rutile. Bemax Resources Limited produces and supplies both ilmenite and natural rutile.

The geographic market for titanium feedstock is global in scope, and TiO<sub>2</sub> producers regularly source and transport titanium feedstock from suppliers located around the world. The following table shows the global trade of titanium feedstock during 2010, in tonnes, based on information provided by TZMI and our own internal calculations.

**EXPORTS****IMPORTS**

	Asia-Pacific	Africa & Middle East	Western Europe & Scandinavia	Central & Eastern Europe	North America	Central & South America
<b>Asia-Pacific</b>		36,081	297,398	91,890	441,929	78,963
<b>Africa &amp; Middle East</b>	448,900		471,095	49,391	1,072,813	41,007
<b>Western Europe &amp; Scandinavia</b>	2,234			145,036		34,097
<b>Central &amp; Eastern Europe</b>	10,051				62,599	27,754
<b>North America</b>	77,911		394,235			
<b>Central &amp; South America</b>			35,504			

The table above shows that approximately 3.8 million tonnes of titanium feedstock were traded among the six main world regions. This is equal to approximately 44% of all titanium feedstock sold in 2010 (around 8,537,000 tonnes), including domestic and intra-regional sales. Large volumes of titanium feedstock were traded from Africa and the Middle East to North America, Western Europe and Scandinavia and the Asia-Pacific region. Significant volumes were also traded from the Asia-Pacific region to North America and Western Europe and Scandinavia and from North America to Western Europe and Scandinavia.

We do not consider transport costs to be a deterrent for sales of titanium feedstock, because the inter-regional shipping costs to Europe, Asia and North America are generally offset by the relatively lower labor costs in South Africa, as compared with Europe and North America. Titanium feedstock is typically priced on a Free-on-Board basis, meaning that the feedstock producers pay for transport and logistics to load the feedstock

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onto a vessel for transportation. The feedstock purchaser (i.e., the pigment producer) then pays the shipping cost. Pigment producers are primarily concerned with the delivered price and, where shipping costs are higher or increase for existing customers, feedstock producers typically absorb any price differential to ensure that supply contracts are met.

Exxaro Mineral Sands' competitive advantages are its depth of experience in various mining methods and technologies, its ability and know how to produce upgraded products by means of direct current smelting of ilmenite and the synthetic rutile process, and its capacity to market zircon and rutile for use in a broad range of end-use applications. Exxaro Mineral Sands' competitive disadvantages are the relative distance between its mining operations and its processing plants at Namakwa Sands and the Tiwest Joint Venture, as well as the relatively short life of its mining operation at KZN Sands and the Tiwest Joint Venture, which necessitates increased expenditures for exploration and development of new mines. We do not consider that these relative competitive disadvantages constitute a material risk to its business.

**Exxaro Mineral Sands' Competitive Position**

Based on data reported by TZMI, and our own internal estimates, in 2010 Exxaro Mineral Sands (including 100% of the Tiwest Joint Venture) was the third largest titanium feedstock producer with approximately 10% of global titanium feedstock production. The largest titanium feedstock producer is the global company Rio Tinto, which had a market share by value of approximately 37.7% in 2010. Australian-based Iluka Resources Limited is the second largest manufacturer, with operations in Australia and the United States, and a market share by value of approximately 15.6% in 2010. A number of other manufacturers, such as Cristal (Saudi Arabia), Eramet SA (France), Kenmare Resources plc (Ireland), Kronos Worldwide Inc. (Europe), Pangang Titanium Industry Co Ltd (China), Kerala Mines and Metals Limited (India) and Ostchem Holding AG (Eastern Europe) also supply to the global market.

The table below shows our estimates of the worldwide titanium feedstock sales during 2010 by producer, based on the total amount of metric tonnage sold in 2010, as estimated by us based on its knowledge of the titanium feedstock industry, and the average price reported by TZMI for 2010.

	Sales by Volume <sup>7</sup>		Sales by Value <sup>8</sup>	
	Tonnes	Market share(%)	U.S. Dollars (in millions)	Market share(%)
Rio Tinto plc <sup>1</sup>	2,009,000	22.0	854.4	37.7
Iluka Resources Limited	1,324,000	14.5	354.6	15.6
<b>Exxaro Mineral Sands<sup>2</sup></b>	<b>493,000</b>	<b>5.4</b>	<b>216.5</b>	<b>9.6</b>
Cristal <sup>3</sup>	314,000	3.4	79.9	3.5
Eramet SA <sup>4</sup>	210,000	2.3	68.0	3.0
Kenmare Resources plc <sup>5</sup>	645,000	7.1	66.6	2.9
Others <sup>6</sup>	4,146,000	45.3	626.9	27.7
Total	9,141,000	100	2,266.9	100

- 1 Rio Tinto's sales data includes sales made by its wholly-owned subsidiary, Canada-based Fer et Titane Inc (QIT), and its 37.0% interest in the largest titanium feedstock producer, South African company Richards Bay Minerals.
- 2 Exxaro Mineral Sands' sales data includes sales made by KZN Sands and Namakwa Sands and 100.0% of the feedstock sales made by the Tiwest Joint Venture.
- 3 Cristal's sales data includes sales made by Cristal Australia Pty Ltd and its wholly-owned subsidiary, Australian company Bemax Resources Limited.
- 4 Eramet's sales data includes sales made by its wholly-owned subsidiary, Norwegian company Tinfos Titan & Iron AS.

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- 5 Kenmare's sales data includes sales made by its wholly-owned subsidiary, Mozambique company Moma Titanium Mineral Mine.
- 6 Others includes Chinese manufacturers, estimated to account for approximately 8% of global feedstock sales by value and 13% of sales by volume in 2010.
- 7 Volume represents sales of chloride ilmenite, sulfate ilmenite, natural rutile, synthetic rutile, chloride slag, sulfate slag (including chloride fines), leucoxene and upgraded slag. Volume values for competitors are derived from 2010 amounts of tonnage sold.
- 8 Sales value for Exxaro Mineral Sands based on U.S. Federal Reserve average exchange rate for 2010 (\$1.00 = R7.30). Sales values for competitors are derived from 2010 sales volume and are based on prices per tonne.

As a result of the global economic downturn, demand for titanium feedstock decreased in 2008 and 2009. This led to a reduction in the level of investment in new mining projects and a reduction in titanium feedstock production. The increase in demand during 2010 and 2011 resulted in increasing prices for titanium feedstock, which was further compounded by the historic lack of investment and decreased output during the downturn. This limited availability is expected to continue in the short to medium term.

As a result of the limited supply of titanium feedstock, the global TiO<sub>2</sub> market is also tight. Due to increasing demand for TiO<sub>2</sub> in 2010 and 2011, major TiO<sub>2</sub> producers are operating at near full capacity and, as a result of limited availability of titanium feedstock, TiO<sub>2</sub> producers are constrained in their ability to meet any further demand by expanding capacity. Access to titanium feedstock is critical in order to effect any meaningful capacity increases.

***The Zircon Market***

Zircon consumption is driven by a number of end-use applications based on its unique properties, including opacification, wear resistance, chemical and thermal stability and electrical properties. The major end-use market for zircon is ceramics, followed by its use in zirconia and zirconium chemicals, refractories, foundries and other uses. Based on data reported by TZMI, in 2010, the largest demand for zircon came from China, representing approximately 42% of global zircon demand, followed by Europe, representing approximately 24% of global zircon demand, and the Asia-Pacific region, representing approximately 18% of global zircon demand. Demand in these regions is largely tied to the strength of the ceramics industries, as well as continued economic growth and a strong manufacturing sector.

TZMI has estimated that approximately three-quarters of the total global zircon supply comes from South Africa and Australia. The top three zircon suppliers in 2010 were Iluka, Exxaro Mineral Sands (including 100% of the Tiwest Joint Venture) and Richards Bay Minerals, representing approximately 33%, 20% and 17%, respectively, of the total zircon sand production.

Zircon producers generally compete on the basis of price, quality, logistics, delivery and payment terms and consistency of supply. Exxaro Mineral Sands has competitive advantages over its competition due to quality, long-term relationships with customers and product range. Exxaro Mineral Sands's primary competitive disadvantage relative to its major competitors is its distance from its main consumers (i.e., Asia and Europe).

Global demand for zircon is strong and is expected to remain so due to increased urbanization, especially in developing economies such as China. Over the remainder of the decade, the global supply/demand deficit is likely to grow. Zircon prices are expected to continue to rise as a result.

***The High Purity Pig Iron Market***

Based on data reported by TZMI, pig iron produced from the mining and beneficiation of titanium feedstock accounted for approximately 3.5% of total global pig iron production in 2010. High purity pig iron produced from mineral sands mining is generally marketed to the steel industry, which uses pig iron in electric arc furnaces

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and the foundry or metal casting industry, for which pig iron is a key raw material. The three largest mineral sands producers who also produce high purity pig iron are Rio Tinto (through its QIT and Richards Bay Minerals operations), Exxaro Mineral Sands (excluding the Tiwest Joint Venture), and Eramet, which in 2010 produced 1,385,000 tonnes, 154,000 tonnes and 115,000 tonnes, respectively.

Pig iron producers typically make use of agents, principal agents or representing officers based within the target market. Pig iron sold to steel producers is normally sold per barge or even per ship load, while foundries tend to buy on a per truck load basis. Pricing is normally market-related, as published by various publications, for basic pig iron, and may vary as a function of quality (i.e., the purer the specification, the higher the value). Sales contracts vary from spot to 3-month supply; very seldom are the commitments longer.

### **Sales and Marketing**

Direct relationship marketing is the primary technique employed by Exxaro Mineral Sands for the marketing of titanium feedstocks. Multi-year contracts are negotiated with annual or half-yearly pricing for the pigment industry, while the contract period tends to be less than one year (either per shipment, quarterly, half-yearly or one year) for feedstock going into the welding rod industry. Pricing for titanium feedstocks is usually adjusted either on a quarterly or half-yearly basis. In some instances, Exxaro Mineral Sands uses traders or agents for the sale of titanium feedstocks.

A portion of the zircon produced at Namakwa Sands is supplied on long-term multi-year tonnage contracts with some of Exxaro Mineral Sands's larger European customers. The tonnage is subject to agreement on pricing, which Exxaro Mineral Sands negotiates at quarterly intervals or on a shipment-by-shipment basis. For customers of KZN Sands, and for smaller customers of Namakwa Sands, Exxaro Mineral Sands contracts zircon tonnage and pricing on a quarterly basis. Exxaro Mineral Sands seeks to avoid the use of agents and traders for the sale of zircon, favoring long-term relationships directly with end users.

Pig iron produced by Exxaro Mineral Sands is sold via agents. The agents either purchase the material directly from Exxaro Mineral Sands or sell the material on Exxaro Mineral Sands's behalf.

The Tiwest Joint Venture does not sell or market its own products.

Exxaro Mineral Sands is not dependent upon any single customer, or a few customers, the loss of any one or more of which would have a material adverse effect on Exxaro Mineral Sands's business.

Based on 2011 revenues, the percentage of titanium feedstock sales to Tronox Incorporated accounted for 6% of Exxaro Mineral Sands's total revenue. Based on 2011 revenues, titanium feedstock sales to Tronox Incorporated combined with TiO<sub>2</sub> pigment sales to Tronox Incorporated accounted for 29% of Exxaro Mineral Sands's total revenue. Following completion of the Transaction, we expect that the percentage of titanium feedstock to be used for Tronox Incorporated's operations within the combined group will increase.

### **Backlog Orders**

The dollar amounts of Exxaro Mineral Sands's backlog orders believed to be firm at the end of 2011 were \$11,418,690 for KZN Sands, \$30,839,480 for Namakwa Sands and \$2,617,018 for Exxaro's former 50.0% interest in the Tiwest Joint Venture. The dollar amounts of Exxaro Mineral Sands's backlog orders believed to be firm as of the end of 2010 were \$8,156,061 for KZN Sands, \$9,198,548 for Namakwa Sands and \$1,854,578 for Exxaro's former 50.0% interest in the Tiwest Joint Venture. The increase in the backlog orders for KZN Sands and Namakwa Sands was caused by shipping delays during the fourth quarter of 2011. Transportation delays are a logistical factor over which Exxaro Mineral Sands has only limited control, as further discussed under Risk Factors. The capacity and cost of transportation facilities, as well as transportation delays and interruptions, could adversely affect our ability to supply titanium feedstock to its pigment operations and its products to its customers. The increase in the backlog orders for Exxaro's former 50.0% interest in the Tiwest Joint Venture

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was mainly due to shipment rollovers from 2010 to 2011. All rollover shipments for Exxaro's former 50% interest in the Tiwest Joint Venture were completed in January 2012. We expect the backlog to be filled by the end of the second quarter of 2012.

### **Seasonality**

Because TiO<sub>2</sub> is widely used in paint and other coatings, titanium feedstocks are in higher demand prior to the painting season (spring and summer in the Northern Hemisphere), and pig iron is in lower demand during the European summer holidays, when many steel plants and foundries undergo maintenance. Zircon generally is a non-seasonal product but is negatively impacted by the Chinese New Year holiday due to reduced zircon demand from China.

### **Exxaro Mineral Sands Licenses and Leases**

#### ***South Africa***

Exxaro Mineral Sands's primary South African mining rights are the Hillendale and Fairbreeze mining rights and the Namakwa Sands mining rights.

The Fairbreeze Conversion mining right is an old order mining right in respect of ilmenite, rutile and zircon (heavy minerals), which was converted to a new order right and executed by the DMR on March 23, 2010 and is valid for a period of 30 years. For a discussion of old order and new order mining rights, see Regulation of the Mining Industry in South Africa and Australia Mining Regulation in South Africa The MPRDA.

The Fairbreeze C Extension mining right is a new order mining right in respect of ilmenite, rutile and zircon (heavy minerals), which was originally granted to Exxaro Sands and executed by the DMR on April 9, 2009 and is valid for a period of 30 years.

The Hartebeestekom mining right at Namakwa Sands is an old order mining right in respect of heavy minerals (general), which was converted to a new order mining right and ceded by Anglo Operations Limited to Exxaro TSA Sands on August 25, 2008. The Hartebeestekom mining right is valid for a period of 30 years, until 2038.

The Rietfontein Conversion mining right at Namakwa Sands is an old order mining right in respect of heavy minerals (general), which was converted to a new order mining right and ceded by Anglo Operations Limited to Exxaro TSA Sands on August 25, 2008. The Rietfontein Conversion mining right is valid for a period of 30 years, until 2038.

The Hillendale mining right at KZN Sands is an old order mining right in respect of heavy minerals (general), which was converted to a new order mining right on March 23, 2010. The Hillendale mining right is valid for a period of 25 years, until 2035.

An application for renewal of a mining right must be submitted within 60 working days prior to the mining right's expiry date. A mining right may be renewed for further periods, each of which may not exceed 30 years. The Minister of Mineral Resources must grant a renewal of a mining right if the holder has complied with the terms and conditions of the mining right and is not in contravention of any provision of South African law.

#### ***Australia***

There is one mining lease for the Tiwest Joint Venture's operations at Cooljarloo, which was granted on March 2, 1989 for a term of 21 years. The term was extended for an additional 10 years in 2010, and will expire on March 1, 2020 (unless the term is further extended).

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The Tiwest Joint Venture operations are also governed by a State Agreement with the State of Western Australia which was approved and ratified by the Parliament of Western Australia. State Agreements are contracts between the government of Western Australia and the proponents of major resources projects, and are ratified by an Act of the State Parliament. State Agreements specify the rights, obligations, terms and conditions for the development of major resources projects, and establish a framework for ongoing relations and cooperation between the State and the proponent of the project. The relevant State Agreement relating to the Tiwest Joint Venture is the agreement authorized and scheduled to the Mineral Sands (Cooljarloo) Mining and Processing Agreement Act 1988 (WA).

The Tiwest Joint Venture has three mining leases at Jurien, which were all granted in 1989 and which were all extended in 2010 for an additional 21 year term ending in 2031. No mining or processing activity has been conducted at Jurien since 1994.

The Tiwest Joint Venture has six mining leases over the Dongara Project area. The Tiwest Joint Venture is in the process of having a Public Environmental Review performed on the Dongara Project area in order to obtain approval to mine from the Environmental Protection Authority (Western Australia). Fourteen additional mining leases over the Dongara Project area are currently under application and are progressing through the future act process under the Native Title Act 1993 (Cth) the ( Native Title Act ) prior to being granted by the Department of Mines and Petroleum.

The Tiwest Joint Venture also manages six exploration licenses at Cooljarloo West, for areas which are currently under active exploration.

## **Research and Development**

We have a research and development section that services all of Exxaro Mineral Sands' commodities. The research and development section focuses on applied research and development testing of both new and existing processes. The research and development facility has an area dedicated to heavy minerals in order to prevent contamination and has both laboratory and pilot scale equipment, mostly for physical beneficiation processes. The facility also has a strong mineralogy section. For the past three years, the research and development section spent approximately R5.0 million (\$0.7 million) per year on development projects. This figure does not include the cost of test work for feasibility studies, which can vary significantly from year to year.

## **Patents, Trademarks, Trade Secrets and Other Intellectual Property Rights**

Proprietary protection of Exxaro Mineral Sands' intellectual property is important to its business. Exxaro Mineral Sands has a comprehensive intellectual property strategy that includes obtaining, maintaining and enforcing its patents, trademarks and other intellectual property.

### ***Patents***

Exxaro Mineral Sands owns three patents (including provisional patent grants) and has another four pending patent applications, and its patents are protected in most of its primary markets. Exxaro Mineral Sands also relies on intellectual property for its Namakwa Sands operations which was granted to Exxaro Mineral Sands in perpetuity by Anglo American South Africa Limited for use on a worldwide basis, pursuant to a non-exclusive license. None of Exxaro Mineral Sands' patents are due to expire in the next five years. While a presumption of validity exists with respect to issued patents, any of Exxaro Mineral Sands' patents could be challenged, invalidated, circumvented or rendered unenforceable. Furthermore, we cannot assure the issuance of any pending patent application or, if patents do issue, that they will provide meaningful protection against competitors or against competitive technologies. In addition, Exxaro Mineral Sands' competitors or other third parties may obtain patents that restrict or preclude its ability to lawfully produce or sell its products in a competitive manner.

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### ***Trademarks and Trade Secrets***

Exxaro Mineral Sands has 14 trademark registrations (including applications for registrations currently pending) in South Africa and Australia. Exxaro Mineral Sands protects the trademarks that it uses in connection with the products it manufactures and sells and has developed goodwill in connection with its long-term use of its trademarks, however, there can be no assurance that the trademark registrations will provide meaningful protection against the use of similar trademarks by competitors, or that the value of Exxaro Mineral Sands' trademarks will not be diluted.

Exxaro Mineral Sands also uses and relies upon unpatented proprietary know-how, continuing technological innovation and other trade secrets to develop and maintain its competitive position. Exxaro Mineral Sands conducts research activities and protects the confidentiality of its trade secrets through reasonable measures, including confidentiality agreements and security procedures.

### **Regulation of the Mining Industry in South Africa and Australia**

#### ***Mining Regulation in South Africa***

The South African Minerals Act of 1991 established legislation to provide for the health and safety of mine workers and to regulate orderly utilization and rehabilitation of the land surface during and after prospecting and mining operations. Following the 1993 amendment of the South African Minerals Act, each new mine must prepare an Environmental Management Program Report (an EMPR) for approval by the DMR. An EMPR is a single document that is meant to satisfy all South African government departments, from Agriculture to Water Affairs and Forestry, and is intended to simplify and standardize the reporting and monitoring procedures governing environmental management of individual mining enterprises. EMPRs cover the environmental impacts of a mine during its life, up to the point where the DMR issues a closure certificate. EMPRs must specify provisions for environmental management during the construction, operational, decommissioning and aftercare phases. EMPRs also set out timetables and the extent of financial commitments to cover each phase of management.

#### **The MPRDA**

The MPRDA came into effect on May 1, 2004, and vests all mineral rights in South Africa in the state (including the right to grant prospecting and mining rights). The objectives of the MPRDA are, among other things, to promote equitable access to the nation's mineral resources by South Africans, expand opportunities for historically disadvantaged persons (HDSAs) who wish to participate in the South African mining industry, advance social and economic development and create an internationally competitive and efficient administrative and regulatory regime based on the universally accepted principle (consistent with common international practice) that mineral resources are part of a nation's patrimony.

There are four principal authorizations available under the MPRDA with respect to minerals: a reconnaissance permission, a prospecting right, a mining right and a retention permit. A reconnaissance permission may be applied for in order to search for minerals by way of geological and geophysical surveys. A reconnaissance permission is valid for two years and is not renewable. Prospecting rights are initially granted for a maximum period of five years and can be renewed once upon application for a further period not exceeding three years. Mining rights are valid for a maximum period of 30 years and can be renewed upon application for further periods, each of which may not exceed 30 years. The MPRDA provides for the grant of retention permits, which would have a maximum term of three years, and which could be renewed once upon application for a further two years.

The Minister of Mineral Resources considers a wide range of factors and principles when deciding whether to grant prospecting and mining rights applications, including proposals relating to black economic empowerment and social responsibility. A mining right can be cancelled if the mineral to which such mining right relates is not mined at an optimal rate.

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Mining rights that existed before the date on which the MPRDA came into effect are referred to as old order mining rights. Old order mining rights were in turn classified as either used or unused. Unused rights were rights under which no prospecting or mining activity took place immediately before the commencement of the MPRDA, whereas used rights were rights under which prospecting or mining activity did take place immediately before the commencement of the MPRDA. The MPRDA required holders of used old order mining rights to apply for conversion of those rights into mining rights granted under the MPRDA, referred to as new order mining rights, by April 30, 2009, and required holders of unused rights to apply for conversion on or before April 30, 2005. Any used old order rights for which a conversion application was not filed by April 30, 2009, and any unused old order rights for which a conversion application was not filed by April 30, 2005, were terminated. All mining rights granted under the MPRDA, either through conversion or pursuant to new applications after the MPRDA came into effect, are referred to as new order mining rights. In accordance with the transitional arrangements of the MPRDA, all applications for prospecting permits, mining authorizations, consent to prospect or mine and all Environmental Management Programs made under the South African Minerals Act but not finalized or approved before May 1, 2004 (the date on which the MPRDA took effect), are treated as having been made under the MPRDA.

The South African government published the Broad Based Socio-Economic Charter for the South African Mining Industry in April 2004 (as amended in 2010) (the Mining Charter). The Mining Charter states that it is not the government's intention to nationalize the mining industry. Instead, the Mining Charter's stated objectives are to:

promote equitable access to South Africa's mineral resources for all the people of South Africa;

substantially and meaningfully expand opportunities for HDSAs and women to enter the mining and minerals industry and to benefit from the exploitation of South Africa's mineral resources;

utilize the existing skills base for the empowerment of HDSAs;

expand the skills base of HDSAs in order to serve the community;

promote employment and advance the social and economic welfare of mining communities and areas supplying mining labor; and

promote beneficiation of South Africa's mineral commodities beyond mining and processing, including the production of consumer products.

To achieve its objectives, the Mining Charter requires that, within five years of its effective date, each mining company must achieve a 15.0% HDSA ownership of mining assets and, within ten years of its effective date, a 26.0% HDSA ownership of mining assets. Ownership can comprise active involvement, involvement through HDSA-controlled companies (where HDSAs own at least 50.0% plus one share of the company and have management control), strategic joint ventures or partnerships (where HDSAs own at least 25.0% plus one vote of the joint venture or partnership interest and there is joint management and control) or collective investment vehicles, the majority ownership of which is HDSA based, or passive involvement, particularly through broad-based vehicles such as employee stock option plans. The Mining Charter envisages measuring progress on transformation of ownership by:

taking into account, among other things, attributable units of production controlled by HDSAs;

allowing flexibility by credits or offsets so that, for example, where HDSA participation exceeds any set target in a particular operation, the excess may be offset against shortfalls in another operation;



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taking into account previous empowerment deals in determining credits and offsets; and

considering special incentives to encourage the retention by HDSAs of newly acquired equity for a reasonable period.

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The Mining Charter envisages that transactions will take place in a transparent manner and for fair market value, with stakeholders meeting after five years to review progress in achieving the 26.0% target. Under the Mining Charter, the mining industry as a whole agreed to assist HDSA companies in securing financing to fund participation in an amount of R100.0 billion (\$12.4 billion) over the first five years, after which HDSA participation will be increased on a willing seller-willing buyer basis, at fair market value, where the mining companies are not at risk.

In addition, the Mining Charter requires, among other things, that mining companies:

spell out plans for achieving employment equity at the management level, with a view to achieving a baseline of 40.0% HDSA participation in management and achieving a baseline of 10.0% participation by women in the mining industry, in each case within five years;

give HDSAs preferred supplier status, where possible, in the procurement of capital goods, services and consumables; and

identify current levels of beneficiation and indicate opportunities for growth.

When considering applications for the conversion of existing licenses, the government takes a scorecard approach to the different facets of promoting the objectives of the Mining Charter. The scorecard sets out the requirements of the Mining Charter in tabular form, which allows the DMR to check off areas where a mining company is in compliance. The scorecard covers the following areas: human resource development; employment equity; migrant labor; mine community and rural development; housing and living conditions; procurement; ownership and joint ventures; beneficiation; and reporting.

The scorecard does not indicate the relative significance of each item, nor does it provide a particular score which an applicant must achieve in order to be in compliance with the Mining Charter and be granted new order rights. The Mining Charter, together with the scorecard, provides a system of credits or offsets with respect to measuring compliance with HDSA ownership targets. Offsets may be claimed for beneficiation activities undertaken or supported by a company above a predetermined base state, which has not yet been established for each mineral. Offsets may also be claimed for the continuing effects of previous empowerment transactions.

The Mining Charter also requires mining companies to submit annual, audited reports on the progress toward their commitments, as part of an ongoing review process.

The DMR recently amended the Mining Charter (the Revised Mining Charter), effective as of September 13, 2010. The requirement under the Mining Charter that mining entities achieve a 26.0% HDSA ownership of mining assets by 2014 has been retained in the Revised Mining Charter. Amendments to the Mining Charter in the Revised Mining Charter include requirements that mining companies achieve the following by 2014:

facilitate local beneficiation of mineral commodities and procure a minimum of 40.0% of capital goods, 70.0% of services and 50.0% of consumer goods from HDSA suppliers (i.e., suppliers of which a minimum of 25.0% plus one vote of their share capital is owned by HDSAs) by 2014 (these targets will be exclusive of non-discretionary procurement expenditure);

ensure that multinational suppliers of capital goods contribute a minimum 0.5% of their annual income generated from South African mining companies towards the socioeconomic development of South African communities into a social development fund from 2010;

achieve a minimum of 40.0% HDSA demographic representation by 2014 at the executive management (board) level, senior management (executive committee) level, core and critical skills, middle management level and junior management level;

invest up to 5.0% of annual payroll in essential skills development activities; and

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implement measures to improve the standards of housing and living conditions for mineworkers by converting or upgrading mineworkers' hostels into family units, attaining an occupancy rate of one person per room and facilitating home ownership options for all mineworkers in consultation with organized labor.

In addition, mining companies are required to monitor and evaluate their compliance with the Revised Mining Charter and must submit annual compliance reports (called scorecards) to the DMR. The scorecard provides for a phased-in approach for compliance with the above targets over the five year period ending in 2014. For measurement purposes, the scorecard allocates various weights to the different elements of the Revised Mining Charter. Failure to comply with the provisions of the Revised Mining Charter will amount to a breach of the MPRDA, may result in the cancellation or suspension of a mining company's existing mining rights and may prevent a mining company from obtaining any new mining rights. For further information, please refer to **Risk Factors** Violations or noncompliance with the extensive environmental, health and safety laws and regulations to which we will be subject or changes in laws or regulations governing our operations could result in unanticipated loss or liability.

### **The Royalty Act**

The Mineral and Petroleum Resources Royalty Act, No. 28 of 2008 was promulgated on November 24, 2008, became effective on March 1, 2010 and imposes a royalty on refined and unrefined minerals payable to the state.

The royalty in respect of refined minerals is calculated by dividing earnings before interest and taxes ( EBIT ) by the product of 12.5 times gross revenue calculated as a percentage, plus an additional 0.5%. EBIT refers to taxable mining income (with certain exceptions, such as no deduction for interest payable and foreign exchange losses) before assessed losses but after capital expenditure. A maximum royalty of 5.0% of revenue has been introduced for refined minerals.

The royalty in respect of unrefined minerals is calculated by dividing EBIT by the product of nine times gross revenue calculated as a percentage, plus an additional 0.5%. Where unrefined mineral resources constitute less than 10.0% in value of the total composite mineral resources, the royalty rate in respect of refined mineral resources may be used for all gross sales and a separate calculation of EBIT for each class of mineral resources is not required. For further information, please refer to **Risk Factors** Violations or noncompliance with the extensive environmental, health and safety laws and regulations to which we will be subject or changes in laws or regulations governing our operations could result in unanticipated loss or liability.

### **Environmental Management**

Applicants for a mining right are required to conduct an environmental impact assessment and submit an Environmental Management Program, while applicants for a prospecting right, mining right or reconnaissance permit have to submit an Environmental Management Plan. Prospecting and mining rights only become effective under the MPRDA on the date that the corresponding Environmental Management Plan or Environmental Management Program has been approved. The MPRDA includes a requirement to make financial provision for the remediation of environmental damage as well as for the issuing of a closure certificate and requires that the financial provision be in place before approval of the Environmental Management Plan or Environmental Management Program. An application for a closure certificate now becomes compulsory upon lapsing of the right or cessation of activities.

Prior to the approval of the EMPR and the proposed mining operation itself, the applicant must make financial provision for the rehabilitation or management of negative environmental impacts, as noted above. In the event that the mine operator fails or is unable to rehabilitate environmental damage, the DMR will use all or part of the financial provision to rehabilitate or manage the negative environmental impact. The mining company must review its environmental liability annually and revise its financial provision accordingly to the satisfaction of the DMR.

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### **The National Environmental Management Act**

The National Environmental Management Act, No. 107 of 1998 ( NEMA ) is intended to integrate environmental management countrywide by establishing principles to serve as a general framework for environmental matters and by providing guidelines for the interpretation, administration and implementation of NEMA and any other environmental law.

Each identified organ of state exercising environmental functions is required to prepare an environmental implementation and management plan and thereafter to exercise its functions in accordance with the plan. The plan is submitted to the Committee for Environmental Co-ordination and the Director-General of Environmental Affairs (and, in turn, to the Minister of Environmental Affairs) followed by annual reports.

NEMA imposes a duty on any person who causes, has caused or may cause significant pollution or environmental degradation to take reasonable measures to prevent, minimize and rectify significant pollution and environmental degradation. There is no stipulated threshold limit for pollution that triggers the obligation to remediate and there are no legislated standards to which contamination must be remediated. What NEMA does require is the taking of reasonable measures. Non-compliance with the duty allows a competent authority to require that specified measures be taken. If such measures are not taken by the relevant regulated person, the competent authority may take those steps itself and recover the costs from various parties. Liability is retrospective.

The creation of a cradle to grave obligation for pollution or degradation of the environment, as well as the methods of enforcement, are extremely important in South Africa. NEMA creates the possibility of a class action against any entity for the potential or actual adverse consequences of a particular activity on the environment.

### **Environmental Impact Assessment Regulations**

The Minister (at the national level) and the MEC (at the provincial level) are empowered to identify activities that require environmental authorization prior to commencement and/or geographical areas in which listed activities may not be commenced without pre-authorization. This pre-authorization may not be granted without compliance with, or exemption from, environmental impact assessment regulations ( EIA Regulations ).

Initial EIA Regulations were promulgated in 2006 and listed the activities that would trigger the need for environmental authorization from the relevant environmental regulatory authority, usually the provincial environmental department, but in some cases the then National Department of Environmental Affairs and Tourism. The 2006 EIA Regulations repealed the regulations made under the Environment Conservation Act (discussed below), and added to them significantly. The 2006 EIA Regulations were enacted to streamline the environmental impact assessment procedure, as well as to shorten the time period from the date of an application to the date of authorization.

In 2010, new EIA Regulations were promulgated in order to revise the environmental impact assessment procedure and the criteria relating to environmental authorizations for the commencement of activities such as prospecting and mining. The 2010 EIA Regulations and a revised set of Listed Activities came into force on August 2, 2010.

### **The Environment Conservation Act**

The Environment Conservation Act, No. 73 of 1989 was, prior to the enactment of NEMA, the primary legislation governing the protection and control of the environment in South Africa, but the enactment of NEMA and its repeal of various parts of the Environment Conservation Act has substantially eroded the power of the Environment Conservation Act. The provisions of the Environment Conservation Act that have survived deal with protected natural environments, limited development areas, regulations on noise, vibration and shock, general regulatory powers, various provisions relating to offenses and penalties and various incidental issues.

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### **The National Water Act**

The National Water Act, No. 36 of 1998 controls the pollution of water resources, regulates water use, water use charges and the protection of water resources, and administers the granting of water use licenses. The National Water Act is important because water is a limited resource in South Africa. The National Water Act creates a hierarchy of water requirements, the first being the maintenance of a reserve needed to maintain the natural environment. Water users are invited to apply for licenses in respect of a particular water use and the procedures for this application are set out in the National Water Act. The license may or may not be issued, or may be issued subject to conditions, including conditions governing the permissible levels of chemicals in discharged waste water. The National Water Act also creates a duty of care regarding water resources similar to the duty imposed by NEMA, with similar consequences for non-compliance.

### **The National Environment Management: Air Quality Act**

The National Environment Management: Air Quality Act, No. 39 of 2004 repealed the Atmospheric Pollution Prevention Act and regulates atmospheric pollution. The Air Quality Act came into full effect on April 1, 2010 and entrusts the Department of Environmental Affairs with the task of preventing pollution and ecological degradation, while at the same time promoting justifiable economic and social development. Metropolitan and district municipalities are charged with issuing atmospheric emission licenses for certain listed activities. Before these licenses will be issued, it must be shown that the best practical means are being employed to limit air pollution. Penalties and criminal sanctions are imposed for non-compliance with the Air Quality Act.

On March 31, 2010, the Department of Environmental Affairs established a list of activities that require atmospheric emission licenses. The Department of Environmental Affairs has published the minimum emission standards resulting from these listed activities. These include the permissible amount, volume, emission rate or concentration of the substance or mixture of substances that may be emitted into the atmosphere and the manner in which measurements of such emissions must be carried out. No person may conduct an activity listed on the national list anywhere in the Republic of South Africa, or an activity on the list applicable to a particular province anywhere in that province, without an atmospheric emission license or a provisional atmospheric emission license.

### **The National Environmental Management: Biodiversity Act**

The National Environmental Management: Biodiversity Act, No. 10 of 2004 seeks, among other things, to manage and conserve biological diversity, to protect certain species and ecosystems, to ensure the sustainable use of biological resources and to promote the fair and equitable sharing of benefits arising from bio-prospecting involving those resources. It also establishes the South African National Biodiversity Institute.

### **The National Environmental Management: Protected Areas Act**

Protected areas, such as nature reserves and special nature reserves, are declared and managed in terms of the National Environmental Management: Protected Areas Act, No. 57 of 2003. Depending on the nature of the protected area, certain activities (such as mining) may require Ministerial consent or may be prohibited outright. The Protected Areas Act also aims to promote the sustainable use of protected areas and the participation of local communities in such areas. In addition, it provides for the continued existence of the South African National Parks.

### **The National Environmental Management: Waste Act**

The National Environmental Management: Waste Act, No. 59 of 2008 seeks to regulate waste management in South Africa by introducing a number of measures such as national norms and standards for waste management, a national waste information system, compliance and enforcement measures, and more specific waste management measures. Ultimately, the Waste Act will also introduce far reaching provisions relating to the declaration and remediation of contaminated land. With the exception of certain provisions, such as those relating to contaminated land, the Waste Act came into effect on July 1, 2009.

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On July 3, 2009, the Department of Environmental Affairs published a list of waste management activities which have, or are likely to have, a detrimental effect on the environment. The consequence of such listing is that no person may commence, undertake or conduct a waste management activity, except in accordance with the requirements of the Waste Act, or a waste management license issued in respect of that activity, if such license is required.

### **The Nuclear Energy Act**

The South African Energy Corporation Limited was established under the Nuclear Energy Act, No. 46 of 1999 to oversee the implementation of the Safeguards Agreement relating to the Nuclear Non-Proliferation Treaty, to regulate nuclear fuel, nuclear material and equipment, and to prescribe measures governing the disposal of radioactive waste and the storage of irradiated fuel.

### **The National Nuclear Regulator Act**

The objects of the National Nuclear Regulator Act, No. 47 of 1999 are to establish a National Nuclear Regulator to regulate nuclear activities and to provide for safety standards and regulatory practices for the protection of persons, property and the environment against nuclear damage.

### **The National Radioactive Waste Disposal Institute Act**

The National Radioactive Waste Disposal Institute Act, No. 53 of 2008 came into operation on December 1, 2009, and establishes the National Radioactive Waste Disposal Institute, the function of which is to manage radioactive waste disposal on a national basis. The National Radioactive Waste Disposal Institute Act also provides that generators of radioactive waste are responsible for all liabilities associated with such waste until the National Radioactive Waste Disposal Institute has received it and accepted it in writing.

### **Mine Health and Safety Act**

The Mine Health and Safety Act, No. 29 of 1996 deals with the protection of the health and safety of persons in the mining industry, but it also has some implications for environmental issues because of the need for both environmental monitoring within mine operations and the maintenance of mine residue deposits.

### **National Environmental Management Amendment Act**

The National Environmental Management Amendment Act, No. 62 of 2008 made a number of amendments to NEMA in order to further regulate environmental authorizations and to empower the Minister of Minerals and Energy to implement environmental matters in terms of NEMA, insofar as it relates to prospecting, mining, exploration, production or related activities on a prospecting, mining, exploration or production area. The National Environmental Management Amendment Act also aligns the environmental requirements in the MPRDA with NEMA by providing for Environmental Management Programs, consultation with state departments, exemption from certain provisions, financial provision for the remediation of environmental damage, the recovery of costs in the event of urgent remedial measures and the issuance of closing certificates as they relate to the conditions of the environmental authorization. The amended Section 24N(1A) of NEMA reads: Where environmental impact assessment has been identified as the environmental instrument to be utilized in informing an application for environmental authorization, or where such application relates to prospecting, mining, exploration, production and related activities on a prospecting, mining, exploration or production area, the Minister, the Minister of Mineral Resources, an MEC or identified competent authority must require the submission of an environmental management program before considering an application for an environmental authorization. It is not possible to grant exemption from the EMPR requirement as it is compulsory for the competent authority to request an EMPR.

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### *Mining Regulation in Australia*

#### **Mining Law**

Each Australian state and territory has its own legislation regulating the exploration for and mining of minerals. Exxaro Mineral Sands' operations are principally regulated by the Western Australian Mining Act 1978 (WA) (the Mining Act) and the Mining Regulations 1981 (WA) (the Mining Regulations). The Department of Mines and Petroleum administers the Mining Act, which makes provision for a number of different tenements, including prospecting licenses, exploration and retention licenses and mining leases. Some of the basic features of these tenements are outlined below.

#### **Mining Tenements**

##### *Prospecting Licenses and Exploration Licenses*

A prospecting license grants the license holder the right to carry out exploration for all minerals (except iron ore, unless expressly authorized) in the license area.

The rights conferred by an exploration license are substantially the same as those conferred by a prospecting license.

##### *Retention License*

A holder of an exploration license, prospecting licence or mining lease may apply for a retention license. The application for a retention license must address certain criteria, including provision of a statutory declaration that mining of the identified mineral resource is for the time being impracticable for one or more of the reasons provided for in the Mining Act.

The holder of a prospecting, exploration or retention licence has the right to apply for a mining lease (over an area over which it has been carrying out its prospecting/exploration activities), and to have the mining lease granted to it (on such terms and conditions as the Minister considers reasonable) provided that there is significant mineralisation on or under the land to which the application relates, and that the application does not relate to certain areas of land such as reserves, for which the Minister's consent is required before mining can be carried out on such land, a marine park or marine management area.

##### *Mining Leases*

In Western Australia, the maximum initial term of a mining lease is 21 years. Upon expiration of the initial term, a mining lease holder may renew the lease for a further period of 21 years, with subsequent renewals subject to the Department of Mines and Petroleum's discretion. The maximum area for a mining lease applied for before February 10, 2006 is 10 square kilometres, after then, the size applied for is to relate to an identified orebody as well as an area for infrastructure requirements.

