

Corsa Coal Corp.
Annual Information Form
For the Year Ended December 31, 2018

Dated February 21, 2019

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#### 1. INTRODUCTION

In this Annual Information Form (the "AIF"), Corsa Coal Corp. is referred to as "Corsa" or the "Company". This AIF is dated February 21, 2019, and the information contained herein is current as of such date, unless otherwise stated.

Corsa's coal operations are conducted through the Northern Appalachia Division ("NAPP Division" or "NAPP"). NAPP is based in Somerset, Pennsylvania, U.S.A. and is primarily focused on metallurgical coal production in the states of Pennsylvania and Maryland. Corsa markets and sells its NAPP coal to customers in North America, South America and Asia.

# 1.1 Currency and Measurement

All references to "dollars", "\$" or "US\$" are to United States dollars, unless otherwise indicated, and references to "CDN\$" are to Canadian dollars. All references to tons are to short tons (2,000 pounds per ton), unless otherwise indicated.

### 1.2 Financial Statements

This AIF should be read in conjunction with the Company's audited consolidated financial statements and management's discussion and analysis for the years ended December 31, 2018 and 2017. The financial statements and management's discussion and analysis are available under Corsa's profile on the SEDAR website at www.sedar.com.

# 1.3 Forward Looking Statements

Certain information set forth in this AIF contains "forward-looking statements" and "forward-looking information" (collectively, "forward looking statements") under applicable securities laws. Except for statements of historical fact, certain information contained herein relating to projected sales, coal prices, coal production, mine development, the capacity and recovery of Corsa's preparation plants, expected cash production costs, geological conditions, future capital expenditures and expectations of market demand for coal, constitutes forward-looking statements which include management's assessment of future plans and operations and are based on current internal expectations, estimates, projections, assumptions and beliefs, which may prove to be incorrect. Some of the forward-looking statements may be identified by words such as "estimates", "expects", "anticipates", "believes", "projects", "plans", "capacity", "hope", "forecast", "anticipate", "could" and similar expressions. These statements are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause Corsa's actual performance and financial results in future periods to differ materially from any projections of future performance or results expressed or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to: risks that the actual production or sales for the 2019 fiscal year will be less than projected production or sales for this period; risks that the prices for coal sales will be less than projected; liabilities inherent in coal mine development and production; geological, mining and processing technical problems; inability to obtain required mine licenses, mine permits and regulatory approvals or renewals required in connection with the mining and processing of coal; risks that Corsa's preparation plants will not operate at production capacity during the relevant period, unexpected changes in coal quality and specification; variations in the coal mine or preparation plant recovery rates; dependence on third party coal transportation systems; competition for, among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel; incorrect assessments of the value of acquisitions; changes in commodity prices and exchange rates; changes in the regulations in respect to the use, mining and processing of coal; changes in regulations on refuse disposal; the effects of competition and pricing pressures in the coal market; the oversupply of, or lack of demand for, coal; inability of management to secure coal sales or third party purchase contracts; currency and interest rate fluctuations; various events which could disrupt operations and/or the transportation of coal products, including labor stoppages and severe weather conditions; the demand for and availability of rail, port and other transportation services; the ability to purchase third party coal for processing and delivery under purchase agreements; the ability to resolve litigation and similar matters involving the Company and/or its assets; and management's ability to anticipate and manage the foregoing factors and risks. The forward-looking statements and information contained in this AIF are based on certain assumptions regarding, among other things, coal sales being consistent with expectations; future prices for coal; future currency and exchange rates; Corsa's ability to generate sufficient cash flow from operations and access capital markets to meet its future obligations; the regulatory framework representing royalties, taxes and environmental matters in the countries in which Corsa conducts business; coal production levels; Corsa's ability to retain qualified staff and equipment in a cost-efficient manner to meet its demand; and Corsa being able to execute its program of operational improvement and initiatives. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The reader is cautioned not to place undue reliance on forward-looking statements. Corsa does not undertake to update any of the forward-looking statements contained in this AIF unless required by law. The statements as to Corsa's capacity to produce coal are no assurance that it will achieve these levels of production or that it will be able to achieve these sales levels.

#### 1.4 Technical Disclosures

### **NAPP Division Properties**

The scientific and technical information contained in this AIF relating to the NAPP Division properties (as defined below), which are effective as of December 31, 2018, have been prepared by Marshall Miller & Associates, Inc. ("MM&A") under the supervision of Justin S. Douthat, P.E., M.B.A., Michael G. McClure, C.P.G., and John W. Eckman, C.P.G., each a qualified person, as such term is defined in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101"). MM&A is independent of Corsa and its subsidiaries. For a complete description of the mines and projects relating to the NAPP Division Properties, see the report prepared pursuant to NI 43-101 by MM&A under Corsa's profile at www.sedar.com entitled "*Technical Report on the Coal Resource and Coal Reserve Controlled by Corsa Coal Corp.*, *Pennsylvania and Maryland, USA - Prepared in Accordance with National Instrument 43-101 Standards for Disclosure for Mineral Projects Effective December 31, 2018*" (the "NAPP Technical Report").

# 1.5 Cautionary Note to U.S. Investors Concerning Reserve and Resource Estimates

This AIF sets forth certain estimates of "reserves" and "resources". While Corsa believes that the estimates were based on methodologies acceptable in Canada pursuant to NI 43-101, such estimates are not synonymous with the United States Securities and Exchange Commission ("SEC") Industry Guide 7 as discussed below. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes in Canada of scientific and technical information concerning mineral projects. Of note to U.S. investors, these standards differ significantly from the requirements of the SEC (including under its Industry Guide 7).

Under U.S. standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. U.S. investors are cautioned not to assume that all or any part of historical estimates of "resources" in this AIF will ever be converted into reserves, or if converted, what actual tonnage and grade they may have. Accordingly, information concerning descriptions or mineralization, "resources" and "reserves" contained in this AIF are not comparable to information made public by U.S. companies subject to the reporting and disclosure requirements of the SEC.

### 1.6 Glossary

The following is a glossary of selected mining terms used in this AIF. Words importing the singular, where the context requires, include the plural and vice versa and words importing any gender include all genders.

"ash" means impurities consisting of silica, iron, alumina and other incombustible matter that are contained in coal. Since ash increases the weight of coal, it adds to the cost of handling and can affect the burning characteristics of coal.