All mining leases carry standard conditions and endorsements regulating the activities that the lease holder may carry out in order to ensure that the land is adequately rehabilitated after mining and that mining is conducted in a safe manner. Mining activity may not commence until the tenement holder has received approval for its operational and environmental plan, which outlines the nature of the proposed development, the method of mining, its environmental impact, rehabilitation proposals and all building plans. The environmental impact plan must include a detailed description of both the proposed project and the existing natural environment in which it will take place, including the relevant aspects of the social environment, such as Aboriginal sites, heritage issues, community values and other existing land uses, and must summarize the licence holder's environmental management commitments to manage and ameliorate any significant environmental impacts.



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### **Mineral Royalties**

Holders of mining leases are required to submit production reports and royalty returns to the Department of Mines and Petroleum on all minerals extracted from the mining area. The holder of, or applicant for, a mining lease shall, on each occasion that they pay royalties to the Department forward with the royalties a royalty return, in a form approved by the Minister, showing in full the details required to calculate those royalties.

### *State Agreements*

State Agreements are essentially contracts between the government of Western Australia and the proponents of major resources projects, and are intended to foster resource development and related infrastructure investments, which are then approved and ratified by the Parliament of Western Australia. Statutory ratification means that the agreement takes effect notwithstanding any statute or general law which would otherwise be applicable to the agreement and the project contemplated by it. State Agreements typically operate as a framework for the development and operation of the relevant project from cradle to grave and are usually the source for all tenure necessary to support the project. A State Agreement typically obliges the private developer to pay royalties, make infrastructure available to third parties and support local content and community development initiatives.

The State Agreement relevant to the Tiwest Joint Venture and its production of mineral sands is the agreement authorized by and scheduled to the Mineral Sands (Cooljarloo) Mining and Processing Agreement Act 1988 (WA). State Agreements may only be amended by mutual consent, which reduces the sovereign risk and increases the security of tenure, however it should be noted that Parliament may, as a matter of principle, enact legislation that overrules or amends the particular State Agreement.

### **Native Title**

Native title describes the rights and interests of Aboriginal and Torres Strait Islander people in relation to land, according to their traditional laws and customs that are recognized by the common law in Australia. The Australian Parliament passed the Native Title Act, which codified the native title doctrine. The Native Title Act recognizes that native title may be extinguished. The Native Title Act also provides for the grant of rights that may affect native title subject to compliance with its processes (such as the grant of a mining lease). It recognizes prior (to its enactment) extinguishment by an action of the government, such as the creation of an interest that is inconsistent with native title, and the grant of a right to exclusive possession through freehold title or certain leases (not including mining leases), although a valid mining title holder may exercise its title rights without interference from native title holders or claimants.

### *Native Title Claims and Determinations*

The Native Title Act also provides for the determination of native title claims by the Federal Court. If a native title claim filed by Aboriginal people passes the registration test, it will be entered on the Register of Native Title Claims, upon which the applicant is entitled to certain statutory rights, including the right to negotiate with respect to the grant of rights that may affect native title (such as the grant of a mining lease). A claim may be referred by the Federal Court to the National Native Title Tribunal in order to mediate an outcome satisfactory to both native title claimants and any other interested parties. If this process is not successful, the Federal Court will set a trial to adjudicate the existence of a native title.

### *Compensation*

The Native Title Act confers on native title holders a right to compensation for the effect of the grant of mining tenements (where native title exists).

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In Western Australia, the State has passed to tenement holders liability for the payment of compensation to native title holders for any effect on their native title of the grant of certain tenements. It is a common condition for tenements granted after 1994 that the tenement holder pays any native title compensation. From January 1999, section 125A of the Mining Act 1978 (WA) passed liability for native title compensation for all tenements granted to the holder.

### **Cultural Heritage**

Western Australian and Commonwealth legislation protects Aboriginal sites and areas as well as objects of archaeological and cultural significance. The consent of the Western Australian Minister is required under State legislation before a project which would impact on an Aboriginal site can proceed. Any declarations made under Commonwealth legislation for Aboriginal sites will also need to be complied with. Mining and development operations and new projects can be halted or delayed due to claims or impacts that operations or proposed projects may have on a site or area of Aboriginal cultural significance which will be damaged or desecrated by the operations or proposed projects. For example, the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth) provides for the preservation and protection of significant Aboriginal areas (which can include bodies of water) and objects throughout Australia which are of particular significance to Aboriginals (including Torres Strait Islanders).

### **Environment**

Mining operations in Western Australia are subject to a variety of environmental protection regulations.

#### *Environmental Protection Act*

The Environmental Protection Act 1986 (WA) is the primary source of environmental regulation in Western Australia. All project proposals that will likely have a significant effect on the environment are subject to an assessment by the Environmental Protection Authority, including a public comment process, and must be approved by way of a Ministerial Statement. Approval of a mid-size mining operation project with one or two sensitive environmental issues takes an average of two to three years to complete the process.

### **Occupational Health and Safety**

Prescriptive legislation regulates health and safety at mining workplaces in Western Australia. The principal general occupational health and safety legislation and regulations are the Occupational Safety and Health Act 1984 (WA) and the Occupational Health and Safety Regulations 1996 (WA).

As part of a national process of harmonising work health and safety laws Australia wide, the Western Australian government is in the process of preparing draft harmonised legislation which will be introduced into Parliament next year. The government intends this legislation will be operational on January 1, 2013.

#### *Environmental, Health and Safety Matters*

### **Overview**

As described above, Exxaro Mineral Sands' facilities and operations are subject to extensive general and industry-specific environmental, health and safety regulations in South Africa and Australia. These regulations include those relating to mine rehabilitation, liability provision, water management, the handling and disposal of hazardous and non-hazardous materials and occupational health and safety. The following describes environmental, health and safety matters with respect to Exxaro Mineral Sands' operations.

With the exception of Namakwa Sands' mining operations, mineral separation plant and smelter operations, where final approval for water licenses required by the National Water Act has not yet been obtained, Exxaro believes that Exxaro Mineral Sands' operations are in compliance, in all material respects, with existing

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health, safety and environmental legislation and regulations. Exxaro Mineral Sands employs health, safety and environmental experts to advise it on technical and regulatory matters relevant to the management of its facilities and operations, and Exxaro continually invests in its plants, equipment and other infrastructure to ensure that the Exxaro Mineral Sands operations comply with its obligations under health, safety and environmental laws and regulations.

### **Capital Expenditures**

We estimate that our material capital expenditures for Exxaro Mineral Sands' s environmental control facilities for the 2012 fiscal year will be approximately R37.0 million (\$4.6 million). The cost of future compliance or further investments required to meet health, safety and environmental laws and regulations are difficult to estimate, but we consider it unlikely that these costs would have a material adverse effect on Exxaro Mineral Sands' s financial position or the results of operations.

### **Environmental Provision**

As of December 31, 2011, Exxaro Mineral Sands' s provision for environmental and decommissioning rehabilitation, through a trust fund and guarantees, was approximately R154.5 million (\$19.1 million) (guarantees) and R156.4 million (\$19.3 million) (trust fund). The more significant sites covered by this provision and the type of rehabilitation and remediation work contemplated are as follows:

Several initiatives at the Namakwa Sands East Mine ensured that rehabilitation has been advanced over large areas to ensure that final rehabilitation liability has been reduced to a minimum.

At KZN Sands, the growth medium experiments at Hillendale have been successful and the final phases of rehabilitation are tested via trial plots.

Namakwa Sands is cleaning up the seepage of polluted water to groundwater and surface water from its evaporation facilities. The water treatment facilities which are required to replace the evaporation ponds are projected to cost in excess of R50.0 million (\$6.2 million).

There is a shortfall (referred to as the environmental provision shortfall ) between the amount of the assessed financial provision for environmental and decommissioning rehabilitation (as required under the MPRDA in respect of Exxaro Mineral Sands' s South African prospecting and mining operations) and the amount standing to the credit of a rehabilitation trust in respect of the assessed financial provision. The amount of the environmental provision shortfall is currently estimated to be approximately R139.5 million (\$17.2 million). There will be an adjustment at the closing if the estimated environmental provision shortfall at the time of the closing exceeds or is less than approximately R139.5 million (\$17.2 million). In addition, within six months after completion of the Transaction, we may elect to undertake a reassessment of the financial provision and if the reassessment results in a different environmental provision shortfall amount than the amount determined at closing, there will be another adjustment to account for the differences.

### **Water Use Licenses**

As noted above, Namakwa Sands' s mining operations, mineral separation plant and smelter operations are not in possession of approved water use licenses, as required by the National Water Act, which requires that such licenses be obtained before operations linked to water use commence. The Department of Water Affairs is authorized to stop unlawful water use at any operations in violation of the water use license requirement. Applications have been made for all of the Namakwa Sands water use licenses but have not yet been granted. The Department of Water Affairs granted Namakwa Sands permission to continue its mining operations, mineral separation plant and smelter operations until water use licenses have been approved for those operations, subject to operating conditions set by the Department of Water Affairs.

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### **Fairbreeze Environmental Impact Assessment**

In order to receive the environmental authorization necessary to begin the Fairbreeze mining operations, Exxaro Mineral Sands prepared an environmental impact assessment report, which it submitted to the Department of Agriculture, Environmental Affairs and Rural Development ( DAEARD ), as required under NEMA. There are two forms of environmental impact reports: a basic assessment report ( BAR ) and a more rigorous scoping and environmental impact report ( SEIR ). NEMA provides that an applicant may request permission to undertake a BAR instead of an SEIR if the applicant believes that the information included in the BAR will be sufficient to allow DAEARD to reach its decision. DAEARD granted Exxaro Mineral Sands permission to submit a BAR based on the fact that Exxaro Mineral Sands had already conducted extensive environmental impact assessments on the proposed Fairbreeze mining area over a period of approximately 13 years, and that undertaking the SEIR process would have repeated many of those assessments.

Although Exxaro Mineral Sands received permission from DAEARD to use the BAR process instead of the SEIR process to conduct its environmental impact assessment, the Mtunzini Conservancy objected to Exxaro Mineral Sands' use of the BAR process and submitted an appeal to DAEARD challenging its grant of permission. DAEARD dismissed the Mtunzini Conservancy's appeal; however, the Mtunzini Conservancy may still decide to contest the Fairbreeze project's other pending authorizations (water use license, environmental authorization and land use planning authorization).

In connection with Exxaro Mineral Sands' BAR for the Fairbreeze mining area, DAEARD requested additional clarification and information from Exxaro Mineral Sands. DAEARD's request was not an indication that it required Exxaro Mineral Sands to use a process other than BAR. Exxaro Mineral Sands submitted the amended BAR for public review on February 9, 2012. The public review period closed on March 9, 2012. Exxaro Mineral Sands reviewed the public comments it received and submitted the amended final BAR to DAEARD on March 22, 2012, which was acknowledged by DAEARD on March 30, 2012.

### **Radioactive Minerals**

Exxaro Mineral Sands has the required permits in South African and Australia to mine, treat, store, dispose of, transport, handle and expose persons to radioactive minerals (zircon and monazite). Provision for the potential cleanup costs related to such activities is included in the mine closure cost and reflected in Exxaro Minerals Sands' financial statements.

### **Exxaro Mineral Sands Employees**

As of December 31, 2010, Exxaro Mineral Sands had 1,662 full-time employees and contractors. Of these employees, 644 employees and 4 fixed-term contract employees and contractors were located at KZN Sands, 975 employees and 8 fixed-term contract employees and contractors at Namakwa Sands, 14 employees at the Exxaro headquarters, 8 employees at Australia Sands, and 9 employees at Tiwest Sales Proprietary Limited (not including employees of the Tiwest Joint Venture).

As of December 31, 2011, Exxaro Mineral Sands had 1,781 full-time employees and contractors. Of these employees, 658 employees and 61 fixed-term contract employees and contractors were located at KZN Sands, 1,008 employees and 54 fixed-term contract employees and contractors at Namakwa Sands, 14 employees at the Exxaro headquarters, 7 employees at Australia Sands, and 8 employees at Tiwest Sales Proprietary Limited (not including employees of the Tiwest Joint Venture).

Exxaro TSA Sands and Exxaro Sands have collective bargaining agreements with labor organizations representing their employees in South Africa and consider their relationships with their employees to be satisfactory.

For a discussion of the Tiwest Joint Venture employees, see Description of Tronox Incorporated Employees.

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### **Social Responsibility**

#### ***Health and Social Programs***

##### **KZN Sands**

As part of its medical surveillance program, KZN Sands conducts medical check-ups on operational employees once a year and on administrative employees every three years. The medical check-ups are conducted through KZN Sands' outsourced occupational health clinic. KZN Sands also conducts regular on-site health and social programs linked to national health initiatives in South Africa and has an Employee Assistance Program in place to assist employees and their immediate families with a range of health and social issues, including trauma, social problems, financial planning, health issues and relationship issues. The Employee Assistance Program also serves as a mandatory referral mechanism in the event of work performance, attendance or social issues with KZN Sands employees. Some of KZN Sands' employees act as Wellness Educators to provide training and share knowledge about wellness issues with other members of the KZN Sands workforce.

As part of its social responsibility commitments, KZN Sands is involved in HIV/AIDS initiatives in the local communities. KZN Sands also has procurement and human resources forums with representatives from the six bordering local communities. The procurement forum is aimed at identifying service and supply contracts that can be sourced from the local communities. The procurement forum assists these new entrepreneurs by providing training internally and, if required, through external organizations as well. The procurement forum also provides assistance in the form of accounting and business registration, site inductions and medical certifications, as well as by providing the required protective personal equipment to allow start-up businesses to begin operations. The human resources forum focuses on empowering the local communities by assisting with direct employment and by providing learnerships that enable community members to gain work experience.

##### **Namakwa Sands**

Namakwa Sands provides primary health services to its employees through on-site occupational clinics at all three of its operations and, as part of its medical surveillance program, conducts medical check-ups on operational employees once a year and on administrative employees every three years. Namakwa Sands also conducts regular on-site health and social programs linked to national health initiatives in South Africa and has an Employee Assistance Program in place to assist employees and their immediate families with a range of health and social issues, including trauma, social problems, financial planning, health issues and relationship issues. The Employee Assistance Program also serves as a mandatory referral mechanism in the event of work performance, attendance or social issues with Namakwa Sands employees. Some of Namakwa Sands' employees act as Wellness Educators to provide training and share knowledge about wellness issues with other members of the Namakwa Sands workforce. As part of its social responsibility commitments, Namakwa Sands is actively involved in running and funding the local HIV/AIDS centers in Vredendal and Vredenburg. Namakwa Sands also contributes annually to the operational cost of the West Coast Business Development Centre, which fosters the growth of small and medium-size enterprises in the region in order to improve employment opportunities and entrepreneurship.

##### **Australia Sands**

The Tiwest Joint Venture has an Employee Assistance Program in place to assist employees and their immediate families with a range of health and social issues, including trauma, social problems, financial planning, health issues and relationship issues.

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### ***Sustainability***

Exxaro Mineral Sands' approach to safety and sustainable development, which is codified in the Exxaro Safety and Sustainable Development Policy, includes the following guiding principles to ensure the health and safety of its employees, the environment, surrounding communities and its resources by ensuring sustainable development in all of its activities:

ensuring an appropriate organizational structure and adequate resources to manage sustainable development, including safety, health and environmental matters and to comply with legislation;

complying with all applicable legislation and international obligations as a minimum requirement and implementing effective company standards, programs and processes to manage risks;

conserving natural resources and reducing the environmental burden of waste generation and emissions to air, water and land through strategies focusing on reducing, reusing, recycling and responsible disposal of waste; and

establishing objectives, targets and continuously improving operations in terms of safety and sustainable development performance and management systems.

In addition, Exxaro Mineral Sands follows management standards that form the basis for the development and application of the Exxaro Safety and Sustainable Development Policy at all levels. The management standards cover the entire life cycle of operations, including decommissioning, closure and rehabilitation.

Exxaro Mineral Sands has approved Social and Labor Plans in place with respect to all of its mining license agreements, as required by the DMR.

### **Legal Proceedings**

From time to time, Exxaro Mineral Sands may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. Exxaro is not currently aware of any such legal proceedings or claims that it believes will have, individually or in the aggregate, a material adverse effect on Exxaro Mineral Sands' business, financial condition or operating results. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm Exxaro Mineral Sands' business.

### ***South Africa***

#### **Foskor Complaint**

On March 14, 2011, the Competition Commission of South Africa received a complaint from Foskor Zirconia Proprietary Limited against Exxaro Sands and its primary competitor in the South African market for zircon sands, Richards Bay Minerals. The complaint alleged that Exxaro Sands and Richards Bay Minerals are involved in conduct which might contravene the South African Competition Act, No 90 of 1998, as amended, by charging excessive prices for zircon sand and limiting the amount of zircon sand that is made available to South African customers. The complaint currently remains under preliminary investigation by the South African Competition Commission and has not been formally referred to the Competition Tribunal of South Africa for a full investigation.

#### **Obanjeni Land Claims**

The South African Restitution of Land Rights Act, which was enacted in 1994, provides for the restitution of land rights to South African individuals or communities dispossessed of their land rights after June 19, 1913 as a result of racially discriminatory laws or practices. The Restitution of Land Rights Act established the Commission on Restitution of Land Rights and the Land Claims Court. The Commission on Restitution of Land



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Rights is responsible for investigating and settling land claims. If, after the Commission completes an investigation, it is evident that a land claim cannot be settled by way of mediation and negotiation, the matter is then referred to the Land Claims Court.

The Obanjeni Community, which is a community organization located in KwaZulu-Natal province, has made land claims against properties owned by Exxaro Sands and properties owned by Mondi Ltd over which Exxaro Sands holds mining rights. The properties subject to the Obanjeni land claims relate to KZN Sands's Fairbreeze mining operations. All of the Obanjeni land claims have been accepted and were gazetted by the KwaZulu-Natal Regional Land Claims Commissioner on July 15, 2011. Exxaro Sands initially objected to the Obanjeni land claims and notified the Land Claims Commissioner of its existing mining rights and proposed mining operations on the properties subject to the Obanjeni land claims. However, on February 10, 2012, Exxaro Sands withdrew its objection after the Land Claims Commissioner assured Exxaro Sands that it would recognize Exxaro Sands's rights with respect to Fairbreeze, whether as landowner or as tenant. Although the Land Claims Commissioner does have the right to expropriate the properties, the Commissioner does not have the right to expropriate a mining right. If the Land Claims Commissioner proceeds to expropriate the properties, it would do so subject to the existing registered lease between Mondi Ltd and Exxaro Sands. If the Land Claims Commissioner also expropriates the lease, Exxaro Sands will retain its statutory right of access to the properties under its mining right, and will enter into negotiations with the Land Claims Commission and the Obanjeni Community to reach an agreement on the terms of Exxaro Sands's access to the properties in order to conduct its mining operations. No landowner has denied Exxaro Sands access to any of the properties subject to the Obanjeni land claims.

### **Port Durnford Land Claim**

The Mkhwanazi Tribe has lodged a land claim with respect to the proposed Port Durnford prospecting right area, and the land claim has been accepted by the Land Claims Commissioner. The land that is subject to the land claim is still held by the South African government and has not yet been transferred to the Mkhwanazi Tribe. Exxaro was approached by the Mkhwanazi Tribe and had preliminary discussions to discuss the way forward for prospecting and/or mining activities.

### ***Australia***

#### **Native Title Claims**

There are a number of registered and unregistered native title claims currently pending in respect of the area of Tiwest Joint Venture's mining tenements in the Federal Court of Australia, which will determine whether the claimants have any and if so what native title right to land. The Tiwest Joint Venture's management generally negotiates compensation arrangements directly with native title claimants to ensure its new mining interests are validly granted without undue delay. None of the native title claims are expected to affect the validity or enforceability of our mining tenements.



**Table of Contents****SELECTED HISTORICAL FINANCIAL DATA**

The following table sets forth selected historical financial data of Tronox Incorporated as of the dates and for the periods indicated. The statement of operations and balance sheet data, as of and for the three months ended March 31, 2012, eleven months ended December 31, 2011, two months ended March 31, 2011, one month ended January 31, 2011 and years ended December 31, 2010, 2009 and 2008, have been derived from Tronox Incorporated's audited Consolidated Financial Statements included in this prospectus.

Tronox Incorporated is unable to prepare financial statements for 2007 in accordance with GAAP without unreasonable effort and expense. As discussed in Note 5 of the annual Consolidated Financial Statements, in May 2009, Tronox Incorporated filed a Form 8-K under Item 4.02 indicating that its previously issued financial statements could no longer be relied upon because Tronox Incorporated failed to establish adequate environmental and other contingent reserves as required by applicable accounting pronouncements. The financial statements affected by this disclosure are Tronox Incorporated's previously issued financial statements for the year ended December 31, 2007, along with the financial information for the first three quarters of 2008. Tronox Incorporated has not restated periods prior to January 1, 2008, as it does not believe the errors discussed below are material to current or future investors. See Notes 1 and 5 to Tronox Incorporated's audited Consolidated Financial Statements for additional information. As such, Tronox Incorporated requested from the SEC, and subsequently received, permission to exclude selected financial information in the table below for 2007.

This information should be read in conjunction with Tronox Incorporated's audited Consolidated Financial Statements (including the notes thereto) and Tronox Incorporated Management's Discussion and Analysis of Financial Condition and Results of Operations.

	<b>Three Months Ended March 31, 2012</b>	<b>Successor Two Months Ended March 31, 2011</b>	<b>Eleven Months Ended December 31, 2011 (Millions of dollars, except per share data)</b>	<b>One Month Ended January 31 2011</b>	<b>Predecessor Year Ended December 31, 2010 2009 2008</b>		
<b>Statement of Operations Data:</b>							
Net Sales	\$ 433.6	\$ 267.1	\$ 1,543.4	\$ 107.6	\$ 1,217.6	\$ 1,070.1	\$ 1,245.8
Cost of goods sold	(276.3)	(229.8)	(1,104.5)	(82.3)	(996.1)	(931.9)	(1,133.4)
Gross Margin	157.3	37.3	438.9	25.3	221.5	138.2	112.4
Selling, general and administrative expenses	(44.3)	(19.5)	(151.7)	(5.4)	(59.2)	(71.7)	(114.1)
Litigation/arbitration settlement			9.8				
Gain on land sales						1.0	25.2
Impairment of long-lived assets(1)						(0.4)	(24.9)
Restructuring charges(2)						(17.3)	(9.6)
Net loss on deconsolidation of subsidiary						(24.3)	
Provision for environmental remediation and restoration, net of reimbursements(3)			4.5		47.3		(72.9)
Income (Loss) from Operations	113.0	17.8	301.5	19.9	209.6	25.5	(83.9)
Interest and debt expense(4)	(7.9)	(5.3)	(30.0)	(2.9)	(49.9)	(35.9)	(53.9)
Gain on liquidation of subsidiary(5)					5.3		
Other income (expense)	(1.4)	1.0	(9.8)	1.6	(13.6)	(10.3)	(9.5)
Reorganization income (expense)				613.6	(144.8)	(9.5)	
Income (Loss) from Continuing Operations before Income Taxes	103.7	13.5	261.7	632.2	6.6	(30.2)	(147.3)
Income tax benefit (provision)	(17.4)	(3.3)	(20.2)	(0.7)	(2.0)	1.5	1.8
Income (Loss) from Continuing Operations	86.3	10.2	241.5	631.5	4.6	(28.7)	(145.5)
Income (Loss) from discontinued operations, net of income tax benefit (provision)(6)				(0.2)	1.2	(9.8)	(189.4)
Net Income (Loss)	\$ 86.3	\$ 10.2	\$ 241.5	\$ 631.3	\$ 5.8	\$ (38.5)	\$ (334.9)

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Earnings (Loss) from Continuing Operations per  
Common Share:

Basic	\$ 5.72	\$ 0.68	\$ 16.12	\$ 15.29	\$ 0.11	\$ (0.70)	\$ (3.55)
Diluted	\$ 5.48	\$ 0.65	\$ 15.46	\$ 15.25	\$ 0.11	\$ (0.70)	\$ (3.55)

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	Three Months Ended March 31, 2012	Successor Two Months Ended March 31, 2011	Eleven Months Ended December 31, 2011	One Month Ended January 31 2011	Predecessor Year Ended December 31, 2010 2009 2008		
	(Millions of dollars, except per share data)						
<b>Balance Sheet Data:</b>							
Working capital(7)	\$ 704.1	\$ 327.2	\$ 488.1	\$ 458.2	\$ 483.4	\$ 488.7	\$ (246.7)
Property, plant and equipment, net(1)	\$ 558.8	448.0	554.5	317.5	315.5	313.6	347.3
Total assets	\$ 1,903.0	\$ 1,447.3	\$ 1,657.4	\$ 1,090.5	\$ 1,097.9	\$ 1,117.8	\$ 1,044.5
<b>Noncurrent liabilities:</b>							
Long-term debt(7)	\$ 551.9	\$ 426.0	\$ 421.4	\$ 420.7	\$ 420.7	\$ 423.3	\$
Environmental remediation and/or restoration(8)	0.5	0.6	0.5	0.6	0.6	0.3	546.0
All other noncurrent liabilities	207.2	166.6	202.3	153.6	154.0	50.0	125.4
Total liabilities(10)	\$ 1,055.0	\$ 875.8	\$ 905.1	\$ 848.0	\$ 827.6	\$ 682.6	\$ 1,642.0
Liabilities subject to compromise	\$	\$	\$	\$ 896.7	\$ 900.3	\$ 1,048.4	\$
Total stockholders' equity	\$ 848.0	\$ 571.5	\$ 752.3	\$ (654.2)	\$ (630.0)	\$ (613.2)	\$ (597.5)
<b>Supplemental Information:</b>							
Depreciation and amortization expense	\$ 22.1	\$ 13.1	\$ 79.1	\$ 4.1	\$ 50.1	\$ 53.1	\$ 75.7
Capital expenditures	\$ 20.7	\$ 8.3	\$ 132.9	\$ 5.5	\$ 45.0	\$ 24.0	\$ 34.3
EBITDA(9)	\$ 133.7	\$ 31.9	\$ 370.8	\$ 639.0	\$ 107.8	\$ 49.0	\$ (207.1)
Adjusted EBITDA(9)	\$ 151.4	\$ 68.1	\$ 468.3	\$ 24.3	\$ 203.1	\$ 141.5	\$ 99.3

- (1) In 2008, Tronox Incorporated recorded impairment charges for long-lived assets of approximately \$3.3 million related to Savannah, Georgia, and approximately \$21.6 million related to Botlek, Netherlands. See Tronox Incorporated Management's Discussion and Analysis of Financial Condition and Operations Critical Accounting Policies for further discussion of Tronox Incorporated's impairment testing methodology.
- (2) Restructuring charges in 2009 were primarily the result of the idling of Tronox Incorporated's Savannah plant. Restructuring charges in 2008 resulted primarily from work force reduction programs, along with asset retirement obligation adjustments.
- (3) In 2010, Tronox Incorporated recorded receivables from its insurance carrier related to environmental clean-up obligations at the Henderson facility. Due to the accounting for the KM Legacy Liabilities, as described in Notes 1 and 5 to the annual Consolidated Financial Statements of Tronox Incorporated, the obligation for this clean-up work had been recorded in 2008 and prior years.
- (4) Excludes \$2.8 million, \$33.3 million, \$32.1 million and nil in the one month ended January 31, 2011 and years ended December 31, 2010, 2009 and 2008, respectively, that would have been payable under the terms of the 9.5% senior unsecured notes.
- (5) The liquidation of certain holding companies resulted in a non-cash net gain resulting from the realization of cumulative translation adjustments.
- (6) See Note 20 to the annual Consolidated Financial Statements included in this registration statement for further information on Income (loss) from discontinued operations.
- (7) Working capital is defined as the excess (deficit) of current assets over current liabilities. Due to Tronox Incorporated's financial condition, the entire balance of our outstanding debt of \$562.8 million was classified as current obligations as of December 31, 2008, resulting in long-term debt having a balance of nil and working capital being negative. In 2009, the \$350.0 million senior unsecured notes were reclassified to Liabilities Subject to Compromise.
- (8) As a result of the bankruptcy filing and the KM Legacy Liability accounting, as described in Note 1 to the annual Consolidated Financial Statements, environmental remediation and/or restoration liabilities were reclassified to Liabilities Subject to Compromise in 2009.
- (9) EBITDA represents net income (loss) before net interest expense, income tax benefit (provision), and depreciation and amortization expense. Adjusted EBITDA represents EBITDA as further adjusted to reflect the items set forth in the table below.
- (10) Represents total liabilities before liabilities subject to compromise.

EBITDA and Adjusted EBITDA, which are used by management to measure performance, are non-GAAP financial measures. Management believes that EBITDA and Adjusted EBITDA are useful to investors, as EBITDA is commonly used in the industry as a means of evaluating operating performance and Adjusted EBITDA is used in our debt instruments to determine compliance with financial covenants. Both EBITDA and Adjusted EBITDA are included as a supplemental measure of our operating performance because they eliminate items that have less bearing on operating performance and highlight trends in the core business that may not otherwise be apparent when relying solely on GAAP financial measures. In addition, Adjusted EBITDA is one of the primary measures management uses for planning and budgeting processes and to monitor and evaluate financial and operating results. EBITDA and Adjusted EBITDA are not recognized terms under GAAP and do not purport to be an alternative to measures of our financial performance as determined in accordance with GAAP, such as net income (loss). Because other companies may calculate EBITDA and Adjusted EBITDA differently than we do, EBITDA may not be, and Adjusted EBITDA as presented herein is not, comparable to similarly titled measures reported by other companies.

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The following table reconciles net income (loss) to EBITDA and Adjusted EBITDA for the periods presented:

	Three Months Ended March 31, 2012	Successor Two Months Ended March 31, 2011	Eleven Months Ended December 31, 2011	One Month Ended January 31, 2011	Predecessor Year Ended December 31, 2010 2009 2008		
	(Millions of dollars)						
Net income (loss)	\$ 86.3	\$ 10.2	\$ 241.5	\$ 631.3	\$ 5.8	\$ (38.5)	\$ (334.9)
Interest and debt expense	7.9	5.3	30.0	2.9	49.9	35.9	53.9
Income tax provision (benefit)	17.4	3.3	20.2	0.7	2.0	(1.5)	(1.8)
Depreciation and amortization expense	22.1	13.1	79.1	4.1	50.1	53.1	75.7
<b>EBITDA</b>	<b>133.7</b>	<b>31.9</b>	<b>370.8</b>	<b>639.0</b>	<b>107.8</b>	<b>49.0</b>	<b>(207.1)</b>
Reorganization expense associated with bankruptcy(a)				45.5	144.8	9.5	
Gain on fresh-start accounting				(659.1)			
Noncash gain on liquidation of subsidiary			(0.2)		(5.3)		
Provision for environmental remediation and restoration, net of reimbursements(b)			(4.5)		(47.3)		72.9
(Income) loss from discontinued operations				0.2	(1.2)	9.8	189.4
Restructuring costs not associated with the bankruptcy							13.5
Pension and post retirement settlement/curtailments						10.0	26.2
Gain on sale of assets						(1.0)	(25.2)
Impairment charges(d)						0.4	24.9
Unusual or non-recurring items(e)						24.3	
Litigation settlement			(9.8)				
Plant closure costs				0.1	1.3	24.5	
Fresh-start inventory mark-up		32.1	35.5				
Stock-based compensation	6.7	2.9	13.8		0.5	0.2	0.5
Foreign currency remeasurement	(0.8)	(0.1)	7.3	(1.3)	11.8	15.1	(6.8)
Transaction costs, registration rights penalty and financial statement costs(f)	9.1		39.2				
Other items(g)	2.7	1.3	16.2	(0.1)	(9.3)	(0.3)	11.0
<b>Adjusted EBITDA</b>	<b>\$ 151.4</b>	<b>\$ 68.1</b>	<b>\$ 468.3</b>	<b>\$ 24.3</b>	<b>\$ 203.1</b>	<b>\$ 141.5</b>	<b>\$ 99.3</b>

- (a) Tronox Incorporated incurred costs related to the Chapter 11 bankruptcy proceedings. These items include cash and non-cash charges related to contract terminations, prepetition obligations, debtor-in-possession financing costs, legal and professional fees.
- (b) In 2010, Tronox Incorporated recorded receivables from our insurance carrier related to environmental clean-up obligations at the Henderson facility. Due to the accounting for the KM Legacy Liabilities, as described in Notes 1 and 5 to the annual Consolidated Financial Statements, the obligation for this clean-up work had been recorded in 2008 and prior years.
- (c) Restructuring costs in 2008 resulted primarily from work force reduction programs along with asset retirement obligation adjustments.
- (d) In 2008, Tronox Incorporated recorded impairment charges for long-lived assets of approximately \$3.3 million related to the Savannah, Georgia, and approximately \$21.6 million related to the Botlek, the Netherlands. See Tronox Incorporated Management's Discussion and Analysis of Financial Condition and Operations Critical Accounting Policies for further discussion of our impairment testing methodology.
- (e) The 2009 amount represents the net loss on deconsolidation of Tronox Incorporated's German subsidiaries.
- (f) In the eleven months ended December 31, 2011, transaction costs and financial statement restatement costs include expenses related to the Transaction of \$20.2 million, the registration rights penalty of \$2.0 million, fresh-start accounting fees of \$2.5 million, costs associated with restating Tronox Incorporated's environmental reserves of \$5.1 million and the auditing of the historical financial statements of \$3.5 million. Costs associated with the Transaction include professional fees related to due diligence and transaction advice as well as investment banking fees. Additionally, Tronox Incorporated incurred legal fees associated with the exit from bankruptcy and the Transaction of \$5.9 million. In the three months ended March 31, 2012, transaction costs consist of costs associated with the acquisition of Exxaro Mineral Sands, including banker fees, legal and professional fees, as well as costs associated with the preparation and amending of the registration statement on Form S-4 filed with the SEC in connection with the Transaction and costs associated with the integration of Exxaro Mineral Sands that will occur after the closing of the Transaction.
- (g) Includes noncash pension and postretirement healthcare costs and accretion expense.



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**TRONOX INCORPORATED MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*The following discussion and analysis should be read in conjunction with the information contained in the audited annual Consolidated Financial Statements for Tronox Incorporated for the three months ended March 31, 2012, eleven months ended December 31, 2011, two months ended March 31, 2011, one month ended January 31, 2011 and years ended December 31, 2010 and 2009 and the related notes thereto. This discussion contains forward-looking statements that involve risks and uncertainties, and actual results could differ materially from those discussed in the forward-looking statements as a result of numerous factors. See Cautionary Note Regarding Forward-Looking Statements.*

*This Tronox Incorporated Management's Discussion and Analysis of Financial Condition and Results of Operations contains certain financial measures, in particular the presentation of Income (Loss) from Operations, which are not presented in accordance with GAAP. These non-GAAP financial measures are being presented because they provide Tronox Incorporated and readers of this prospectus with additional insight into Tronox Incorporated's operational performance relative to earlier periods and relative to its competitors. We do not intend for these non-GAAP financial measures to be a substitute for any GAAP financial information. Readers of this prospectus should use these non-GAAP financial measures only in conjunction with the comparable GAAP financial measures. Reconciliations of Income (Loss) from Operations to Income (Loss) from Continuing Operations, the most comparable GAAP measure, are provided in this prospectus.*

**General**

Tronox Incorporated is one of the leading producers and marketers of TiO<sub>2</sub> by capacity, which is used in consumer products such as paint, plastic and certain specialty products. Tronox Incorporated is one of the few TiO<sub>2</sub> manufacturers with global operations having production facilities and sales and marketing presence in the Americas, Europe and the Asia-Pacific regions.

Tronox Incorporated operates chloride process TiO<sub>2</sub> production facilities in Hamilton, Mississippi; Botlek, the Netherlands; and Kwinana, Western Australia. The Hamilton, Mississippi facility is the third largest plant of its kind in the world by nameplate capacity. The Kwinana Facility is a fully integrated facility that is part of the Tiwest Joint Venture, and in connection with the Transaction, the Tiwest Joint Venture became a wholly-owned business of Tronox Limited. The joint venture is an integral aspect of our operations due to its backward integration into titanium ore raw materials. See the discussion of the Tiwest Joint Venture below.

Tronox Incorporated's global presence enables it to sell its products to a diverse portfolio of customers with whom it has well-established relationships. Tronox Incorporated's customer base consists of more than 1,000 customers in approximately 90 countries and includes market leaders in each of the major end-use markets for TiO<sub>2</sub>. Additionally, Tronox Incorporated has supplied each of its top ten customers with TiO<sub>2</sub> for more than ten years.

In addition to its pigment business, Tronox Incorporated has other operations that manufacture and market electrolytic and specialty chemical products. Tronox Incorporated's electrolytic and other chemical products businesses produce electrolytic manganese dioxide, sodium chlorate, boron-based and other specialty chemicals, and is focused on three end-use markets: advanced battery materials, sodium chlorate for pulp and paper manufacture and specialty boron products serving the semi-conductor, pharmaceutical and igniter industries.

*The Tiwest Joint Venture.* Historically, Tronox Incorporated and Exxaro have operated the Tiwest Joint Venture, which includes a chloride process TiO<sub>2</sub> plant located at the Kwinana Facility, a mining venture in Cooljarloo, Western Australia, and a mineral separation plant and synthetic rutile processing facility, both in Chandala, Western Australia. The Tiwest Joint Venture also includes operations related to heavy minerals production other than titanium bearing ores. The heavy minerals produced by the Tiwest Joint Venture are used

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by its own mining and separation facilities, and sold to Tronox Incorporated facilities and to third parties. These include natural rutile, leucocoxene and the co-product zircon. Because of the terms of the joint ownership agreement governing the Tiwest Joint Venture, the joint venture is proportionately consolidated in Tronox Incorporated's financial statements. The assets in the Tiwest Joint Venture were jointly controlled by Tronox Incorporated and Exxaro, as each had an undivided interest in them. As a result, Tronox Incorporated's Consolidated Balance Sheets presented in this prospectus include Tronox Incorporated's share of the assets that are jointly controlled and Tronox Incorporated's share of the liabilities for which it is jointly responsible. Tronox Incorporated's Consolidated Statements of Operations include its share of the income and expenses of the Tiwest Joint Venture. Through a separate agreement, Tronox Incorporated is responsible for the marketing of Exxaro's share of the TiO<sub>2</sub> production in which capacity it acts as principal and bears the credit risk for such sales. As a result, the aggregate TiO<sub>2</sub> production allocated to Exxaro has been included in Tronox Incorporated's net sales, and the cost attributable to buying Exxaro's share of TiO<sub>2</sub> production at market price has been included in Tronox Incorporated's cost of goods sold. In connection with the Transaction, Tronox Limited acquired Exxaro's 50.0% interest in the Tiwest Joint Venture and operate the business as a wholly-owned business.

*Segment Evaluation.* Tronox Incorporated's business has one reportable segment, pigment. The pigment segment primarily produces and markets TiO<sub>2</sub>, and has production facilities in the United States, Australia and the Netherlands. Tronox Incorporated's other business line, electrolytic and other chemical products, is comprised of its electrolytic manufacturing and marketing operations. Corporate and other is comprised of corporate activities and businesses that are no longer in operation. Although Tronox Incorporated's electrolytic and other chemical products business line and corporate and other do not constitute reportable segments under Accounting Standards Codification (ASC) 280, *Segment Reporting* (ASC 280), they are discussed and disclosed separately in this prospectus as management believes that providing this information is useful to the readers.

Tronox Incorporated evaluates the pigment segment's performance separately based on segment income (loss) from operations, which represents the results of segment operations before unallocated costs, such as general corporate expenses not identified to a specific segment, environmental provisions related to sites no longer in operation, interest and debt expense, income tax expense or benefit, reorganization income (expense) and other income (expense). Total income (loss) from operations of Tronox Incorporated's segment and other business lines is a financial measure of its performance, which is not determined in accordance with GAAP, as it excludes the items listed above, all of which are components of Income (Loss) from Continuing Operations, on the Consolidated Statements of Operations, the most comparable GAAP measure.

***General Factors Affecting the Results of Continuing Operations***

The following strategic and operational events during the three months ended March 31, 2012, eleven months ended December 31, 2011, two months ended March 31, 2011, one month ended January 31, 2011 and years ended December 31, 2010 and 2009, affected Tronox Incorporated's results of operations as follows:

*Exit Facility Refinancing* On February 8, 2012, the Company refinanced the Exit Financing Facility. The Company obtained a new Goldman Sachs facility comprised of a \$550.0 million Senior Secured Term Loan and a \$150.0 million Senior Secured Delayed Draw Term Loan (together, the Term Facility). The Term Facility expressly permits the Transaction and, together with existing cash, is expected to fund the cash needs of the combined business, including any cash needs arising from the Transaction.

*Wells Revolver Amendment* On February 8, 2012, the Company amended the Wells Revolver to allow for the Transaction to occur while keeping the revolver in force.

*RTI Hamilton Settlement* The outstanding legal disputes between Tronox Incorporated and RTI Hamilton, Inc dating back to 2008 have come to a close with the parties reaching an agreement in principle during August 2011. The settlement agreement reflects a compromise and settlement of disputed claims in complete accord and

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satisfaction thereof. RTI Hamilton paid Tronox Incorporated \$10.5 million on September 12, 2011, including \$0.7 million in payment for capital costs incurred by Tronox Incorporated in relation to the agreement, including interest.

*Tiwest Joint Venture Expansion* The expansion of the Tiwest Joint Venture TiO<sub>2</sub> plant in Kwinana, Western Australia was completed and commissioned at the end of the second quarter of 2010. The expansion increased TiO<sub>2</sub> production capacity at the Kwinana Facility from 110,000 to 150,000 tonnes per annum. While Tronox Incorporated was in bankruptcy, Exxaro funded the majority of the expansion. Tronox Incorporated bought into its 50.0% share of the TiO<sub>2</sub> plant expansion as of June 30, 2011 for \$79.1 million. Going forward, Tronox Incorporated expects that the increase in tonnes per annum will increase profitability due to acquiring the incremental production at the cost of production versus purchasing the tonnes at market prices.

*Financing Arrangement* In March 2011, the Tiwest Joint Venture acquired a steam and electricity gas fired co-generation plant adjacent to the Kwinana Facility, through a five year financing arrangement. Tronox Western Australia Pty Ltd, our wholly-owned subsidiary, owned a 50.0% undivided interest in the co-generation plant through the Tiwest Joint Venture. As a result, Tronox Incorporated incurred additional debt totaling \$8.0 million in order to finance its share of the asset purchase. Under the financing arrangement, monthly payments are required and interest accrues on the remaining balance owed at the rate of 6.5% per annum. During the eleven months ended December 31, 2011, Tronox Incorporated made scheduled repayments of \$1.5 million. In connection with the Transaction, the operations of the Tiwest Joint Venture became wholly-owned by Tronox Limited, and we expect Tronox Limited will continue to experience increased profitability from the plant.

*Tiwest Joint Venture Outages* During the fourth quarter of 2010, the Tiwest Joint Venture was impacted by outages experienced by the Kwinana Facility's industrial gas supplier, Air Liquide WA. The Kwinana Facility lost 13 days of production with approximately another 12 days of production at significantly reduced rates. As a result of these outages and the lost production, Tronox Incorporated recorded idle facility charges of \$3.3 million during the fourth quarter. Tronox Incorporated is reviewing both contractual and insurance remedies to mitigate the business interruption loss, but does not yet have an estimate for any potential recovery.

*Savannah Facility* In December 2009, Tronox Incorporated completed the idling of the Savannah TiO<sub>2</sub> operations. On July 21, 2009, Tronox Incorporated announced its decision to idle the production at its Savannah facility. Tronox Incorporated subsequently removed all proprietary technology related to the TiO<sub>2</sub> operations, wrote down certain inventories to net realizable value and recognized a restructuring charge for severance payments to employees of the Savannah TiO<sub>2</sub> operations. Pursuant to the Plan, the Savannah site was transferred to an environmental response trust upon Tronox Incorporated's emergence from bankruptcy on February 14, 2011. Tronox Incorporated has determined that the Savannah TiO<sub>2</sub> operations do not meet the criteria for discontinued operations treatment. Therefore, the financial results of the Savannah TiO<sub>2</sub> operations are included in the pigment segment. The sulfuric acid operations and other residual costs related to the former sulfate operations are included in corporate and other. Historical revenues attributable to our Savannah facility for the eleven months ended December 31, 2011, one month ended January 31, 2011 and years ended December 31, 2010 and 2009 were \$0.1 million, \$2.4 million, \$37.4 million, and \$107.4 million, respectively.

***Emergence from Chapter 11***

On the Petition Date, the Debtors, including Tronox Incorporated, filed voluntary petitions in the United States Bankruptcy Court seeking reorganization relief under the Bankruptcy Code. The Chapter 11 cases were consolidated for procedural purposes and were jointly administered under the caption *In re Tronox Incorporated*, et al., Case No. 09-10156 (ALG), and the Debtors operated their businesses and managed their properties as debtors in possession under the jurisdiction of the Bankruptcy Court and in accordance with the applicable provisions of the Bankruptcy Code and orders of the Bankruptcy Court.



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Material conditions to the Plan, most notably the claims related to the Debtors' Legacy Environmental Liabilities and Legacy Tort Liabilities were resolved and settled as part of the Plan, which was confirmed on January 26, 2011. Subsequently, on February 14, 2011 (the Effective Date), Tronox Incorporated emerged from bankruptcy and continued operations as reorganized Tronox Incorporated.

Following its emergence from the Chapter 11 proceedings, reorganized Tronox Incorporated was free from the significant KM Legacy Liabilities and was sufficiently capitalized. With respect to claims related to the Legacy Environmental Liabilities were resolved through a settlement that allocated cash and other assets to certain environmental response trusts and environmental agencies in accordance with the terms of a settlement agreement (the Environmental Claims Settlement Agreement), which was approved by the Bankruptcy Court as being a fair and equitable settlement of the potential numerous claims and varying priorities of the Legacy Environmental Liabilities claims.

As part of the Environmental Claims Settlement Agreement, the governmental claimants provided the Debtors and the reorganized Tronox Incorporated with discharges and/or covenants not to sue with respect to the Debtors liability for the Legacy Environmental Liabilities subsequent to the Effective Date. Similarly, the Plan provided for the creation and funding of a torts claim trust (the Tort Claims Trust), which is the sole source of distributions to holders of Legacy Tort Liabilities claims.

In conjunction with the transfer of liabilities achieved through allocating funds to the applicable trusts and/or responsible agencies, the Plan preserved Tronox Incorporated, which was reorganized around its existing operating locations, including: (a) its headquarters and technical facility at Oklahoma City, Oklahoma; (b) the titanium dioxide facilities at Hamilton, Mississippi and Botlek, the Netherlands; (c) the electrolytic chemical businesses at Hamilton, Mississippi and Henderson, Nevada (except that the real property and buildings associated with such business was transferred to an environmental response trust and reorganized Tronox Incorporated is not responsible for environmental remediation related to historic contamination at such site); and (d) its interest in the Tiwest Joint Venture in Australia.

As part of the emergence from the Chapter 11 proceedings, Tronox Incorporated relied on a combination of debt and equity financing. Specifically, the Plan included: (i) total funded exit financing of no more than \$470 million; (ii) the proceeds of a \$185 million rights offering (the Rights Offering) open to substantially all unsecured creditors and backstopped by certain existing creditors; (iii) settlement of government claims related to the Legacy Environmental Liabilities through the creation of certain environmental response trusts and a litigation trust; (iv) settlement of claims related to the Legacy Tort Liabilities through the establishment of a torts claim trust; (v) issuance of new common stock (the New Common Stock) whereby holders of the allowed general unsecured claims received their pro rata share of 50.9% of the New Common Stock on the Effective Date, and the opportunity to participate in the Rights Offering for an aggregate of 49.1% of the New Common Stock, also issued on the Effective Date; and (vi) issuance of warrants, on the Effective Date, to the holders of equity prior to the Debtors' emergence from bankruptcy, consisting of two tranches: the new series A warrants (the Series A Warrants) and the new series B warrants (the Series B Warrants), to purchase their pro rata share of a combined total of 7.5% of the New Common Stock, after and including the issuance of any New Common Stock upon exercise of the Series A Warrants and the Series B Warrants.

Following consummation of the Plan, Tronox Incorporated was required to adopt fresh-start accounting. Having resolved the material contingencies related to implementing the Plan, most notably the approval under U.S. federal and applicable state environmental law of the settlement of the Legacy Environmental Liabilities, on January 26, 2011, and due to the proximity to Tronox Incorporated's end of the month accounting period, which closed on January 31, 2011, it applied fresh-start accounting as of January 31, 2011. Tronox Incorporated evaluated the activity between January 26, 2011 and January 31, 2011 and, based upon the immateriality of such activity, concluded that the use of January 31, 2011 to reflect the fresh-start accounting adjustments was appropriate for financial reporting purposes. The use of the January 31, 2011 date is

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for financial reporting purposes only and does not affect the Effective Date of the Plan. Accordingly, the financial information set forth in this report, unless otherwise expressly set forth or as the context otherwise indicates, reflects the consolidated results of operations and financial condition of Tronox Incorporated and its subsidiaries on a fresh-start basis for the period following January 31, 2011 ( Successor ), and of Tronox Incorporated and its subsidiaries on a historical basis for the periods through January 31, 2011 ( Predecessor ). Fresh-start accounting and reporting provisions were applied pursuant to ASC 852 and the financial statements as of February 1, 2011 and for subsequent periods report the results of Tronox Incorporated with no beginning retained earnings or accumulated deficit.

The primary impacts of Tronox Incorporated's reorganization pursuant to the Plan and the adoption of fresh-start accounting on its results of operations were as follows:

*Depreciation and amortization expense*

Depreciation and amortization expense was higher in 2011 compared to 2010 as a result of the revaluation of assets for fresh-start accounting. Revaluation increased depreciation and amortization by \$26.8 million in 2011. For additional information on the revaluation of assets, see Note 4 to the Tronox Incorporated Consolidated Financial Statements. Depreciation and amortization as reported for both periods presented is as follows:

	Successor Eleven Months Ended December 31, 2011	One Month Ended January 31, 2011 (Millions of dollars)	Predecessor Year Ended December 31,	
			2010	2009
<b>Cost of goods sold:</b>				
Depreciation	\$ 54.0	\$ 3.6	\$ 44.1	\$ 45.9
Amortization	1.4	0.3	3.2	3.3
<b>Selling, general and administrative expenses:</b>				
Depreciation	2.1	0.2	2.8	3.9
Amortization	21.6			
<b>Total</b>	<b>\$ 79.1</b>	<b>\$ 4.1</b>	<b>\$ 50.1</b>	<b>\$ 53.1</b>

*Interest expense*

Lower interest expense in 2011 compared to 2010 was largely driven by lower interest rates and lower amortization of debt issuance costs on our debtor-in possession ( DIP ) facilities. In October 2010, Tronox Incorporated refinanced its second DIP facility into a final DIP facility ( Final DIP Facility ), lowering the LIBOR margin applicable to the loans by 2%. On February 14, 2011, the Final DIP Facility converted into a \$425.0 million exit facility (the Exit Financing Facility ) which bears interest at the same rate. In addition, in conjunction with the refinancing and the application of fresh-start accounting, the debt issuance costs related to the second DIP facility and the final DIP facility were written off as of October 21, 2010 and February 1, 2011, respectively. See the discussion in Capital Resources for additional information on the DIP facilities.

	Successor Eleven Months Ended December 31, 2011	One Month Ended January 31, 2011 (Millions of dollars)	Predecessor Year Ended December 31,	
			2010	2009
Interest Expense	\$ 30.0	\$ 2.9	\$ 49.9	\$ 35.9



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**Table of Contents*****Anadarko Litigation***

In May 2009, Tronox Incorporated and certain of its affiliates filed a lawsuit against Anadarko Petroleum and Kerr-McGee (a predecessor to Anadarko) asserting the Anadarko Claim. In connection with the Chapter 11 proceedings of Tronox Incorporated, Tronox Incorporated assigned all of the Anadarko Claim to a litigation trust on behalf of the holders of environmental claims and tort claims against Tronox Incorporated, pursuant to a full satisfaction of such claims. Tronox Incorporated has no economic interest in the litigation trust. However, pursuant to the terms of the litigation trust, Tronox Incorporated could continue to be treated as the owner of the Anadarko Claim solely for purposes of federal and state income taxes. Depending on the outcome of the Anadarko Claim, it is possible that Tronox Incorporated will receive the benefit of certain tax deductions that would result if the Anadarko Claim is resolved successfully and the proceeds of the Anadarko Claim are used as contemplated under the terms of the litigation trust.

***Business Environment***

The following discussion includes trends and factors that may affect future operating results.

***Supply and Demand***

The majority of Tronox Incorporated's revenue comes from the sale of TiO<sub>2</sub> (85.1% and 83.4% for the first quarter of 2012 and 2011, respectively, and 85.5%, 82.3%, and 81.2% for the twelve months ended December 31, 2011, 2010 and 2009, respectively). TiO<sub>2</sub> is a chemical used in many quality of life products, such as paints, plastics, paper, inks and rubber as well as in various specialty applications. Supply and demand for TiO<sub>2</sub> products is currently in balance globally, allowing producers to maintain high capacity utilization rates (production levels). Over the long-term, we expect the demand for TiO<sub>2</sub> to grow by approximately 3% to 4% per year. This is consistent with our expectation for the long-term growth in GDP.

***Pricing***

Due to supply and demand dynamics, TiO<sub>2</sub> prices rose significantly during 2011 but increases have moderated in early 2012, in part due to normal seasonality, and therefore pricing increased modestly over the fourth quarter of 2011, while being significantly higher than the first quarter of 2011. Going forward, we expect the market to remain in balance, enabling prices to remain at current levels and/or increase at moderate rates.

***Raw Materials***

The primary raw materials used in the production of TiO<sub>2</sub>, titanium feedstock ore, experienced significant increases in price during 2011, which have continued into 2012. Our price for raw materials during the first quarter of 2012 increased over 100% compared to the first quarter of 2011. As the cost of titanium feedstock continues to rise, our operating expenses will continue to increase. Due to the constraints of adding significant new production capacity for titanium feedstock, we expect titanium feedstock production to remain constrained, thereby putting upward pressure on our raw material costs.

***Seasonality***

The demand for TiO<sub>2</sub> during any given year is subject to seasonal fluctuations. TiO<sub>2</sub> sales are generally higher in the second and third quarters of the year primarily due to the increase in paint production to meet demand resulting from the spring and summer painting season in North America and Europe. We continue to believe that in the absence of material new supply and the continued long term development of demand, the medium and long term supply and demand fundamentals of the TiO<sub>2</sub> market will remain strong. The impacts from the seasonality of the fourth quarter 2011 and the first quarter of 2012, compounded by destocking of inventory by customers and the impact of the economic slowdown in China, are still present in the market as of the date of this filing. However, we believe those issues will improve in the coming months.

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### ***Currency Exchange Rates***

The financial condition and results of operations of Tronox Incorporated operating entities in the Netherlands and Australia are reported in various foreign currencies and then converted into U.S. dollars at the applicable exchange rate for inclusion in its consolidated financial statements. As a result, any volatility of the U.S. dollar against these foreign currencies creates uncertainty for and may have a positive or negative impact on reported sales and operating margins. During 2011 and the three months ended March 31, 2012, Tronox Incorporated experienced unfavorable foreign currency effects. Foreign currency effects appear in the financial statements in several ways. First, they impact reported amounts of revenues and expenses and are embedded in each line item of the financials. Second, for changes in reported asset and liability amounts in either income and expense or in cumulative translation adjustments in Accumulated other comprehensive income (loss) on the Consolidated Balance Sheets. Foreign currency losses recognized in Other income (expense) on the Consolidated Statements of Operations were \$7.8 million for the eleven months ended December 31, 2011 and \$2.2 million for the three months ended March 31, 2012, while foreign currency gains recognized were \$0.9 million for the two months ended March 31, 2011 and \$1.5 million for the one month ended January 31, 2011.

### ***Competition***

Each of the markets in which Tronox Incorporated competes is highly competitive. Competition is based on a number of factors such as price, product quality and service. Tronox Incorporated faces significant competition from major international and smaller regional competitors. The most significant competitors include major chemical and materials manufacturers and diversified companies, a number of which have substantially larger financial resources and a greater number of personnel than Tronox Incorporated.

Within the end-use markets in which Tronox Incorporated competes, competition between products is intense. Tronox Incorporated faces substantial risk that certain events, such as new product development by competitors, changing customer needs, production advances for competing products or price changes in raw materials, could cause its customers to switch to its competitors' products.

### **Government Regulations and Environmental Matters**

Tronox Incorporated is subject to extensive regulation by federal, state, local and foreign governments. Governmental authorities regulate the generation and treatment of waste and air emissions at its operations and facilities. At many of its operations, Tronox Incorporated also complies with worldwide, voluntary standards developed by the International Organization for Standardization (ISO), a nongovernmental organization that promotes the development of standards and serves as a bridging organization for quality and environmental standards, such as ISO 9002 for quality management and ISO 14001 for environmental management.

Tronox Incorporated is in compliance with applicable environmental rules and regulations. Currently, Tronox Incorporated does not have any outstanding notices of violations or orders from regulatory agencies.

### **Critical Accounting Policies**

The preparation of financial statements in conformity with GAAP requires management to make certain estimates and assumptions regarding matters that are inherently uncertain and that ultimately affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosure of contingent assets and liabilities. The estimates and assumptions are based on management's experience and understanding of current facts and circumstances. These estimates may differ from actual results. Certain of Tronox Incorporated's accounting policies are considered critical as they are both important to reflect Tronox Incorporated's financial position and results of operations and require significant or complex judgment on the part of management. The following is a summary of certain accounting policies considered critical by the management of Tronox Incorporated.

In connection with the Transaction, the Company is in the process of evaluating its accounting policies and disclosure requirements, which may result in revisions in future filings.

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### ***Long-Lived Assets***

Key estimates related to long-lived assets include useful lives, recoverability of carrying values and the existence of any retirement obligations. As a result of future decisions, such estimates could be significantly modified. The estimated useful lives of property, plant and equipment range from three to forty years, and depreciation is recognized on a straight-line basis. Useful lives are estimated based upon Tronox Incorporated's historical experience, engineering estimates and industry information. These estimates include an assumption regarding periodic maintenance and an appropriate level of annual capital expenditures to maintain the assets.

Long-lived assets are evaluated for potential impairment whenever events or changes in circumstances indicate that carrying value may be greater than future net cash flows. Such evaluations involve a significant amount of judgment since the results are based on estimated future events, such as sales prices, costs to produce the products, the economic and regulatory climates and other factors. Tronox Incorporated evaluates impairments by asset group for which the lowest level of independent cash flows can be identified. If the sum of these estimated future cash flows (undiscounted and without interest charges) is less than the carrying amount of the asset, an impairment loss is recognized for the excess of the carrying amount of the asset over its estimated fair value.

### ***Intangible Assets***

Intangible assets with finite useful lives are amortized on the straight-line basis over their estimated useful lives. The amortization methods and remaining useful lives are reviewed annually. The carrying amounts are reviewed at each financial year-end to determine whether there is any indication of impairment.

### ***Asset Retirement Obligations***

To the extent a legal obligation exists, an asset retirement obligation is recorded at its estimated fair value and accretion expense is recognized over time as the discounted liability is accreted to its expected settlement value. Fair value is measured using expected future cash outflows discounted at Tronox Incorporated's credit-adjusted risk-free interest rate. No market-risk premium has been included in the calculation of asset retirement obligation balances since no reliable estimate can be made by management.

Tronox Incorporated's most significant asset retirement obligation at December 31, 2011 and 2010 was its share of mine closure and rehabilitation costs associated with the Tiwest Joint Venture. Significant judgment is applied in estimating the ultimate cost that will be required to rehabilitate the mines. Management used the following assumptions in determining asset retirement obligations associated with mine closure and rehabilitation costs associated with the Tiwest Joint Venture:

inflation of 2.5% per year during 2011 and 2010;

credit adjusted risk-free rate of 6.1% per year during 2011 and 13.6% per year during 2010;

life of mine over 15 years in 2011 and 13 years in 2010; and

life of mine rehabilitation over 18 years in 2011 and 19 years in 2010.

A primary factor resulting in the 2010 credit adjusted risk-free rate of 13.6% was Tronox Incorporated's bankruptcy status.

### ***Restructuring and Exit Activities***

Tronox Incorporated's restructuring activities in the past have included closing of facilities and work force reduction programs. With the exception of asset retirement obligations, these charges are recorded when management commits to a plan and incurs a liability related to the plan. Estimates for plant closing include the write-down of inventory, write-down of property, plant and equipment, any necessary environmental or regulatory costs, contract termination and severance costs. Asset retirement obligations are recorded in accordance with ASC 410, *Asset Retirement and Environmental Obligations* (ASC 410). Estimates for work



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force reductions are recorded based on estimates of the number of positions to be terminated, termination benefits to be provided, estimates of any enhanced benefits provided under pension and postretirement plans and the period over which future service will continue, if any. Tronox Incorporated evaluates the estimates on a quarterly basis and adjust the reserves when information indicates that the estimates are above or below the initial estimates. Tronox Incorporated cannot predict when or if future restructuring or exit reserves will be required.

### **Environmental Costs and Other Contingency Reserves**

In accordance with ASC 450, *Contingencies*, and ASC 410, management makes judgments and estimates in accordance with applicable accounting rules when it establishes reserves for environmental costs, litigation and other contingent matters. Provisions for such matters are charged to expense when it is probable that a liability has been incurred and reasonable estimates of the liability can be made. Estimates of environmental liabilities, which include the cost of investigation and remediation, are based on a variety of matters, including, but not limited to, the stage of investigation; the stage of the remedial design; the availability of existing remediation technologies; presently enacted laws and regulations; and the state of any related legal or administrative investigation or proceedings.

### **Income Taxes**

Tronox Incorporated has operations in several countries around the world and is subject to income and similar taxes in these countries. The estimation of the amounts of income tax involves the interpretation of complex tax laws and regulations and how foreign taxes affect domestic taxes, as well as the analysis of the realizability of deferred tax assets, tax audit findings and uncertain tax positions. Although Tronox Incorporated believes its tax accruals are adequate, differences may occur in the future, depending on the resolution of pending and new tax matters.

Deferred tax assets and liabilities are determined based on temporary differences between the financial reporting and tax bases of assets and liabilities using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. A valuation allowance is provided against a deferred tax asset when it is more likely than not that all or some portion of the deferred tax asset will not be realized. Tronox Incorporated periodically assesses the likelihood that it will be able to recover its deferred tax assets, and reflects any changes in its estimates in the valuation allowance, with a corresponding adjustment to earnings or other comprehensive income (loss) as appropriate. ASC 740, *Income Taxes*, requires that all available positive and negative evidence be weighted to determine whether a valuation allowance should be recorded.

The amount of income taxes Tronox Incorporated pays is subject to ongoing audits by federal, state and foreign tax authorities, which may result in proposed assessments. Tronox Incorporated's estimate for the potential outcome for any uncertain tax issue is highly judgmental. Tronox Incorporated assesses its income tax positions and records tax benefits for all years subject to examination based upon its evaluation of the facts, circumstances and information available at the reporting date. For those tax positions for which it is more likely than not that a tax benefit will be sustained, Tronox Incorporated records the amount that has a greater than 50.0% likelihood of being realized upon settlement with a taxing authority that has full knowledge of all relevant information. Interest and penalties are accrued as part of tax expense, where applicable. If Tronox Incorporated does not believe that it is more likely than not that a tax benefit will be sustained, no tax benefit is recognized.

### **Pension and Postretirement Accounting**

Tronox Incorporated provides pension and postretirement benefits for qualifying employees worldwide. However, Tronox Incorporated froze its U.S. nonqualified and qualified pension benefit plans in 2008 and 2009, respectively. These plans are accounted for and disclosed in accordance with ASC 715, *Compensation Retirement Benefits*.



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### *U.S. Plans*

The following are considered significant assumptions related to Tronox Incorporated's retirement and postretirement plans, with a brief description of the methodology used by management to develop the significant assumptions included below:

*Discount Rate.* The discount rate selected for all U.S. plans was 4.50% as of December 31, 2011 and 5.00% at both January 31, 2011 and December 31, 2010. The rate was selected based on the results of a cash flow matching analysis, which projected the expected cash flows of the plans using a yield curves model developed from a universe of Aa-graded U.S. currency corporate bonds (obtained from Bloomberg) with at least \$50.0 million outstanding. Bonds with features that imply unreliable pricing, a less than certain cash flow, or other indicators of optionality are filtered out of the universe. The remaining universe is categorized into maturity groups, and within each of the maturity groups yields are ranked into percentiles.

*Expected Long-term Rate of Return.* The estimated long-term rate of return assumption used in the determination of net periodic cost for the years ended December 31, 2011 and 2010 was 7.50%. This rate was developed after reviewing both a capital asset pricing model using historical data and a forecasted earnings model. An expected return analysis is performed which incorporates the current portfolio allocation, historical asset-class returns and an assessment of expected future performance using asset-class risk factors.

*Rate of Compensation Increases.* Tronox Incorporated's estimated rate of compensation increase was 3.50% at both December 31, 2011 and 2010, based on our long-term plans for compensation increases and expected economic conditions, including the effects of merit increases, promotions and general inflation.

*Health Care Cost Trend Rates.* At December 31, 2011, the assumed health care cost trend rates used to measure the expected cost of benefits covered by the postretirement healthcare plan was 9.0% in 2012, gradually declining to 5.0% in 2018 and thereafter. A 1% increase in the assumed health care cost trend rate for each future year would increase the accumulated postretirement benefit obligation at December 31, 2011 by \$1.0 million, while the aggregate of the service and interest cost components of the 2011 net periodic postretirement cost would increase by \$0.1 million. A 1% decrease in the trend rate for each future year would reduce the accumulated benefit obligation at December 31, 2011 by \$0.8 million and decrease the aggregate of the service and interest cost components of the net periodic postretirement cost for 2011 by \$0.1 million.

### *Foreign Benefit Plans*

Tronox Incorporated currently provides defined benefit retirement plans (funded) for qualifying employees in the Netherlands. The various assumptions used and the attribution of the costs to periods of employee service are fundamental to the measurement of net periodic cost and pension obligations associated with the retirement plans.

The following are considered significant assumptions related to Tronox Incorporated's foreign retirement plans:

*Discount Rate.* The discount rate selected for the Netherlands plan was 5.25% as of December 31, 2011 and 2010, which is based on long-term Euro corporate bond index rates that correlate with anticipated cash flows associated with future benefit payments.

*Expected Long-term Rate of Return.* The expected long-term rate of return assumption for the Netherlands plan of 5.25% as of December 31, 2011 and 5.75% as of December 31, 2010 was developed considering the portfolio mix and country-specific economic data that includes the expected long-term rates of return on local government and corporate bonds.

*Rate of Compensation Increases.* Tronox Incorporated determines its rate of compensation assumptions based on its long-term plans for compensation increases specific to employee groups covered. At December 31, 2011 and 2010, the rate of compensation increases for the Netherlands plan was 3.50%.

**Table of Contents****Recent Accounting Pronouncements**

On January 1, 2012, Tronox Incorporated adopted the required guidance under ASU 2011-05, *Presentation of Comprehensive Income* ( ASU 2011-05 ), which changes the presentation requirements of comprehensive income to improve the comparability, consistency, and transparency of financial reporting and to increase the prominence of items reported in other comprehensive income. The adoption of this guidance did not have a material impact on the consolidated financial statements. During 2011, the FASB issued ASU 2011-12, which deferred certain requirements of ASU 2011-05. The Company did not adopt such deferred requirements.

In May 2011, the FASB issued ASU 2011-04, *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and International Financial Reporting Standards ( IFRS )* ( ASU 2011-04 ), which changes certain fair value measurement and disclosure requirements, clarifies the application of existing fair value measurement and disclosure requirements and provides consistency to ensure that U.S. GAAP and IFRS fair value measurement and disclosure requirements are described in the same way. ASU 2011-04 is effective for interim and annual periods beginning after December 15, 2011. The adoption of this guidance did not have a material impact on the consolidated financial statements.

**The Three Months Ended March 31, 2012 Compared to the Combined Three Month Period Ended March 31, 2011**

The following table presents Tronox Incorporated's results of operations for the periods indicated. References to 2011 refer to the combined three month period ended March 31, 2011, which includes the Successor period and the Predecessor period, unless otherwise indicated.

	Successor		Predecessor	Change, 2012 from Combined Three Months 2011
	Three Months Ended March 31, 2012	Two Months Ended March 31, 2011	One Month Ended January 31, 2011	
	(Millions of dollars)			
<b>Net Sales</b>	\$ 433.6	\$ 267.1	\$ 107.6	\$ 58.9
Cost of goods sold	(276.3)	(229.8)	(82.3)	35.8
<b>Gross Margin</b>	157.3	37.3	25.3	94.7
Selling, general and administrative expenses	(44.3)	(19.5)	(5.4)	(19.4)
<b>Income from Operations</b>	113.0	17.8	19.9	75.3
Interest and debt expense	(7.9)	(5.3)	(2.9)	0.3
Other income (expense)	(1.4)	1.0	1.6	(4.0)
Reorganization income (expense)			613.6	(613.6)
<b>Income from Continuing Operations before Income Taxes</b>	103.7	13.5	632.2	(542.0)
Income tax provision	(17.4)	(3.3)	(0.7)	(13.4)
<b>Income from Continuing Operations</b>	\$ 86.3	\$ 10.2	\$ 631.5	\$ (555.4)

*Net sales* increased \$58.9 million, or 15.7%, to \$433.6 million for 2012, from \$374.7 million for 2011. Pigment segment sales accounted for approximately 92.8% of our total sales during 2012 and approximately 90.0% in 2011. Increases in sales price of both TiO<sub>2</sub> and mineral products during 2012 resulted in a \$130.4 million increase in net sales, while decreases in sales volumes of both TiO<sub>2</sub> and mineral products resulted in a \$61.7 million decrease in net sales. Additionally, the impact of foreign currency exchange rate changes related to TiO<sub>2</sub> decreased net sales by \$3.3 million. See discussion of Net Sales by business line for further information.

*Costs of goods sold* decreased \$35.8 million, or 11.5%, to \$276.3 million for 2012, from \$312.1 million for 2011. The decrease is primarily due to a decrease in volume, offset by higher raw material, chemicals, energy and employee related costs year over year. Also contributing to the increase is unfavorable exchange rate changes



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primarily due to movements in the Australian dollar versus the U.S. dollar. Cost of goods sold as a percentage of net sales was 63.7% during 2012 down from 83.3% during 2011 primarily due to increased sales prices partially offset by the higher costs.

**Gross margin** increased \$94.7 million, or 151.3%, to \$157.3 million for 2012, from \$62.6 million for 2011. Gross margin percentage improved to 36.3% during 2012, up from 16.7% during 2011. Gross margin and gross margin percentage improved primarily due to the increased selling prices, discussed above, partially offset by decreased sales volumes, higher costs and unfavorable exchange rate changes. See discussion of Income (Loss) from Operations by business line for further information.

**Selling, general and administrative** expenses increased \$19.4 million, or 77.9%, to \$44.3 million for 2012, from \$24.9 million for 2011. The increase was primarily due to costs associated with the acquisition of Exxaro's mineral sands operations, as well as increased employee variable compensation and benefit costs.

Costs associated with the acquisition of Exxaro Mineral Sands, including banker fees, legal and professional fees, as well as costs associated with the preparation and amending of the registration statement on Form S-4 filed with the SEC in connection with the Transaction and costs associated with the integration of Exxaro Mineral Sands that occurred after the closing of the transaction amounted to approximately \$9.1 million. Employee variable compensation and benefit costs increased costs by approximately \$9.1 million due to the implementation of incentive cash and stock compensation programs. Amortization of intangible assets increased \$2.0 million due to an additional month of amortization in 2012 and travel and entertainment increased \$1.0 million. Other costs decreased \$1.8 million.

**Interest and debt expense** decreased \$0.3 million, or 3.7%, to \$7.9 million for 2012, from \$8.2 million for 2011. The decreased costs are primarily attributable to lower interest rates and lower amortization of debt issuance costs on the Term Facility in existence in 2012. Additionally, during 2011, interest expense excluded \$2.8 million that would have been payable under the terms of the \$350.0 million 9.5% senior unsecured notes, which was not accrued while we were in bankruptcy in accordance with ASC 852, *Reorganizations*.

**Other income (expense)** decreased \$4.0 million to an expense of \$1.4 million for 2012, from income of \$2.6 million for 2011. The change was primarily due to foreign currency losses of \$2.2 million during 2012 as compared to foreign currency gains of \$2.4 million in 2011, partially offset by a \$0.6 million overall increase in other miscellaneous items such as interest income and other non-operating income.

**Reorganization income** was income of \$613.6 million for 2011. The 2011 income is primarily the result of the application of fresh-start accounting as of January 31, 2011, which resulted in a \$659.1 million gain being recognized due to implementation of fresh-start accounting and the discharge of debt and satisfaction of claims that was only partially offset by \$45.5 million of reorganization items including legal and professional fees, claims adjustments and other fees related to the rights offering and debt financing. As of emergence, we no longer report reorganization expense. Any residual reorganization costs are primarily included in selling, general and administrative expenses.

**Income tax provision** was \$17.4 million for the three months ended March 31, 2012, representing an effective tax rate of 16.8% on pre-tax income of \$103.7 million. In the two months ended March 31, 2011, we recorded a tax provision of \$3.3 million, representing an effective tax rate of 24.4% on pre-tax income of \$13.5 million. In the one month ended January 31, 2011, we recorded a tax provision of \$0.7 million, representing an effective tax rate of 0.1% on pre-tax income of \$632.2 million.

The tax provisions for the three months ended March 31, 2012 and the two months ended March 31, 2011 differ from the U.S. statutory rate of 35% primarily due to valuation allowances in the U.S. and income in foreign jurisdictions taxed at rates lower than 35%.

In the one month ended January 31, 2011, the tax provision differs from the U.S. statutory rate of 35% primarily due to fresh-start adjustments, which were booked net of tax.

**Table of Contents****Discussion by Business Lines for the Three Months Ended March 31, 2012 Compared to the Combined Three Month Period Ended March 31, 2011**

The following table presents results of operations of each business line for the periods indicated. References to 2011 refer to the combined three month period ended March 31, 2011, which includes the Successor period and the Predecessor period, unless otherwise indicated.

	Successor		Predecessor	Change, 2012 from Combined Three Months 2011
	Three Months Ended March 31, 2012	Two Months Ended March 31, 2011	One Month Ended January 31, 2011	
	(Millions of dollars)			
<b>Net Sales</b>				
Pigment segment	\$ 402.5	\$ 244.0	\$ 93.1	\$ 65.4
Electrolytic and other chemical products	30.8	22.9	12.1	(4.2)
Corporate and Other	0.3	0.2	2.4	(2.3)
<b>Net Sales</b>	<b>\$ 433.6</b>	<b>\$ 267.1</b>	<b>\$ 107.6</b>	<b>\$ 58.9</b>
<b>Income (Loss) from Operations</b>				
Pigment segment	\$ 141.1	\$ 24.5	\$ 21.4	\$ 95.2
Electrolytic and other chemical products	(1.1)	0.3	0.7	(2.1)
Corporate and Other	(27.0)	(7.0)	(2.2)	(17.8)
<b>Income from Operations</b>	<b>\$ 113.0</b>	<b>\$ 17.8</b>	<b>\$ 19.9</b>	<b>\$ 75.3</b>

**Net Sales**

**Pigment segment** net sales increased \$65.4 million, or 19.4%, to \$402.5 million for 2012, from \$337.1 million during 2011. Net sales include the sale of TiO<sub>2</sub>, as well as the sale of heavy minerals, such as ilmenite, rutile, synthetic rutile, leucogene, zircon, activated carbon and staurolite, produced by the Tiwest Joint Venture.

During 2012, TiO<sub>2</sub> sales accounted for approximately 89.8% of pigment segment net sales, and the increase in TiO<sub>2</sub> sales accounted for \$42.6 million, or 65% of the total increase in pigment segment net sales. The increase was primarily due to a 37% increase (excluding foreign currency effects) in the price per metric tonne, offset by a 17% decrease in TiO<sub>2</sub> sales volumes. Higher TiO<sub>2</sub> pricing resulted in an increase to sales of approximately \$99.2 million, which was offset by a decrease in sales volumes of \$53.3 million. Higher sales prices are primarily due to the supply and demand balance in TiO<sub>2</sub> markets which enabled us to pass through price increases to our customers primarily in 2011, which we have maintained in 2012. Decreased sales volumes are primarily a result of temporary factors, namely destocking, the process by which manufacturers and other end users pare down their inventories. Additionally, the impact of foreign currency exchange rate changes related to TiO<sub>2</sub> decreased net sales by \$3.3 million.

The majority of the remaining increase in pigment segment net sales of \$22.8 million, or 35% is attributable to increase in the sale of heavy minerals produced by the Tiwest Joint Venture. The increase was primarily due to an increase in price and a higher valued sales mix year over year. Higher pricing resulted in an increase to sales of approximately \$20.4 million, while the sales mix increased sales by \$2.4 million. The largest contributor to the increase was synthetic rutile. Synthetic rutile accounted for approximately \$17.8 million of the increase due to an increase in sales volume of over 100%, as well as an increase in the average price per tonne from the first quarter of 2011 to the first quarter of 2012 of over 100%.

**Electrolytic and other chemical products** net sales decreased \$4.2 million, or 12.0%, to \$30.8 million for 2012, from \$35.0 million during 2011. The decrease in sales was primarily due to decreases in volumes sold of \$4.9 million for sodium chlorate and electrolytic manganese dioxide (EMD), offset by higher prices of \$0.7 million due to maintaining price increases despite competitive conditions.



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**Corporate and Other** net sales decreased \$2.3 million, or 88.5%, to \$0.3 million for 2012, from \$2.6 million during 2011. Net sales in corporate and other, is primarily attributable to sulfuric acid sales which decreased as a result of the sulfuric acid operation being transferred to an environmental remediation trust upon emergence from bankruptcy.

### ***Income from Operations***

**Pigment segment** income from operations increased \$95.2 million, to \$141.1 million for 2012, from \$45.9 million during 2011. The increase was primarily due to the effects of higher TiO<sub>2</sub> sales prices partially offset by lower sales volumes and higher production costs and selling, general and administrative expenses.

Increased TiO<sub>2</sub> net sales of \$42.6 million were partially offset by lower sales volumes, as discussed above, and increased production costs of \$20.6 million, which includes \$0.8 million of favorable foreign currency effects. Higher costs were primarily due to increase in raw material (titanium ores), chemicals and employee related costs. Higher sales prices of heavy minerals produced by the Tiwest Joint Venture, slightly offset by lower volumes sold, resulted in increased revenue of \$22.8 million, as discussed above. Additionally, decreased costs of goods sold of \$2.5 million for heavy minerals contributed to the \$25.3 million increase in operating profit. Selling, general and administrative expenses and other costs for the pigment segment increased operating income \$0.4 million for the first quarter 2012.

**Electrolytic and other chemical products** income from operations decreased \$2.1 million, to a loss of \$1.1 million for 2012, from income of \$1.0 million during 2011. Decreased profitability was driven by decreased sales volumes resulting in lower production and delivery costs and selling, general and administrative expenses. Net sales were unfavorable \$4.2 million. Lower volumes produced and sold during 2012 reduced costs and freight increasing operating profit \$3.4 million and \$0.2 million, respectively. Selling, general and administrative and other items were unfavorable \$1.6 million. Included in selling, general and administrative expenses is \$0.2 million of amortization of customer relationship intangible assets.

**Corporate and Other** had an operating loss of \$27.0 million during 2012, increasing \$17.8 million from an operating loss of \$9.2 million during 2011. Costs associated with the acquisition of Exxaro Mineral Sands, including banker fees, legal and professional fees, as well as costs associated with the preparation and amending of the registration statement on Form S-4 filed with the SEC in connection with the Transaction and costs associated with the integration of Exxaro Mineral Sands that will occur after the closing of the transaction amounted to approximately \$9.1 million. Additionally, employee variable compensation and benefit costs increased due to the implementation of incentive cash and stock compensation programs. Included in the operating loss is \$0.8 million of amortization of TiO<sub>2</sub> technology, trade names, and in-process research and development intangible assets.