"bituminous coal" means a common type of coal with moisture content less than 20% by weight. It is dense and black and often has well-defined bands of bright and dull material.

"British thermal unit" or "BTU" means a measure of the thermal energy required to raise the temperature of one pound of pure liquid water one degree Fahrenheit at the temperature at which water has its greatest density (39 degrees Fahrenheit).

"coal seam" means a layer of a coal deposit.

"coke" means a hard, dry carbon substance produced by heating coal to a very high temperature in the absence of air and used in the manufacturing of iron and steel.

"Common Shares" means the common shares of the Company.

"continuous miner" means a machine used in underground mining to cut coal from the seam and load onto conveyers or shuttle cars in a continuous operation. In contrast, a conventional mining unit must stop extracting in order to begin loading.

"continuous mining" means a form of underground mining that cuts the coal from the seam and loads the coal on to a conveyor system continuously, thus eliminating the separate cycles of cutting, drilling, shooting and loading.

"hard coking coal" or "HCC" means a type of metallurgical coal that is a necessary ingredient in the production of strong coke. It is evaluated based on the strength, yield and size distribution of coke produced from such coal which is dependent on rank and

plastic properties of the coal. Hard coking coals trade at a premium to other coals due to their importance in producing strong coke and as they are a limited resource.

- "indicated Mineral Resource" means that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resources has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.
- "Industrial coal" means a coal generally used as a heat source in the production of lime, cement, or for other industrial uses and is not considered thermal coal or metallurgical coal.
- "Inferred Mineral Resource" means that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Resource. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
- "Measured Mineral Resource" means that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.
- "metallurgical coal" means the various grades of coal with suitable carbonization properties to make coke or be used as a pulverized injection ingredient for steel manufacture, including hard coking coal (see definition above), semi-soft coking coal ("SSCC") and PCI Coal (see definition below). Also known as "met" coal, its quality depends on four important criteria: (1) volatility, which affects coke yield; (2) the level of impurities including sulfur and ash, which affect coke quality; (3) composition, which affects coke strength; and (4) other basic characteristics that affect coke oven safety. Met coal typically has particularly high Btu characteristics but low ash and sulfur content.
- "Mineral Reserve" means the economically mineable part of a Measured Mineral Resource and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that, at the time of reporting, could reasonably be justified.
- "Mineral Resource" means a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.
- "modifying factors" means the considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.
- "overburden" means layers of earth and rock covering a coal seam. In surface mining operations, overburden must be removed prior to coal extraction.
- "PCI coal" means a coal used by steel makers for pulverized coal injection (PCI) into blast furnaces to use in combination with the coke used to produce steel. The use of PCI allows a steel maker to reduce the amount of coke needed in the steel making process.
- "preparation plant" means a facility for crushing, sizing and washing coal to remove impurities and prepare it for use by a particular customer. The washing process has the added benefit of removing some of the coal's sulfur content.
- "Probable Mineral Reserve" means the economically mineable part of an Indicated Mineral Resource, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.

"Proven Mineral Reserve" means the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.

"reclamation" means the process of restoring land and the environment to their original or otherwise rehabilitated state following mining activities. The process commonly includes "recontouring" or reshaping the land to its approximate original appearance, restoring topsoil and planting native grass and ground covers. Reclamation operations are usually underway before the mining of a particular site is completed. Reclamation is closely regulated by both state and federal law.

"roof" means the stratum of rock or other mineral above a coal seam; the overhead surface of a coal working place.

"sulfur" means one of the elements present in varying quantities in coal that could contribute to environmental degradation when coal is burned. Sulfur dioxide is produced as a gaseous by-product of coal combustion.

"surface mine" means a mine where the coal lies at or near the surface and can be extracted by removing the covering layer of soil (see "Overburden") without tunneling underground.

"thermal coal" means a coal used by power plants and industrial steam boilers to produce electricity, steam or both.

"ton" means a "short" ton equal to 2,000 pounds. A "metric" ton is approximately 2,205 pounds; a "long" or British ton is equal to 2,240 pounds.

"underground mine" means a mine where the coal lays at a sufficient depth below the earth's surface that is not practical for a surface mine. Also known as a "deep" or "drift" mine. An underground mine's coal is typically removed mechanically and transferred by shuttle car and/or conveyor to a surface location.

# 2. CORPORATE STRUCTURE

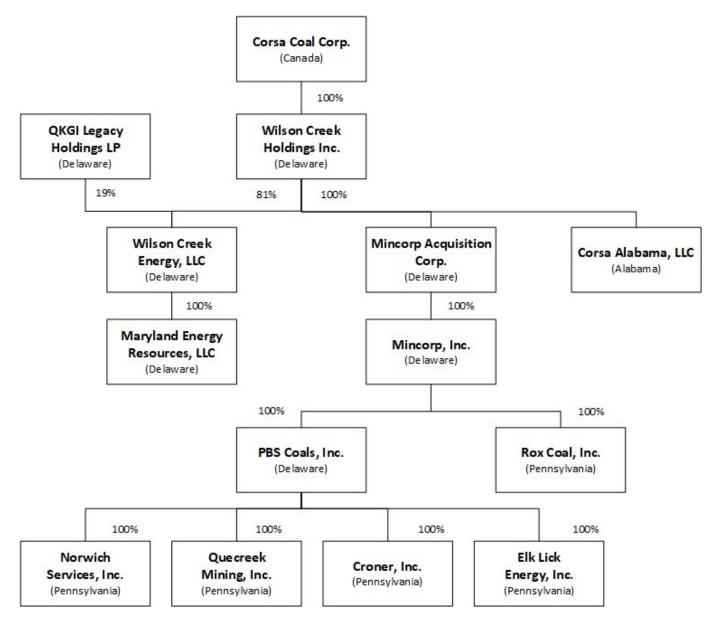
### 2.1 Name, Address and Incorporation

The Company was incorporated on June 14, 2007 under the name of 0794168 B.C. Ltd. pursuant to the *Business Corporations Act* (British Columbia). On July 18, 2007, Articles of Amendment were filed to change its name to "Corsa Capital Ltd.". On April 27, 2011, Articles of Amendment were filed to change its name to "Corsa Coal Corp." and on June 27, 2011, the Company was continued under the *Canada Business Corporations Act* ("CBCA"). On April 17, 2008, Corsa was listed on the TSX Venture Exchange ("TSX-V") under the symbol "CSO". Corsa is a reporting issuer in the provinces of British Columbia, Alberta and Ontario.