**Table of Contents****The Eleven Months Ended December 31, 2011, One Month Ended January 31, 2011 and Twelve Months Ended December 31, 2010**

The following table presents Tronox Incorporated's results of operations for the periods indicated.

	Successor Eleven Months Ended December 31, 2011	Predecessor One Month Ended January 31, 2011	Predecessor Year Ended December 31, 2010
	(Millions of dollars)		
<b>Net Sales</b>	\$ 1,543.4	\$ 107.6	\$ 1,217.6
Cost of goods sold	(1,104.5)	(82.3)	(996.1)
<b>Gross Margin</b>	438.9	25.3	221.5
Selling, general and administrative expenses	(151.7)	(5.4)	(59.2)
Litigation/arbitration settlement	9.8		
Provision for environmental remediation and restoration, net of reimbursements	4.5		47.3
<b>Income from Operations</b>	301.5	19.9	209.6
Interest and debt expense	(30.0)	(2.9)	(49.9)
Other income (expense)	(9.8)	1.6	(8.3)
Reorganization income (expense)		613.6	(144.8)
<b>Income from Continuing Operations before Income Taxes</b>	261.7	632.2	6.6
Income tax provision	(20.2)	(0.7)	(2.0)
<b>Income from Continuing Operations</b>	\$ 241.5	\$ 631.5	\$ 4.6

*Net sales* were \$1,543.4 million for the eleven months ended December 31, 2011 and \$107.6 million for the one month ended January 31, 2011 compared to \$1,217.6 million for the year ended December 31, 2010. Pigment segment sales accounted for approximately 92.0%, 86.5%, 87.7% of our total sales during the eleven months ended December 31, 2011, one month ended January 31, 2011 and year ended December 31, 2010, respectively. Both sales price and sales volumes of TiO<sub>2</sub> and mineral products increased throughout 2011. See discussion of Net Sales by business line for the further information.

*Cost of goods sold* was \$1,104.5 million for the eleven months ended December 31, 2011 and \$82.3 million for the one month ended January 31, 2011 compared to \$996.1 million for 2010. Throughout 2011, Tronox Incorporated experienced increases in raw material, chemicals, energy and employee related costs. During the eleven months ended December 31, 2011 and the year ended December 31, 2010, Tronox Incorporated recorded unfavorable exchange rate changes primarily due to movements in the Australian dollar versus the U.S. dollar, which increased cost of goods sold compared to favorable exchange rate changes recorded in the one month ended January 31, 2011 which offset costs of goods sold. Additionally, as a result of fresh-start accounting, Tronox Incorporated recorded \$35.5 million related to non-cash fresh-start inventory accounting affects, which was amortized during the eleven months ended December 31, 2011.

*Gross margin* was \$438.9 million during the eleven months ended December 31, 2011 and \$25.3 million during the one month ended January 31, 2011 compared to \$221.5 million during 2010. Gross margin percentage was 28.4%, 23.5% and 18.2% during the eleven months ended December 31, 2011, one month ended January 31, 2011 and the year ended December 31, 2010, respectively. Gross margin and gross margin percentage continued to improve primarily due to the increased selling prices and sales volumes, discussed above, which were partially offset by higher costs and unfavorable exchange rate changes. See discussion of Income from Operations by business line for further information.



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***Selling, general and administrative expenses*** were \$151.7 million for the eleven months ended December 31, 2011 and \$5.4 million for the one month ended January 31, 2011 compared to \$59.2 million during 2010.

The expense of \$151.7 million during the eleven months ended December 31, 2011 was primarily due to amortization of intangible assets subsequent to fresh-start accounting of \$21.6 million, employee variable compensation and benefit costs of approximately \$48.4 million (including \$13.7 million related to amortization of restricted stock), costs associated with the Transaction, including banker fees, legal and professional fees and the registration rights penalty of approximately \$28.2 million, audit and professional fees incurred related to fresh-start accounting and the three year audit of our financial statements of approximately \$15.7 million, marketing costs of \$13.5 million and other costs of approximately \$24.3 million.

Additionally, in October 2011, Dennis Wanlass stepped down from his position as CEO; however, he continued through the close of the Transaction to help facilitate a smooth transition. On December 21, 2011, Tronox Incorporated entered into the separation agreement with Dennis Wanlass. Pursuant to the terms of such agreement, Tronox Incorporated recorded a cash severance payment of \$3.1 million and accelerated vesting of \$2.9 million related to restricted shares granted under the management equity incentive plan, which are included in selling, general and administrative expenses.

As a result of the departure of Dennis Wanlass, the board of directors hired Thomas Casey, the Chairman of the Board, to take over as the CEO as Tronox Incorporated prepared to transition through the Transaction. Thomas Casey was paid a \$2.0 million sign-on bonus, which was included in selling, general and administrative expenses during the fourth quarter of 2011.

The expense of \$5.4 million during the one month ended January 31, 2011 was primarily due to employee variable compensation and benefit costs of approximately \$1.7 million, marketing costs of \$1.0 million and other costs of approximately \$2.7 million.

The expense of \$59.2 million during 2010 was primarily due to employee variable compensation and benefit costs of approximately \$19.7 million, outside services used during the bankruptcy and during the emergence from bankruptcy including attorneys, contract labor and other of \$16.5 million, marketing costs of \$11.2 million and other costs of approximately \$11.8 million.

***Litigation/arbitration settlement*** was income of \$9.8 million for the eleven months ended December 31, 2011 due to the settlement with RTI Hamilton, Inc. The settlement agreement reflects a compromise and settlement of disputed claims in complete accord and satisfaction thereof. Of the total payment of \$10.5 million, \$0.7 million constitutes payment for capital costs incurred by Tronox Incorporated in relation to the agreement, plus interest.

***Provision for environmental remediation and restoration*** was income of \$4.5 million during the eleven months ended December 31, 2011, \$0 during the one month ended January 31, 2011 and income of \$47.3 million during 2010. During the eleven months ended December 31, 2011, Tronox Incorporated received additional reimbursements under its environmental insurance policy outstanding during the predecessor period related to its remediation efforts at the Henderson, Nevada site. During 2010, Tronox Incorporated recorded receivables from its insurance carrier related to environmental clean-up obligations at the Henderson facility. Due to the accounting for the KM Legacy Liabilities, as described in Note 5 to the Tronox Incorporated Consolidated Financial Statements, the obligation for the clean-up work had been recorded in prior years, but the insurance coverage was confirmed in 2010.

***Interest and debt expense*** was \$30.0 million for the eleven months ended December 31, 2011, \$2.9 million for the one month ended January 30, 2011 and \$49.9 million during 2010. The \$30.0 million during the eleven months ended December 31, 2011 is comprised of \$29.3 million of interest expense on the Exit Financing Facility and the Wells Revolver, \$0.8 million of amortization of deferred debt issuance costs and \$0.6 million of

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other costs, offset by \$0.7 million of capitalized interest. The \$2.9 million of interest expense during the one month ended January 31, 2011 is comprised of \$2.6 million of interest expense and \$0.3 million of amortization of deferred debt costs. Additionally, during the one month ended January 31, 2011, interest expense excludes \$2.8 million, which would have been payable under the terms of the \$350.0 million 9.5% senior unsecured notes, which was not accrued while Tronox Incorporated was in bankruptcy in accordance with ASC 852, *Reorganizations* ( ASC 852 ). The \$49.9 million during 2010 is comprised of \$39.7 million of interest expense on the DIP facility, \$9.2 million of amortization of deferred debt issuance costs and \$1.0 million of other costs. Additionally, during 2010, interest expense excluded \$33.3 million, which would have been payable under the terms of the \$350.0 million 9.5% senior unsecured notes, which was not accrued while Tronox Incorporated was in bankruptcy.

**Other income (expense)** was an expense of \$9.8 million for the eleven months ended December 31, 2011, income of \$1.6 million for the one month ended January 31, 2011 and an expense of \$8.3 million during 2010. The expense of \$9.8 million during the eleven months ended December 31, 2011 is comprised of a \$7.8 million net foreign currency loss and \$2.8 million of other expenses, offset by a \$0.2 million gain on liquidation of subsidiary and \$0.6 million of interest income. The income of \$1.6 million for the one month ended January 31, 2011 is comprised of a \$1.5 million net foreign currency gain and \$0.1 million of interest income. The expense of \$8.3 million during 2010 is comprised of a \$12.5 million net foreign currency loss and a \$2.0 million loss in net earnings of equity method investees, offset by a one-time \$5.3 million gain on the dissolution of subsidiary, interest income of \$0.6 million and other income of \$0.3 million.

**Reorganization income (expense)** was \$0 for the eleven months ended December 31, 2011, income of \$613.6 million for the one month ended January 31, 2011 and an expense of \$144.8 million for 2010. Upon emergence from bankruptcy, Tronox Incorporated no longer records reorganization income (expense). Any residual costs are included in Selling, general and administrative expenses. The income of \$613.6 million for the one month ended January 31, 2011 is primarily the result of the application of fresh-start accounting as of January 31, 2011, which resulted in a \$659.1 million gain being recognized due to implementation of fresh-start accounting and the discharge of debt and satisfaction of claims that was only partially offset by \$45.5 million of reorganization items including legal and professional fees, claims adjustments and other fees related to the Rights Offering and debt financing. In 2010, Tronox Incorporated incurred \$144.8 million of reorganization expenses including legal and professional fees related to finalizing the Plan and disclosure statement, as well as fees related to the DIP financing in place during the period, partially offset by gains on rejected contracts and other items related to the ongoing claims reconciliation process.

**Income tax provision** was \$20.2 million for the eleven months ended December 31, 2011, representing an effective tax rate of 7.7% on pre-tax income of \$261.7 million. In the one month ended January 31, 2011, Tronox Incorporated recorded a tax provision of \$0.7 million, representing an effective tax rate of 0.1% on pre-tax income of \$632.2 million. In 2010, Tronox Incorporated recorded a tax provision of \$2.0 million, representing an effective tax rate of 30.3% on pre-tax income of \$6.6 million.

The tax provision for the eleven months ended December 31, 2011 differs from the U.S. statutory rate of 35.0% primarily due to valuation allowances in the United States and income in foreign jurisdictions taxed at rates lower than 35.0%. For the eleven months ended December 31, 2011, the rate is additionally impacted by statute lapses in a foreign jurisdiction, which released significant liabilities related to uncertain tax positions.

In the one month ended January 31, 2011, the tax provision differs from the U.S. statutory rate of 35.0% primarily due to fresh-start adjustments, which were booked net of tax.

**Table of Contents****Discussion by Business Lines for the Eleven Months Ended December 31, 2011, One Month Ended January 31, 2011 and Twelve Months Ended December 31, 2010**

The following table presents results of operations of each business line for the periods indicated.

	Successor	Predecessor	
	Eleven Months	One	Year
	Ended	Month	Ended
	December 31,	January 31,	December 31,
	2011	2011	2010
	(Millions of dollars)		
<b>Net Sales</b>			
Pigment segment	\$ 1,420.4	\$ 93.1	\$ 1,068.2
Electrolytic and other chemical products	116.6	12.1	128.3
Corporate and Other	6.4	2.4	21.1
<b>Net Sales</b>	<b>\$ 1,543.4</b>	<b>\$ 107.6</b>	<b>\$ 1,217.6</b>
<b>Income (Loss) from Operations</b>			
Pigment segment	\$ 355.1	\$ 21.4	\$ 169.7
Electrolytic and other chemical products	(0.3)	0.7	5.8
Corporate and Other	(53.3)	(2.2)	34.1
<b>Income from Operations</b>	<b>\$ 301.5</b>	<b>\$ 19.9</b>	<b>\$ 209.6</b>
<b>Net Sales</b>			

**Pigment segment** net sales were \$1,420.4 million for the eleven months ended December 31, 2011 and \$93.1 million for the one month ended January 31, 2011 compared to \$1,068.2 million during 2010. Net sales include the sale of TiO<sub>2</sub>, as well as the sale of heavy minerals, such as ilmenite, rutile, synthetic rutile, leucoxene, zircon, activated carbon and staurolite, produced by the Tiwest Joint Venture.

During the eleven months ended December 31, 2011 and the one month ended January 31, 2011, TiO<sub>2</sub> sales accounted for approximately 93% and 95%, respectively, of pigment segment net sales. During 2011, TiO<sub>2</sub> sales prices increased, primarily the result of the general global economic recovery and constrained supply of TiO<sub>2</sub>. These factors have caused a supply and demand situation that has enabled Tronox Incorporated to pass through price increases to its customers. The average price per metric tonne sold during the eleven months ended December 31, 2011 and one month ended January 31, 2011 increased 41% and 20%, respectively, compared to the average price sold during the year ended December 31, 2010.

The remaining pigment net sales during the eleven months ended December 31, 2011 and one month ended January 31, 2011 are primarily attributable to the sale of heavy minerals produced by the Tiwest Joint Venture. During the eleven months ended December 31, 2011, Tronox Incorporated experienced increased prices in certain heavy minerals, which were partially offset by lower valued sales mix from prior periods.

**Electrolytic and other chemical products** net sales were \$116.6 million for the eleven months ended December 31, 2011 and \$12.1 million for the one month ended January 31, 2011 compared to \$128.3 million during 2010. The increase in sales during the eleven months ended December 31, 2011 and one month ended January 31, 2011 compared to the twelve months ended December 31, 2010 was primarily due to higher prices for sodium chlorate, which were offset by decreases in volumes sold of sodium chlorate, and manganese dioxide. Higher pricing during both the eleven months ended December 31, 2011 and one month ended January 31, 2011 was due to maintaining the 2010 price increases despite competitive conditions. Lower volumes sold during the eleven months ended December 31, 2011 was primarily due to unplanned outages at our sodium chlorate facility in Hamilton, Mississippi.



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**Corporate and Other** net sales were \$6.4 million for the eleven months ended December 31, 2011, \$2.4 million for the one month ended January 31, 2011 and \$21.1 million during 2010. During the one month ended January 31, 2011 and the year ended 2010, net sales in corporate and other, were primarily attributable to sulfuric acid operations, which were transferred to an environmental remediation trust upon emergence from bankruptcy.

### ***Income from Operations***

**Pigment segment** income from operations was income of \$355.1 million during the eleven months ended December 31, 2011 and \$21.4 million for the one month ended January 31, 2011 compared to \$169.7 million during the year ended December 31, 2010. During both the eleven months ended December 31, 2011 and the one month ended January 31, 2011, TiO<sub>2</sub> sales prices and volumes increased. Such increases were partially offset by higher production costs and selling, general and administrative expenses during both periods. Higher production costs were due to a 19% increase year over year for raw materials and process chemicals. Additionally, included in pigment segment cost of goods sold was the cost to purchase Exxaro's share of the Tiwest Joint Venture tonnes, which increased from 2010 to 2011 by approximately \$53.5 million due to the higher market prices in 2011. Higher sales prices and volumes of heavy minerals produced by the Tiwest Joint Venture resulted in increased revenue, which was offset by an increase in related cost of goods sold for reductions to income from operations, including unfavorable foreign currency effects.

During the eleven months ended December 31, 2011, in addition to the increase for raw materials and process chemicals, Tronox Incorporated also experienced increased energy costs and increased employee related costs due to the implementation of variable compensation and the post emergence accounting impact on pension and post retirement medical costs. Foreign currency effects on operating profit were net unfavorable primarily due to movements in the Australian dollar versus the U.S. dollar. Freight costs, due to volumes and higher costs, were also unfavorable.

During the eleven months ended December 31, 2011, selling, general and administrative expenses decreased income from operations by \$73.2 million, and include \$17.8 million of pigment-specific intangible asset amortization, as well as the pigment segment's share of employee costs including salaries, benefits, travel costs and outside services. Marketing costs specific to TiO<sub>2</sub> products of \$13.5 million also increased due to higher volumes and prices.

During the one month ended January 31, 2011, selling, general and administrative expenses decreased income from operations by \$3.3 million, and were primarily comprised of marketing costs of \$1.0 million, as well as the pigment segment's share of employee-related compensation costs.

**Electrolytic and other chemical products** income from operations was a loss of \$0.3 million during the eleven months ended December 31, 2011 and income of \$0.7 million during the one month ended January 31, 2011 compared to \$5.8 million during the year ended December 31, 2010.

Decreased profitability during the eleven months ended December 31, 2011 was driven by a decrease in sales volumes, higher production and delivery costs and higher selling, general and administrative expenses. Included in selling, general and administrative expenses during the eleven months ended December 31, 2011 is \$0.8 million of amortization of customer relationship intangible assets. The decrease was partially offset by the effects of favorable pricing.

**Corporate and Other** had an operating loss of \$53.3 million during the eleven months ended December 31, 2011 and an operating loss of \$2.2 million during the one month ended January 31, 2011 compared to \$34.1 million of profit the year ended December 31, 2010.

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During the eleven months ended December 31, 2011 Tronox Incorporated incurred costs associated with the bankruptcy and the Transaction, including banker fees, legal and professional fees and the registration rights penalty accounted for approximately \$28.2 million. Additionally, Tronox Incorporated incurred audit and professional fees related to the three year audit of its financial statements of approximately \$15.7 million, employee variable compensation and benefit costs associated with implementation of incentive cash and stock compensation programs and costs associated with our post-emergence accounting for pension and postretirement healthcare benefit costs. During the eleven months ended December 31, 2011, Tronox Incorporated recognized \$3.0 million of amortization of intangible assets recorded as part of the fresh-start accounting at emergence from bankruptcy, offset by a litigation/arbitration settlement of \$9.8 million and reimbursements of environmental expenditures received during the eleven months ended December 31, 2011 of \$4.3 million compared to \$47.3 million received during 2010. The decline was a result of Tronox Incorporated's exit from bankruptcy, whereby it transferred responsibility for environmental remediation to the trusts established as part of the Plan.

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

The following table presents Tronox Incorporated's results of operations for the periods indicated:

	Year Ended December 31,		
	2010	2009	Change
	(Millions of dollars)		
<b>Net Sales</b>	\$ 1,217.6	\$ 1,070.1	\$ 147.5
Cost of goods sold	(996.1)	(931.9)	64.2
<b>Gross Margin</b>	221.5	138.2	83.3
Selling, general and administrative expenses	(59.2)	(71.7)	12.5
Gain on land sales		1.0	(1.0)
Impairment of long-lived assets		(0.4)	0.4
Restructuring charges		(17.3)	17.3
Net loss on deconsolidation of subsidiary		(24.3)	24.3
Provision for environmental remediation and restoration, net of reimbursements	47.3		47.3
<b>Income (Loss) from Operations</b>	209.6	25.5	184.1
Interest and debt expense	(49.9)	(35.9)	(14.0)
Other expense	(8.3)	(10.3)	2.0
Reorganization expense	(144.8)	(9.5)	(135.3)
<b>Income (Loss) from Continuing Operations before Income Taxes</b>	6.6	(30.2)	36.8
Income tax benefit (provision)	(2.0)	1.5	(3.5)
<b>Income (Loss) from Continuing Operations</b>	\$ 4.6	\$ (28.7)	\$ 33.3

*Net sales* increased \$147.5 million, or 13.8%, to \$1,217.6 million during 2010, from \$1,070.1 million during 2009. The increase was primarily due to a 12.3% (\$131.3 million) increase in selling prices and a 2.6% (\$27.7 million) increase in volume, which was partially offset by the unfavorable effects of foreign exchange rates and a slight decline in other revenues that reduced net sales by 1.1% (\$11.5 million). The change in sales volumes is primarily the result of recovering industry demand in 2010 as compared to 2009, which had lower sales volumes caused by the recession in 2009 following the global financial crisis in 2008. Higher pricing is also a result of increased global demand coupled with lower industry capacity of TiO<sub>2</sub> as producers had permanently removed capacity and also experienced unplanned production outages. See discussion of Net Sales by business lines for a further analysis of net sales.

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**Gross margin** increased \$83.3 million, or 60.3%, to \$221.5 million during 2010, from \$138.2 million during 2009. Gross margin improved to 18.2% during 2010, up from 12.9% during 2009. Gross margin improved primarily due to increased selling prices and sales volumes, discussed above, partially offset by higher costs and unfavorable exchange rate changes. Costs increased due in part to higher raw material chemicals and energy costs, as well as higher freight costs, partially offset by the benefit of having shut down the Savannah TiO<sub>2</sub> facility in 2009. Unfavorable exchange rate effects were primarily due to movements in the Australian dollar versus the U.S. dollar. See discussion of Income from Operations by business line for a further analysis of gross margin.

**Selling, general and administrative expenses** decreased \$12.5 million, or 17.4%, to \$59.2 million during 2010, from \$71.7 million during 2009. The decrease was primarily due to lower employee compensation and benefit costs of approximately \$16.8 million due to reduced headcount, reduced bonus accruals, reduced severance costs, and lower pension and medical costs in 2010 versus 2009. This was partially offset by increased marketing costs due to higher sales volumes and prices of \$2.6 million, other items of \$0.3 million and one-time costs for the maintenance of our headquarters and technical facility in Oklahoma City, Oklahoma of \$1.4 million.

**Gain on land sales** in 2009 was \$1.0 million, which was related to the sale of parcels of land in Knoxville, Tennessee, and Norman, Oklahoma.

**Impairment of long-lived assets** in 2009 was \$0.4 million, which was primarily related to the idling of the TiO<sub>2</sub> business at our Savannah plant.

**Restructuring charges** were \$0 during 2010 compared to \$17.3 million in expenses for 2009. The restructuring charges in 2009 were primarily a result of severance, early termination benefits under Tronox Incorporated's U.S. qualified defined benefit plan and asset write-downs, all related to the idling of the TiO<sub>2</sub> business at our Savannah plant.

**Net loss on deconsolidation of subsidiaries** in 2009 was \$24.3 million, which was related to the effect of deconsolidating the assets and liabilities of the German subsidiaries and the impact of writing off receivables from the German subsidiaries not expected to be collected due to their insolvency.

**Provision for environmental remediation and restoration** was income of \$47.3 million during 2010 compared to \$0 for 2009. During 2010, Tronox Incorporated recorded receivables from its insurance carrier related to environmental clean-up obligations at the Henderson facility. Due to the accounting for the KM Legacy Liabilities, as described in Note 5 to the Tronox Incorporated Consolidated Financial Statements, the obligation for the cleanup work had been recorded in prior years, but the insurance coverage was confirmed in 2010. In 2009, due to the bankruptcy filing and the accounting for the KM Legacy Liabilities, an adjustment to the KM Legacy Liabilities was recorded in reorganization expense.

**Interest and debt expense** increased \$14.0 million to \$49.9 million for 2010, from \$35.9 million during 2009. Increased costs are primarily attributable to the second DIP facility entered into in conjunction with the term sheet in 2009 for the agreed upon framework of the Plan, as well as the Final DIP Facility entered into on October 21, 2010. Interest expense for the twelve months ended December 31, 2010 and December 31, 2009 excludes \$33.3 and \$32.1 million, respectively, of interest on Tronox Incorporated's \$350.0 million 9.5% senior unsecured notes due 2012 (the Senior Unsecured Notes), which was no longer being accrued subsequent to the Chapter 11 filing on January 12, 2009.

**Other expense** decreased \$2.0 million to \$8.3 million for 2010, from \$10.3 million during 2009. The change was primarily due to a one-time gain of \$5.3 million in 2010 due to the recognition of the cumulative translation adjustment upon the dissolution of certain European financing and holding companies. Additionally, during 2010 Tronox Incorporated recognized decreased losses from equity affiliates of \$1.6 million, as well as decreased losses on derivatives of \$0.7 million, which were offset by higher foreign currency losses of \$4.8 million and a \$0.8 million increase in other expenses.

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**Reorganization expense** increased \$135.3 million to \$144.8 million for 2010, from \$9.5 million during 2009. Reorganization fees in 2010 relate primarily to refinancing Tronox Incorporated's original DIP facility, negotiating an asset backed lending agreement, legal and professional fees associated with negotiating the specific terms of the Plan, preparing the disclosure statement, negotiating and filing the environmental settlement agreement, as well as the ongoing bankruptcy claims reconciliation process.

Reorganization expenses in 2009 include costs associated with the entry into the original DIP facility, the write-off of deferred debt issuance costs associated with the Senior Unsecured Notes and the secured term loans and revolver, costs associated with amending the terms of the original DIP facility and negotiating the second DIP facility, costs related to efforts to sell assets pursuant to section 363 of the Bankruptcy Code, losses incurred in connection with rejecting contracts and leases and professional fees related to the Chapter 11 activities incurred subsequent to the Chapter 11 filing. Included within this \$9.5 million is a \$75.7 million credit that adjusted the accrued environmental and remediation liabilities to the Settlement amount.

**Income tax provision** was \$2.0 million for 2010, representing an effective tax rate of 30.3% on pre-tax income of \$6.6 million. For 2009, Tronox Incorporated recorded a tax benefit of \$1.5 million, representing an effective tax rate of 5.0% on a pre-tax loss of \$30.2 million. The rates in both years exclude the effects of operations that are now reported as discontinued.

During 2010, the rate differs from the U.S. statutory rate of 35% primarily due to valuation allowances in multiple jurisdictions along with state income tax benefits offset by capitalized professional fees, the taxation of foreign operations, prior year accrual adjustments, the disallowance of foreign interest deductions, and interest accrued on uncertain tax positions.

During 2009, the rate differs from the U.S. statutory rate of 35% primarily due to valuation allowances in multiple jurisdictions, capitalized professional fees, and prior year accrual adjustments offset by the equity deconsolidation of a foreign subsidiary and state income tax benefits.

**Discussion by Business Lines for Year Ended December 31, 2010 Compared to Year Ended December 31, 2009**

The following table presents Tronox Incorporated's results of operations of each business line for the periods indicated.

	Year Ended December 31,		
	2010	2009	Change
	(Millions of dollars)		
<b>Net Sales</b>			
Pigment	\$ 1,068.2	\$ 924.4	\$ 143.8
Electrolytic and other chemical products	128.3	127.1	1.2
Corporate and Other	21.1	18.6	2.5
<b>Net Sales</b>	<b>\$ 1,217.6</b>	<b>\$ 1,070.1</b>	<b>\$ 147.5</b>
<b>Income (Loss) from Operations</b>			
Pigment	\$ 169.7	\$ 43.0	\$ 126.7
Electrolytic and other chemical products	5.8	18.0	(12.2)
Corporate and Other	34.1	(35.5)	69.6
<b>Income from Operations</b>	<b>\$ 209.6</b>	<b>\$ 25.5</b>	<b>\$ 184.1</b>



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**Table of Contents****Net Sales**

**Pigment segment** net sales increased \$143.8 million, or 15.6%, to \$1,068.2 million during 2010, from \$924.4 million during 2009. The increase was primarily due to a 14.4% (\$133.2 million) increase in selling prices, a 2.3% (\$21.4 million) increase in volume and a \$0.3 million increase in other revenues, which was partially offset by the unfavorable effects of foreign exchange rates that reduced net sales by 1.2% (\$11.1 million). The change in sales volumes was primarily the result of recovering industry demand in 2010 as compared to 2009, which had lower sales volumes caused by the recession in 2009 following the global financial crisis in 2008. Higher pricing was also a result of the recovery in demand coupled with lower industry capacity of TiO<sub>2</sub>, as producers had permanently removed capacity and also experienced unplanned production outages that created shortages for TiO<sub>2</sub> products.

**Electrolytic and other chemical products** net sales increased \$1.2 million, or 0.9%, to \$128.3 million during 2010, from \$127.1 million during 2009. The increase in sales was due to higher volumes of manganese dioxide offset by lower volumes and prices on sodium chlorate. Higher volumes of manganese dioxide were due to growth in the high drain battery market. During 2010, sodium chlorate had an unplanned outage that curtailed production resulting in lost sales opportunities. Higher sales volumes increased net sales by \$5.3 million or 4.2%, offset by unfavorable pricing changes that reduced net sales by \$4.1 million or 3.2%.

**Corporate and other** net sales increased \$2.5 million or 13.4% to \$21.1 million during 2010, from \$18.6 million during 2009. Net sales in Corporate and Other, was primarily attributable to sulfuric acid sales, which increased year over year. Other revenues include billings to Exxaro for research and development related to their share of the TiO<sub>2</sub> production from the Tiwest Joint Venture.

Pursuant to the Plan, the sulfuric acid operation was transferred to an environmental response trust effective upon Tronox Incorporated's emergence from bankruptcy on February 14, 2011. Accordingly, the sulfuric acid plant will no longer be included in Tronox Incorporated's consolidated financial results after emergence.

**Income from Operations**

**Pigment segment** income from operations increased \$126.7 million, to \$169.7 million during 2010, from \$43.0 million during 2009. The increase was primarily due to gross margin, which increased \$102.5 million, restructuring charges which decreased by \$17.2 million and selling, general and administrative expenses which decreased \$7.0 million. Gross margin increased primarily due to the increase in selling prices, discussed above, partially offset by higher costs, as well as the unfavorable effects of foreign exchange rates. Higher costs were driven by increased freight expenses of \$8.2 million and the higher cost of \$19.1 million to purchase Exxaro's share of the Tiwest Joint Venture tonnes, partially offset by the favorable effects of having shut down the Savannah TiO<sub>2</sub> facility in 2009. Currency exchange rate effects on operating profit were unfavorable primarily due to movements in the Australian dollar versus the U.S. dollar.

Selling, general and administrative expenses decreased by \$7.0 million, primarily due to pigment's share of the lower employee compensation costs discussed above, partially offset by higher marketing costs due to higher sales prices and volumes. Decreased restructuring charges were the result of severance, early termination benefits under Tronox Incorporated's U.S. qualified defined benefit plan and asset write-downs, all related to the idling of the Savannah TiO<sub>2</sub> plant in 2009.

**Electrolytic and other chemical products** businesses income from operations decreased \$12.2 million, to \$5.8 million for 2010, from \$18.0 million during 2009. The decrease in profitability was driven by lower pricing and higher production costs. Pricing decreased in the second half of 2009 in response to weak economic conditions and increased competition and continued into 2010. Higher costs for sodium chlorate were due to higher electricity prices and reduced production from the unplanned outage that curtailed production resulting in higher per unit costs. Higher costs for the manganese dioxide business were due to higher manganese ore costs.

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In addition, sodium chlorate freight costs were adversely impacted by mandated repairs to sodium chlorate rail cars. Pricing was unfavorable \$4.1 million and the effect of volumes and costs decreased operating profit \$8.0 million, while selling, general and administrative expenses were an unfavorable \$0.1 million.

**Corporate and other** income from operations increased \$69.6 million, to \$34.1 million in profit for 2010, from a \$35.5 million loss during 2009. The loss in 2009 was primarily driven by the recognition of a \$24.3 million loss related to the deconsolidation of the German subsidiary. In addition, operating profit of the sulfuric acid business declined \$6.9 million due to higher costs, which was partially offset by lower selling, general and administrative expenses, due to the reductions discussed above, and other items of \$4.9 million.

**Financial Condition and Liquidity**

*For the Three Months Ended March 31, 2012*

The following table provides information for the analysis of our historical financial condition and liquidity:

	March 31, 2012	Successor December 31, 2011
	(Millions of dollars)	
Cash and cash equivalents	\$ 222.7	\$ 154.0
Working capital(1)	704.1	488.1
Total assets	1,903.0	1,657.4
Total long-term debt	\$ 556.3	\$ 427.3

(1) Represents excess of current assets over current liabilities.

As of March 31, 2012, our total liquidity was \$321.4 million, which was comprised of \$98.7 million available under the Wells Revolver and \$222.7 million in cash and cash equivalents. As of March 31, 2012, we had no amounts drawn on the Wells Revolver, but had \$31.1 million of committed letters of credit, of which \$26.3 million were against the Wells Revolver. In the first quarter, cash and cash equivalents increased \$68.7 million, reflecting the refinancing of our \$425.0 million Exit Financing Facility to a \$550.0 million Term Loan, partially offset by cash used in operations and cash used to pay the fees associated with the refinancing. Working capital increased \$216.0 million reflecting increases in accounts receivable, due primarily to the timing of such sales and higher selling prices, as well as inventories which reflects the increased cost of raw materials and therefore finished goods as well.

At March 31, 2012, we held cash and cash equivalents in the respective jurisdictions: United States \$123.6 million, Australia \$35.3 million and Europe \$63.8 million. Our credit facilities limit transfers of funds from subsidiaries in the United States to foreign subsidiaries. Foreign subsidiaries do not have limits on transferring funds to the United States or between themselves. We have in place intercompany financing agreements that enable the movement of cash to the United States, if needed.

During 2012, our use of cash will include servicing our interest and debt repayment obligations, making pension contributions, as well as funding certain capital expenditures for innovative initiatives, productivity enhancements and maintenance and safety requirements. Further, to the extent it is necessary to fund certain seasonal demands of our operations and to support revenue growth, an additional modest use of cash may be needed for working capital. New sources of liquidity may include additional drawings on the Wells Revolver, financing other assets, and/or non-core asset sales, all of which are allowable, with certain limitations, under our existing credit agreements.

In connection with the Transaction, cash needed to cover the disclosed merger consideration to Tronox Incorporated shareholders of approximately \$190.0 million was covered by cash and cash equivalents and the drawdown of the developed draw under our Term Facility together with other sources of liquidity. As discussed

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below, we have amended the Exit Financing Facility and replaced the Wells Revolver with the UBS Revolver to facilitate the Transaction. This includes, but is not limited to, the modification of restrictions in the agreements which limit the use of funds, increasing the amount of financing available to the company and an ability to accommodate the local capital needs of the combined company.

In summary, we expect that our cash on hand, coupled with future cash flows from operations and other sources of liquidity, including the UBS Revolver, will provide sufficient liquidity to allow us to meet our projected cash requirements.

**Cash Flows**

The following table presents cash flow for the periods indicated:

	Successor		Predecessor
	Three Months	Two Months	One Month
	Ended	Ended	Ended
	March 31, 2012	March 31, 2011	January 31, 2011
	(Millions of dollars)		
Net cash used in operating activities	\$ (25.8)	\$ (4.2)	\$ (283.1)
Net cash used in investing activities	(20.7)	(8.3)	(5.5)
Net cash provided by financing activities	110.2	12.9	207.6
Effect of exchange rate changes on cash	5.0	0.4	0.3
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>\$ 68.7</b>	<b>\$ 0.8</b>	<b>\$ (80.7)</b>

*Cash Flows from Operating Activities* Cash flows from operating activities for 2012 were a use of funds of \$25.8 million compared to a use of funds of \$287.3 million for 2011. The \$261.5 million decrease in cash used for operating activities during 2012 reflects the effects of our emergence from bankruptcy during the one month ended January, 31, 2011, including the funding of the environmental and tort trusts, the payment of claims and professional fees in cash, and clearance of our liabilities subject to compromise. During the three months ended March 31, 2012, cash flows used in operating activities reflects increases in both accounts receivable, primarily due to higher selling prices, and inventories, which reflects the increased cost of production.

*Cash Flows from Investing Activities* Net cash used in investing activities increased \$6.9 million, to \$20.7 million during 2012, compared to \$13.8 million during 2011. The increase was due to increased capital expenditures during 2012. Capital expenditures for 2012 are expected to be in the range of \$85.0 million to \$95.0 million, exclusive of capital expenditures associated with the businesses to be acquired.

*Cash Flows from Financing Activities* - Net cash provided by financing activities was \$110.2 million compared \$220.5 million in 2011. During 2012, we refinanced the Exit Facility with a \$700.0 million Term Facility, of which \$550.0 million was funded at closing and \$150.0 million was funded at completion of the Transaction, resulting in a net cash inflow of \$110.5 million. Additionally, we paid a \$0.6 million fee to Wells Fargo to amend our existing revolving credit agreement, as discussed below. The 2011 amount was primarily due to the receipt of \$185.0 million in proceeds from the rights offering that we executed in conjunction with our emergence from bankruptcy, as well as borrowings against the Wells Revolver. During 2011, to facilitate our exit from bankruptcy and help pay for the buy-in of our 50% share of the Kwinana TiO<sub>2</sub> expansion, we borrowed \$39.0 million against the Wells Revolver, which by December 31, 2011, was fully repaid using cash generated from operations.

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For the Years Ended December 31, 2011 and 2010

The following table provides information for the analysis of Tronox Incorporated's historical financial condition and liquidity:

	<b>Successor December 31, 2011</b>	<b>Predecessor December 31, 2010</b>
	(Millions of dollars)	
Cash and cash equivalents	\$ 154.0	\$ 141.7
Working capital(1)	488.1	483.4
Total assets	1,657.4	1,097.9
Total long-term debt(2)	\$ 427.3	\$ 425.0

(1) Represents excess of current assets over current liabilities.

(2) Excludes the \$350.0 million of senior unsecured notes classified as Liabilities subject to compromise on the Consolidated Balance Sheet at December 31, 2010.

At December 31, 2011, Tronox Incorporated's total liquidity was \$261.4 million, which was comprised of \$107.4 million available under the Wells Revolver and \$154.0 million in cash and cash equivalents. At December 31, 2011, Tronox Incorporated had no amounts drawn on the Wells Revolver, but had \$22.3 million of committed letters of credit, of which \$17.6 million were against the Wells Revolver.

During the eleven months ended December 31, 2011, cash and cash equivalents increased \$93.0 million, reflecting the effects of Tronox Incorporated's emergence from bankruptcy (see Note 1 to the Tronox Incorporated Consolidated Financial Statements), as well as the improved cash flow from operations since emergence, offset by Tronox Incorporated buying into the Tiwest Joint Venture expansion during the period. Working capital increased \$168.8 million from January 31, 2011 reflecting significant increases in both accounts receivable, primarily due to higher selling prices, and inventories, which reflects the increased cost of production. Days inventory outstanding increased from 73 days in 2010 to 96 days in 2011 due to an increase in the carrying value of raw materials and finished goods on hand. The increase reflects the increased cost of titanium bearing feedstocks shipped at year-end 2011 and the replenishment of finished goods inventory from the prior year. Days sales outstanding decreased from 74 days in 2010 to 61 days in 2011 due to a decrease in insurance receivables as a result of the plan of reorganization from bankruptcy and, to a lesser extent, an improvement in trade receivables.

During the one month ended January 31, 2011, cash and cash equivalents decreased \$80.7 million, reflecting the funding of the environmental and tort trusts, the payment of claims and professional fees in cash, and clearance of Tronox Incorporated's liabilities subject to compromise. Working capital decreased \$164.1 million from December 31, 2010 reflecting the effects of Tronox Incorporated's emergence from bankruptcy, including the release of the environmental settlement escrow of \$35.0 million, and the release of cash security on letters of credit and surety bonds of \$51.7 million, some of which transferred to the environmental trust as a part of the Environmental Claims Settlement Agreement and others that reverted to Tronox Incorporated.

At December 31, 2011, Tronox Incorporated held cash and cash equivalents in the following jurisdictions: United States \$62.1 million, Australia \$45.6 million and Europe \$46.3 million. Tronox Incorporated's credit facilities limit transfers of funds from subsidiaries in the United States to foreign subsidiaries. Foreign subsidiaries do not have limits on transferring funds among themselves or to the United States. Tronox Incorporated has in place intercompany financing that enable the movement of cash to the United States, if needed.

During 2012, Tronox Incorporated's anticipated use of cash includes servicing its interest and debt repayment obligations, pension contributions, as well as certain capital expenditures for innovative initiatives, productivity enhancements and maintenance and safety requirements. Further, to the extent it is necessary to fund

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certain seasonal demands of Tronox Incorporated's operations or to support revenue growth, an additional modest use of cash may be needed for working capital. New sources of liquidity may include additional drawings on the UBS Revolver (as described below), financing other assets, and/or non-core asset sales, all of which are allowable, with certain limitations, under Tronox Incorporated's existing credit agreements.

In connection with the Transaction, cash needs to cover the disclosed merger consideration to Tronox Incorporated's stockholders of approximately \$190.0 million and other Transaction related expenditures of approximately \$113.6 million were covered by cash and cash equivalents, the refinancing of the term debt together with other sources of liquidity. As discussed below, Tronox Incorporated has refinanced the Exit Financing Facility and entered into the UBS Revolver in part to facilitate the Transaction. This includes, but is not limited to, the modification of restrictions in the agreements which limit the use of funds, increasing the amount of financing available to Tronox Incorporated and an ability to accommodate the local capital needs of the combined company.