The Company is domiciled in Canada and the registered office of Corsa is located at 199 Bay Street, Suite 5300, Commerce Court West, Toronto, Ontario M5L 1B9 and the head office of Corsa is located at 4600 J. Barry Court, Suite 220, Canonsburg, Pennsylvania 15317.

# 2.2 Intercorporate Relationships

The following diagram illustrates the corporate structure of Corsa as of the date of this AIF.



#### 3. GENERAL DEVELOPMENT OF THE BUSINESS

### 3.1 Overview

Corsa is one of the leading United States suppliers of premium quality metallurgical coal, an essential ingredient in the production of steel. Corsa's core business is supplying premium quality metallurgical coal to domestic and international steel and coke producers. On March 13, 2018, Corsa divested its thermal and industrial coal division based in Tennessee (the "CAPP Division") by way of the sale of Kopper Glo Mining, LLC (the "CAPP Division Divestiture"). As a result of the CAPP Division Divestiture, the CAPP Division is classified as a discontinued operation.

### 3.2 Three Year History

### 2016

In 2016, the average realized price for metallurgical coal increased by \$2.55 per ton sold compared to 2015. Spot prices for metallurgical coal rose by approximately 200% over the course of 2016. Chinese policy initiatives to reduce production of coal, in addition to supply disruptions in Australia, created a deficit of metallurgical coal on the seaborne market in the second half of 2016. The rebound in pricing caused a supply response to occur in coal exporting countries such as Australia, the United States, and Mongolia. It is believed that a large scale metallurgical supply response will be slow, as major Australian and Canadian mines are already running near maximum capacity. Incremental production from greenfield and brownfield projects may take up to two years or longer to come online as permits need to be acquired, equipment needs to be ordered, mines need to be staffed, and coal producers need to raise capital to fund the projects. Additionally, historically low metallurgical coal prices during the period of time from 2014 through mid-2016, led to a lack of investment in reserves, infrastructure, new mining permits, and equipment, all of which will slow the supply response to higher prices.

During the year ended December 31, 2016, Corsa completed three private placements, all of which are described below on a post-consolidation basis:

- In March 2016, Corsa completed a non-brokered private placement of 10,387,200 Common Shares for gross proceeds of CDN\$10,387,200 (\$8,000,000 USD) at CDN\$1.00 per Common Share (the "March 2016 Private Placement"). The proceeds of the March 2016 Private Placement were used to fund working capital and for general corporate purposes. In connection with the March 2016 Private Placement, WCH entered into a second amending agreement (the "Second Amending Agreement") to amend certain terms of the \$25,000,000 secured term loan (the "Facility") with Sprott Resource Lending Corp. ("SRLC"). SRLC received 389,520 Common Shares in connection with entering into the Second Amending Agreement, which represents consideration equivalent of US\$300,000.
- In June 2016, Corsa completed a private placement of 3,150,000 Common Shares, 2,800,000 of which were closed on a brokered basis and 350,000 of which were closed on a non-brokered basis, for gross proceeds of CDN\$3,150,000 at CDN \$1.00 per Common Share (US\$2,410,000) (the "June 2016 Private Placement"). Paradigm Capital Inc. ("Paradigm") acted as lead agent for the brokered portion of the June 2016 Private Placement. The Company paid Paradigm aggregate cash commissions of CDN\$168,000 (U.S.\$129,000) and issued a total of 168,000 compensation warrants ("Compensation Warrants") in connection with the June 2016 Private Placement. Each Compensation Warrant entitles Paradigm to purchase one Common Share at CDN\$1.00, exercisable for a period of 24 months. The proceeds of the June 2016 Private Placement are being used to fund working capital and for general corporate purposes.
- In October 2016, Corsa completed a private placement of 11,500,000 Common Shares, 10,694,000 of which were closed on a brokered basis and 806,000 of which were closed on a non-brokered basis, for gross proceeds of CDN\$23,000,000 at CDN\$2.00 per Common Share (US\$17,191,000) (the "October 2016 Private Placement"). Paradigm Capital Inc., GMP Securities Inc., and Pareto Securities Limited (collective, the "Agents") acted as agents for the brokered portion of the October 2016 Private Placement. The Company paid the Agents aggregate cash commissions of CDN\$923,000 (US \$690,000) in connection with the October 2016 Private Placement. The proceeds of the October 2016 Private Placement will be primarily used for mine development, general corporate and working capital purposes.

In December 2016, the Company gave effect to the consolidation of the issued and outstanding Common Shares on the basis of one (1) post-consolidation Common Share for each 20 pre-consolidation Common Shares (the "Consolidation") and an amendment to the Company's articles authorizing the issuance of an unlimited number of preferred shares, issuable in series, with such rights, privileges, restrictions and conditions as the board of directors of the Company may determine from time to time.

Corsa commenced development work at the Acosta mine in Somerset County, Pennsylvania, which is forecasted to produce 400,000 tons per year of low volatile metallurgical coal once fully operational. Coal production at the mine began in the second quarter of 2017 and ramped up over the course of the year.

During the year ended December 31, 2016, the Company sold 669,000 tons of metallurgical coal at an average realized price of \$79.66 per ton from the NAPP Division. The Company incurred a net loss from continuing operations of \$32.7 million for the year ended December 31, 2016.

### 2017

In 2017, the average realized price for metallurgical coal increased by \$45.90 per ton sold compared to 2016. Spot prices varied dramatically throughout the year, fueled by supply restrictions in a tightly balanced metallurgical coal market. Strong year-over-year growth in global steel production with continued growth forecasted in 2018 increased coking coal demand and also has supported coal prices. Although there was some activity with mine restarts and openings, incremental production from greenfield and brownfield projects during market shortages was lacking due to the significant lead time required to acquire permits, order equipment, staff the mines and for coal producers to raise capital funds for the projects. The supply chain for metallurgical coal remains extremely fragile and prone to disruption, as was demonstrated by dramatic price increases in the second and fourth quarters when significantly reduced export operations were experienced in Australia.