In summary, Tronox Limited expects that cash on hand, coupled with future cash flows from operations and other sources of liquidity, including the UBS Revolver, will provide sufficient liquidity to allow it to meet projected cash requirements.

**Cash Flows**

The following table presents Tronox Incorporated's cash flows for the periods indicated:

	<b>Successor</b>	<b>One</b>	<b>Predecessor</b>	
	<b>Eleven</b>	<b>Month</b>	<b>Year Ended</b>	
	<b>Months</b>	<b>Ended</b>	<b>December 31,</b>	
	<b>Ended</b>	<b>January</b>	<b>31,</b>	
	<b>December 31,</b>	<b>31,</b>	<b>2011</b>	
	<b>2011</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
	<b>(Millions of dollars)</b>			
Net cash provided by (used in) operating activities	\$ 263.4	\$ (283.1)	\$ 76.9	\$ (54.5)
Net cash used in investing activities	(132.4)	(5.5)	(45.0)	(22.8)
Net cash provided by (used in) financing activities	(34.9)	207.6	(32.2)	171.6
Effect of exchange rate changes on cash	(3.1)	0.3	(1.3)	(0.8)
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>\$ 93.0</b>	<b>\$ (80.7)</b>	<b>\$ (1.6)</b>	<b>\$ 93.5</b>

**Cash Flows from Operating Activities**

Cash flows from operating activities for the eleven months ended December 31, 2011 were a source of funds of \$263.4 million, which reflects Tronox Incorporated's strong business performance since it exited bankruptcy.

Cash flows from operating activities for the one month ended January 31, 2011 were a use of funds of \$283.1 million, which reflects the effects of Tronox Incorporated's emergence from bankruptcy, including the funding of the environmental and tort trusts, the payment of claims and professional fees in cash and clearance of its liabilities subject to compromise.

Cash flows from operating activities for 2010 were a source of funds of \$76.9 million compared to a use of funds of \$54.5 million for 2009. The \$131.4 million increase in cash flows from operating activities was primarily due to improved income from continuing operations in 2010 versus losses from operations in 2009. In addition, during 2009, Tronox Incorporated funded a \$35.0 million escrow account for the environmental response trusts and contributed \$78.2 million to cash collateralize existing letters of credit at the time of refinancing its original DIP facility. This was partially offset by increased environmental remediation spending at several sites, during 2010, as required by the parties to the Environmental Claims Settlement Agreement.



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### **Cash Flows from Investing Activities**

Net cash used in investing activities was \$132.4 million during the eleven months ended December 31, 2011 due to capital expenditures of \$132.9 million, including the buy-in to the completed expansion of the Tiwest Joint Venture's Kwinana Facility for \$79.1 million and equipment purchased at Botlek, as well as normal expenditures at other facilities to maintain business.

Net cash used in investing activities was \$5.5 million during the one month ended January 31, 2011 due to capital expenditures during the period.

Net cash used in investing activities increased \$22.2 million, to \$45.0 million for 2010, compared to \$22.8 million for 2009. The increase was primarily due to a \$21.0 million increase in capital expenditures in 2010 and a decrease in proceeds from the sale of assets of \$1.2 million.

In February 2012, Tronox Incorporated refinanced its Exit Financing Facility with a new facility (as discussed below). There are no limits on capital expenditures under the new Term Facility. Capital expenditures for 2012 are expected to be in the range of \$80.0 million to \$90.0 million, exclusive of capital expenditures associated with the new operations resulting from the Transaction.

### **Cash Flows from Financing Activities**

Net cash used in financing activities was \$34.9 million during the eleven months ended December 31, 2011. During the eleven months ended December 31, 2011, Tronox Incorporated borrowed an additional \$14.0 million against the Wells Revolver to facilitate its exit from bankruptcy and help pay for the buy-in of its 50% share of the Kwinana TiO<sub>2</sub> expansion. During 2011, Tronox Incorporated repaid the entire balance on the Wells Revolver of \$39.0 million (of which \$25.0 million was borrowed during the one month ended January 31, 2011), and made scheduled repayments of \$4.3 million on the Exit Facility and \$1.5 million on the financing agreement. Additionally, the Company paid \$5.5 million of commitment fees during the eleven months ended December 31, 2011.

Net cash provided by financing activities was \$207.6 million during the one month ended January 31, 2011, which was primarily due to the receipt of \$185.0 million in proceeds from the rights offering that Tronox Incorporated executed in conjunction with its emergence from bankruptcy, as well as \$25.0 million borrowed against the Wells Revolver (which was repaid during the eleven months ended December 31, 2011).

Net cash used in financing activities was \$32.2 million for 2010 and net cash provided by financing activities was \$171.6 million for 2009. In 2010, Tronox Incorporated paid \$15.4 million in fees related to the refinancing of the DIP facilities and the Exit Financing Facility, obtaining the Wells Revolver and other fees associated with the Rights Offering pursuant to the Plan. In 2009, the source of funds from financing activities was primarily due to the \$65.0 million in proceeds from the original DIP facility, \$425.0 million in proceeds from the second DIP facility, partially offset by \$272.8 million of debt repayments on the term loan and the original DIP facility and \$45.6 million in debt issuance and reorganization related costs.

### ***Capital Resources***

#### ***Term Facility***

On February 8, 2012, we entered into the Term Facility. The Term Facility, together with other sources of financing (including the UBS Revolver described below), as well as cash generated from the combined businesses and cash on hand, are expected to fund the cash needs of the combined business.

The Term Facility bears interest at a base rate plus a margin of 2.25% or adjusted Eurodollar rate plus a margin of 3.25% (with a possible 0.25% increase or decrease based on our public credit rating). The base rate is expected to be defined as the greater of (i) the prime lending rate as quoted in the print edition of The Wall Street Journal, (ii) the Federal Funds Rate plus 0.50%, or (iii) 2%.

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The Term Facility is secured by a first priority lien (subject to the UBS Revolver’s first priority lien on accounts receivable and inventory) on substantially all of the Tronox Limited and the subsidiary guarantors’ existing and future property and assets. This includes certain assets acquired in the Transaction.

On June 14, 2012, Tronox Pigment (Netherlands) BV (the Goldman Borrower) borrowed the full amount of the Senior Secured Delayed Draw Term Loan (\$150.0 million), the proceeds from which were used to pay a portion of the \$12.50/per share to Tronox Incorporated stockholders in connection with the Transaction.

On June 18, 2012, we entered into a global senior secured asset-based revolving credit agreement with UBS AG, Stamford branch (the UBS Revolver) with a maturity date of the fifth anniversary of the closing date. The UBS Revolver provides us with a committed source of capital with a principal borrowing amount of up to \$300.0 million, subject to a borrowing base, and also permits an expansion to the existing borrowing amount of up to \$200.0 million. The borrowing base is related to certain eligible inventory and accounts receivable held by our U.S. subsidiaries, Australia subsidiaries and, subject to certain conditions being achieved, Netherlands subsidiaries. As of the closing date, our borrowing base was approximately \$290.2 million, less letters of credit outstanding of approximately \$30.2 million, for a total net availability of approximately \$260.0 million. Following completion of certain conditions expected to occur within 90 days from the closing date, we anticipate that our borrowing base will be in excess of \$395.0 million, subject to discretionary reserves.

Obligations under the UBS Revolver are secured by a first priority lien on substantially all of the borrowers’ and guarantors’ existing, and future deposit accounts, inventory and receivables and certain related assets, and a second priority lien on all of the borrowers’ and guarantors’ other assets, including capital stock which serve as first-priority security under the Term Facility.

The UBS Revolver bears interest at Tronox Limited’s option at either (i) the alternate base rate (defined to mean a rate that is the greatest of (a) the lenders’ prime rate, (b) the Federal funds effective rate plus 0.50% and (c) the adjusted LIBOR rate for a one-month period plus 1.00%) or (ii) the adjusted LIBOR rate, in each case plus the applicable margin. The applicable margin ranges from 1.50% to 2.00% for borrowings at the adjusted LIBOR rate, and from 0.50% to 1.00% for borrowings at the alternate base rate, based upon the average daily borrowing availability during a given period. For the first six months following the closing date, the applicable margins shall be deemed to be 1.75% for borrowings at the adjusted LIBOR rate and 0.75% for borrowings at the alternate base rate.

*Exit Financing Facility*

On February 14, 2011, the Final DIP Facility, in accordance with its terms, converted into a \$425.0 million exit facility (the Exit Financing Facility) under substantially the same terms and conditions that existed under the Final DIP Facility, with a maturity date of October 2015. The Exit Financing Facility was secured by the same assets as the Final DIP Facility, subject however to certain subordination agreements (as more fully described below under the heading Asset Based Lending Facility).

*Financial Covenants*

The Company has financial covenants on the Term Facility and UBS Revolver.

The terms of the Term Facility provides for customary representations and warranties, affirmative and negative covenants and events of default. The terms of the covenants, subject to certain exceptions, restrict, among other things: (i) debt incurrence; (ii) lien incurrence; (iii) investments, dividends and distributions; (iv) dispositions of assets and subsidiary interests; (v) acquisitions; (vi) sale and leaseback transactions; and (vii) transactions with affiliates and shareholders. In addition, the Term Facility will require that a leverage ratio, as defined in the agreement, not exceed, as of the last day of any fiscal quarter, the correlative ratio as follows:

<b>Fiscal Quarter Ending</b>	<b>Total Leverage Ratio</b>
June 30, 2012 through December 31, 2015	3.00:1.00
March 31, 2016 and thereafter	2.75:1.00



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The UBS Revolver contains various covenants and restrictive provisions which limits our ability to incur additional indebtedness. The UBS Revolver agreement requires us to maintain a Consolidated Fixed Charge Coverage Ratio of 1.0 to 1.0 calculated on a quarterly basis, only if excess availability on the UBS Revolver is less than the greater of (A) \$20.0 million and (B) 10% of the lesser of (x) the aggregate commitments in effect at such time and (y) the borrowing base at such time. If we are required to maintain the Consolidated Fixed Charge Coverage Ratio then we will be required to maintain such ratio until, during the preceding 60 days the borrowing availability shall have been the greater of \$20.0 million and 10% of the aggregate commitments in effect at such time.

The UBS Revolver and the Term Facility are subject to an intercreditor agreement pursuant to which the lenders' respective rights and interests in the security are set forth.

We were in compliance with our financial covenants at March 31, 2012 and December 31, 2011. A breach of any of the covenants imposed on the Company by the terms of the Term Facility or UBS Revolver could result in a default under the agreement. In the event of a default, the lenders could terminate their commitments to us and could accelerate the repayment of all of our indebtedness under the agreement. In such case, we may not have sufficient funds to pay the total amount of accelerated obligations, and our lenders could proceed against the collateral pledged.

### *Deployment of Capital*

Management currently intends to recommend the following actions to the Board of Tronox Limited shortly following the closing:

issuing a special dividend of \$25.00 per share;

authorizing up to \$250.0 million of share repurchases under certain circumstances;

adopting a regular quarterly dividend commencing in the fourth quarter 2012; and

a split of the shares on an approximate ratio of between 7:1 and 9:1.

There is no assurance that management will make these recommendations or, if the recommendations are made, that they will be adopted by the Board of Tronox Limited and ultimately pursued. These recommendations are subject to a number of factors, including, but not limited to, the availability of financing, the performance of the combined business, and the cash needs of the combined business.

### *Rights Offering*

On February 14, 2011, Tronox Incorporated received \$185.0 million of new equity investment in the Rights Offering that was open to certain general unsecured creditors. Under the Plan, the general unsecured creditors were given rights to purchase up to 45.5% of the New Common Stock issued on the Effective Date, based on a 17.6% discount to Tronox Incorporated's total enterprise value of \$1,062.5 million as presented in the Plan. The backstop parties, a group of holders of the Senior Unsecured Notes, committed to purchase any of the New Common Stock that was not subscribed to in the Rights Offering, thereby assuring that we received the full \$185.0 million. In return for this commitment, the backstop parties received consideration equal to 8.0% of the \$185.0 million equity commitment (payable as an additional 3.6% of the New Common Stock issued on the Effective Date).

### *Receivables Securitization*

In September 2007, Tronox Incorporated executed a \$100.0 million accounts receivable securitization program (the Program) with an initial term of one year. Under the initial terms of the agreement, financing could be extended for an additional two years in the form of a securitization or a secured borrowing as



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determined by the sponsoring institution, Royal Bank of Scotland ( RBS ). Tronox Incorporated subsequently entered into multiple amendments for the purpose of extending the Program s termination date to January 9, 2009, or immediately prior to the Chapter 11 filing. On January 14, 2009, using proceeds from the Original DIP Facility, Tronox Incorporated remitted \$41.1 million to RBS to repurchase RBS interest in the receivables. Upon receipt of the payment, RBS released its interest in the receivables and the lockbox cash accounts to which collections on the receivables are deposited. The Program was terminated with the entire \$41.1 million balance in transferred receivables repurchased and fully collected from customers by Tronox Incorporated.

**Contractual Obligations**

The following table sets forth information relating to our contractual obligations as of March 31, 2012:

	Contractual Obligation Payments Due by Year				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
	(Millions of dollars)				
Long-term debt (including interest)(1)	\$ 690.0	\$ 28.0	\$ 60.7	\$ 57.5	\$ 543.8
Ore contracts(2)	1,269.3	422.2	631.1	216.0	
Other purchase obligations(3)	212.8	92.4	73.7	12.4	34.3
Operating leases (excluding railcar leases)	119.1	15.1	21.6	19.6	62.8
Railcar leases	16.4	2.6	4.7	4.1	5.0
Total	\$ 2,307.6	\$ 560.3	\$ 791.8	\$ 309.6	\$ 645.9

- (1) The Company calculated the Term Facility interest at a base rate of 2% plus a margin of 2.25%.
- (2) Approximately 58% of current annual usage acquired from one supplier.
- (3) Includes obligations to purchase requirements of process chemicals, supplies, utilities and services.

**Quantitative and Qualitative Disclosures About Market Risk**

The Company is exposed to various market, credit, operational and liquidity risks (see *Financial Condition and Liquidity* discussion above) in the normal course of business, which are discussed below. We manage these risks through normal operating and financing activities and, when appropriate, through the use of derivative instruments. Tronox does not invest in derivative instruments for speculative purposes, but historically has entered into, and may enter into, derivative instruments for hedging purposes in order to reduce the exposure to fluctuations in interest rates, natural gas prices and exchange rates.

**Commodity Price Risk**

A substantial portion of our products and raw materials are commodities whose prices fluctuate as market supply and demand fundamentals change. Accordingly, product margins and the level of our profitability tend to fluctuate with changes in the business cycle and are expected to do so in the near term as ore prices are expected to increase rapidly over the next few years. The Company tries to protect against such instability through various business strategies. These include provisions in sales contracts allowing us to pass on higher raw material costs through timely price increases and formula price contracts to transfer or share commodity price risk.

**Credit Risk**

A significant portion of the Company s liquidity is concentrated in trade accounts receivable that arise from sales of TiO<sub>2</sub> to customers in the paint and coatings industry. The industry concentration has the potential to impact the Company s overall exposure to credit risk, either positively or negatively, in that its customers may be similarly affected by changes in economic, industry or other conditions. The Company performs ongoing credit



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evaluations of its customers, and uses credit risk insurance policies from time to time as deemed appropriate to mitigate credit risk but generally does not require collateral. The Company maintains allowances for potential credit losses based on historical experience.

### **Interest Rate Risk**

The Company is exposed to interest rate risk with respect to its variable rate debt. Currently, we do not have interest rate swaps on this exposure. Using a sensitivity analysis and a hypothetical 1.0% increase in interest rates from those in effect at March 31, 2012, the increase in Tronox Incorporated's annual interest expense on the variable-rate debt of \$700.0 million would have reduced net income by approximately \$7.0 million.

### **Foreign Exchange Risk**

The Company manufactures and markets its products in a number of countries throughout the world and, as a result, is exposed to changes in foreign currency exchange rates, particularly in the Netherlands and Australia. Costs in the Netherlands and Australia are incurred, in part, in local currencies other than the U.S. dollar. In Europe, a majority of our revenues and costs are in the local currency creating a partial natural hedge. In Australia however, the majority of our revenues are in U.S. dollars, while a majority of the costs are in Australian dollars. This leaves the Company exposed to movements in the Australian dollar versus the U.S. dollar. In order to manage this risk, we have from time to time entered into forward contracts to buy and sell foreign currencies as economic hedges for these foreign currency transactions. As of March 31, 2012, we did not have any forward contracts in place.

### **Environmental Matters**

#### ***Ongoing Businesses of Tronox Incorporated***

Tronox Incorporated is subject to a broad array of international, federal, state and local laws and regulations relating to safety, pollution, protection of the environment and the generation, storage, handling, transportation, treatment, disposal and remediation of hazardous substances and waste materials. In the ordinary course of business, Tronox Incorporated is subject to frequent environmental inspections and monitoring and occasional investigations by governmental enforcement authorities. Under these laws, Tronox Incorporated is or may be required to obtain or maintain permits or licenses in connection with its operations. In addition, under these laws, Tronox Incorporated is or may be required to remove or mitigate the effects on the environment of the disposal or release of chemical, petroleum, low-level radioactive and other substances at its facilities. Tronox Incorporated may incur future costs for capital improvements and general compliance under environmental, health and safety laws, including costs to acquire, maintain and repair pollution control equipment. Environmental laws and regulations are becoming increasingly stringent, and compliance costs are significant and will continue to be significant in the foreseeable future. There can be no assurance that such laws and regulations or any environmental law or regulation enacted in the future is not likely to have a material effect on Tronox Incorporated.

In December 2006, the European parliament and European council approved a new European regulatory framework for chemicals called REACH. REACH took effect on June 1, 2007, and the program it establishes will be phased in over 11 years. The registration, evaluation and authorization phases of the program will require expenditures and resource commitments in order to, for example, participate in mandatory data-sharing forums; acquire, generate and evaluate data; prepare and submit dossiers for substance registration; obtain legal advice and reformulate products, if necessary.

Certain aspects of Tronox Incorporated's operations may be subject to GHG emissions monitoring and reporting requirements. The EPA has proposed regulations that would require a reduction in emissions of GHGs

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from motor vehicles and adopted regulations that could trigger permit review for GHG emissions from certain stationary sources. For its operations subject to EPA GHG regulations, Tronox Incorporated may face increased monitoring, reporting, and compliance costs. However, it is not possible to estimate the likely financial impact of potential future GHG regulation on any of Tronox Incorporated's sites. Tronox Incorporated is already managing and reporting GHG emissions, to varying degrees, as required by law for its facilities. The Tiwest Joint Venture TiO<sub>2</sub> plant will be subject to a new Australian carbon tax law beginning in 2012. The estimated impact to the Tiwest Joint Venture is approximately \$10 million Australian dollars annually.

Expenditures for environmental protection and cleanup related to Tronox Incorporated's ongoing businesses for the years ended December 31, 2011, 2010 and 2009, were as follows:

	Year Ended December 31,		
	2011	2010	2009
	(Millions of dollars)		
Cash expenditures of environmental reserves	\$ 0.2	\$ 0.0	\$ 0.1
Recurring operating expenses	30.0	27.5	27.9
Environmental capital expenditures associated with ongoing operations	3.6	3.0	1.8

Recurring operating expenses are expenditures related to the maintenance and operation of environmental equipment such as incinerators, waste treatment systems and pollution control equipment, as well as the cost of materials, energy and outside services needed to neutralize, process, handle and dispose of current waste streams at Tronox Incorporated's operating facilities. These operating and capital expenditures are necessary to ensure that ongoing operations are handled in an environmentally safe and effective manner. In addition to past expenditures, reserves were established for the remediation and restoration of sites where liability was probable and future costs to be incurred were reasonably estimable.

As of March 31, 2012, Tronox Incorporated's financial reserves for sites associated with its ongoing business totaled \$0.6 million. In the Tronox Incorporated Consolidated Balance Sheet at March 31, 2012, \$0.5 million of the total reserve was included in Noncurrent Liabilities Other and the remaining \$0.1 million was included in Accrued Liabilities on the Consolidated Balance Sheets. We believe Tronox Incorporated reserved adequately for the reasonably estimable costs of known environmental contingencies. However, adjustments to reserves may be required in the future due to the previously noted uncertainties.

***Legacy Environmental Liabilities***

At the time of the spin-off of Tronox Incorporated in 2005 by Kerr-McGee Corporation, Tronox Incorporated became liable for significant legacy environmental liabilities related to businesses and operations of Kerr-McGee that were shut down or discontinued prior to the spin-off.

As part of Tronox Incorporated's Plan, it reached a comprehensive settlement with the U.S. government and more than 30 states, local, tribal and quasi-governmental entities that resolved its significant Legacy Environmental Liabilities. The final settlement was reached in November 2010 and was approved by the Bankruptcy Court under environmental law on January 26, 2011. As a result of the Settlement, Tronox Incorporated received a discharge and/or release for the Legacy Environmental Liabilities following its emergence from bankruptcy.

The Settlement established certain environmental response and tort claims trusts that are now responsible for the Legacy Environmental Liabilities in exchange for cash, certain non-monetary assets, and the rights to the proceeds of certain ongoing litigation and insurance and other third party reimbursement agreements. As a result, the Legacy Environmental Liabilities are no longer included in Tronox Incorporated's consolidated financial statements after its emergence from bankruptcy.

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Substantially all of the Legacy Environmental Liabilities related to liabilities for civil remediation and other environmental claims by federal, state, local, tribal and quasi-governmental agencies arising from historical activities by Kerr-McGee or its antecedents over a 60-year period at more than 2,800 wood treatment, thorium, refining, petroleum marketing, coal, nuclear, offshore contract drilling, mining, fertilizer, waste disposal and other sites throughout the United States. The Legacy Environmental Liabilities included claims for soil, groundwater and other contamination resulting from, among other things, radioactive waste rock from uranium mining on the Navajo Nation and elsewhere in the southwestern United States, creosote used in the treatment of railroad ties at approximately 40 sites across the United States, the production of ammonium perchlorate in Nevada for use in rocketfuel, the production of radioactive thorium in Illinois for use in gas mantles, the manufacture and blending of fertilizer products at dozens of sites across the United States, and the production and sale of petroleum products at various refineries and storage facilities and hundreds of service stations across the United States. The Legacy Environmental Liabilities also included liabilities related to the Comprehensive Environmental Response, Compensation, and Liability Act ( CERCLA ) Superfund Sites in Jacksonville, Florida; Manville, New Jersey; Soda Springs, Idaho; West Chicago, Illinois; Milwaukee, Wisconsin; and Wilmington, North Carolina.

Under CERCLA and similar state laws, a current or former owner or operator of real property may be liable for remediation costs regardless of whether the release or disposal of hazardous substances was in compliance with law at the time it occurred, and a current owner or operator may be liable regardless of whether it owned or operated the facility at the time of the release. Tronox Incorporated was also obligated to perform or have performed remediation or remedial investigations and feasibility studies at sites that were not designated as Superfund sites by the EPA. Such work was undertaken pursuant to consent orders or other agreements. Decommissioning and remediation obligations, and the attendant costs, varied substantially from site to site and depended on unique site characteristics, available technology and the regulatory requirements applicable to each site. As discussed above, Tronox Incorporated has settled the Legacy Environmental Liabilities and, as such, the Legacy Environmental Liabilities are no longer included in its consolidated financial statements now that Tronox Incorporated has emerged from bankruptcy.

Tronox Incorporated's expenditures for environmental protection and cleanup related to the Legacy Environmental Liabilities for the years ended December 31, 2011, 2010, and 2009 were as follows:

	Year Ended December 31,		
	2011	2010	2009
	(Millions of dollars)		
Cash expenditures of environmental reserves	\$ 23.0	\$ 57.9	\$ 23.6
Recurring operating expenses	0.0	0.6	3.9
Environmental capital expenditures associated with ongoing operations	0.0	0.7	0.1

Recurring operating expenses are expenditures related to the maintenance and operation of environmental equipment, as well as the cost of materials, energy and outside services needed to maintain the properties.

As discussed above, reserves have been established for environmental costs at its facilities and were established for remediation and restoration of Legacy Environmental Liabilities where liability was probable and future costs to be incurred were reasonably estimable. Tronox Incorporated considered a variety of matters when setting environmental reserves, including the stage of investigation; whether the EPA or another relevant agency had ordered action or quantified cost; whether Tronox Incorporated had received an order to conduct work; whether Tronox Incorporated participated as a PRP in the Remedial Investigation/Feasibility Study ( RI/FS ) process and, if so, how far the RI/FS had progressed; the status of the record of decision by the relevant agency; the status of site characterization; the stage of the remedial design; evaluation of existing remediation technologies; the number and financial condition of other PRPs; and whether Tronox Incorporated could reasonably evaluate costs based on a remedial design or engineering plan.

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At December 31, 2010, Tronox Incorporated's financial reserves for the Legacy Environmental Liabilities totaled \$440.1 million, which was classified on the Consolidated Balance Sheets at December 31, 2010, as Liabilities Subject to Compromise.

### **Financial Statements and Supplementary Data**

The Tronox Incorporated Consolidated Financial Statements are included in this prospectus.

### **Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

#### ***Former Independent Registered Accounting Firm***

Effective May 12, 2010, the client-auditor relationship between Tronox Incorporated and Ernst & Young LLP ( E&Y ) was terminated upon the dismissal of E&Y as Tronox Incorporated's independent registered accounting firm. The decision to change accountants was recommended and approved by Tronox Incorporated's board of directors.

As previously disclosed on May 5, 2009, Tronox Incorporated concluded that their previously filed financial reports should no longer be relied upon because Tronox Incorporated failed to establish adequate reserves as required by applicable accounting pronouncements. The financial statements that would be affected by any restatement related to the methodology previously employed in establishing and maintaining Tronox Incorporated's environmental and other contingent reserves are Tronox Incorporated's previously issued financial statements for the years ended December 31, 2005, 2006, and 2007 along with affected Selected Consolidated Financial Data for 2003 and 2004 and the financial information for the first three quarters of 2008.

E&Y reported in their letter to Tronox Incorporated filed as an Exhibit to Form 8-K/A filed by Tronox Incorporated on June 3, 2010 that they did not agree with the description of the events reported in the paragraph above. On or about May 5, 2009, E&Y advised Tronox Incorporated and the Chairman of the Audit Committee that they did not believe a sufficient reconciliation had been performed between indications that the environmental and other contingent liability reserves may have been understated (as reported by Tronox Incorporated on Form 8-K filed on April 13, 2009) and Tronox Incorporated's previous accounting and reporting for those reserves. Such reconciliation in the view of E&Y would have provided information with respect to the adequacy of internal controls, including disclosure controls, and the possible need to restate previously issued financial statements. As of the date of filing of Form 8-K by Tronox Incorporated on June 3, 2010, E&Y was unaware if any such reconciliation had been performed. Without the reconciliation as referred to above, E&Y was unable to agree that Tronox Incorporated had a sufficient basis to determine that the 2007 and prior financial statements should no longer be relied upon as reported in Form 8-K filed by Tronox Incorporated on May 9, 2009 noted above. E&Y agrees with the statements made by Tronox Incorporated in the first sentence of the paragraph which follows regarding their report on 2007 financial statements as originally issued. Further, since E&Y has not performed an audit of Tronox Incorporated's financial statements since 2007 they have no basis to agree or disagree with respect to the statements made in the following paragraph pertaining to disagreements or reportable events covering the fiscal years ended 2008 and 2009 and the period through the termination of the client-auditor relationship.

E&Y's report on the financial statements for the fiscal year ended December 31, 2007 did not contain any adverse opinion or disclaimer of opinion and was not qualified as to uncertainty, audit scope or accounting principles. During the fiscal years ended December 31, 2008 and 2009, and the interim periods ending with the termination of the client-auditor relationship, (i) there were no disagreements between Tronox Incorporated and E&Y on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure which, if not resolved to the satisfaction of E&Y, would have caused E&Y to make reference to the subject matter of the disagreement in connection with any report that E&Y would have been required to provide had Tronox Incorporated obtained an audit for each of such fiscal years, and (ii) there were no reportable events, as defined in Item 304(a)(1)(v) of Regulation S-K of the Securities and Exchange Commission.



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**Current Independent Registered Accounting Firm**

Effective June 8, 2010, with the prior approval of its board of directors, Tronox Incorporated engaged Grant Thornton LLP ( "GT" ) as its principal independent registered public accounting firm to audit Tronox Incorporated's financial statements for the fiscal years ended December 31, 2010, 2009 and 2008.

Tronox Incorporated had not previously consulted with GT regarding either (i) the application of accounting principles to a specific completed or contemplated transaction; (ii) the type of audit opinion that might be rendered on Tronox Incorporated's financial statements; or (iii) any matter that was either the subject of a disagreement with E&Y or a reportable event (as provided in Item 304(a)(1)(v) of Regulation S-K) during the years ended December 31, 2010, 2009 and 2008 and any later interim periods.

The audited financial statements of Tronox Incorporated included in this prospectus include only financial statements that have been audited by GT.

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**EXXARO MINERAL SANDS**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS OF**  
**FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

**Exxaro Mineral Sands MD&A**

*The following discussion and analysis should be read in conjunction with the information contained in the Exxaro Mineral Sands audited annual combined financial statements for the years ended December 31, 2011, December 31, 2010 and December 31, 2009 and the related notes thereto ( Exxaro Mineral Sands's combined annual financial statements and, collectively, the Exxaro Mineral Sands Combined Financial Statements ), which can be found elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties, and actual results could differ materially from those discussed in the forward-looking statements as a result of numerous factors. See Cautionary Note Regarding Forward-Looking Statements.*

*The Exxaro Mineral Sands Combined Financial Statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ( IFRS ). IFRS differs in some respects from GAAP; therefore, some of the financial information may not be comparable to the financial information of United States companies.*

**General**

Based on data reported by TZMI, Exxaro Mineral Sands (including 100% of the Tiwest Joint Venture) is the world's third-largest titanium feedstock producer, with 10% of global titanium feedstock production in 2010, and the world's second-largest zircon producer, with 20% of global zircon production in 2010. In 2011, Exxaro Mineral Sands produced 277,000 tonnes of titanium slag, 195,000 tonnes of zircon, 110,000 tonnes of synthetic rutile and 76,000 tonnes of TiO<sub>2</sub> pigment, resulting in combined revenue of R6,586 million (\$907 million).

Exxaro Mineral Sands's operations comprise KZN Sands and Namakwa Sands, both located in South Africa, and Australia Sands in Australia. The KZN Sands operations involve the exploration, mining and beneficiation of mineral sands deposits in the KwaZulu-Natal province of South Africa, and the Namakwa Sands operations involve the exploration, mining and beneficiation of mineral sands deposits in the Western Cape province of South Africa. These operations produce titanium feedstock, including ilmenite, chloride slag, slag fines and rutile, as well as the co-products pig iron and zircon. Australia Sands's principal asset is its 50% interest in the Tiwest Joint Venture, which conducts the exploration, mining and processing of mineral sands deposits and the production of TiO<sub>2</sub> in Australia.

**Table of Contents****Exxaro Mineral Sands Selected Historical Financial Data**

The following table sets forth Exxaro Mineral Sands' selected historical financial data as of the dates and for the periods indicated. The statement of operations and balance sheet data have been derived from the Exxaro Mineral Sands Combined Financial Statements included elsewhere in this prospectus. This information should be read in conjunction with the Exxaro Mineral Sands Combined Financial Statements and the discussion included below.

	Year Ended December 31,		
	2011	2010	2009
	(Rand in millions)		
<b>Statement of Operations Data:</b>			
<b>Revenue</b>	<b>R 6,585.9</b>	<b>R 4,640.0</b>	<b>R 3,508.3</b>
Raw materials and consumables used	(1,288.1)	(1,078.9)	(1,175.3)
Changes in inventories of finished goods and work-in-progress	123.1	(277.0)	600.0
Staff costs	(1,033.3)	(918.2)	(824.5)
Depreciation and amortization	(547.5)	(601.3)	(479.1)
Impairment reversal/(charge) of property, plant and equipment	877.2		(1,435.0)
Energy costs	(679.1)	(501.1)	(434.0)
Other operating expenses	(1,368.4)	(1,013.0)	(1,165.5)
<b>Operating profit/(loss)</b>	<b>2,669.8</b>	<b>250.5</b>	<b>(1,405.1)</b>
Interest income	61.0	9.2	10.8
Interest expenses	(260.6)	(299.4)	(369.1)
<b>Profit/(loss) before tax</b>	<b>2,470.2</b>	<b>(39.7)</b>	<b>(1,763.4)</b>
Income tax (expense)/benefit	79.8	48.2	(307.7)
<b>Profit/(loss) for the period</b>	<b>R 2,550.0</b>	<b>R 8.5</b>	<b>R (2,071.1)</b>

	As of December 31,		
	2011	2010	2009
	(Rand in millions)		
<b>Balance Sheet Data:</b>			
Working capital(1)	3,285.9	2,423.0	2,592.9
Property, plant and equipment	6,285.6	5,252.6	5,114.4
<b>Total assets</b>	<b>15,390.2</b>	<b>10,221.3</b>	<b>9,696.9</b>
Net investment by Exxaro	3,691.7	(490.6)	(604.3)
<b>Non-current liabilities:</b>			
Interest-bearing borrowings and amounts due to related parties	2,475.1	2,999.2	3,416.0
All other noncurrent liabilities	571.1	495.2	440.4
<b>Current liabilities:</b>			
Interest-bearing borrowings and amounts due to related parties	7,750.6	6,485.9	5,794.5
All other current liabilities	901.7	731.6	650.3

(1) Working capital represents excess of current assets, less cash and cash equivalents and amounts due from related parties, over current liabilities, less interest-bearing borrowings and amounts due to related parties.

**Recent Developments****Fairbreeze Mining Project**

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Exxaro's board of directors, as a result of depressed market conditions at that time, decided not to proceed with the planned development of the Fairbreeze mine and instead began planning for Hillendale's closure at KZN Sands and investigating feedstock alternatives to permit the continuation of KZN Sands's operations following

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Hillendale's closure. As a result of this decision, Exxaro Mineral Sands recognized a R1,435.0 million (\$170.4 million) impairment of the carrying value of KZN Sands's assets, which negatively impacted Exxaro Mineral Sands's 2009 results of operations. On February 22, 2011, due to the improvement in global market conditions and increased demand for titanium feedstock and zircon and the consequential increases in their prices, Exxaro's board of directors reversed this decision and approved the development of the Fairbreeze mine as a replacement feedstock producer to the Hillendale mine at KZN Sands, subject to obtaining the required regulatory and environmental approvals, which is an on-going process. Once the required approvals have been received, Exxaro Mineral Sands intends to commence construction on the Fairbreeze mining project. During the period between the decommissioning of the Hillendale mine, which is expected to occur at the end of 2012, and the commencement of operations at the Fairbreeze mine, which is expected in the second half of 2014, KZN Sands has identified possible alternate supplies of ilmenite from Namakwa Sands and the Tiwest Joint Venture. The identification of alternate supplies of ilmenite has led to an increase in the recoverable amount of the smelters at KZN Sands. As a result, management reversed the impairment previously recognized on smelter-specific property, plant and equipment, amounting to R877.2 million (\$120.8 million). The impairment reversal was restricted to increasing the carrying value of the relevant smelter assets to the carrying value that would have been recognized had the original impairment not occurred (that is, after taking account of normal depreciation that would have been charged had no impairment occurred).

The Hillendale mine produced 370,322 tonnes of heavy mineral concentrate, 167,578 tonnes of crude ilmenite, 28,374 tonnes of zircon and 16,916 tonnes of rutile in 2011. Exxaro Mineral Sands expects these quantities to continue to decrease during 2012 as planned due to a reduction in mining grades as Hillendale approaches the end of its life of mine. In addition, ilmenite, zircon and rutile are not expected to be mined at KZN Sands between January 2013 and the second half of 2014. As a result, during the period between the decommissioning of the Hillendale mine, which is expected to occur at the end of 2012, and the commencement of operations at the Fairbreeze mine, which is expected in the second half of 2014, KZN Sands intends to source ilmenite from its own stockpile as an alternate supply and from inventory held at Namakwa Sands and the Tiwest Joint Venture, as further described below. Exxaro Mineral Sands estimates that approximately 937,883 tonnes of smelter grade ilmenite will be required in order for titanium slag to continue being produced at KZN Sands during this period. Exxaro Mineral Sands anticipates that it will be able, at maximum production levels, to acquire the shortfall of smelter grade ilmenite from the following alternative sources during this period in order to meet the anticipated demand and maintain an acceptable stock level:

the existing stockpile of smelter grade ilmenite at the KZN Sands smelter, which is expected to comprise approximately 429,669 tonnes by June 2012;

production of approximately 168,949 tonnes of ilmenite from the Hillendale mine in 2012;

additional ilmenite production at the Namakwa Sands operations, which Exxaro Mineral Sands estimates will contribute approximately 139,409 tonnes;

upgrading a portion of the approximately 3.8 million tonnes of unattritioned ilmenite presently held at Namakwa Sands. At present the construction of an Unattritioned Magnetic Material (UMM) plant is scheduled to begin in Q4 2012. This two module plant is expected to produce 225,663 tonnes of smelter grade ilmenite, at a capacity of 14,000 tonnes per month, as further described under

The Businesses Description of Exxaro Mineral Sands Properties and Reserves Properties Namakwa Sands Description of Property. An option exists to add further modules in order to increase production of smelter grade ilmenite from this stockpile; and

importation of ilmenite from the Tiwest Joint Venture, which currently holds a stockpile of 530,000 tonnes of high grade smelter grade ilmenite.

Exxaro Mineral Sands's estimates of the available supply of and likely demand for smelter grade ilmenite at KZN Sands between the closure of the Hillendale mine and the commencement of operations at the Fairbreeze mine may be affected by various factors, including an increase in furnace ilmenite consumption. During the

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fourth quarter of 2011, both KZN Sands and Namakwa Sands increased their ilmenite consumption by approximately 10% as a result of improvement projects such as the installation of the copper plate conductive hearth at KZN Sands' Furnace 1 and the upgrading of the electrical and feed systems at the Namakwa Sands furnaces. This has led to a combination of both an increase in slag production and efficiency improvements that have positively impacted on costs.

If the commencement of operations at the Fairbreeze mine is delayed, the furnaces at KZN Sands will require additional ilmenite to continue operations at currently anticipated output levels. As discussed under *The Businesses' Description of Exxaro Mineral Sands' Regulation of the Mining Industry in South Africa and Australia' Environmental, Health and Safety Matters' Fairbreeze Environmental Impact Assessment, The Businesses' Description of Exxaro Mineral Sands' Legal Proceedings' South Africa' Obanjeni Land Claims' and Risk Factors' Exxaro Mineral Sands' privately held and leased South African land and mineral rights could be subject to land restitution claims, the commencement of operations at the Fairbreeze mine is dependent on various external factors that are beyond Exxaro Mineral Sands' control, such as the timing and conditions of regulatory approvals and the potential for regulatory authorizations to be challenged or appealed by third parties. Exxaro Mineral Sands estimates that a six month delay in the anticipated commencement date of operations at the Fairbreeze mine would require KZN Sands to seek an additional 205,000 tonnes of ilmenite in order to continue KZN Sands' operations at the currently anticipated output levels. This additional smelter grade ilmenite could be sourced internally from a combination of Namakwa Sands and the Tiwest Joint Venture. Exxaro Mineral Sands estimates that a six month delay in the commencement of operations at the Fairbreeze mine would decrease the output of zircon and rutile at KZN Sands from current estimates by approximately 25,400 tonnes and 12,400 tonnes, respectively, which could potentially reduce revenue by an estimated amount of approximately \$80.5 million in 2014.*

KZN Sands' fixed cost of approximately \$41 million for heavy mineral concentrate incurred during 2011 is expected to remain unchanged during the period between the decommissioning of the Hillendale mine and the commencement of operations at the Fairbreeze mine; however, a variable cost of approximately \$25.60 per tonne of heavy mineral concentrate is expected to be saved as a result of the break in production.

***Furnace Shutdowns***

In October 2010, KZN Sands' Furnace 2 suffered a burn-through, resulting in its shutdown for repairs and a technological upgrade as further described below, which continued until late October 2011. In addition, in August 2011, a scheduled inspection of KZN Sands' other furnace, Furnace 1, revealed a water ingress, resulting in its shutdown and the inoperability of both of KZN Sands' furnaces for almost three months during that period. In addition to repairing the furnaces, Exxaro Mineral Sands converted the furnace technology to conductive hearth technology, which is presently used in the Namakwa Sands operations. Conductive hearth technology is more efficient and requires shorter and less frequent scheduled downtime for maintenance than the technology previously used by the furnaces.