Although the first quarter 2017 benchmark moved to \$285 per metric ton, spot prices declined in December 2016 through February 2017 as Australian mines that were disrupted in the fall of 2016 returned to production, inventory de-stocking occurred in China and India, and as the Chinese relaxed the 276 workday policy and went back to a 330 workday policy for the winter months. Prices reversed course in the end of the first quarter with April spot market pricing reaching five-year highs due to the Australian supply restrictions resulting from Cyclone Debbie. Metallurgical coal prices declined from record levels in April 2017 after the Australian export terminals returned to service.

Spot prices for low volatile metallurgical coal again experienced significant volatility in the third quarter of 2017. Additional supply interruptions in Australia and the United States occurred in July pushing spot prices higher and ultimately rising approximately 40% from the previous quarter to a high in early September 2017 before finishing the third quarter at levels 30% higher than at the end of the second quarter.

Following a softening price environment in the early part of the fourth quarter, logistics issues led to long vessel queues in Australia and a resulting premium for high quality metallurgical coal cargoes. Severe weather on the United States east coast also disrupted coal mining operations, limited railroad activities, and shut down the export terminals late in the quarter putting additional upward pressure on spot prices.

Chinese domestic metallurgical coal prices remained elevated due to strong steel production and government policy initiatives to decrease coal production capacity and consolidate coal production. The forward curve for low volatile metallurgical coal prices for calendar 2018 is above \$200/mt and supported by high levels of steel production globally, including the Indian market which is poised to become the world's second largest steel producing country. Steel production in the United States also remains strong with continued economic growth, the potential of significant infrastructure spending, and the pending outcome of steel trade actions supporting high prices and profitability for the steel makers

Corsa commenced production at the Acosta mine in Somerset County, Pennsylvania in June 2017. Coal production ramped up over the course of the remainder of the year and the Company added the fourth production shift in early 2018. The Acosta mine is currently at full production and is expected to produce 400,000 tons per year of low volatile metallurgical coal.

Corsa established a sales and trading platform in early 2017 which was not previously part of the Company's business model. In the sales and trading platform, the Company purchases and then sells coal on a clean or finished goods basis from suppliers outside of the Company's main operating area. The Company blends this coal, which primarily has a different quality basis than the coal the Company produces, to provide a blended product to customers who do not have the ability to purchase and blend different qualities of coal at their facilities.

During the year ended December 31, 2017, the Company sold 1,475,000 tons of metallurgical coal at an average realized price of \$125.56 per ton and 215,000 tons of thermal coal at an average realized price of \$45.01 per ton from the NAPP Division. The Company achieved net income from continuing operations of \$108.6 million for the year ended December 31, 2017, which included a reversal of \$86.2 million of an impairment that was previously recognized in the year ended December 31, 2015. The impairment reversal was the result of an increased in the carrying amount of the cash generating unit that was determined (net of amortization and depreciation) had no impairment loss been recognized in prior periods.

# **2018**

In 2018, strong global steel demand and corresponding high levels of steel production continued to support metallurgical coal prices in both domestic and export markets. United States steel trade actions and continued economic growth led to higher domestic steel prices, increased blast furnace production and added demand for metallurgical coal. These drivers, as well as the limited availability of high quality, low volatile metallurgical coal, supported price levels in 2018.

Prices during first quarter for Australian premium low volatile metallurgical coal ("PLV") started the year at \$260 per metric ton and averaged \$228 per metric ton while the USEC Low Vol prices started the year at \$200 per metric ton and averaged \$195 per metric ton. Prices were supported during the first quarter by logistical issues and weather concerns. These supply constraints eased into the beginning of the second quarter as railroads and ports approached normal operations, vessel queues were reduced and mills worked through inventories on hand. Chinese import restrictions, production policies and high production costs for metallurgical coal, along with increased steel production in India, continued to support pricing in the export market.

On March 8th the U.S. imposed trade tariffs under Section 232 of the Trade Expansion Act of 1962 for imported steel and aluminum products which would become effective March 23, 2018. Spot prices moderated during second quarter as prices for PLV averaged \$190 per metric ton. With prices softening and as buyers remained concerned about the extreme congestion at ports, several U.S. buyers moved up their 2019 buying process to earlier in the year. Prices for USEC Low Vol averaged \$177 per metric ton.

Prices softened into the middle of the third quarter then market conditions grew more constructive as there were several notable supply side issues that constrained an already tight global supply chain. Prices during the third quarter for PLV averaged \$189 per metric ton but rose to over \$200 by the end of the quarter. Prices for USEC Low Vol averaged \$177 per metric ton. On Aug 15, 2018, Turkey imposed a 13.7% tariff on U.S. coal products as a response to the U.S. increasing steel tariffs to 50% and aluminum to 20%.

The tightening of supply continued throughout the fourth quarter as Australia encountered geological issues that resulted in metallurgical coal mines being shut down, port and railroad worker strikes and weather impacting the availability of their coal ports. The U.S. had similar challenges with a large metallurgical coal producer filing bankruptcy, a hurricane hitting the USEC which slowed port and rail operations and a silo failure at a metallurgical coal producer which limited deliveries. Prices continued the rebound into the fourth quarter averaging \$221 per metric ton for PLV and \$203 per metric ton for USEC Low Vol. The quarter finished with China instituting a metallurgical coal import ban on coal products for December. Prices finished the year at \$220 per metric ton for PLV and \$198 per metric ton for USEC Low Vol.

Global steel production finished up 4.5% on the year and, excluding China, the rest of the world grew at 2.3%, according to the World Steel Association. Chinese steel production grew 6.6%, while India was up 4.9%, and the US was up 6.2%. The strong global steel market continued to drive a healthy US export coal market. Total annual US metallurgical coal exports were 49.5 million metric tons which was up 10% on the year.

On March 13, 2018, Corsa divested its thermal and industrial coal division based in Tennessee, becoming a pure-play metallurgical coal producer.

In December 2018, the Company entered into an amending agreement to extend the maturity date of its term credit facility from August 19, 2019 to August 19, 2020 and to amend certain other terms of the credit agreement governing its term credit facility made available by Sprott Resource Lending Corp.

During the year ended December 31, 2018, the Company sold 1,872,000 tons of metallurgical coal at an average realized price of \$114.50 per ton. The Company achieved net income from continuing operations of \$5.9 million.