The furnace shutdowns resulted in a reduction of approximately 16,300 tonnes of ilmenite treated per month per furnace (Furnace 1 and Furnace 2 have a similar ilmenite treatment capacity). Furnace 2's unavailability negatively impacted Exxaro Mineral Sands' operations for the twelve-month period that it was out of commission, resulting in reduced slag and pig iron production of approximately 90,000 tonnes and 54,700 tonnes, respectively, and a loss of revenue during the period of approximately R436 million (\$54 million). Furnace 1 was out of operation until February 25, 2012, which resulted in an estimated reduced production of slag and pig iron for the second half of 2011 of approximately 30,000 tonnes and 18,240 tonnes, respectively, and an estimated loss of revenue during the period of approximately R145.3 million (\$20.0 million). Furnace 1's unavailability is also expected to result in reduced production of slag and pig iron for the first half of 2012 of approximately 22,500 tonnes and 13,680 tonnes, respectively, and a loss of revenue during the period of approximately R109 million (\$13.5 million).

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### ***The Kwinana Facility Expansion***

The expansion of the Kwinana Facility at the Tiwest Joint Venture was completed and commissioned at the end of June 2010. The expansion increased TiO<sub>2</sub> production capacity at the Kwinana Facility from 110,000 to 150,000 tonnes per annum. While Tronox Incorporated was in bankruptcy, Exxaro Mineral Sands funded 96.9% of the expansion capital expenditure (despite only being obligated to fund 50%, in proportion to its ownership interest in the Tiwest Joint Venture). As provided in the Tiwest Joint Venture development agreement, the rights to the TiO<sub>2</sub> produced as a result of the Kwinana Facility expansion follow the levels of contribution for the expansion, which meant that Exxaro Mineral Sands received 96.9% of the TiO<sub>2</sub> production attributable to the expansion (as well as the proportionate share of operating expenses) during the period from June 30, 2010 to June 30, 2011, when Tronox Incorporated bought into its 50% share of the Kwinana Facility's expansion for \$79.1 million. Exxaro Mineral Sands's share of revenue and operating expenses from the Kwinana Facility are proportionally higher for the year ended December 31, 2011 than for the year ended December 31, 2010, representing an additional 19,000 tonnes of TiO<sub>2</sub> produced during the period as a result of the expansion.

### ***Recapitalization of Exxaro TSA Sands***

On December 20, 2011, Exxaro TSA Sands authorized the issue of an ordinary share to Exxaro in exchange for a cash payment of R1,800 million (\$222.5 million), which Exxaro funded from its cash on hand. Because Exxaro Mineral Sands's South African operations are wholly-owned by another South African company (Exxaro), South African tax transfer pricing legislation permits the companies to be funded predominantly through shareholder loans advanced by Exxaro. Following the completion of the Transaction, Exxaro Mineral Sands's South African operations will be majority-owned by a non-South African tax resident, Tronox Limited. Under the South African tax transfer pricing legislation, when a non-South African tax resident provides a loan to a South African tax resident company, the debt to equity ratio of the South African tax resident company must not exceed 3 to 1. Exxaro determined the amount of equity that would be necessary to ensure that Exxaro Mineral Sands's South African operations would satisfy the prescribed ratio following completion of the Transaction and the transfer of the shareholder loans to Tronox Limited (as further discussed under "Description of the Transaction Documents - The Transaction Agreement"). The calculation indicated that R1,800 million (\$222.5 million) in capital would be required.

In January 2012, Exxaro TSA Sands used the cash received by Exxaro's share subscription to repay a portion of the current amounts due to Exxaro, bringing Exxaro TSA Sands's debt to equity ratio into conformity with the prescribed ratio. If Exxaro TSA Sands had not effected this recapitalization, upon the transfer of the loan accounts to Tronox Limited as part of the Transaction, Exxaro TSA Sands's debt to equity ratio would have exceeded the prescribed ratio, and Exxaro TSA Sands would not have been able to claim a tax deduction for any portion of interest paid in excess of the prescribed ratio.

Exxaro Sands is already in compliance with the required ratio, and will remain in compliance following the transfer of the shareholder loans to Tronox Limited; therefore, no adjustments were necessary to its capitalization.

### **Basis of Preparation**

In the absence of a legal ultimate parent, the Exxaro Mineral Sands Combined Financial Statements have not been prepared by consolidating the ultimate parent and its subsidiaries, but by combining all individual entities that comprise Exxaro's mineral sands operations into one reporting entity referred to in this prospectus as Exxaro Mineral Sands. These entities, which are identified below, have been classified as subsidiary or joint venture undertakings. All transactions, balances, income and expenses, including unrealized profits on such transactions, between or among the entities that comprise Exxaro Mineral Sands have been eliminated on combination.

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The Exxaro Mineral Sands Combined Financial Statements have been prepared by combining the financial information from the local reporting records of the Exxaro Mineral Sands legal entities. The combined financial statements have been prepared under the historical cost convention as modified by the revaluation of financial assets and liabilities (including derivative instruments) at fair value through profit and loss and, in all material respects, in accordance with IFRS as adopted by the IASB and may not be indicative of the actual results of Exxaro's mineral sands operations and financial position had they been operated as a separate entity.

The Exxaro Mineral Sands Combined Financial Statements have been prepared for the purposes of presenting, as far as practical, the financial position, results of operations and cash flows of Exxaro's mineral sands operations on a standalone basis. The Exxaro Mineral Sands Combined Financial Statements reflect assets, liabilities, revenues and expenses directly attributable to Exxaro's mineral sands operations, including management fee allocations recognized on a historical basis in Exxaro's accounting records on a legal entity basis. Although it is not possible to estimate the actual costs that Exxaro Mineral Sands would have incurred if the services performed by Exxaro had been purchased from independent third parties, Exxaro's directors and senior management consider the allocations reasonable. However, Exxaro Mineral Sands's financial position, results of operations and cash flows presented below are not necessarily representative or indicative of those that would have been achieved had Exxaro's mineral sands operations operated autonomously or independently from Exxaro.

### ***Exxaro Mineral Sands Entities***

The Exxaro Mineral Sands entities comprise Exxaro Sands, Exxaro TSA Sands, Australia Sands (which includes a 50% interest in the Tiwest Joint Venture), and the other Australian and Dutch entities that comprise Australia Sands listed in Note 1 to Exxaro Mineral Sands's combined annual financial statements included elsewhere in this prospectus.

Exxaro Sands is the legal entity which owns KZN Sands's mining and prospecting rights, including the Hillendale mining operation and the mineral separation plant at Empangeni. Exxaro TSA Sands is the legal entity which owns Namakwa Sands, as well as the remainder of KZN Sands's operations.

Australia Sands's interest in the Tiwest Joint Venture in Australia is accounted for as a joint venture. A joint venture is a contractual arrangement whereby Exxaro Mineral Sands and one or more parties undertake an economic activity that is subject to joint control. Joint ventures in which Exxaro Mineral Sands participates with other parties are proportionately combined. In applying the proportionate combination method, Exxaro Mineral Sands's percentage share of the balance sheet and income statement items are included in the Exxaro Mineral Sands Combined Financial Statements.

### ***Management Fees***

Exxaro uses a cost recovery mechanism to recover central management and other similar costs it incurs at a corporate level. The management fees reflected in the Exxaro Mineral Sands Combined Financial Statements are based on the amounts historically recorded in the accounts of the individual entities that comprise Exxaro's mineral sands operations as a result of this cost recovery mechanism. An appropriate proportion of the salaries, pension costs and other remuneration for Exxaro's senior management, including Exxaro Mineral Sands's senior management, are included in these management fees. Costs have principally been allocated on the basis of actual services delivered or benefits received. Additional information about Exxaro Mineral Sands's relationship with Exxaro and other Exxaro companies, including a description of the costs that have historically been charged to Exxaro Mineral Sands, is included in Note 14 to Exxaro Mineral Sands's combined annual financial statements included elsewhere in this prospectus.



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### ***Interest***

The interest charge reflected in the Exxaro Mineral Sands Combined Financial Statements is based on the interest charge historically incurred by the entities included in Exxaro's mineral sands operations on specific external borrowings or financing provided by other Exxaro companies. No debt unrelated to the Exxaro Mineral Sands business at an Exxaro consolidated basis has been pushed down or allocated to Exxaro Mineral Sands.

### ***Taxation***

The entities that comprise Exxaro Mineral Sands's South African operations file separate tax returns in South Africa, and their current and deferred income taxes are based on these separate returns.

In Australia, Australia Sands and its subsidiaries are part of a multiple entry tax-consolidated group (an MEC group) under Australian taxation law and file a consolidated tax return. Exxaro Australia Pty Ltd, which is an Exxaro subsidiary that will not be transferred to Tronox Limited as part of the Transaction, presently is the MEC Group's head entity. As the head entity of the MEC group, Exxaro Australia Pty Ltd recognizes the current tax liabilities and assets and deferred tax assets arising from unused tax losses and tax credits of the MEC group members. Due to the existence of a tax funding agreement between these entities, which will be terminated prior to completion of the Transaction, amounts are recognized as payable to or receivable by each member of the MEC group in relation to the tax contribution amounts paid or payable between Exxaro Australia Pty Ltd and the other members of the MEC group in accordance with the agreement, and each of the entities has agreed to pay a tax equivalent payment to Exxaro Australia Pty Ltd based on such entity's current tax liability or asset. Such amounts are reflected in the amounts receivable from or payable to related parties.

When the MEC group members (other than Exxaro Australia Pty Ltd) are transferred to Tronox Limited upon completion of the Transaction, each member leaving the MEC group must pay to Exxaro Australia Pty Ltd an estimate of its tax contribution amounts for tax liabilities which have not yet fallen due for payment prior to transfer to Tronox Limited.

### ***Share-based Payments***

Exxaro Mineral Sands employees participate in Exxaro's performance share schemes and management option plan. For purposes of the Exxaro Mineral Sands Combined Financial Statements, transfers of Exxaro's equity instruments to Exxaro Mineral Sands employees have been reflected as equity settled share-based payment transactions on the basis that the responsibility for settling the awards resides with Exxaro and not the entities comprising Exxaro Mineral Sands.

### ***Net Investment by Other Exxaro Companies***

The balance sheets in the Exxaro Mineral Sands Combined Financial Statements show the amount of other Exxaro companies' net investment in Exxaro Mineral Sands in lieu of showing shareholders' equity. Such amounts represent the entities' aggregated combined share capital, accumulated losses and other reserves, including share-based payment reserve, hedging reserve and cumulative translation adjustments.

### ***Critical Accounting Policies***

In the application of its accounting policies, Exxaro Mineral Sands's senior management makes judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. For example, senior management estimates the tax rate applied to foreign exchange gains or losses that may be realized in the future. These estimates and associated assumptions are based on historical experience and other factors that senior management considers relevant. Actual results may differ from these estimates.

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Exxaro Mineral Sands' senior management reviews these estimates and underlying assumptions on an on-going basis and recognizes revisions to accounting estimates in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

### ***Impairment of Property, Plant and Equipment***

Exxaro Mineral Sands reviews the carrying amount of its property, plant and equipment at the end of each annual reporting period to determine whether there is any indication of impairment. Where such an indication exists, Exxaro Mineral Sands' management estimates the recoverable amount in accordance with the accounting policy described in Note 3(g) to Exxaro Mineral Sands' combined annual financial statements included elsewhere in this prospectus.

Decreased demand for Exxaro Mineral Sands' products and lower average product prices caused by the 2008-2009 global economic recession negatively affected the carrying value of KZN Sands' operations as at December 31, 2009. As a result, Exxaro's decision to suspend the planned development of the Fairbreeze mine and instead plan for Hillendale's closure at KZN Sands in 2009, as further discussed above under "Recent Developments Fairbreeze Mining Project," resulted in the carrying amount of KZN Sands' cash generating unit being written down to its recoverable amount, creating a R1,435.0 million (\$170.4 million) impairment charge in KZN Sands' operations in 2009. The identification of alternate supplies of ilmenite to be utilized by KZN Sands during the period between the decommissioning of the Hillendale mine (expected to occur at the end of 2012) and the commencement of operations at the Fairbreeze mine (expected in 2014), as further discussed under "The Businesses Description of Exxaro Mineral Sands Properties and Reserves Properties Hillendale Mining Operations Description of Property," "The Businesses Description of Exxaro Mineral Sands Properties and Reserves Properties Namakwa Sands Description of Property" and "Recent Developments Fairbreeze Mining Project," have led to an increase in the recoverable amount of the smelters at KZN Sands. As a result, management reversed the impairment previously recognized on smelter-specific property, plant and equipment amounting to R877.2 million (\$120.8 million). Exxaro Mineral Sands' management's assumptions are set out in Note 8 to Exxaro Mineral Sands' combined annual financial statements included elsewhere in this prospectus.

### ***Provisions***

Exxaro Mineral Sands estimates its long-term environmental rehabilitation and mine decommissioning obligations based on its environmental management plans, which are submitted as part of the environmental approval process for its mining and prospecting operations, and current technological, environmental and regulatory requirements. Exxaro Mineral Sands' senior management exercises its judgment when estimating the ultimate rehabilitation costs for its mining operations and determining the appropriate provisions, using the following assumptions during 2011 and 2010:

	<b>South African Operations</b>	<b>Australian Operations</b>
Inflation rate per annum	5%	2.5%
Discount rate per annum	8.8% in 2011, 10% in 2010	5.5% in 2010
Life of Mine	2-18 years in 2011	16-38 years in 2011
	3-19 years in 2010	16-39 years in 2010

The ultimate cost of Exxaro Mineral Sands' environmental rehabilitation and mine decommissioning obligations may differ significantly from its estimates and provisions.

Provisions are funded either through guarantees or through a trust fund. Exxaro Mineral Sands makes quarterly contributions to the Exxaro Environmental Rehabilitation Fund, which is a trust fund maintained to provide for the rehabilitation and management of negative environmental impacts in respect of the prospecting

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and mining activities of Exxaro Mineral Sands' South African operations, as required by the MPRDA, the DMR and Exxaro Mineral Sands' prospecting and mining licenses. As of December 31, 2011 and December 31, 2010, the balance in this fund attributable to Exxaro Mineral Sands' South African operations was R156.4 million (\$19.3 million) and R120.1 million (\$18.1 million), respectively, which is reflected in the financial assets line item on the Statements of Financial Position of the Exxaro Mineral Sands Combined Financial Statements. Exxaro also has entered into guarantees in favor of the DMR which are issued by financial institutions for the benefit of Exxaro Mineral Sands in respect of the mine closure and rehabilitation liabilities of Exxaro Mineral Sands' South African operations. Exxaro Mineral Sands' contributions to this fund will be transferred to a new, Tronox Limited trust fund established pursuant to the Transaction Agreement at or after the closing date and Exxaro's guarantees to the DMR will be extinguished at the completion of the Transaction and will be replaced by Tronox Limited guarantees.

### ***Mineral Resources and Ore Reserves***

Exxaro Mineral Sands' mineral resources and ore reserve estimates, which are included under The Businesses Exxaro Mineral Sands' Business Properties and Reserves Mineral Resources and Reserves, represent the amount of minerals that can be economically and legally extracted from Exxaro Mineral Sands' operations. In order to calculate the mineral reserves and resources, Exxaro Mineral Sands makes estimates and relies on assumptions concerning a range of geological, technical and economic factors, costs, commodity prices and exchange rates. Estimating the quantities and grade of the reserves and resources requires Exxaro Mineral Sands to determine the size, shape and depth of the ore bodies by analyzing geological data such as the logging and assaying of drill samples. This process may require complex and difficult geological judgments and calculations to interpret the data.

Because the economic assumptions used to estimate the mineral reserves and ore resources change from year to year, and because additional geological data is generated during the course of operations, Exxaro Mineral Sands' estimates of the mineral reserves and ore resources may change from year to year. Changes in the reserves and resources may affect Exxaro Mineral Sands' financial results and financial position in a number of ways, such as changes to asset carrying values due to changes in estimated cash flows, changes to depreciation and amortization charges in the income statement (because they are calculated using the units-of-production method), and changes to environmental provisions as the timing or cost of Exxaro Mineral Sands' operating activities are affected as a result of revised estimates.

### ***Estimate of Post-retirement Obligations***

With respect to Exxaro Mineral Sands' defined benefit schemes, management makes annual estimates and assumptions about future returns on classes of scheme assets, future remuneration changes, employee attrition rates, administration costs, changes in benefits, inflation rates, exchange rates, average life expectancy and expected remaining periods of employee service, as further discussed under Note 21 to Exxaro Mineral Sands' combined annual financial statements. In making these estimates and assumptions, management considers advice provided by external advisers, such as actuaries.

### ***Income Taxes***

Exxaro Mineral Sands is principally subject to income taxes in South Africa and Australia, which requires Exxaro Mineral Sands' senior management to exercise its judgment when determining worldwide provisions for income taxes. In many transactions, the calculation of the ultimate tax determination is uncertain. Where the final tax outcome is different from the amounts initially recorded, such differences will impact income tax and deferred tax provisions for the period in which such determinations are made.

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Management exercises its judgment with regard to the recognition of deferred tax assets, principally relating to tax losses in South Africa. Where the possibility exists that no future taxable income may flow against which these assets can be offset, the deferred tax assets are not recognized. As of December 31, 2011, Exxaro Mineral Sands recognized deferred taxes relating to tax losses at its mining and smelter operations. Unrecognized tax losses amounting to R109.1 million (\$13.5 million) relate principally to KZN Sands's non-smelter operations (forming part of the Exxaro Sands legal entity) operations. For further information, refer to Note 4.2 of Exxaro Mineral Sands's combined annual financial statements.

***Derivatives***

Exxaro Mineral Sands from time to time holds derivative financial instruments to hedge its foreign exchange exposure and interest rate exposure. Derivatives are initially recognized at fair value as of the date on which a derivative contract is entered into, with attributable transaction costs recognized in the income statement as incurred. The fair value of derivatives not quoted in active trading markets is determined using valuation techniques, which make use of observable market data, with management making judgments to select from a variety of valuation methods and assumptions based on then-current market conditions.

Subsequent to their initial recognition, derivatives are measured at fair value, and changes in fair value are accounted for based on whether Exxaro Mineral Sands has designated the derivative as a hedging instrument, and if so, the nature of the item being hedged. During the years ended December 31, 2011, 2010 and 2009, the total amount of the change in fair values of derivatives that Exxaro Mineral Sands recognized, estimated using a discounted cash flow analysis, was a loss of R281.9 million (\$38.8 million) compared to a profit of R236.7 million (\$32.3 million) and a profit of R156.2 million (\$18.6 million) in each respective period.

Exxaro Mineral Sands designates most of its derivatives as either fair value hedges, cash flow hedges or economic hedges. When a derivative is designated as a hedge of the change in fair value of a recognized asset or liability or a firm commitment, changes in the fair value of the derivative are recognized immediately in the income statement together with changes in the fair value of the hedged item that are attributable to the hedged risk. If the derivative expires or is sold, terminated, or exercised, or no longer meets the criteria for fair value hedge accounting, or the designation is revoked, hedge accounting is discontinued. Any adjustment up to that point, to a hedged item for which the effective interest rate method is used, is amortized to the income statement as part of the recalculated effective interest rate of the item over its remaining life.

When a derivative is designated as a hedge of the variability in cash flows attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction that could affect the income statement, the effective portion of changes in the fair value of the derivative is recognized directly in equity. The amount recognized in equity is removed and included in profit or loss in the same period as the hedged item's cash flows affect the income statement under the same income statement line item as the hedged item. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in the income statement. If the derivative expires or is sold, terminated, or exercised, or no longer meets the criteria for cash flow hedge accounting, or the designation is revoked, then hedge accounting is discontinued and the amount recognized in equity remains in equity until the forecast transaction affects the income statement. If the forecast transaction is no longer expected to occur, then hedge accounting is discontinued and the balance in equity is recognized immediately in the income statement.

Derivative instruments that economically hedge monetary assets and liabilities denominated in foreign currency, such as foreign exchange contracts and currency options, do not qualify for hedge accounting. Changes in the fair value of these instruments are recognized immediately in the income statement as part of foreign currency gains and losses.

**Table of Contents****Results of Operations*****Year Ended December 31, 2011 Compared to Year Ended December 31, 2010***

Exxaro Mineral Sands' s revenue increased by R1,945.9 million (\$274.1 million), or 41.9%, to R6,585.9 million (\$907.1 million) for the year ended December 31, 2011 from R4,640.0 million (\$633.0 million) for the year ended December 31, 2010, mainly due to the increases in selling prices for most of Exxaro Mineral Sands' s products complemented by increased demand. Exxaro Mineral Sands improved operational efficiencies and continued cost containment, despite the impact of stronger Rand and Australian dollar as compared with the U.S. dollar during the period. KZN Sands recorded an operating profit of R753.0 million (\$103.7 million) for the year ended December 31, 2011, which includes the impairment reversal of R877.2 million (\$120.8 million), compared to a loss of R66.0 million (\$9.0 million) for the year ended December 31, 2010, which was partially offset by a non-recurring insurance payment receipt of R98.0 million (\$13.4 million). Namakwa Sands and Australia Sands recorded net operating profit increases of R880.0 million (\$121.4 million) and R800.0 million (\$110.4 million), respectively, for the year ended December 31, 2011 as compared with the year ended December 31, 2010. The higher profits were recorded at respective operating margins of 33.9% and 37.7%.

At KZN Sands, heavy mineral concentrate production was approximately 43,888 tonnes lower during the year ended December 31, 2011 as compared with the year ended December 31, 2010 due to the Hillendale mine nearing its end of life, which resulted in lower zircon production of approximately 4,752 tonnes and marginally lower rutile production as compared with the previous period. The lower heavy mineral concentrate production, together with the inoperability of Furnace 2 during most of the period, as further discussed under Recent Developments Furnace Shutdowns, also resulted in lower titanium slag production during the period as compared with the previous period.

Namakwa Sands recorded higher zircon and rutile production of approximately 6,366 tonnes and 2,429 tonnes, respectively, during the year ended December 31, 2011 as compared with the year ended December 31, 2010. With greater uptimes of Namakwa Sands' s furnaces, titanium slag production overall increased by 54,781 tonnes as compared with the previous period.

At Australia Sands, synthetic rutile production increased during the year ended December 31, 2011 as compared with the year ended December 31, 2010, due to improved consistency in production together with the reduction of coal quality problems which adversely affected the Kwinana Facility in the past. Zircon production at Australia Sands was marginally lower as compared with the previous period as a result of harder digging conditions. TiO<sub>2</sub> production at the Kwinana Facility was significantly higher during the period as compared with the previous period following the commissioning and ramp-up of the TiO<sub>2</sub> plant expansion, for which Exxaro Mineral Sands was entitled to a proportionate share in excess of its 50% interest in the Tiwest Joint Venture during the period, as further discussed under Recent Developments Kwinana Facility Expansion, combined with improved performance from the existing plant. Total sales volumes were in line with the previous corresponding period, but at a different overall product mix, which led to more favorable selling prices.

The following table presents a summary of Exxaro Mineral Sands' s saleable production by product for the periods indicated:

	<b>Year Ended December 31,</b>	
	<b>2011</b>	<b>2010</b>
	<b>(Tonnes)</b>	
Slag tapped	277,000	262,000
Rutile	66,000	63,000
Zircon	195,000	196,000
TiO <sub>2</sub>	76,000	57,000
Pig iron and scrap iron	167,000	164,000

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The following table presents Exxaro Mineral Sands' consolidated results of operations for the periods indicated:

	2011	Year Ended December 31, 2010 (Rand in millions)	Change
Revenue	R 6,585.9	R 4,640.0	R 1,945.9
Operating expenses	(3,916.1)	(4,389.5)	473.4
<b>Net operating profit</b>	<b>2,669.8</b>	<b>250.5</b>	<b>2,419.3</b>
Interest income	61.0	9.2	51.8
Interest expense	(260.6)	(299.4)	38.8
<b>Profit/(loss) before tax</b>	<b>2,470.2</b>	<b>(39.7)</b>	<b>2,509.9</b>
Income tax (expense)/benefit	79.8	48.2	31.6
<b>Profit/(loss) for the period</b>	<b>R 2,550.0</b>	<b>R 8.5</b>	<b>R 2,541.5</b>

*Revenue* increased by R1,945.9 million (\$274.1 million), or 41.9%, to R6,585.9 million (\$907.1 million) for the year ended December 31, 2011, from R4,640.0 million (\$633.0 million) for the year ended December 31, 2010. The increase was primarily due to price increases for all mineral sands products supported by higher production volumes at Namakwa Sands and Australia Sands, in part due to the additional 19,000 tonnes of TiO<sub>2</sub> produced during the period that was attributed to Australia Sands as a result of the Kwinana Facility expansion, offset by lower production volumes at KZN Sands as a result of the Hillendale mine nearing its end of life of mine. Zircon prices were 107.6% higher and pigment prices 35.7% higher in December 2011 compared to December 2010. These increases were partially offset by a 0.1% average realized increase in the Rand exchange rate against the U.S. dollar and a 11.6% average realized increase in the Australian dollar exchange rate against the U.S. dollar in December 2011 compared to December 2010.

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*Operating expenses* decreased by R473.4 million (\$59.4 million), or 10.8%, to R3,916.1 million (\$539.4 million) for the year ended December 31, 2011, from R4,389.5 million (\$598.8 million) for the year ended December 31, 2010, mainly as a result of the partial impairment reversal of property, plant and equipment at KZN Sands offset by the costs associated with additional 19,000 tonnes of TiO<sub>2</sub> produced during the period that was attributed to Australia Sands as part of the Kwinana Facility expansion. Exxaro Mineral Sands presents its expenses under IFRS as issued by the IASB by nature. Under the nature of expense method, expenses are classified according to their nature (for example, use of raw materials and consumables, depreciation and amortization, staff costs, etc.) and are not reallocated among various functions within the entity. Operating expenses are presented on a gross basis, before the deduction of any amounts capitalized to work-in-progress or finished goods on hand. For example, raw materials and consumables used represents the total of all raw materials and consumables used, even if they were used relating to items of inventory on hand at the end of the period. The line item Changes in inventories of finished goods and work-in-progress therefore represents the period-on-period movement in inventory that is necessary to ensure that operating profit is reported net of amounts capitalized, when expenses are presented by nature. The following table presents the principal components of Exxaro Mineral Sands' operating expenses for the years ended December 31, 2011 and December 31, 2010:

	Year Ended December 31,		
	2011	2010	Change
	(Rand in millions)		
Raw materials and consumables used	R1,288.1	R1,078.9	R209.2
Changes in inventories of finished goods and work-in-progress	(123.1)	277.0	(400.1)
Staff costs	1,033.3	918.2	115.1
Depreciation and amortization	547.5	601.3	(53.8)
Reversal of impairment of property, plant and equipment	(877.2)		(877.2)
Energy costs	679.1	501.1	178.0
Other operating expenses	1,368.4	1,013.0	355.4
<b>Total operating expenses</b>	<b>R3,916.1</b>	<b>R4,389.5</b>	<b>R(473.4)</b>

*Raw materials and consumables used*, which are described under The Businesses Description of Exxaro Mineral Sands Business Mining and Processing Techniques Raw Materials, increased by R209.2 million (\$30.2 million), or 19.4%, to R1,288.1 million (\$177.4 million) in the year ended December 31, 2011 from R1,078.9 million (\$147.2 million) for the year ended December 31, 2010, due to normal inflation, an increase in production performance as well as the Kwinana Facility expansion.

*Changes in inventories of finished goods and work-in-progress* adjusts the statement of comprehensive income to reflect the amounts that have been capitalized to work-in-progress and finished goods on hand. Inventories of finished goods and work-in-progress increased by R123.1 million (\$17.0 million), or 9.3%, from R1,329.4 million (\$179.5 million) as of December 31, 2010 to R1,452.5 million (\$200.8 million) as of December 31, 2011. Finished goods and work-in-progress levels increased as of December 31, 2011, mainly as a result of slower customer demand for zircon in the fourth quarter of 2011. Inventory levels decreased as of December 31, 2010 as a result of increased market demand and the realization of costs associated with sales of stock accumulated in the previous years (due to depressed markets).

*Staff costs*, which include salaries and wages, share-based payments, termination benefits, pension costs and medical costs, increased by R115.1 million (\$17.1 million), or 12.5%, to R1,033.3 million (\$142.3 million) for the year ended December 31, 2011 from R918.2 million (\$125.3 million) for the year ended December 31, 2010, mainly as a result of above inflation-related staff cost increases and bonuses paid to Exxaro Mineral Sands' employees.

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*Depreciation and amortization* decreased by R53.8 million (\$6.6 million), or 8.9%, to R547.5 million (\$75.4 million) for the year ended December 31, 2011 from R601.3 million (\$82.0 million) for the year ended December 31, 2010, as a result of accelerated depreciation in 2010 relating to an adjustment to the useful life of KZN Sands' assets following management's revision of its useful life assumptions as a result of the decision not to pursue the Fairbreeze mine, as discussed above. The useful life of the KZN assets (smelter-specific property, plant and equipment) was extended in 2011 following the identification of alternate sources of ilmenite. The lower depreciation at KZN Sands in 2011 was offset by an increase of R19.0 million (\$2.6 million) during 2011 relating to an increase in the depreciation charges relating to additional capital in use for the expanded Kwinana Plant at Australia Sands after June 30, 2010.

*Reversal of impairment of property, plant and equipment* represents the reversal of an impairment loss recognized at KZN Sands during the year ended December 31, 2011. KZN Sands has identified alternate supplies of ilmenite from Namakwa Sands, the Tiwest Joint Venture and other third party suppliers that may be used during the period between the decommissioning of the Hillendale mine (expected to occur at the end of 2012) and the commencement of operations at the Fairbreeze mine (expected in 2014). The identification of alternate supplies of ilmenite has led to an increase in the recoverable amount of the smelters at KZN Sands. As a result, management reversed the impairment previously recognized on smelter-specific property, plant and equipment amounting to R877.2 million (\$120.8 million).

*Energy costs*, which include the energy and fuel supplies used in Exxaro Mineral Sands' production, increased by R178.0 million (\$25.2 million), or 35.5%, to R679.1 million (\$93.5 million) for the year ended December 31, 2011 from R501.1 million (\$68.4 million) for the year ended December 31, 2010, as a result of 25% higher electricity costs in South Africa during the period including better overall furnace utilization for the year ended December 31, 2011. Higher electricity costs in Australia resulted from the expansion of the Kwinana Facility.

*Other operating expenses*, which includes corporate service fees, sales and distribution, royalty taxes, repairs and maintenance and outside services, increased by R355.4 million (\$50.3 million), or 35.5%, to R1,368.4 million (\$188.5 million) for the year ended December 31, 2011 from R1,013.0 million (\$138.2 million) for the year ended December 31, 2010. The increase was due to, among other things, higher maintenance costs, including costs incurred in Australia during the Kwinana Facility expansion in the amount of R19.0 million (\$2.6 million), higher sales and distribution costs of R60.0 million (\$8.3 million), including an amount of R29.8 million (\$4.1 million) due to higher TiO<sub>2</sub> sales volumes, an increase in royalties of R35.7 million (\$4.9 million) due to higher revenues and profitability for the period, and an increase in outside services and general expenses of R18.0 million (\$2.5 million) and R83.0 million (\$11.4 million), respectively.

*Interest income* increased by R51.8 million (\$7.1 million), or 563.0%, to R61.0 million (\$8.4 million) for the year ended December 31, 2011, from R9.2 million (\$1.3 million) for the year ended December 31, 2010. This increase represents interest earned on higher cash and cash equivalents, which increased by R2,579.4 million (\$307.3 million), or 615.8%, to R2,998.3 million (\$370.6 million) during the period.

*Interest expense* decreased by R38.8 million (\$5.0 million), or 13.0%, to R260.6 million (\$35.9 million) for the year ended December 31, 2011, from R299.4 million (\$40.8 million) for the year ended December 31, 2010. The decrease was a result of Tronox refunding Exxaro Mineral Sands with R41.5 million (\$5.7 million) interest as a result of the TiO<sub>2</sub> expansion buyback and was offset by the interest on interest bearing loans raised for the year ended December 31, 2011.

*Income tax* increased from a R48.2 million (\$6.6 million) benefit for the year ended December 31, 2010 to a benefit of R79.8 million (\$11.0 million) for the year ended December 31, 2011, due to Exxaro Mineral Sands recognizing deferred tax assets for tax losses carried forward in 2011 as a result of the increased profitability at KZN Sands smelter operations. The income tax benefit in 2010 and 2011 was determined by taking into consideration disallowable expenditure, exempt income and special allowances. Disallowable expenditure relates



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to expenses not deductible in terms of the South African and Australian income tax regulations, and includes depreciation on items of property, plant and equipment for which no tax allowances can be claimed, legal fees, and consulting fees. Exempt income relates primarily to non-taxable interest income between Exxaro Mineral Sands entities which, although eliminated on combination, qualifies as a tax deduction within the entity paying such interest and constitutes non-taxable income for the receiving entity. The special tax allowances relate to additional tax deductions in Australia, calculated as a percentage of the cost of qualifying eligible capital expenditures. The special tax allowances are designed to stimulate new investment by Australian businesses by providing an incentive to bring forward and sustain capital investment.

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

The improved financial results during the year ended December 31, 2010 as compared to the year ended December 31, 2009, can be attributed to significant price increases in TiO<sub>2</sub> and zircon prices during 2010 and stronger sales volumes of all Exxaro Mineral Sands' products, which resulted from higher production volumes for TiO<sub>2</sub> and zircon during 2010 and inventory sales of slag, despite a decrease in total production during the period, as noted below. Unlike 2009, where all three components of Exxaro Mineral Sands' operations (KZN Sands, Namakwa Sands and Australia Sands) reported net operating losses, in 2010, only KZN Sands reported a net operating loss. The improvement in results was partially offset by a stronger Australian dollar as compared with the U.S. dollar during 2010 and the continuing strength of the Rand against the U.S. dollar. The average exchange rate in 2010 of the U.S. dollar against the Rand and the Australian dollar was R7.72 and A\$0.87, respectively, compared with R8.39 and A\$0.76, respectively, in 2009. Management mitigated the impact of the stronger Rand and Australian dollar through increased hedging of its U.S. dollar-denominated trade receivables, as further below discussed under Quantitative and Qualitative Disclosure about Market Risks - Currency Risk.

Planned and unplanned furnace downtime increased by 44.7% during 2010 as compared with 2009. At KZN Sands, Furnace 1 was shut on July 1, 2010 for a planned reline and pre-heating, restarting production at the end of January 2011. In addition, the burn-through at Furnace 2 on October 26, 2010 resulted in both of KZN Sands' furnaces being out of commission simultaneously for two months in the last quarter of 2010. As a result of these furnace incidents and shutdowns, slag production was 69,000 tonnes lower in 2010 than in 2009. Sales, however, increased by 115,000 tonnes in 2010 as a result of the de-stocking of high inventory levels which were built up during the global financial crisis in 2008 and 2009.

Total run-of-mine tonnage for all products was more than a million tonnes lower in 2010 than in 2009 as KZN Sands' Hillendale mine neared the end of its life. As a consequence of this and lower grades, heavy mineral concentrate production at KZN Sands was 73,000 tonnes lower in 2010 than in 2009 at 414,000 tonnes in total. Zircon production was 11,000 tonnes higher than in 2009, as higher zircon production at Australia Sands due to improved overall utilization of the dredge mine, coupled with improved recoveries at Namakwa Sands despite lower zircon head grades, more than offset lower production at KZN Sands resulting from the lower concentrate grade. Rutile production was also 1,000 tonnes higher than in 2009.

Higher slag and pig iron production at Namakwa Sands was insufficient to fully offset lower furnace production at KZN Sands caused by the extended furnace downtime. Total slag tapped was 69,000 tonnes lower than in 2009 at 262,000 tonnes, resulting in a loss of revenue during the period of approximately R206.0 million (\$28.1 million), while pig iron and scrap iron was 31,000 tonnes lower than in 2009 at 165,000 tonnes, resulting in a loss of revenue during the period of approximately R95.0 million (\$13.0 million).

At Australia Sands, synthetic rutile production was lower due to the planned 38-day shutdown late in the year (the synthetic rutile plant undergoes a major shutdown every three years) and maintenance-related challenges in the first quarter of 2010. Because this was a planned shutdown that was budgeted for, Exxaro Mineral Sands did not experience a loss of anticipated revenue or production. The Kwinana TiO<sub>2</sub> plant expansion at the Tiwest Joint Venture was successfully commissioned in late June 2010 and achieved design production

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capacity of 150,000 tonnes per year in October 2010. Significant supply interruptions from a key raw material supplier led to a production loss of more than 10,000 tonnes of production in November and December 2010 and an 11-day shutdown in May 2010 to complete all the tie-ins for the expansion led to lower TiO<sub>2</sub> production.

Increased overall utilization at the mining operations of the Tiwest Joint Venture led to increased heavy mineral concentrate production during 2010, which together with processed inventory resulted in ilmenite, rutile and zircon production increases of 10%, 13% and 4%, respectively, as compared with production volumes during 2009. To counter lower grades expected to be recovered on the future mine path, a 30% expansion of the Tiwest Joint Venture's South Mine at a capital cost of R200.0 million (\$24.7 million) (representing 100% of the Tiwest Joint Venture) is expected to be completed by the end of the second quarter of 2012.

The following table presents a summary of Exxaro Mineral Sands's saleable production by product for the years ended December 31, 2010 and December 31, 2009:

	Year Ended December 31,	
	2010	2009
	(Tonnes)	
Slag tapped	262,000	331,000
Rutile	63,000	62,000
Zircon	196,000	185,000
TiO <sub>2</sub>	57,000	53,000
Pig iron and scrap iron	165,000	196,000

The following table presents Exxaro Mineral Sands's combined results of operations for the years ended December 31, 2010 and December 31, 2009:

	Years Ended December 31,		
	2010	2009	Change
	(Rand in millions)		
Revenue	R 4,640.0	R 3,508.3	R 1,131.7
Operating expenses	(4,389.5)	(4,913.4)	523.9
<b>Net operating profit/(loss)</b>	<b>250.5</b>	<b>(1,405.1)</b>	<b>1,655.6</b>
Interest income	9.2	10.8	(1.6)
Interest expense	(299.4)	(369.1)	69.7
<b>Loss before tax</b>	<b>(39.7)</b>	<b>(1,763.4)</b>	<b>1,723.7</b>
Income tax benefit/(expense)	48.2	(307.7)	355.9
<b>Profit/(loss) for the year</b>	<b>R 8.5</b>	<b>R (2,071.1)</b>	<b>R 2,079.6</b>

Revenue increased by R1,131.7 million (\$216.4 million), or 32.3%, to R4,640.0 million (\$633.0 million) for the year ended December 31, 2010, from R3,508.3 million (\$416.7 million) for the year ended December 31, 2009. The increased revenue during the period can be attributed to significant increases in TiO<sub>2</sub> and zircon prices during 2010 and stronger sales volumes of several of Exxaro Mineral Sands's products. TiO<sub>2</sub> prices increased by an average of 20% during 2010. Zircon prices started to increase substantially in the second half of 2010 and the average price during 2010 was 14.2% higher than the average price during 2009. These increases were partially offset by an 8.0% average realized increase in the Rand exchange rate against the U.S. dollar and a 14.5% average realized increase in the Australian dollar exchange rate against the U.S. dollar in 2010 as compared to 2009, which significantly impacted revenue and earnings.