# 3.3 Significant Acquisitions

No significant acquisitions were completed during the year ended December 31, 2018.

### 4. DESCRIPTION OF THE BUSINESS

#### 4.1 General

Corsa is one of the leading United States suppliers of premium quality metallurgical coal, an essential ingredient in the production of steel. Corsa's core business is supplying premium quality metallurgical coal to domestic and international steel and coke producers.

# **Coal Characteristics**

Coal is a combustible, sedimentary, organic rock, which is composed mainly of carbon, hydrogen and oxygen. It is formed from vegetation, which has been consolidated between other rock strata and altered by the combined effects of pressure and heat over millions of years to form coal seams. Coal is generally classified as either metallurgical coal or thermal coal (also known as steam

and industrial coal). Sulfur, ash and moisture content as well as coking characteristics are key attributes in grading metallurgical coal while heat value, ash and sulfur content are important variables in rating thermal coal.

**Heat Value:** The heating value of coal is supplied by its carbon content and volatile matter and commonly measured in BTUs. Coal deposits are generally classified into four categories, ranging from lignite, sub-bituminous, bituminous and anthracite, reflecting their response to increasing heat and pressure.

**Sulfur Content:** Sulfur content can differ from coal seam to coal seam. Low sulfur coals have a sulfur content of 1.5% or less. Coal produces undesirable sulfur dioxide when it burns, the amount of which depends on the concentration of sulfur in the coal as well as the chemical composition of the coal itself.

Ash and Moisture Content: Ash is the residue that remains after the combustion of coal. Low ash is desirable because businesses must dispose of ash after the coal is used. High moisture content decreases the heat value of the coal and increases the coal's weight, both of which are undesirable.

Coking Characteristics (metallurgical coal only): Two important coking characteristics are coke strength and volatility. Coke strength is an indicator of physical strength of a coke made from a particular coal. Coke needs to be strong to support the iron ore and coke mix above it in the blast furnace. Volatility of coking coal is used to determine the percentage of coke that a given type of coal would produce. This measure is known as coke yield. A low volatility results in a higher coke yield.

### **Types of Coal**

Metallurgical coal is classified into three major categories: HCC; semi-soft coking coal; and PCI. Coking coals are the basic ingredients for manufacture of metallurgical coke. PCI coal is not used in coke making but is rather injected directly into the lower region of blast furnaces to supply both energy and carbon for iron reduction. The use of PCI can be a substitute for some of the metallurgical coke that would otherwise have been used.

Thermal and industrial coal is the most abundant form of coal and is commonly referred to as steam coal. Such coal has a relatively high heat value and has long been used for steam generation in electric power and industrial boiler plants.

# **Coal Mining Methods**

Coal is mined using both underground and surface mining methods. The mining methods to be employed are determined by the geological characteristics of coal reserves.

*Underground Mining:* Underground mining methods are employed when coal reserves cannot be mined using surface mining methods. The two different underground mining techniques are "long-wall" mining and "room-and-pillar" mining.

In long-wall mining, mechanized shearers are used to cut and remove the coal from long rectangular blocks of medium to thick coal seams called panels. Continuous miners are used to develop access to these coal blocks. After the coal is removed, it drops onto a conveyor system that takes the coal to production shafts or slopes where it is hoisted to the surface. In long-wall mining, mobile hydraulic powered roof supports, called shields, hold up the roof throughout the extraction process.

In room-and-pillar mining, a network of rooms is cut into the coal seam by continuous miners, while also leaving a series of coal pillars to support the mine roof. Shuttle cars and continuous haulage systems transport the coal to the surface.

Surface Mining: Surface mining methods are employed when coal reserves are located close to the surface.

Strip mining involves removing the topsoil followed by a process of drilling and blasting the overburden covering the coal seam with explosives. The overburden is then removed with earth-moving equipment such as draglines, power shovels, excavators and loaders exposing the coal seam. Once exposed, the coal seam is extracted and loaded into haul trucks for transportation to preparation plants or load-out facilities. After the coal is removed, reclamation activities use the topsoil and overburden removed at the beginning of the process to backfill the excavated coal pits and disturbed areas. After the overburden and topsoil are replaced, vegetation is re-established into the reclaimed area. Ultimate seam recovery for surface mining typically exceeds 80% and is dependent on overburden, coal thickness, geological factors, and equipment used.

Highwall surface mining involves using a highwall mining machine to mine coal seams that are exposed, at the outcrops or at the limit of economic depth in a pit for a strip mine, during the surface mining process, but which cannot be accessed by the earth moving equipment used for surface strip mining.

#### **Coal Markets**

Coal prices differ substantially by region and are impacted by many factors including the overall economy, demand for steel, demand for electricity, location, market, quality and type of coal, mine operation costs and the cost of customer alternatives.

# Metallurgical Coal

Spot prices varied dramatically throughout 2018, though not as much as 2017, fueled by supply side constraints. Prices ranged between \$172 and \$262 per metric ton for PLV during 2018 while averaging \$207 which was up from the 2017 average of \$188 per metric ton. Despite the broader economy and financial markets having softened considerably leading into 2019 the global coking coal market outlook remains supportive. This depicts the continued supply side risk for high quality coking coals globally and constrained supply chains. Spot prices for PLV started the year at averaging \$199 per metric ton through January and \$188 for USEC Low Vol.

The World Steel Association in its most recent outlook forecasts steel demand up 1.4% globally in 2019. Asian steel demand is forecasted to be up 6.8% while developed economics globally will average 1.2%. With Section 232 tariffs still in place the US market continues to look robust and there remains further upside if the US government passes a significant infrastructure spending bill.

The market is watching the Chinese government for policy changes for coal imports and expects a bounce back in January despite their December ban. The Chinese government recently announced several mine safety issues which has caused a review of their safety procedures and temporary mine shut downs. This review could potentially increase the Chinese import requirement for metallurgical coal.

The forward curve for low volatile metallurgical coal prices is supported by high levels of steel production globally even in a more subdued global economic outlook. The 2020 forward curve for PLV is \$180 per metric ton. The Indian market which is poised to become the world's second largest steel producing country and largest coking coal importer over the next few years is a key driver to the steel growth story. The market anticipates production growth in Australia though there continues to be skepticism if there is adequate rail capacity and port availability. To start the year, there have already been several incidents involving port closures due to operational issues and heavy rain in Australia which supports a more moderate outlook on shipments. In the US, the market is expecting lower exports in 2019 primarily due to a producer bankruptcy and improved domestic pricing. The industry anticipates 2% of incremental US production growth for coking coal which indicates production is inelastic due to limited access to capital and constrained geological conditions. While rail and port performance has greatly improved from early 2018, there doesn't appear to be any signs of material capital investment that would expand export capacity.

### **Principal Markets**

The principal market for the Company's metallurgical coal is domestic and international steel producers.

#### Distribution

The primary distribution method for the Company's coals is by rail from a preparation plant to the customer; however, distribution by truck or by truck and barge to the customer is also utilized.

# Revenues

For the years ended December 31, 2018 and 2017, the revenues from continuing operations from the sale of metallurgical coal were \$258.4 million and \$204.3 million, respectively, and the revenues from continuing operations from the sale of thermal coal were \$0.9 million and \$9.7 million, respectively.

#### **Coal Operations**

Corsa's coal operations are conducted through the NAPP Division, which is based in Friedens, Pennsylvania, U.S.A. and focused on metallurgical coal production and sales in the Northern Appalachia coal region of the United States.

#### **NAPP Division**

NAPP produces and sells metallurgical coal used for the production of coke from its mines in the Northern Appalachia coal region of the United States. The coal mined is sold to international and domestic steel producers, as well as other coal companies for

blending, and is shipped by rail, truck and barge. In addition to the mines currently in production, NAPP has a significant pipeline of projects which the Company anticipates developing.

NAPP is centrally located in and around Somerset County, Pennsylvania, located approximately 70 miles from Pittsburgh, Pennsylvania, and operates in Pennsylvania and Maryland. NAPP usually ships by rail, although shipping can be done by truck or barge. The preparation plants have access to both the CSX and NS rail lines and can access the Eastern Seaboard ports such as the Port of Baltimore which is 170 miles away. The location of NAPP is also consistent with Corsa's strategy to provide a competitively lower delivery cost to key customers, including steel mills around Pittsburgh, the Great Lakes region and Canada.

### Mines

NAPP currently operates three underground mines and two surface mines. The information disclosed below is based on the information contained in the NAPP Technical Report related to such properties. Please refer to "Introduction - Technical Disclosures" above for more information.

| Mine                       | Type of mine       | 2019 Annual production capacity in clean tons <sup>(1)</sup> |
|----------------------------|--------------------|--|
| Casselman mine             | Underground        | 639,000  |
| Acosta mine                | Underground        | 437,000  |
| Horning mine               | Underground        | 202,000  |
| Schrock Run surface mine   | Surface            | 290,000  |
| Hamer (Byers) surface mine | Surface / highwall | 24,000 (2)   |
| Rhoads                     | Surface / highwall | 99,000   |

<sup>(1)</sup> Annual production capacity is based on the operations as they are currently configured at the date of this AIF.

### Preparation Plants

NAPP currently operates two preparation plants (Cambria and Shade Creek) and has one preparation plant (Rockwood) that has been temporarily idled. The raw metallurgical coal produced from the mines is trucked to the preparation plants where it is processed or "washed" using conventional coal processing techniques and stored for shipping. All plants have loadout facilities adjacent to a rail line. Coal is usually shipped by rail; however, it can also be shipped by truck. All of the preparation plants are located in Somerset County, Pennsylvania. The Cambria Plant has an operating capacity of 325 tons of raw coal per hour, storage capacity for 130,000 tons of clean coal and 55,000 tons of raw coal and loadout facilities adjacent to a CSX rail line. The Shade Creek Plant has an operating capacity of 450 tons of raw coal per hour, storage capacity for 75,000 tons of clean coal and 170,000 tons of raw coal and loadout facilities adjacent to a Norfolk Southern rail line. The Rockwood Plant has an operating capacity of 325 tons of raw coal per hour, storage capacity of 24,000 tons of clean coal and 85,000 tons of raw coal and load out facilities adjacent to a CSX rail line.

### **Projects**

NAPP has several projects which are in various stages of permitting and development. The information disclosed below is based on the information contained in the NAPP Technical Report. Please refer to "Introduction - Technical Disclosures" above for more information.

| Project            | Type of mine | Status            |
|--------------------|--------------|-------------------|
| Keyser Project     | Underground  | Permit in Process |
| North Mine Project | Underground  | Permit in Process |
| A Seam Project     | Underground  | Permitted         |

### **Environmental and Other Regulatory Matters**

The Company's business is subject to numerous federal, state and local laws and regulations with respect to matters such as permitting and licensing, employee health and safety, reclamation and restoration of property and protection of the environment.

<sup>(2)</sup> The Hamer (Byers) surface mine will exhaust its economically recoverable reserves in 2019.

In the United States, environmental laws and regulations include, but are not limited to, the federal Clean Air Act ("CAA") and its state and local counterparts with respect to air emissions; the federal Clean Water Act ("CWA") and its state counterparts with respect to water discharges; the Resource Conservation and Recovery Act ("RCRA") and its state counterparts with respect to solid and hazardous waste generation, treatment, storage and disposal, as well as the regulation of underground storage tanks; and the federal Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and its state counterparts with respect to releases, threatened releases, and remediation of hazardous substances. Other environmental laws and regulations require reporting, even though the impact of that reporting is unknown. The Company's compliance with these laws and regulations may be costly and time-consuming and may delay commencement, continuation or expansion of exploration or production at our operations. These laws are constantly evolving and have become increasingly stringent, however, with the recent change in the U.S. Administration, there has been repeal of some over-reaching regulation and an indication that additional over-stringent regulations will be modified. The ultimate impact of complying with existing laws and regulations is not always clearly known or determinable due in part to the fact that certain implementing regulations for these environmental laws have not yet been promulgated and in certain instances are undergoing revision. These laws and regulations, particularly new legislative or administrative proposals (or judicial interpretations of existing laws and regulations) related to the protection of the environment, could result in substantially increased capital, operating and compliance costs and could have a material adverse effect on our operations and/or our customers' ability to use our products.

The Company strives to conduct its mining operations in compliance with all applicable federal, state and local laws and regulations. However, due in part to the extensive and comprehensive regulatory requirements, along with changing interpretations of these requirements, violations occur from time to time in our industry and at our operations.