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*Operating expenses* decreased by R523.9 million (\$15.3 million), or 10.7%, to R4,389.5 million (\$598.8 million) for the year ended December 31, 2010, from R4,913.4 million (\$583.5 million) for the year ended December 31, 2009. Exxaro Mineral Sands presents its expenses under IFRS as issued by the IASB by nature. Under the nature of expense method, expenses are classified according to their nature (for example, use of raw materials and consumables, depreciation and amortization, staff costs, etc.) and are not reallocated among various functions within the entity. Operating expenses are presented on a gross basis, before the deduction of any amounts capitalized to work-in-progress or finished goods on hand. For example, raw materials and consumables used represents the total of all raw materials and consumables used, even if they were used relating to items of inventory on hand at the end of the period. The line item *Changes in inventories of finished goods and work-in-progress* therefore represents the period-on-period movement in inventory that is necessary to ensure that operating profit is reported net of amounts capitalized, when expenses are presented by nature. The following table presents the principal components of Exxaro Mineral Sands' operating expenses for the years ended December 31, 2010 and December 31, 2009:

	Years Ended December 31,		
	2010	2009	Change
	(Rand in millions)		
Raw materials and consumables used	R 1,078.9	R 1,175.3	R (96.4)
Changes in inventories of finished goods and work-in-progress	277.0	(600.0)	877.0
Staff costs	918.2	824.5	93.7
Depreciation and amortization	601.3	479.1	122.2
Energy	501.1	434.0	67.1
Impairment of property, plant and equipment		1,435.0	(1,435.0)
Other operating expenses	1,013.0	1,165.5	152.5
<b>Total operating expenses</b>	<b>R 4,389.5</b>	<b>R 4,913.4</b>	<b>R 523.9</b>

*Raw materials and consumables used*, which are described under *The Business Description of Exxaro Mineral Sands Business Mining and Processing Techniques Raw Materials*, experienced a slight decrease of R96.4 million (\$7.6 million), or 8.2%, to R1,078.9 million (\$147.2 million) for the year ended December 31, 2010 from R1,175.3 million (\$139.6 million) for the year ended December 31, 2009. The decrease resulted primarily from a saving at KZN Sands on electrodes, flocculant, reductant and chemicals as a result of both furnaces being down and Namakwa Sands achieving a favorable commodity variance due to the consumption of anthracite at a lower average price.

*Changes in inventories of finished goods and work-in-progress* adjusts the statement of comprehensive income to reflect the amounts that have been capitalized to work-in-progress and finished goods on hand. Inventories of finished goods and work-in-progress decreased by R277.0 million (\$37.8 million), or 17.2%, from R1,606.4 million (\$217.7 million) as of December 31, 2009 to R1,329.4 million (\$200.8 million) as of December 31, 2010. The decrease in inventory levels was a direct result of the reduction in the significant inventory accumulation that had occurred during the global financial crisis. The inventory accumulation in 2009 could not be prevented as the furnace technology only allows for furnaces to be switched off during planned relines or rebuilds. Switching furnaces off at any other time would result in unnecessary reline costs because all refractories would then need to be replaced prematurely. When the abnormal inventory levels were reduced as of December 31, 2010, there was a corresponding increase in the changes in inventories of finished goods and work-in-progress statement of comprehensive income line item.

*Staff costs*, which include salaries and wages, share-based payments, termination benefits, pension costs and medical costs, increased by R93.7 million (\$27.3 million), or 11.4%, to R918.2 million (\$125.3 million) for the year ended December 31, 2010 from R824.5 million (\$97.9 million) for the year ended December 31, 2009, due to above inflation-related increases.

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*Depreciation and amortization* increased by R122.2 million (\$25.1 million), or 25.5%, to R601.3 million (\$82.0 million) for the year ended December 31, 2010 from R479.1 million (\$56.9 million) for the year ended December 31, 2009, as result of R77.0 million (\$10.5 million) in accelerated depreciation from the impairment at KZN Sands and the resultant shorter life of the assets.

*Energy costs*, which include the energy and fuel supplies used in Exxaro Mineral Sands' s production, increased by R67.1 million (\$16.8 million), or 15.5%, to R501.1 million (\$68.4 million) for the year ended December 31, 2010 from R434.0 million (\$51.5 million) for the year ended December 31, 2009, as a result of an average 25% electricity price increase in South Africa, partially offset by a savings at both Namakwa Sands and KZN Sands due to furnaces being out of operation and a reversal of previously accrued Australia Sands' s energy costs following settlement of a pricing dispute with Verve Energy, the electricity and steam supplier at the Tiwest Joint Venture' s TiO<sub>2</sub> plant.

*Impairment of property, plant and equipment*, primarily represent an impairment charge during 2009 of R1,435.0 million (\$170.4 million) to Exxaro Mineral Sands' s investment in KZN Sands as a result of Exxaro Mineral Sands' s decision in 2009 not to develop the Fairbreeze mine. This decision negatively affected the carrying value of KZN Sands as of December 31, 2009, because Fairbreeze' s development was deemed to be linked to KZN Sands' s future economic value. Exxaro Mineral Sands performed a similar evaluation as of December 31, 2010, which indicated that neither a further impairment nor a reversal of the previous impairment was required. For further information, see Recent Developments Fairbreeze Mining Project.

*Other operating expenses*, which includes corporate service fees, general charges, sales and distribution, royalty taxes, repairs and maintenance and outside services, decreased by R152.5 million (\$0.2 million), or 13.1%, to R1,013.0 million (\$138.2 million) for the year ended December 31, 2010 from R1,165.3 million (\$138.4 million) for the year ended December 31, 2009. The decrease was primarily due to higher foreign exchange gains of R433.0 million (\$58.5 million) recognized in 2011 when compared to 2010. Lower outside services utilization of R47.3 million (\$6.5 million) in 2010 also contributed to the decrease. The decrease was offset by the following items:

Higher maintenance costs of R74.9 million (\$10.2 million) were incurred as a result of the synthetic rutile shutdown at the Tiwest Joint Venture and the two limited relines on Furnace 2 at Namakwa Sands;

Higher sales and distribution costs of R43.3 million (\$5.9 million) were incurred due to higher sales volumes at Australia Sands;

Royalty taxes increased by R11.5 million (\$1.6 million) based on higher turnover and operating profit; and

General charges, which include insurance costs, equipment hire and legal charges, among other things, increased by R106.2 million (\$22.3 million), or 24.0%, to R548.2 million (\$74.8 million) for the year ended December 31, 2010 from R442.0 (\$52.5 million) million for the year ended December 31, 2009, as a result of increases due to inflation and certain contracted amounts where contracts were renegotiated and additional use of equipment and transport, which is variable in nature.

*Interest income* decreased slightly by R1.6 million (\$0.0 million), or 14.8%, to R9.2 million (\$1.3 million) for the year ended December 31, 2010, from R10.8 million (\$1.3 million) for the year ended December 31, 2009.

*Interest expense* decreased by R69.7 million (\$3.0 million), or 18.9%, to R299.4 million (\$40.8 million) for the year ended December 31, 2010, from R369.1 million (\$43.8 million) for the year ended December 31, 2009, due to a repayment of R329.7 million (\$45.0 million) on the Namakwa Sands interest bearing loans resulting in a R99.3 million (\$13.5 million) lower interest payment when compared to 2009. The savings in 2010 was partially offset by additional interest paid on the Kwinana TiO<sub>2</sub> plant expansion as a result of Exxaro Mineral Sands' s higher funding allocation.

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*Income tax benefit/(expense)* increased to a R48.2 million (\$6.6 million) benefit for the year ended December 31, 2010 from a R307.7 million (\$36.5 million) expense for the year ended December 31, 2009, principally due to the derecognition of the deferred tax asset relating to KZN Sands' operations in 2009. The income tax benefit in 2010 was determined by taking into consideration disallowable expenditure, exempt income and special allowances. Disallowable expenditure relates to expenses not deductible in terms of the South African and Australian income tax regulations, and includes depreciation on items of property, plant and equipment for which no tax allowances can be claimed, legal fees, and consulting fees. Exempt income relates primarily to non-taxable interest income between Exxaro Mineral Sands entities which, although eliminated on combination, qualifies as a tax deduction within the entity paying such interest and constitutes non-taxable income for the receiving entity. The special tax allowances relate to additional tax deductions in Australia, calculated as a percentage of the cost of qualifying eligible capital expenditures. The special tax allowances are designed to stimulate new investment by Australian businesses by providing an incentive to bring forward and sustain capital investment.

**Liquidity and Capital Resources*****Financial Condition and Liquidity***

Exxaro Mineral Sands' primary source of liquidity on an ongoing basis is cash flows from operating activities, which is generally used to fund working capital expenditures and to repay any short-term indebtedness incurred for working capital purposes. Exxaro Mineral Sands also incurs borrowings from Exxaro, in the case of Exxaro Mineral Sands' South African operations, and external borrowings, in the case of Exxaro Mineral Sands' Australian operations, to fund short-term working capital needs, refinance existing indebtedness or fund major capital expenditures or asset acquisitions, in each case as further discussed below under Capital Resources.

During 2010, Australia Sands implemented a new trade receivable facility, as further discussed below under Investec Finance Facility, under which R160.7 million (\$24.25 million) was outstanding as of December 31, 2010, and R171.8 million (\$21.25 million) outstanding as of December 31, 2011.

The following table provides information for the analysis of Exxaro Mineral Sands' historical financial condition and liquidity:

	2011	December 31, 2010 (Rand in millions)	2009
Interest-bearing loans and borrowings(1)	R2,750.5	R3,269.9	R3,432.4
Cash and cash equivalents	2,998.3	418.9	276.9
Working capital(2)	3,285.9	2,423.0	2,592.9
Total assets	15,390.2	10,221.3	9,696.9
Total debt(3)	10,225.7	9,485.2	9,210.6

(1) Includes interest-bearing amounts due to related parties.

(2) Represents excess of current assets, less cash and cash equivalents and amounts due from related parties, over current liabilities, less interest-bearing borrowings and amounts due to related parties.

(3) Includes interest-bearing external borrowings and all amounts due to related parties.

**Table of Contents****Cash Flows for Year Ended December 31, 2011 Compared to Year Ended December 31, 2010 and Year Ended December 31, 2009**

The following table presents Exxaro Mineral Sands' s cash flow for the periods indicated:

	2011	Year Ended December 31, 2010 (R and in millions)	2009
Net cash provided by/(used in) operating activities	R 1,599.4	R 702.9	R (467.6)
Net cash used in investing activities	(311.8)	(990.9)	(1,077.9)
Net cash provided by financing activities	1,207.0	433.9	1,088.1
Net increase/(decrease) in cash and cash equivalents	R 2,494.6	R 145.9	R (457.4)

*Cash Flows from Operating Activities.* Cash provided by operating activities for the year ended December 31, 2011 was R1,599.4 million (\$220.3 million) compared to R702.9 million (\$95.9 million) for the year ended December 31, 2010 and cash utilized of R467.6 million (\$55.5 million) for the year ended December 31, 2009. The R896.5 million (\$124.4 million) increase in cash provided by operating activities from 2010 to 2011 reflects the significant increase in Exxaro Mineral Sands' s net operating profit during the period. The R1,170.5 million (\$151.4 million) increase in the amount of cash used in operating activities from 2009 to 2010 also reflects the increased operating profit for the period.

Days inventory outstanding (which is the year end inventories balance divided by cost of goods sold multiplied by 365 days) decreased from 335 days as of December 31, 2009 to 201 days as of December 31, 2010, then increased to 222 days as of December 31, 2011. The overall decrease in days inventory outstanding reflects the improved market conditions and resultant increase in profitability. The days inventory outstanding increase from 201 days as of December 31, 2010 to 222 days as of December 31, 2011 was primarily as a result of a slowdown in the zircon and TiO<sub>2</sub> markets in the last quarter of 2011 that led to an increase in inventory levels as of December 31, 2011. The improved market conditions also resulted in an improvement in the days sales outstanding (which is the year end trade receivables balance divided by revenues multiplied by 365 days) from a low of 102 days as of December 31, 2009 to 78 days as of December 31, 2010. Days sales outstanding slipped to 87 days as of December 31, 2011, but remains within Exxaro Mineral Sands' s 90 day debtors collection guidelines.

*Cash Flows from Investing Activities.* Net cash used in investing activities for the year ended December 31, 2011 was R311.8 million (\$42.9 million) compared to R990.0 million (\$135.2 million) for the year ended December 31, 2010 and R1,077.9 million (\$128.0 million) for the year ended December 31, 2009. The significant cash expenditures for investing activities in 2009 and 2010 was the result of capital expenditure invested in acquiring property, plant and equipment, and an increase in amounts owing by other entities in the Exxaro group. R862.0 million (\$117.6 million) of the investment in these years was related to the pigment expansion at Australia Sands. The net cash used in inventory activities in 2011 was lower than 2010 and 2009 as a result of the completion of the expansion at Australia Sands and included the receipt of R427.2 million (\$58.8 million) from Tronox Incorporated for Tronox Incorporated' s share of expansion costs.

*Cash Flows from Financing Activities.* Net cash provided by financing activities for the year ended December 31, 2011 was R1,207.0 million (\$166.3 million) compared to R433.9 million (\$59.2 million) for the year ended December 31, 2010 and R1,088.1 million (\$129.2 million) for the year ended December 31, 2009. The substantial amounts received in 2009 and 2011 were primarily due to a R1,800 million (\$222.5 million) recapitalization in 2011 (which was offset by the dividend paid of R685.7 million (\$94.4 million)) and the receipt of proceeds from borrowings from Exxaro and other Exxaro companies in 2009.

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### ***Capital Expenditure***

Exxaro Mineral Sands had capital expenditure of R664.5 million (\$91.5 million) for the year ended December 31, 2011, R692.8 million (\$94.5 million) for the year ended December 31, 2010, and R825.8 million (\$98.1 million) for the year ended December 31, 2009. Exxaro Mineral Sands' capital expenditures for the 2012 financial year are expected to be approximately R998 million (\$137.5 million), excluding the capital expenditure amounts spent on the Fairbreeze project, which will be reimbursed by Tronox Limited in connection with the completion of the Transaction pursuant to the terms of the Transaction Agreement.

### ***Capital Resources***

On a net basis, Exxaro Mineral Sands borrowed R415.5 million (\$57.2 million) in a combination of interest-bearing loans and loans from other Exxaro companies during 2011, and repaid R322.8 million (\$44.5 million) of its outstanding indebtedness.

### ***Syndicated Loan Facility***

On October 11, 2005, Australia Sands entered into a multicurrency syndicated loan facility arranged through ANZ Limited. The facility was guaranteed by each member of Australia Sands and secured by Australia Sands' investment in the Tiwest Joint Venture, which is subordinated to the cross-charges existing between Tiwest Pty Ltd, Tronox Western Australia Pty Ltd and Australia Sands, and Australia Sands' other property, subject to subordination in favor of the lender under the Investec loan facility in respect of the trade receivables priority assets. As required under the Second Amendment and Restatement Deed dated July 30, 2010, the syndicated loan facility was repaid in full on July 6, 2011 and all pledges of security interests were released. Interest was payable quarterly at bank base rate (BBR) plus 2% per annum until July 31, 2010, and from August 1, 2010, interest was payable quarterly at BBR plus 3% per annum.

### ***Guaranteed Senior Secured Notes***

In 1998 and 2004, Ticor Finance (A.C.T.) Pty Ltd, an entity controlled by Australia Sands, issued US\$10.0 million and US\$50.0 million in guaranteed senior secured notes, of which a total of US\$58.4 million and US\$58.4 million was outstanding as of December 31, 2010 and June 30, 2011, respectively. The senior secured notes are guaranteed by each member of Australia Sands and secured by the same assets that provide security for the syndicated loan facility. The interest rate for the 1998 series of notes is fixed with respect to an assessed credit rating at a weighted average rate of 8.68% during 2010 (an increase from 7.68% during 2009) and interest is paid quarterly. The interest rate for the 2004 series of notes is fixed with respect to an assessed credit rating at a weighted average rate of 7.45% during 2010 (an increase from 6.45% during 2009) and interest is paid semi-annually. There were no changes in interest rates during the six months ended June 30, 2011.

Australia Sands intends to prepay the senior secured notes shortly after completion of the Transaction with its available cash on hand. Exxaro has agreed in the Transaction Agreement to ensure that Australia Sands has sufficient available cash upon completion of the Transaction to prepay the notes in full (including any fees, accrued interest and make whole premiums), and Tronox Limited has agreed to apply the cash maintained at Australia Sands to the prepayment of the notes shortly after completion of the Transaction and to assist in securing the release of all related security interests.

### ***Investec Finance Facility***

On July 30, 2010, Yalgoo Minerals Pty Ltd, an entity controlled by Australia Sands, entered into a two-year, US\$25.0 million amortizing non-revolving secured cash advance facility which is repayable by sixteen initial monthly installments of US\$250,000, followed by four monthly installments of US\$1.0 million and a subsequent

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final bullet repayment of US\$17.0 million. As of December 31, 2011, the balance on this facility was US\$21.25 million. The finance facility is subject to monthly interest charge at a margin of 3.5% plus one month London Interbank Offer Rate (LIBOR). Additionally, a receivables fee is charged during the period from the initial draw down until the facility's end date of 1% per annum, calculated on a daily basis on the higher of the outstanding amount and the facility limit payable monthly in arrears. The facility is secured by Australia Sands's trade receivables priority assets and, subject to subordination in respect of the Tiwest Joint Venture and the lenders of the syndicated loan facility and the guaranteed senior secured notes, Australia Sands's other property.

Australia Sands intends to prepay the facility shortly after completion of the Transaction with its available cash on hand. Exxaro has agreed in the Transaction Agreement to ensure that Australia Sands has sufficient available cash upon completion of the Transaction to prepay the facility in full (including any fees, accrued interest and make whole premiums), and Tronox Limited has agreed to apply the cash maintained at Australia Sands to the prepayment of the facility shortly after completion of the Transaction and to assist in securing the release of all related security interests.

**Namakwa Sands Acquisition Loan**

In 2008, Exxaro provided Exxaro TSA Sands with a loan in the amount R3,114.1 million (\$333.1 million) to finance the acquisition of Namakwa Sands, of which R1,925.8 million (\$238.0 million) was outstanding as of December 31, 2011. The loan carried an average interest rate linked to the Jibar 3-month interest rate ranging from 6.81% to 6.91% in 2010 and from 6.83% to 6.93% in 2011. The final repayment date for the loan is November 2013.

**Exxaro Related Party Loans**

Exxaro and its related entities have provided Exxaro Sands, Exxaro TSA Sands and Australia Sands with loans in the amount of R9,401.0 million (\$1,162.1 million), including the Namakwa Sands Acquisition Loan described above. In connection with the Transaction, Exxaro and its related entities will transfer all of their interests in the receivables from the related party loans made to Exxaro Sands and Exxaro TSA Sands that remain outstanding on the closing date to a newly formed Tronox Limited subsidiary, which will be wholly owned by an entity that is 74% owned by Tronox Limited and 26% owned by Exxaro, as further discussed under Description of the Transaction Documents The Transaction Agreement. As of December 31, 2011, the outstanding amount of the related party loans to be transferred in connection with the Transaction was R6,801.9 million (\$840.8 million), including R2,473.8 million (\$305.8 million) in shareholder loans from Exxaro and its related entities to Exxaro Sands and Exxaro TSA Sands, and the outstanding balance of the Namakwa Sands Acquisition Loan in the amount of R1,925.8 million (\$238.0 million).



**Table of Contents****Amounts Due to Related Parties**

The table below sets forth amounts due from Exxaro Mineral Sands to related parties as of December 31, 2011. As of December 31, 2011, the total amount of interest-bearing related party loans was R1,925.8 million (\$238.0 million), and the total amount of non interest-bearing related party loans was R7,475.2 million (\$924.0 million).

	(Rand in millions)
Non current related party loans	R1,925.8
Interest-bearing	1,925.8
Non interest-bearing	
Current related party loans <sup>1</sup>	7,475.2
Interest-bearing	
Non interest-bearing	7,475.2
<b>Total related party loans<sup>2</sup></b>	<b>R9,401.0</b>
Related party receivables	(1,151.1)
<b>Total net amounts due to related parties</b>	<b>R8,249.9</b>

- 1 Includes R2,473.8 million (\$305.8 million) in shareholder loans from Exxaro and its related entities to Exxaro Sands and Exxaro TSA Sands.
- 2 Includes R6,801.9 million (\$840.8 million) in related party loans from Exxaro and its related entities to Exxaro Sands and Exxaro TSA Sands. The amount of these related party loans that remains outstanding on the closing date will be transferred to a Tronox Limited subsidiary as part of the Transaction, as further discussed under Description of the Transaction Documents The Transaction Agreement.

**Indebtedness and Contractual Obligations**

The table below sets forth Exxaro Mineral Sands' indebtedness and contractual obligations as of December 31, 2011.

	Total	Payments Due by Period		
		Less than 1 year	1-5 years	More than 5 years
		(Rand in millions)		
<b>Contractual Obligations</b>				
Long-term debt obligations, including current portion(1)	10,039.3	7,730.7	2,308.6	
Finance lease obligations	519.8	45.9	140.8	333.1
Operating lease obligations	43.2	20.6	22.6	
<b>TOTAL</b>	<b>10,602.3</b>	<b>7,797.2</b>	<b>2,472.0</b>	<b>333.1</b>

(1) Includes Exxaro shareholder loans and other amounts due to related parties.

Of the approximately R7.8 billion (\$1.0 billion) in contractual obligations due within one year, approximately R7.5 billion (\$0.9 billion) comprises amounts due to related parties in the form of loans (comprising related party loans to Exxaro Sands and Exxaro TSA Sands which will be transferred to a newly formed Tronox Limited subsidiary as part of the Transaction and related party loans to Australia Sands which will be repaid in connection with the Transaction). Exxaro and its related entities will transfer their interests in the receivables from the related party

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loans made to Exxaro Sands and Exxaro TSA Sands to the newly formed Tronox Limited subsidiary, and those loans will remain outstanding after the completion of the Transaction. Exxaro Mineral Sands's management expects that Exxaro Mineral Sands will generate sufficient cash flow to repay its current external liabilities during 2012. Exxaro has provided legally binding letters of support to Exxaro

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Mineral Sands, including an undertaking to provide Exxaro Mineral Sands with such additional facilities as may be required to ensure that it remains as a going concern, for so long as each Exxaro Mineral Sands entity continues to be wholly-owned by Exxaro. Following completion of the Transaction, Exxaro Mineral Sands will no longer be wholly-owned by Exxaro, and Exxaro's financial support commitment to Exxaro Mineral Sands will cease.

### ***Contingencies***

Exxaro Mineral Sands carried contingent liabilities of R259.3 million (\$32.1 million) as of December 31, 2011, and R222.3 million (\$33.6 million) as of December 31, 2010, arising from ordinary course guarantees for which it anticipates that no material liability will arise, which includes a portion of the contingent liability attributable to Exxaro Mineral Sands's guarantees to the DMR in respect of environmental liabilities for closure of its mining operations. The increase from 2010 to 2011 is mainly attributable to an assessment received by Exxaro Investments (Australia) Pty Ltd from the Office of State Revenue of Western Australia of a R59.8 million (\$7.4 million) liability relating to stamp duty in respect of land rich assets associated with the 2005 acquisition of Tigor Ltd., which is currently under appeal.

### **Material New Accounting Standards**

No new material accounting standards were adopted during the periods presented. New accounting standards are discussed under Note 3 to Exxaro Mineral Sands's audited annual combined financial statements.

### **Quantitative and Qualitative Disclosure about Market Risks**

Exxaro Mineral Sands's principal financial instruments, other than derivatives, comprise non-interest-bearing loans, interest-bearing borrowings, cash and short-term deposits. Exxaro Mineral Sands has various other financial instruments, such as trade payables and trade receivables, which arise directly from its operations. Exxaro Mineral Sands historically has entered into derivative transactions to hedge its foreign currency risk arising on imported capital expenditures and some trade-related payables and receivables. Exxaro Mineral Sands does not trade in financial instruments, in accordance with its own internal policy.

### ***Financial Risk Management Objectives***

Exxaro Mineral Sands's senior management and Exxaro's Audit and Risk Management Committee monitor and manage the financial risks relating to Exxaro Mineral Sands's operations through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include currency risk, interest rate risk and commodity price risk. Exxaro Mineral Sands's overall risk management program identifies, quantifies and assesses impacts on the business and implements mitigating strategies to minimize potential adverse effects on Exxaro Mineral Sands's financial performance. Exxaro Mineral Sands's senior management oversees the management of these risks, and financial risk-taking activities are governed by appropriate policies and procedures so that financial risks are identified, measured and managed in accordance with group policies. The policies for managing each of these risks are summarized below.

### ***Currency Risk***

Exxaro Mineral Sands exports most of its products outside of its production centers in South Africa and Australia, and Exxaro Mineral Sands's sales transactions, imported capital equipment and external borrowings are mainly denominated in U.S. dollars while most of its operating costs are in South African Rand and Australian dollars, which expose the business to exchange rate fluctuations. Exxaro Mineral Sands utilizes derivative financial instruments, such as forward exchange contracts, currency options, call options and zero cost options, to minimize its exposure to currency risk. The use of such derivatives is governed by a hedging policy which has been approved by Exxaro's board of directors. Exxaro Mineral Sands's management provides Exxaro

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with monthly reports on compliance with the hedging policy, and the internal auditors review compliance annually. Exxaro Mineral Sands does not enter into or trade financial instruments for speculative purposes.

Exxaro Mineral Sands's South African operations' foreign exchange rate position is fully covered with respect to its imported capital equipment financing by fully converting these exposures to Rand. Trade-related import currency exposure is managed through economic hedges arising from export revenue and forward exchange contracts. Trade-related export currency exposure, especially with respect to its short-term receivables, is hedged using forward exchange contracts and various options. Most derivative currency hedging instruments have a maturity of less than one year and can be rolled-over at maturity.

The following table includes outstanding foreign currency denominated monetary items and adjusts their translation at the period end for a 10% increase in foreign currency rates and demonstrates Exxaro Mineral Sands's sensitivity to such increases (a 10% decrease in the Rand against each foreign exchange rate would have an equal but opposite effect on the above, assuming all other variables remain constant). This analysis includes foreign currency denominated monetary items (such as cash balances, trade receivables, trade payables and loans). A positive number represents a gain, while a negative number represents a loss. For example, an increase in the Rand-to-U.S. dollar exchange rate from R7.22:US\$1 to R8.17:US\$1 represents a weakening of the Rand against the U.S. dollar, which results in an incurred (unhedged) profit of R0.95. The opposite applies for a decrease in the exchange rate.

	Profit or (loss)		Equity	
	2011	2010	2011	2010
	(Rand in millions)			
US\$	17.0	21.3	(40.6)	(34.9)
Euro	1.3	2.4		

**Interest Rate Risk**

Exxaro Mineral Sands has credit facilities that permit borrowing at fixed and floating interest rates, which exposes it to interest rate risk. Exxaro Mineral Sands does not actively hedge its interest rate risk, but manages the risk by maintaining what it considers an appropriate mix between fixed and floating rate borrowings taking into account future interest rate expectations. Exxaro Mineral Sands also has used interest rate derivatives in the past to hedge specific interest rate exposures. The interest rate sensitivity table below has been determined based on Exxaro Mineral Sands's exposure to interest rates and the potential impact on earnings, given a 50 basis point movement in interest rates, for the years ended December 30, 2011 and 2010, showing the changes from the beginning of each financial period and held constant throughout the reporting period.

	Increase of 50 basis points in interest rate		Decrease of 50 basis points in interest rate	
	2011	2010	2011	2010
	(Rand in thousands)			
Profit/(loss)	(4)	(18)	4	18

**Credit Risk**

Credit risk relates to potential default by counterparties on cash and cash equivalents, investments, trade receivables and hedged positions. Exxaro Mineral Sands limits its counterparty exposure arising from money market and derivative instruments by only dealing with well-established financial institutions of high credit standing. Exxaro Mineral Sands's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate transaction value is spread among various approved counterparties, and it controls credit exposure by counterparty limits that are reviewed and approved annually.

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Trade receivables are generated by a number of customers with whom Exxaro Mineral Sands has long-standing relationships, which represents a substantial portion of Exxaro Mineral Sands' s term supply arrangements, resulting in limited credit exposure. Exxaro Mineral Sands further manages this exposure by monitoring customer credit worthiness, country risk assessments, and where indicated, obtaining a combination of confirmed letters of credit and credit risk insurance.

Exxaro Mineral Sands establishes an allowance for non-recoverability or impairment that represents its estimate of incurred losses in respect of trade and other receivables and investments. The main components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established based on similar financial assets in respect of losses that have historical data of payment statistics.

A financial asset's carrying amount represents the maximum credit exposure. The maximum exposure to credit risk as of December 31, 2011 and 2010 was equal to the carrying value of Exxaro Mineral Sands' s total financial assets. The combined company does not have any significant credit risk exposure to any single counterparty or any combined company of counterparties having similar characteristics.

The tables below provide details of Exxaro Mineral Sands' s trade receivable credit risk exposure by industry and country as of December 31, 2011.

<b>By Industry</b>	<b>%</b>	<b>By Geographical Area</b>	<b>%</b>
Manufacturing (including structured metal and steel)	27	USA	6
Merchants	10	Asia	7
Pigment, ceramics and chemicals	60	Europe	30
Other	3	South Africa	3
<b>Total</b>	<b>100</b>	Australia	42
		Other	12
		<b>Total</b>	<b>100</b>

**Commodity Price Risk**

Exxaro Mineral Sands is exposed to commodity price risk for all of its products and does not actively hedge its exposure through the use of derivative instruments, which are not readily available for the commodities produced by Exxaro Mineral Sands.

**Related Party Transactions**

Exxaro Mineral Sands enters into inter-company and related party commercial agreements in the ordinary course of its business. In total, as of December 31, 2011 and 2010, Exxaro Mineral Sands owed R9,401.0 million (\$1,162.1 million) and R8,561.9 million (\$1,293.3 million), respectively, to Exxaro and other Exxaro companies. Part of these borrowings are unsecured loans with no fixed repayment terms from Exxaro and other Exxaro companies with balances of R7,475.2 million (\$924.0 million) and R6,215.3 million (\$938.9 million) as of December 31, 2011 and 2010, respectively. Exxaro Mineral Sands made interest payments to Exxaro for the Namakwa Sands loan in the amount of R154.6 million (\$21.3 million), R208.4 million (\$28.4 million) and R307.7 million (\$36.5 million) in 2011, 2010 and 2009, respectively. Exxaro Mineral Sands also advances funds to other entities in the Exxaro group of companies. As of December 31, 2011 and 2010, Exxaro Mineral Sands was owed R1,151.1 million (\$142.3 million) and R1,057.5 million (\$159.7 million), respectively, by Exxaro and other companies within the Exxaro group.

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Exxaro Mineral Sands paid fees to Exxaro for management, information technology, administrative and accounting services, research and development costs of R149.5 million (\$20.6 million), R152.8 million (\$20.8 million) and R151.2 million (\$18.0 million) for the years ended December 31, 2011, 2010 and 2009, respectively.

Exxaro did not receive dividends from Exxaro Mineral Sands during 2010 and 2009. In 2011, Exxaro Sands Holdings BV, an Exxaro Mineral Sands entity, paid dividends to Exxaro International BV, a non-Exxaro Mineral Sands entity, in the amount of R685.7 million (\$94.4 million).

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Set forth below are the names of those individuals that serve as officers and directors of Tronox Limited.

<b>Name</b>	<b>Age</b>	<b>Position</b>
Thomas Casey	60	Chairman of the Board and Chief Executive Officer
Daniel D. Greenwell	48	Senior Vice President and Chief Financial Officer
Andrew P. Hines	72	Director
Wayne A. Hinman	65	Director
Ilan Kaufthal	64	Director
Jeffry N. Quinn	53	Director
John William Logan Armstrong	62	Director
Daniel Blue	59	Director
Wim de Klerk	48	Director
Sipho Nkosi	56	Director
John D. Romano	47	Senior Vice President and President, Pigment and Electrolytic Operations
Michael J. Foster	45	Senior Vice President, General Counsel and Secretary
Robert C. Gibney	49	Senior Vice President and Chief Administrative Officer
Edward G. Ritter	51	Controller and Chief Accounting Officer
Pravindran Trevor Arran	44	Senior Vice President and President, Mineral Sands Operations
Willem Van Niekerk	52	Senior Vice President, Strategic Planning and Business Development

**Executive Officers**

Set forth below is a description of the backgrounds of our executive officers. Each of our officers joined Tronox Limited on June 15, 2012 upon completion of the Transaction. There are no family relationships among any of our executive officers or directors.

**Thomas Casey****Chairman of the Board and Chief Executive Officer**

Mr. Casey currently serves as Chairman of the Board and Chief Executive Officer of Tronox Incorporated. Mr. Casey has served as Chairman since February 2011 and as Chief Executive Officer since October 2011. Mr. Casey served as Chief Executive Officer of Integra Telecom, Inc. from February 2011 until October 2011 when Mr. Casey assumed the position of Chief Executive Officer of Tronox Incorporated. He has previously served as Chairman of the Board of Integra Telecom between December 2009 and February 2011, Chief Executive Officer and Director of Current Group LLC between September 2006 and February 2011, Chairman of the Board of Pacific Crossing Ltd., as Chief Executive Officer and Chairman of the Board of Choice One Communications, Inc., and as Chief Executive Officer and Director of One Communication Corp and of Global Crossing Ltd. Mr. Casey was a managing director of Merrill Lynch & Co, and was a partner at Skadden, Arps, Slate, Meagher & Flom LLP and at Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. He also had various positions in the United States Government, including in the Antitrust Division of the U.S. Department of Justice. Mr. Casey graduated with honors from Boston College and The George Washington University, National Law Center. These positions give Mr. Casey significant insight into, and understanding of, complex transactions and business operations, including with respect to the banking, legal, and operational aspects thereof. On April 11, 2005, the SEC, Global Crossing, Mr. Casey (who was at the relevant time the Chief Executive Officer of Global Crossing) and other members of Global Crossing's management reached a settlement related to an SEC investigation regarding alleged violations of the reporting provisions of Section 13(a) of the Exchange Act (and regulations thereunder), with such parties agreeing not to cause any violations of such reporting provisions. In the settlement, no party admitted liability and no other violations of securities laws were alleged. The Tronox Incorporated board of directors was fully aware of the settlement order and its circumstances and, in naming Mr. Casey as Chief Executive Officer, expressed its confidence in his ability to serve as Chief Executive Officer.

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***Daniel D. Greenwell***

***Senior Vice President and Chief Financial Officer***

Mr. Greenwell has been our Senior Vice President and Chief Financial Officer since February 6, 2012 and the Chief Financial Officer of Tronox Incorporated since January 2, 2012. Between April 2010 and January 2012, Mr. Greenwell was pursuing personal interests. Before that, he served as Senior Vice President and Chief Financial Officer of Terra Industries, Inc. from July 2007 to April 2010; Vice President and Controller of Terra Industries, Inc. from April 2005 to July 2007; Director of Terra Nitrogen GP Inc., the General Partner of Terra Nitrogen Company, L.P., from March 2008 to April 2011; Vice President and Chief Financial Officer of Terra Nitrogen GP Inc. from February 2008 to April 2011; Vice President and Chief Accounting Officer of Terra Nitrogen GP Inc. from April 2006 to February 2008; Corporate Controller for Belden CDT Inc. from 2002 to 2005; and Chief Financial Officer of Zoltek Companies from 1996 to 2002.

***John D. Romano***

***Senior Vice President and President, Pigment and Electrolytic Operations***

Mr. Romano has been our Senior Vice President and President, Pigment and Electrolytic Operations since June 15, 2012 and the Executive Vice President of Tronox Incorporated since January 1, 2011 and Vice President, Sales and Marketing of Tronox Incorporated since January 2008. Before that he served as Vice President, Sales for Tronox Incorporated from 2005 to January 2008; Vice President, Global Pigment Sales for Tronox LLC from January 2005 to November 2005; Vice President, Global Pigment Marketing for Tronox LLC from 2002 to 2005 and Regional Marketing Manager for Tronox LLC from 1998 to 2002.

***Michael J. Foster***

***Senior Vice President, General Counsel and Secretary***

Mr. Foster has been our Senior Vice President, General Counsel and Secretary since June 15, 2012 and the Vice President, General Counsel and Secretary of Tronox Incorporated since January 2008. Before that he served as Managing Counsel of Tronox Incorporated from 2006 to January 2008; Staff Attorney of Tronox Incorporated from 2005 to 2006 and Staff Attorney for Kerr-McGee Shared Services LLC from 2003 to 2005; Corporate Counsel for CMS Field Services from 2001 to 2003; and Counsel for Enogex, Inc. from 1998 to 2001. Mr. Foster's experience also includes more than five years practicing law in the public and private sectors.

***Robert C. Gibney***

***Senior Vice President and Chief Administrative Officer***

Mr. Gibney has served as our Senior Vice President and Chief Administrative Officer since June 15, 2012 and the Vice President, Administration and Materials Procurement for Tronox Incorporated since January 1, 2011. Before that he served as Vice President of Corporate Affairs for Tronox Incorporated from March 2008 to January 2011; Vice President, Investor Relations and External Affairs for Tronox Incorporated from 2005 to March 2008 and Vice President and General Manager, Paper and Specialties for Tronox LLC from January 2005 to November 2005. Mr. Gibney's other experience includes Chief Marketing Officer for Kerr-McGee's joint venture, Avestor LLC, from 2002 to 2005; Vice President, Global Pigment Marketing for Tronox LLC from 1999 to 2002; and Director, Pigment Sales and Marketing from 1997 to 1999. Mr. Gibney joined Tronox LLC in 1991.

***Edward G. Ritter***

***Controller and Chief Accounting Officer***

Mr. Ritter has served as our Controller and Chief Accounting Officer since June 15, 2012 and the Controller and Chief Accounting Officer of Tronox Incorporated since June 2008; Before that he served as Assistant Controller of Tronox Incorporated from November 2007 to June 2008; Director North America Accounting Operations of Tronox Incorporated from July 2006 to November 2007 and Finance Manager of Tronox



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Incorporated from August 2002 to July 2006. Mr. Ritter's other experience includes serving as Corporate Controller at AMX Corporation from November 2001 until May 2002 and Vice President and Controller of TriQuest LP from January 1998 until November 2001. From 1985 until 1998 he held various positions of increasing responsibility with Hoechst Celanese Corporation. Mr. Ritter began his career with two years at Price Waterhouse (Coopers) in Hackensack N.J. Mr. Ritter is a Certified Public Accountant and has an MBA in Finance from Seton Hall University.

***Trevor Arran***

***Senior Vice President and President, Mineral Sands Operations***

Mr. Arran has served as our Senior Vice President and President, Mineral Sands Operations since June 15, 2012. Prior to joining Tronox Limited upon completion of the Transaction, he served as the Executive General Manager of Exxaro's mineral sands and base metals business since April 2009. Prior to that he served as the Executive General Manager of Corporate Affairs and Strategy for Exxaro from November 2006 until March 2009. Mr. Arran has broad experience in the mining industry, supplemented by financial experience gained in equity markets, investment banking and new business. He holds a Bachelor of Science in Geology from the University of Durban Westville and a Bachelor of Science with honors in Economic Geology from the University of Natal. Mr. Arran also completed the Advanced Management Programme at the University of Pretoria's Gordon Institute of Business Science and the Business and Environment Programme at the University of Cambridge.

***Willem van Niekerk***

***Senior Vice President, Strategic Planning and Business Development***

Dr. van Niekerk has served as our Senior Vice President, Strategic Planning and Business Development. Prior to joining Tronox Limited upon completion of the Transaction, he served as the Executive General Manager of Corporate Services for Exxaro, which includes the mineral sands business, since May 2009, where he is responsible for Exxaro's technology, research and development, information management and supply chain management departments. Prior to that, he served as Manager of Growth for Exxaro's mineral sands and base metals business and as General Manager for Marketing and Business Development for Exxaro's mineral sands and base metals business. Dr. van Niekerk co-managed the Tiwest Joint Venture from 2006 to 2008. Dr. van Niekerk has a PhD in pyrometallurgy from the University of Pretoria and oversaw the design and development of the titanium smelting technology for the slag furnaces at KZN Sands.

***Board of Directors***

Unless otherwise indicated below, each of our directors joined the Tronox Limited board of directors on June 15, 2012 upon completion of the Transaction.

***Thomas Casey***

Mr. Casey's biographical information is set forth under the caption "Executive Officers," above.

***Andrew P. Hines***

Mr. Hines has been a director of Tronox Incorporated since February 2011. Mr. Hines has been Executive Vice President/Chief Financial Officer of RHI Entertainment since June 2011. The company develops, produces and distributes original made-for-television movies and mini-series. Prior to that time he was a principal of Hines and Associates, a financial management consulting firm. From September 2009 to June 2010, Mr. Hines served as Executive Vice President/Chief Financial Officer of World Color Press Inc. (formerly Quebecor World), a company which provided high-value and comprehensive print, digital and related services to businesses worldwide. From October 2006 to August 2009, Mr. Hines was a principal of Hines and Associates, and from October 2005 to September 2006, he served as Vice President and Chief Financial Officer of GenTek, Inc., a manufacturer of industrial components and performance chemicals. Mr. Hines is also a director of Hughes Telematics, Inc. and C&D Technologies, Inc. and he is Chairman of both Companies' Audit Committees. From

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November 2003 to 2007, Mr. Hines served as a director and Chairman of the Audit Committee of Superior Essex, Inc. Mr. Hines has in-depth financial experience and highly valued senior leadership experience, making him a valued member of our Board of Directors. Because of his accounting background and extensive financial experience, Mr. Hines has been named Chairman of the Audit Committee, as well as the Audit Committee financial expert, as defined by the applicable rules of the SEC.

***Wayne A. Hinman***

Mr. Hinman has been a director of Tronox Incorporated since February 2011. He served in various positions at Air Products & Chemicals, Inc. during his 33 year career, including President of Asia and, most recently, vice president and general manager of the worldwide merchant gases business. He also has served as an Air Products director on numerous joint venture boards. In the past, Mr. Hinman has served as a member of the board of directors of American Refuel, Pure Air USA, and Taylor-Wharton International. Mr. Hinman served in the United States Air Force achieving the rank of Captain. He graduated from Belknap College, received his MBA from Virginia Polytechnic Institute and completed the Harvard AMP program. With his extensive background in international business, Mr. Hinman brings a unique perspective to the board and makes him an invaluable advisor.

***Ilan Kaufthal***

Mr. Kaufthal has been a director of Tronox Incorporated since February 2011. He is Senior Advisor at Irving Place Capital. Prior to joining Irving Place Capital, he was Vice Chairman of Investment Banking at Bear Stearns & Co., Vice Chairman and Head of Mergers and Acquisitions at Schroder & Co., and SVP and CFO at NL Industries. Mr. Kaufthal serves on the board of directors of Cambrex Corporation and Edmunds.com. He is a member of the Advisory Board of Jerusalem Venture Partners Media Fund. Mr. Kaufthal is also Chairman of East Wind Advisors, an investment banking advisory firm. He is a graduate of Columbia University and the New York University Graduate School of Business Administration. With his extensive background in the investment banking community coupled with his business experience as the Chief Financial Officer of NL Industries, Mr. Kaufthal brings a unique perspective to the board. Mr. Kaufthal's extensive investment banking experience makes him an invaluable advisor, particularly in the context of merger and acquisition activities.

***Jeffrey N. Quinn***

Mr. Quinn has been a director of Tronox Incorporated since February 2011. He is currently Chairman, CEO and President of Solutia Inc. Mr. Quinn joined Solutia in 2003 as Senior Vice President, General Counsel and Secretary. Mr. Quinn became Solutia's President and CEO and a director of Solutia in May 2004 and was elected Chairman of the Board of Solutia in February 2006. Previously, Mr. Quinn was Executive Vice President of Premcor Inc., one of the nation's largest independent oil refiners. His responsibilities included the legal, human resources, governmental and public affairs, and strategic planning functions. In addition, he also served as Senior Vice President, General Counsel and Secretary of Arch Coal, Inc., the nation's second-largest coal producer. Mr. Quinn was previously a director of Tecumseh Products Co. and serves as a Director of the American Chemistry Council. Mr. Quinn received a bachelor's degree in engineering and a Juris Doctor degree, both from the University of Kentucky. Mr. Quinn is eminently qualified to serve as director with senior level executive leadership experience in diverse industries and broad experience in a wide range of functional areas, including strategic planning, mergers and acquisitions, human resources, and legal and governmental affairs. He also has extensive experience in board process and governance.

Each of the directors set forth above was selected by creditors in the Tronox Incorporated Chapter 11 proceedings that backstopped the rights offering conducted by Tronox Incorporated in such Chapter 11 proceedings. The backstop parties made their selections in consultation with Tronox Incorporated and the official committee of unsecured creditors in Tronox Incorporated's Chapter 11 proceedings.

***John William Logan Armstrong***

Mr. Armstrong has been a director of Tronox Limited since December 2011. Mr. Armstrong was a corporate and commercial partner of Australian law firm Blake Dawson Waldron (now Ashurst) for over 24 years. He established the

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firm's Brisbane office and was Managing Partner of the Melbourne office for four years. He was also a member of the firm's national board for many years and was lead partner responsible for many of the firm's most important clients. His major areas of experience include mergers and acquisitions, restructuring companies, project and corporate senior management. Since 2005 he has practiced in his own legal and consulting firm. His corporate experience includes acting as Company Secretary of AWB Limited (when it was listed on the Australian Stock Exchange) and Company Secretary/General Counsel of AWB International Limited. These roles included advising on corporate governance, head office and board issues, the proposed demerger of AWB International and dealings with the Wheat Export Authority. He currently serves as a board member of the Australian Research Centre for Urban Ecology and as a trustee of the Baker Foundation. He holds bachelor degrees in law and economics from Monash University and attended an executive program at Stanford University. As a senior commercial lawyer and consultant, Mr. Armstrong will be an invaluable advisor.

The following individuals are Class B directors of Tronox Limited:

***Daniel Blue***

Mr. Blue is currently a corporate partner at the Australian law firm Holding Redlich. He is the corporate and commercial group leader in the firm's Melbourne office and co-head of its national energy and resources practice. Before joining Holding Redlich in 2012, Mr. Blue was a senior commercial partner at the Australian law firm Freehills. He joined Freehills in September of 1997. Prior to joining Freehills, Mr. Blue was a corporate partner at the Australian law firm Parker & Parker. Mr. Blue has more than twenty-five years of experience as an advisor for major mergers and acquisitions and other complex commercial matters worldwide, including in Australia, South Africa and Asia, and across a range of industries, including the energy and resources sector. Mr. Blue currently serves on the board of directors of Business for Millenium Development Ltd. He previously served as a director of Lynas Gold N.L. and Acclaim Exploration N.L. Mr. Blue also served as the Chairman of the Acclaim board of directors. Mr. Blue holds B. Juris, LL.B, B. Ec. and MBA degrees, all from the University of Western Australia. As a senior commercial lawyer, business strategist and negotiator with broad corporate and commercial experience, Mr. Blue will be an invaluable advisor, particularly in the context of any merger and acquisition activities.

***Wim de Klerk***

Mr. de Klerk is the Finance Director of Exxaro, a position he has held since 2009. Mr. de Klerk joined Iscor Limited in 1996, where he served on the Executive Management Team and was responsible for strategy and continuous improvement. He also managed Iscor's quarries as well as the Grootegeeluk coal mine. From 2001, Mr. de Klerk managed Exxaro's mineral sands commodity business and then the base metals businesses in 2008. Mr. de Klerk has served on a number of sub-committees of both the Minister of Finance and the Minister of Trade and Industry in South Africa. He holds a Bachelor of Commerce degree with honors from the University of Pretoria and a CTA from UNISA. He also attended the Executive Program at the University of Virginia Darden School of Business and obtained an SMD from Harvard. Mr. de Klerk is a Qualified Chartered Accountant and a Fellow of the Australian Institute of Company Directors. Mr. de Klerk's in-depth financial experience and senior level executive leadership experience will make him a highly valued member of the Tronox Limited board of directors.

***Sipho Nkosi***

Mr. Nkosi is a director and the CEO of Exxaro. After 20 years in the industrial and mining sectors, in 2001, Mr. Nkosi founded Eyesizwe Holdings, one of South Africa's largest coal producers, and served as Eyesizwe's CEO until it merged into Exxaro in 2006. Mr. Nkosi was appointed CEO of Exxaro in 2007. Prior to founding Eyesizwe, Mr. Nkosi spent three years with Asea Brown Boveri Sub Sahara Africa (Pty) Ltd and Alstom SA (Pty) Ltd, initially as Managing Director of ABB Power Generation (SA), and then as Country Manager of ABB/Alstom Power until December 2000. From 1993 to 1997, Mr. Nkosi was Marketing Manager for Billiton Ltd., an international mining company. Mr. Nkosi has been independent Non-Executive Chairman of the board of directors of African Life Assurance Co. Ltd. since November 2002. Mr. Nkosi served as a non-executive director of Kumba Resources Limited from May 2001 until October 2006. Mr. Nkosi has served as a director of Exxaro since November 2006, a non-executive director of Anooraq Resources Corp. since November 2004, and

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an independent director of Sanlam Ltd. since March 2006. Mr. Nkosi also served as a director of Great Basin Gold Ltd. from August 13, 2003 to July 17, 2009. Mr. Nkosi is a Past President of the Chamber of Mines of South Africa and has been serving on the Executive Council of the Chamber since November 2006. He holds a Bachelor of Commerce degree with honors from the University of South Africa and an MBA from the University of Massachusetts. Mr. Nkosi’s extensive background in the mining and power industries and his senior executive leadership experience make him an invaluable advisor. In addition, because Mr. Nkosi has served on a number of boards of directors, he also has extensive experience with board process and governance.

**Board Committees**

Standing committees of the Tronox Limited board are the following: the Audit Committee, the Human Resources and Compensation Committee ( HRCC ) and the Corporate Governance and Nominating Committee ( CGNC ). Each of the board’s committees has a written charter, which can be found on the Corporate Governance page of the Investor Relations section of our website at [www.tronox.com](http://www.tronox.com). The chart below shows Tronox Limited’s committee assignments:

Name	Board	Audit	HRCC	CGNC
Mr. Casey	D			
Mr. Hines		D		
Mr. Hinman				D
Mr. Kaufthal				
Mr. Quinn			D	
Mr. Blue				
Mr. de Klerk				
Mr. Armstrong				
Mr. Nkosi				

D Chair Member

The board of Tronox Limited has made the determination that Mr. Hines is an audit committee financial expert as set forth in Item 407(d)(5) of Regulation S-K. The board determined that Mr. Hines acquired such attributes through his experience in preparing, auditing, analyzing or evaluating financial statements containing accounting issues as generally complex as our financial statements, or actively supervising one or more persons engaged in such activities, and his experience of overseeing or assessing the performance of companies and public accountants with respect to the preparation, auditing or evaluation of financial statements. The board further determined that each member of the Audit Committee is financially literate and able to read and understand our financial statements.

Mr. Hines has in-depth financial experience and highly valued senior leadership experience, making him a valued member of Tronox Incorporated’s board of directors. Because of his accounting background and extensive financial experience, Mr. Hines has been named Chairman of the Audit Committee, as well as the Audit Committee financial expert, as defined by the applicable rules of the Securities and Exchange Commission.

**Code of Business Conduct and Ethics**

Tronox Incorporated’s board of directors adopted a Code of Business Conduct and Ethics that applies to all of our employees, officers and directors. The purpose and role of this code is to focus our employees, officers and directors on areas of ethical risk, provide guidance to help them recognize and deal with ethical issues, provide mechanisms to report unethical or unlawful conduct, and to help enhance and formalize our culture of integrity, honesty, and accountability. Tronox Incorporated also has supplemented the Code of Business Conduct and Ethics with a Code of Ethics for the Chief Executive Officer and Principal Financial Officers. Each of these codes of conduct applies to Tronox Limited. Each of these codes of conduct can be found on the Corporate Governance page of the Investor Relations section of our website at [www.tronox.com](http://www.tronox.com). We also will post any amendments to the codes of ethics and any waivers required to be disclosed by SEC rules on our website.

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### **EXECUTIVE COMPENSATION**

*For the purposes of this Executive Compensation discussion, unless otherwise stated or the context otherwise requires, references to we, us, and our refer to Tronox Incorporated and its subsidiaries collectively.*

#### **Compensation Discussion and Analysis**

The following Compensation Discussion and Analysis describes the material elements of the compensation paid to each of Tronox Incorporated's named executive officers identified in the Summary Compensation Table. This discussion should be read in conjunction with the named executive compensation tables below.

#### **Compensation Philosophy and Objectives**

Our executive compensation program is designed to attract, retain and motivate talented executive officers and also to align the objectives of our executive officers with our stockholders' expectations of increased value. In support of that objective, our executive compensation program is intended to:

provide competitive levels of total compensation for our executive officers;

reward the achievement of specific annual, long-term and strategic company goals and specific individual goals set for each executive officer;

align our executive officers' interests with those of the stockholders through equity-based awards and by rewarding performance based upon established goals, with the ultimate objective of improving stockholder value; and

motivate our executive officers and other employees to achieve superior results.

#### **Setting Executive Compensation**

##### ***Elements of Compensation***

The Human Resources and Compensation Committee ( HRCC ) from the time Tronox Incorporated emerged from bankruptcy determines all components of executive compensation and will consider the following elements to promote our pay-for-performance philosophy and compensation goals and objectives:

base salary;

annual cash incentive awards linked to our overall performance;

grants of long-term equity-based compensation, such as restricted stock or options;

termination and change of control provisions; and

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benefits generally available to employees.

We combine these elements in order to formulate compensation packages that provide competitive pay, reward the achievement of financial, operational and strategic objectives and align the interests of our executive officers and other senior personnel with those of our stockholders.

### *Pay Mix*

We utilize the particular elements of compensation described above because we believe that it provides a mix of secure compensation, retention value and at-risk compensation which produces short-term and long-term performance incentives and rewards. By following this approach, we provide the executive with a measure of financial and job security, while motivating the executive to focus on business metrics that will produce a high level of short-term and long-term performance for Tronox Incorporated that will create value for shareholders and executives alike. Our compensation mix, which includes short- and long-term incentives and rewards reduces

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the risk of recruitment of our top executive talent by competitors. The mix of metrics used for our annual performance bonus and long-term incentive program likewise provides an appropriate balance between short-term financial performance and long-term financial and stock performance. All incentives are aligned with our stated compensation philosophy of providing compensation commensurate with performance, while targeting pay at approximately the 50th percentile of the competitive market.

***Role of the Human Resources and Compensation Committee***

The HRCC administers our executive compensation program and assists our board of directors in fulfilling its oversight responsibilities with respect to the compensation we pay to our executive officers and our non-employee directors. Among its other duties, the HRCC:

evaluates and recommends to the board of directors, the total compensation of our Chief Executive Officer;

reviews and evaluates the salaries and benefits recommended by our Chief Executive Officer for all of our other executive officers and makes recommendations to the board of directors regarding the compensation paid to our other executive officers after making any changes it deems appropriate to the recommendations of our Chief Executive Officer;

evaluates and recommends to the board of directors, the incentive compensation to be awarded for all executive officers;

recommends to the board of directors individual performance goals for our Chief Executive Officer and, after making any changes it deems appropriate to the recommendations for our Chief Executive Officer, recommends to the board of directors performance goals for our other executive officers; and

considers industry conditions, relevant market conditions and our prospects and achievements when making recommendations with respect to compensation matters.

The HRCC has established the following percentile targets as guidelines for determining the compensation of our named executive officers using the benchmark statistics provided by our compensation consultant (described below):

<b>Compensation Element</b>	<b>Percentile Target</b>
Total Direct Compensation	50 <sup>th</sup>
Base Salary	50 <sup>th</sup>
Annual Incentive Awards	50 <sup>th</sup>
Long-Term Incentive Awards	50 <sup>th</sup>

The actual pay level for each named executive officer may vary from these targeted levels based on experience, job performance, actual duties and company performance. The compensation of our named executive officers is approved by the board of directors based upon recommendations from the HRCC. When making recommendations with respect to our named executive officers other than our Chief Executive Officer, the HRCC considers the recommendations made by the Chief Executive Officer and his evaluation of our other executive officers performance.

Elements considered by the HRCC and our Chief Executive Officer when reviewing our performance include: stock price, our performance as measured against the performance goals established under the Annual Incentive Plan for the previous year, non-controllable events that may impact our performance, attainment of significant non-financial milestones and any other factors or goals it determines to be relevant to measuring our performance. The individual performance of our named executive officers is measured against individual performance goals that were set for the named executive officer.





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Our HRCC and Board of Directors have analyzed and continue to monitor whether our compensation practices with respect to executive officers or any of its employees create incentives for risk-taking that could harm Tronox Incorporated or its business. The HRCC and the board of directors have all determined that none of Tronox Incorporated's compensation practices creates a risk that is reasonably likely to have a material adverse effect on Tronox Incorporated.

**Role of the Compensation Consultant**

The HRCC has engaged Lyons, Benenson & Company Inc. as its compensation consultant, to provide information to the HRCC to assist it in making determinations regarding our compensation programs for executives and non-employee directors. Our compensation consultant provides the HRCC with a competitive pay analysis comparing the compensation of our named executive officers against the benchmark compensation statistics compiled by our compensation consultant, which includes compensation programs and levels among a peer group of comparable companies in our industry. Members of Tronox Incorporated's peer group for 2011 included:

Cabot Corp.	FMC Corp.	PPG Industries, Inc.	Teck Resources Ltd.
Celanese Corp.	Freeport-McMoran Cooper & Gold Inc.	Rockwood Holdings, Inc.	The Valspar Corp.
Chemtura Corp.	Georgia Gulf Corp.	RPM Holdings, Inc.	W.R.Grace & Co.
Cliffs Natural Resources, Inc.	Huntsman Corp.	The Sherwin Williams Co.	Westlake Chemical Corp.
Cytec Industries, Inc.	Kronos Worldwide, Inc.	Solutia Inc.	
Eastman Chemical Co.	The Lubrizol Co.	Southern Copper Corp.	

The HRCC believes this peer group better reflects both chemical companies and companies against which Tronox Incorporated competes for talent.

In carrying out its assignments, Lyons, Benenson & Company Inc. may also interact with management when necessary and appropriate. Lyons, Benenson & Company Inc. may, in its discretion, seek input and feedback from management regarding its consulting work product prior to presentation to the HRCC in order to confirm alignment with our business strategy, and identify data questions or other similar issues, if any. During fiscal year 2011, Lyons, Benenson & Company Inc. did not perform any other services for us.

**Elements of Executive Compensation**

**Base Salary**

We consider base salary an element of total compensation that is tied to job responsibility and individual contributions to our success. Base salary is intended to be set at a level needed to attract and retain quality executive officers. While the HRCC uses benchmark statistics to guide it in its recommendations regarding levels of base salary, it has considerable discretion when making its recommendations and considers our financial performance and the individual performance of our named executive officers when making recommendations regarding base salary.

Our named executive officers will be paid the following salaries for 2012:

Name	Annual Base Salary
Thomas Casey	\$ 1,000,000
Daniel D. Greenwell	\$ 440,000
John D. Romano	\$ 360,000
Michael J. Foster	\$ 330,000
Robert C. Gibney	\$ 300,000
Edward G. Ritter	\$ 250,000

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Effective October 5, 2011, Tronox Incorporated hired Thomas Casey as its Chief Executive Officer, in addition to his continuing service as Chairman of the board of directors. In connection with Mr. Casey's employment as Chief Executive Officer, Tronox Incorporated and Mr. Casey entered into an offer letter and binding term sheet regarding the terms of his employment (the "Casey Offer Letter"). Pursuant to the Casey Offer Letter, Tronox Incorporated and Mr. Casey agreed to enter into an employment agreement embodying the terms set forth in the Casey Offer Letter, as well as other customary terms (the "Casey Employment Agreement"). Accordingly, on April 11, 2012, the HRCC approved the Casey Employment Agreement. Please see the Section captioned "Employment Agreements" for a more detailed description of the terms of the Casey Employment Agreement.

**Bonus Plans**

For 2011, Tronox Incorporated's executive officers were eligible to receive cash bonuses under the 2011 Cash Incentive Plan, which was recommended by the HRCC and approved by the bankruptcy court and subsequently by the board of directors.

The size of the potential bonus payable to each executive officer is set as a percentage of each executive officer's base salary (the "Target Percentage") and ranged from 50% to 200% of an executive officer's base salary. The board of directors considers the recommendations of the HRCC and benchmark statistics when setting the Target Percentage for each executive officer each year.

Each year our board of directors sets the performance goals under the Annual Incentive Plan and the portion of the bonus attributable to the achievement of each performance goal. The board of directors sets performance goals tied to financial measures that it believes will benefit our stockholders the most if those performance goals are met. The Tronox Incorporated board of directors set the following goals under the 2011 Cash Incentive Plan, which will be paid in 2012:

2011 Participant	2011 Target Bonus (% of Base Salary)	Base Salary
Thomas Casey	150%	\$ 1,000,000
Dennis L. Wanlass	100%	\$ 775,000
John D. Romano	65%	\$ 360,000
Michael J. Foster	50%	\$ 330,000
Robert C. Gibney	50%	\$ 300,000
Edward G. Ritter	30%	\$ 192,732

2011 Performance Targets	Threshold 276,000,000 EBITDAR	Target 345,000,000 EBITDAR	Maximum 414,000,000 EBITDAR
Percentage of 2011 Target Bonus Payable for Achievement of EBITDAR for the 2011 Fiscal year	50%	100%	200%

As of the date of filing, the 2011 bonus payments have been paid.

**Sign-on Incentives**

In connection with Thomas Casey's execution of the Casey Offer Letter, Mr. Casey was paid a cash sign-on bonus of \$2.0 million in recognition of certain payments due from his previous employer for relocation guarantees, closing costs and the pro rata portion of his 2011 annual performance bonus, all of which were foregone by his acceptance of employment with Tronox Incorporated. This bonus is subject to a ratable clawback in the event of his resignation without good reason or his employment is terminated by the company for cause prior to the first anniversary of his employment (good reason and cause are defined in the Casey Employment Agreement).

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In addition, Mr. Casey was granted an initial sign-on grant of 50,000 RSUs in order to compensate him for value that he forfeited when he terminated his employment with his previous employer. Pursuant to the Casey Offer Letter, the sign-on grant will be subject to 3-year cliff vesting. In the event, however, of Mr. Casey's death or permanent disability resulting in termination of his employment, the sign-on grant will be subject to pro rata accelerated vesting based on the number of months Mr. Casey was employed prior to his termination of employment divided by 36 months, subject to a minimum vesting of 25% of the grant.

### ***Separation Agreement***

Effective October 3, 2011, Mr. Wanlass resigned from his position as an executive officer of Tronox Incorporated. However, Mr. Wanlass has agreed to continue to perform services for Tronox Incorporated as an employee, for which he will be paid an annualized base salary of \$775,000. Mr. Wanlass's resignation was treated as a termination by Tronox Incorporated without cause and, in accordance with the terms of his employment agreement, was paid a lump sum amount equal to \$3,100,000 following his resignation. In addition, Mr. Wanlass received accelerated vesting of 31,952 shares of restricted stock and, subject to the completion of the Transaction, an additional 31,750 shares of restricted stock will vest. Moreover, upon Mr. Wanlass's termination of service as an employee, he will receive a lump sum cash payment equal to \$1,550,000 and he will be entitled to continued payment for medical and dental insurance coverage for a period of eighteen months or until he reaches the age of 65, whichever is longer, under Tronox Incorporated's health and welfare plans.

### ***Long Term Incentive***

Tronox Incorporated's Long-Term Incentive Plan, under which grants of equity were made to employees prior to 2009, was terminated upon our emergence from bankruptcy and all outstanding awards were cancelled. The 2010 Management Equity Incentive Plan (the 2010 Equity Plan) became effective upon Tronox Incorporated's emergence from Chapter 11 bankruptcy proceedings and provides for grants of nonqualified stock options, incentive stock options, stock appreciation rights, performance units, performance shares and other performance awards, restricted stock units and restricted stock, and other awards valued in whole or in part by reference to, or otherwise based on, the stock of Tronox Incorporated. Directors, officers and other employees of Tronox Incorporated and its subsidiaries or affiliates, as well as others performing services for Tronox Incorporated and its subsidiaries or affiliates, will be eligible for grants under the 2010 Equity Plan. The purpose of the 2010 Equity Plan is to provide incentives that will attract, retain and motivate highly competent officers, directors, employees, independent contractors and consultants by providing them with appropriate incentives and rewards either through a proprietary interest in Tronox Incorporated's long-term success or compensation based on their performance in fulfilling their personal responsibilities. The following is a summary of the material terms of the 2010 Equity Plan, but does not include all of the provisions of the 2010 Equity Plan. Capitalized terms used but not defined within this section have the meanings set forth in the 2010 Equity Plan.

### ***Administration***

The 2010 Equity Plan is administered by the HRCC. Among the HRCC's powers are to determine the form, amount and other terms and conditions of awards, clarify, construe or resolve any ambiguity in any provision of the 2010 Equity Plan or any award agreement, amend the terms of outstanding awards and adopt such rules, forms, instruments and guidelines for administering the 2010 Equity Plan as it deems necessary or appropriate. All actions, interpretations and determinations by the HRCC or by the board of directors are final and binding.

### ***Available Shares***

The aggregate number of shares of common stock which may be issued under the 2010 Equity Plan or with respect to which awards may be granted may not exceed 1,200,000 shares, which may be either authorized and unissued shares of Tronox Incorporated's common stock or shares of common stock held in or acquired for Tronox Incorporated's treasury. In general, if awards under the 2010 Equity Plan are, for any reason, cancelled or expire or terminate unexercised, the shares covered by such awards will again be available for the grant of awards under the 2010 Equity Plan. The aggregate number of shares subject to restricted stock, restricted stock

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units and certain other stock-based awards granted under the 2010 Equity Plan at any time may not exceed 360,000 shares and the aggregate fair market value of shares underlying incentive stock options granted to a single participant during any calendar year under the 2010 Equity Plan may not exceed \$100,000.

### ***Eligibility for Participation***

Members of the board of directors, as well as employees and independent contractors of, and advisors to, Tronox Incorporated or any of its subsidiaries and affiliates are eligible to receive awards under the 2010 Equity Plan. The selection of participants is within the sole discretion of the HRCC.

### ***Award Agreement***

Awards granted under the 2010 Equity Plan will be evidenced by award agreements providing additional terms, conditions, restrictions and/or limitations covering the grant of the award, as determined by the HRCC in its sole discretion.

### **The following types of awards are available under the 2010 Equity Plan:**

#### ***Stock Options***

The HRCC may grant nonqualified stock options and incentive stock options (only to eligible employees) to purchase shares of common stock. The HRCC will determine the number of shares of common stock subject to each option, the term of each option (which may not exceed ten years (or five years in the case of an incentive stock option granted to a 10% stockholder)), the exercise price, the vesting schedule (if any), and the other material terms of each option. No incentive stock option granted to a 10% stockholder may have an exercise price less than 110% of the fair market value of a share of common stock at the time of grant. Options will be exercisable at such time or times and subject to such terms and conditions as determined by the committee at grant and the exercisability of such options may be accelerated by the HRCC in its sole discretion.

#### ***Stock Appreciation Rights***

The HRCC may grant stock appreciation rights (which are referred to herein as SARs) either with a stock option, which may be exercised only at such times and to the extent the related option is exercisable (a Related SAR), or independent of a stock option. A SAR is a right to receive a payment in shares of common stock or cash equal in value to the excess of the fair market value of one share of common stock on the date of exercise over the base price per share established in connection with the grant of the SAR. The term of each SAR may not exceed ten years, provided that the expiration date of a Related SAR shall not be later than the expiration date of the related option. The base price per share covered by a SAR will be the exercise price per share of the related option in the case of a Related SAR.

#### ***Restricted Stock and Restricted Stock Units***

The HRCC may award shares of restricted stock and restricted stock units. Except as otherwise provided by the HRCC, upon the award of restricted stock, the recipient generally has the rights of a stockholder with respect to the shares, including the right to receive dividends, the right to vote the shares of restricted stock and, conditioned upon full vesting of shares of restricted stock, the right to sell or transfer such shares. The HRCC may determine at the time of award that the payment of dividends or other distributions, if any, will be subject to the same vesting requirements as the underlying award and deferred until the expiration of the applicable restriction period. The terms applicable to an award of restricted stock or restricted stock units will be determined by the HRCC in its sole discretion, including, without limitation, the number of shares or units to be granted, the price, if any, to be paid for such shares or units, the period of restriction applicable to such award and, with respect to restricted stock units, whether such restricted stock units will be settled in shares, cash or a combination thereof.

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### ***Other Stock-Based Awards***

The HRCC may, in its discretion, grant other stock-based awards that are payable in, valued in whole or in part by reference to, or otherwise based upon or related to Tronox Incorporated's common stock, including shares awarded purely as a bonus and not subject to any restrictions, shares in payment of the amounts due under an incentive or performance plan sponsored or maintained by Tronox Incorporated or its subsidiaries, performance units, dividend equivalent units, stock equivalent units and deferred stock units. The terms applicable to any such stock-based award, including the vesting schedule and the exercise price for such an award, if any, will be determined by the HRCC in its sole discretion.

### ***Performance Awards***

The HRCC may grant a performance award to a participant payable upon the attainment of specific performance goals. If the performance award is payable in cash, it may be paid upon the attainment of the relevant performance goals either in cash or in shares of restricted stock, as determined by the HRCC, in its sole discretion. The HRCC will establish the value or range of value of any performance award, the form in which it will be paid and the date(s) or timing of any payments made pursuant to such an award.

These awards may be granted, vest and be paid based on attainment of specified performance goals established by the HRCC. These performance goals will be based on one or more of the following criteria selected by the HRCC: (i) revenue, (ii) earnings per share, (iii) net income per share, (iv) share price, (v) pre-tax profits, (vi) net earnings, (vii) net income, (viii) operating income, (ix) cash flow, (x) EBITDA, (xi) earnings before interest and taxes, (xii) sales, (xiii) total stockholder return relative to assets, (xiv) total stockholder return relative to peers, (xv) financial returns, (xvi) cost reduction targets, (xvii) customer satisfaction, (xviii) customer growth, (xix) employee satisfaction, (xx) gross margin, (xxi) revenue growth, (xxii) market share, (xxiii) book value per share, (xxiv) expenses and expense ratio management, (xxv) system-wide sales or system-wide sales growth, (xxvi) traffic or customer counts, (xxvii) new product sales, or (xxviii) any combination thereof and such other criteria as the HRCC may determine. Performance objectives may be in respect of: (a) the performance of Tronox Incorporated or Tronox Limited, (b) the performance of any of their subsidiaries or affiliates, or (c) the performance of any of their divisions or business units. The HRCC may also include or exclude items from the foregoing criteria as it deems necessary, including, but not limited to, extraordinary, unusual or non-recurring items, expenses for restructuring, and acquisition expenses and may adjust previously established performance goals to reflect major unforeseen events.

### ***Termination of Service***

Unless otherwise determined by the HRCC or as set forth in an applicable award agreement, upon the termination of a participant's service with Tronox Incorporated and its affiliates, all vested and exercisable options and SARs held by the participant at the time of such termination may be exercised by the participant or such participant's estate, as applicable, as follows, but in no event beyond the expiration of the stated term of such options or SARs: (i) within the one-year period following a termination of the participant's service by reason of death or Disability, and (ii) within the 90-day period following a termination of the participant's service by Tronox Incorporated without Cause or by the participant for any reason. If a participant's service is terminated by Tronox Incorporated for Cause, all options or SARs held by such participant, whether vested or unvested, will terminate and expire as of the date of such termination. All unvested options and SARs held by a participant will terminate as of the date of the termination of such participant's service with Tronox Incorporated for any reason. Unless otherwise determined by the HRCC or as set forth in an applicable award agreement, upon the termination of a participant's service with Tronox Incorporated and its affiliates for any reason, all shares of restricted stock and restricted stock units that are still subject to restrictions, as well as all unvested performance awards and other stock-based awards, shall be forfeited.

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### ***Change in Control***

In connection with a Change in Control, the HRCC may provide for the vesting of all awards. In addition, the board of directors can unilaterally implement and/or negotiate a procedure with any party to the Change in Control such that all unexercised options may be cashed out for an amount equal to the excess of the price of a share of common stock paid in the Change in Control over the exercise price of the award(s).

### ***Stockholder Rights***

Except as otherwise provided with respect to awards of restricted stock and restricted stock units, a participant has no rights as a stockholder with respect to shares of common stock covered by any award until the participant becomes the record holder of such shares.

### ***Amendment and Termination***

The board of directors may at any time amend, suspend or terminate any or all of the provisions of the 2010 Equity Plan, subject to any requirement of stockholder approval required by applicable law; provided, however, that the board of directors may make any amendment necessary to avoid the imposition of any taxes under Section 409A of the Internal Revenue Code of 1986, as amended, without stockholder approval. Subject to the foregoing, the amendment, suspension or termination of the 2010 Equity Plan may not, without the consent of a participant, materially adversely alter or impair any rights or obligations under any award granted to such participant.

### ***Transferability***

Awards granted under the 2010 Equity Plan are generally nontransferable (other than by will or the laws of descent and distribution), except that a participant may transfer, without consideration, awards other than incentive stock options to certain family members, to a trust for the exclusive benefit of such family members, or to a partnership or limited liability company, the partners or members of which are exclusively such family members.

### ***Awards under the 2010 Equity Plan***

We believe that the use of stock based compensation to establish a direct relationship between the compensation of executive officers and the value of our stock helps ensure continued alignment among the interests of the executive officers, our interests and the interests of our stockholders. In this regard, the employment agreements for our named executive officers, other than Mr. Ritter, (as described below), provide for a restricted stock award of 84,933, 42,467, 35,081, and 22,157 shares to each of Messrs. Wanlass, Romano, Foster, and Gibney, respectively, (the Emergence Awards ) which were granted on February 14, 2011. The Emergence Awards are subject to the terms and provisions of the 2010 Equity Plan. Similarly, the HRCC granted Mr. Ritter 6,500 shares of restricted stock which are also subject to the terms of the 2010 Plan.

Mr. Casey was also granted a sign-on equity grant of 50,000 shares of restricted stock which will cliff vest on the third anniversary of the date of grant.

In addition, the Casey Employment Agreement provides for Mr. Casey to receive an annual RSU or restricted stock grant with a value at grant equal to \$3.0 million, and the first such grant was based on the volume-weighted average stock price over the 30-day period preceding the date of announcement of the Transaction and vesting as follows: (i) 30 percent of such grant will vest in equal installments on each of the first three anniversaries of the date of grant and (ii) 70% of such grant will be eligible to vest based upon the achievement of the following performance criteria: (a) 50% of such award will vest based upon total shareholder return for the three year period beginning October 1, 2011 and ending September 30, 2014 and

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(b) 50% of such award will vest based upon return on invested capital over the three year period beginning October 1, 2011 and ending September 30, 2014. The Casey Employment Agreement also provides that subsequent RSU or restricted stock grants will be based on the volume-weighted average price over the 30-day period preceding the date of grant.

On January 2, 2012, Tronox Incorporated hired Daniel D. Greenwell to serve as its Chief Financial Officer. In connection with his commencement of employment, Mr. Greenwell was granted a sign-on equity grant of 7,333 shares of restricted stock, an initial equity award consisting of 2,750 shares of restricted stock and 4,466 stock options, in each case, vesting in three pro-rata equal installments on each of January 2, 2013, January 2, 2014, and January 2, 2015, respectively; provided, however, the portion of each award scheduled to vest on January 2, 2013 will immediately vest upon the consummation of the Transaction.

**Tronox Limited Management Equity Incentive Plan**

Prior to the completion of the Transaction, the Tronox Limited board of directors will adopt, and Tronox Incorporated (in its capacity as the sole shareholder of Tronox Limited) will approve, the Tronox Limited Management Equity Incentive Plan (the Tronox Limited Equity Plan ) which will take effect upon the completion of the Transaction. In connection with the effectiveness of the Tronox Limited Equity Plan, no further grants will be made under the 2010 Equity Plan. Additionally, all equity awards outstanding following the consummation of the Transaction will be rolled under the Tronox Limited Equity Plan and governed by the terms and conditions thereof; provided that all such awards will remain subject to the vesting and other conditions of the applicable grant agreement. The Tronox Limited Equity Plan provides for grants of nonqualified share options, incentive stock options, share appreciation rights, performance units, performance shares and other performance awards, restricted share units and restricted shares, and other awards valued in whole or in part by reference to, or otherwise based on, the shares of Tronox Limited. Directors, officers and other employees of Tronox Limited and its subsidiaries or affiliates, as well as others performing services for Tronox Limited and its subsidiaries or affiliates, will be eligible for grants under the Tronox Limited Equity Plan. The purpose of the Tronox Limited Equity Plan is to provide incentives that will attract, retain and motivate highly competent officers, directors, employees and consultants by providing them with appropriate incentives and rewards either through a proprietary interest in Tronox Limited's long-term success or compensation based on their performance in fulfilling their personal responsibilities. The following is a summary of the material terms of the Tronox Limited Equity Plan, but does not include all of the terms and provisions of the Tronox Limited Equity Plan.

***Administration***

The Tronox Limited Equity Plan will be administered by a committee designated by the Tronox Limited board of directors (the Plan Committee ). Among the Plan Committee's powers will be to determine the form, amount and other terms and conditions of awards, clarify, construe or resolve any ambiguity in any provision of the Tronox Limited Equity Plan or any award agreement, amend the terms of outstanding awards and adopt such rules, forms, instruments and guidelines for administering the Tronox Limited Equity Plan as it deems necessary or appropriate. All actions, interpretations and determinations by the Plan Committee or by the Tronox Limited board of directors will be final and binding.

***Available Shares***

The aggregate number of shares which are intended to be issued under the Tronox Limited Equity Plan or with respect to which awards may be granted (inclusive of unissued shares to which outstanding incentive stock options relate) may not exceed 2,217,630 shares (representing 8.5% of shares outstanding) plus the aggregate number of shares subject to outstanding and unvested awards under the 2010 Equity Plan. In general, if awards under the Tronox Limited Equity Plan are for any reason cancelled, expire or terminate unexercised or are withheld as consideration for the exercise or purchase price of an award, the shares covered by such awards will

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again be available for the grant of awards under the Tronox Limited Equity Plan. The aggregate fair market value of shares underlying incentive stock options granted to a single participant during any calendar year under the Tronox Limited Equity Plan may not exceed \$100,000.

### ***Eligibility for Participation***

Members of the Tronox Limited board of directors, as well as employees and independent contractors of, and advisors to, Tronox Limited or any of its subsidiaries and affiliates, are eligible to receive awards under the Tronox Limited Equity Plan. The selection of participants is within the sole discretion of the Plan Committee.

### ***Award Agreement***

Awards granted under the Tronox Limited Equity Plan will be evidenced by award agreements providing additional terms, conditions, restrictions and/or limitations covering the grant of the award, as determined by the Plan Committee in its sole discretion.

### ***Awards Under the Tronox Limited Equity Plan***

The following types of awards are available under the Tronox Limited Equity Plan:

#### ***Share Options***

The Plan Committee may grant nonqualified share options and incentive stock options (only to eligible employees) to purchase shares. The Plan Committee will determine the number of shares subject to each option, the term of each option (which may not exceed ten years (or five years in the case of an incentive stock option granted to a 10% shareholder)), the exercise price, the vesting schedule (if any), and the other material terms of each option. No incentive stock option granted to a 10% shareholder may have an exercise price less than 110% of the fair market value of a share at the time of grant. Options will be exercisable at such time or times and subject to such terms and conditions as determined by the Plan Committee at grant and the exercisability of such options may be accelerated by the Plan Committee in its sole discretion.

#### ***Share Appreciation Rights***

The Plan Committee may grant share appreciation rights (which are referred to herein as SARs) either with a share option, which may be exercised only at such times and to the extent the related option is exercisable (a Related SAR), or independent of a share option. A SAR is a right to receive a payment in shares or cash equal in value to the excess of the fair market value of one share on the date of exercise over the base price per share established in connection with the grant of the SAR. The term of each SAR may not exceed ten years. The base price per share covered by a SAR will be the exercise price per share of the related option in the case of a Related SAR.

#### ***Restricted Share and Restricted Share Units***

The Plan Committee may award restricted shares and restricted share units. Except as otherwise provided by the Plan Committee, upon the award of restricted shares, the recipient generally has the rights of a shareholder with respect to the shares, including the right to receive dividends, the right to vote the restricted shares and, conditioned upon full vesting of the restricted shares, the right to sell or transfer such shares. The Plan Committee may determine at the time of award that the payment of dividends or other distributions, if any, will be subject to the same vesting requirements as the underlying award and may be deferred until the expiration of the applicable restriction period. If a restricted share award is forfeited, the Plan Committee will either cause the forfeited shares to be bought back by Tronox Limited in accor