### **Employees**

As of the date of this AIF, Corsa produces coal from five mines and operates two preparation plants with approximately 400 employees.

# 4.2 Risk Factors

Corsa is subject to a number of risks and uncertainties as a result of its operations. In addition to the other information contained in this AIF and Corsa's other publicly filed disclosure documents, readers should give careful consideration to the following risks, each of which could have a material adverse effect on Corsa's business prospects or financial condition.

### **Risk Factors Relating to Operations and Production**

### Production

Corsa's revenues depend on its level of coal mining production and the sales price for the coal it has mined. Production targets include Corsa's current operating mines and those that are in the permitting stage, under development or under option. As a result, Corsa may not achieve its production projections. Corsa may then need to lease and/or option additional properties which may take time and may be subject to the same uncertainties inherent in mining. In addition, Corsa's production levels are no guarantee that Corsa will be able to obtain sales contracts or orders for the coal it produces and as a result, sales may be below its production capabilities and Corsa may reduce actual production to reflect actual customer demand and sales orders received. Also, there is no guarantee as to the price for the coal sales.

Resource Exploration, Development and Production Risks

Corsa is engaged in the business of exploring, acquiring and developing coal resource properties. Coal exploration is speculative in nature and there can be no assurance that any coal discovered or acquired will result in an increase in Corsa's resource base. Such exploration and development as well as acquisitions involves a high degree of financial and other risks over a significant period of time, which even a combination of careful evaluation, experience and knowledge may not eliminate. Substantial expenses will be required to expand its resource base and to design and construct mining and processing facilities. Whether a resource deposit will be commercially viable depends on a number of factors, including the particular attributes of the deposit (i.e., coal quality, size, access and proximity to infrastructure), financing costs, the cyclical nature of commodity prices and government regulations (including those relating to environmental protection).

A future increase in Corsa's reserves will depend on its ability to select and acquire suitable properties. No assurance can be given that Corsa will be able to locate or acquire control over satisfactory properties for acquisition that will be economically viable in the current market.

#### Resource and Reserves

To achieve its projected level of production, a significant portion of Corsa's resources will need to be upgraded to reserves. Such upgrade in classification will require additional data and establishing the economic feasibility of mineralization currently classified as resources. There can be no assurance that Corsa will be able to successfully upgrade its resources to reserves.

#### Reserve Estimates and Replacement of Reserves

Estimating reserves and resources involves a determination of economic recovery of minerals that are in the ground, which in turn requires that assumptions be made regarding its future price and the cost of recovery. There are numerous uncertainties inherent in estimating the quantities and qualities of, and costs to mine, recoverable reserves, including many factors beyond Corsa's control. Such factors include: improvements to mining technology; changes to government regulation; geologic and mining conditions, which may not be fully identified by available exploration data or may differ from Corsa's experience in current operations; historical production from the area compared with production from other producing areas; future coal prices; operating costs; capital expenditures; taxes; royalties and development and reclamation costs; preparation plant recovery levels and mine recovery levels; all of which may vary considerably from actual results.

Corsa's actual production experience may require the revision of production estimates because actual mineral tonnage recovered from an identified reserve or property may vary materially from estimates. Coal reserves disclosed by Corsa should not be interpreted as assurance of mine life or of the profitability of current or future operations. In addition, revenues and expenditures with respect to Corsa's reserves may vary materially from estimates. The estimates of reserves may not accurately reflect Corsa's actual reserves and may need to be restated in the future. Any inaccuracy in Corsa's estimates could result in lower than expected revenues or higher than expected costs. Corsa's recoverable reserves will decline as it produces coal and Corsa may not be able to mine all of its reserves. Corsa's future success may depend on conducting successful exploration and development activities or acquiring properties containing economically recoverable reserves. There can be no assurance that Corsa will succeed in developing additional mines in the future.

### Permitting Matters

Mining companies must obtain numerous permits, licenses and approvals that strictly regulate access, environmental and health and safety and other matters in connection with coal mining. Permitting rules are complex and may change over time, which may make securing additional permits or modification to existing permits and compliance difficult.

Regulatory agencies have considerable discretion in whether or not to issue permits or grant consents and they may choose not to issue permits or grant consents to Corsa or renew existing permits, licenses or consents as they come due. There can be no assurance that Corsa will be able to acquire, maintain, amend or renew all necessary licenses, permits, mining rights or surface rights for its anticipated exploration and development. If Corsa is to be granted a permit, it may be some time before those new permits are issued. Accordingly, new permits, licenses and approvals required by Corsa to operate the mines may not be issued at all, or if issued, may not be issued in a timely fashion, or may contain requirements which restrict its ability to conduct its mining operations or subject it to additional constraints or costs.

# Government Regulation

Government authorities regulate the coal mining industry to a significant degree, in connection with, among other things, exploration and development activities, employee health and safety, labor standards, air quality standards, toxic substances, water pollution, groundwater quality and availability, plant and wildlife protection, the reclamation and restoration of mining properties and the discharge of materials into the environment. Corsa is subject to extensive U.S. federal and state laws and regulations controlling not only the mining of and exploration of mineral properties, but also the possible effects of such activities upon the environment. For example, government regulatory agencies may order certain of Corsa's mines to be closed temporarily or permanently. Future legislation and regulations or amendments could cause additional expense, capital expenditures, reclamation obligations, revocation of licenses, restrictions and delays in the development of Corsa's properties, the extent of which cannot be predicted. Government regulations in the U.S. and the countries where our international export customers are located including regulations relating to the environment, prices, taxes (including tariffs or similar duties on steel, of which metallurgical coal in an essential requirement for production), royalties, land tenure, land use and importing and exporting of coal also impact on the marketability of the coal owned by Corsa.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions against Corsa, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Parties engaged in mining

operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

# Operating Risks

Corsa's coal mining operations are and will continue to be subject to operating risks that could result in decreased coal production. Such operating risks may increase Corsa's cost of mining and delay or halt production at particular mines, either permanently or for varying lengths of time. These conditions and events include but are not limited to:

- the lack of availability of qualified labor;
- inability to acquire, maintain, amend or renew necessary permits or mining or surface rights in a timely manner, if at all;
- failure of resource and reserve estimates to prove correct;
- interruptions due to transportation delays or unavailability;
- changes in governmental regulation of the coal industry, including the imposition of additional taxes, fees or actions to suspend or revoke its permits or changes in the manner of enforcement of existing regulations;
- limited availability of mining and processing equipment and parts from suppliers;
- the lack of availability of the necessary equipment of the type and size required to meet production expectations;
- mining and processing equipment failures and unexpected maintenance problems;
- unfavorable changes or variations in geologic conditions, such as the thickness of the coal deposits, irregularity in coal seams and the amount of rock embedded in or overlying the coal deposit and other conditions that can make underground or open pit mining difficult or impossible;
- severe and adverse weather and natural disasters, such as heavy rains and flooding;
- increased or unexpected reclamation and/or water treatment costs;
- unfavorable fluctuations in the cost or availability of necessary commodities or commodities-based products such as diesel fuel, lubricants, explosives, electric cables and steel;
- · unexpected mine safety accidents, including fires and explosions from methane; and
- failure of coal mined to meet expected quality specifications.

These conditions and events may increase Corsa's cost of mining and delay or halt production at particular mines either permanently or for varying lengths of time. Corsa's planned exploration and development projects and acquisition activities may not result in the acquisition of significant additional coal deposits and Corsa may not have continuing success developing its current or additional mines.

#### Mining Operations and Insurance

Mining operations generally involve a high degree of risk. Corsa's operations will be subject to all of the hazards and risks normally encountered in resource exploration, development and exploitation that are beyond the control of Corsa. Such risks include pit wall slides, pit flooding, unusual and unexpected geological formations, seismic activity, rock bursts, ground failure and other conditions involved in the drilling or cutting and removal of material, environmental hazards, industrial accidents, periodic interruptions due to adverse weather conditions, labor disputes, political unrest, threats of war, terrorist threats and theft of production. The occurrence of any of the foregoing could result in damage to, or destruction of, resource properties or interests, production facilities, personal injury, damage to life or property, environmental damage, delays or interruption of operations, increases in costs, monetary losses, legal liability and adverse government action. Although Corsa maintains liability insurance in an amount and scope that it considers consistent with industry practice, covered liabilities could exceed policy limits resulting in Corsa incurring significant costs. The potential costs associated with liabilities not covered by insurance or excess insurance coverage may cause substantial delays and require significant capital outlays.

The climatic conditions of Corsa's activities will have an impact on operations and, in particular, severe weather such as heavy precipitation and flooding could disrupt the delivery of supplies, equipment and fuel. Exploration and mining activity levels could fluctuate. Unscheduled interruptions in Corsa's operations due to mechanical or other failures or industrial relations related issues or problems or issues with the supply of goods or services could have a serious impact on the performance of those operations. Other operating risks include unfavorable changes or variations in geological conditions such as the thickness of the coal deposits and the amount of rock embedded in or overlying the coal deposit and other conditions that can make underground mining difficult or impossible; mining and processing equipment failures and unexpected maintenance problems; increased water entering mining areas and increased or accidental mine water discharges; unfavorable fluctuations in commodities-based products such as diesel fuel, reagents for processing, lubricants, electric cables, rubber, explosives, steel, copper, and other raw materials; and unexpected mine safety accidents, including fires and explosions from methane. There can be no assurance that Corsa will be able to manage effectively the expansion of its operations or that its current personnel, systems, procedures and controls will be adequate to support operations.

### Fatality or Severe Injury to Employees or Contractors

The business of coal mining is inherently risky. During construction of the mine, maintaining the mine or during mining operations, employees and contractors may be subject to risks and hazards, including environmental hazards, industrial accidents, human error, weather events, light vehicle incidents or other events. The occurrence of any of the foregoing could result in personal injury, permanent disabilities or fatalities to one or more employees or contractors. These incidents could lead to investigation delays, criminal or civil proceedings, investigation costs, monetary damages and reputation damage to Corsa.

#### Uninsured Risks

Corsa may become subject to liability for hazards that cannot be insured against or against which it may elect not to be so insured because of high premium costs. Furthermore, Corsa may incur liability to third parties (in excess of any insurance coverage) arising from negative environmental impacts or any other damage or injury.

# Coal Transportation and Costs

Coal producers depend upon rail, barge, trucking, overland conveyor and other systems to deliver coal to customers and transportation costs are a significant component of the total cost of supplying coal. While domestic coal customers often arrange and pay for transportation of coal from the mine to the point of use, Corsa is required to transport the coal to the port of vessel loading. Disruption of these transportation services because of weather-related problems, insurgency, strikes, lock-outs, transportation delays, excessive demand for their services or other events could temporarily impair Corsa's ability to supply coal to customers and expose Corsa to liability for vessel and rail demurrage which could adversely affect Corsa's revenue and results of operations.

Disruption in capacity of, or increased costs of, transportation services could make coal a less competitive source of energy or could make Corsa's coal less competitive than other sources of coal. In addition, increases in the cost of fuel, or changes in other costs relative to transportation costs for coal produced by competitors, could adversely affect Corsa's operations. To the extent such increases are sustained, Corsa could experience losses and may decide to discontinue certain operations forcing Corsa to incur closure or care and maintenance costs, as the case may be.

# Dependence on Third Party Suppliers and Loss of Customer Base

Corsa may enter into coal supply agreements which may require the delivery of coal on a regular basis to its customers. If Corsa's own mining production does not reach capacity, Corsa may have to enter into coal supply agreements with third party suppliers in order to meet its customers' demands. There can be no assurance that the third parties will, from time to time, be able to supply the requisite quantities of coal on the schedule negotiated with Corsa. Such third party suppliers may be subject to the same risks relating to mining, engineering, weather, labor, materials and equipment as Corsa.

Changes in purchasing patterns in the coal industry may make it difficult for Corsa to enter into long term supply agreements with new customers. The execution of a satisfactory coal supply agreement may be the basis on which Corsa will undertake the development of coal reserves required to be supplied under the agreement. When Corsa's current agreements with customers expire or are otherwise renegotiated, Corsa's customers may decide to purchase fewer tons of coal than in the past or on different terms, including pricing terms less favorable to Corsa, or may choose to purchase from other suppliers. Coal contracts may also contain force majeure or other provisions which may allow for the temporary suspension of performance by Corsa or its customers during the duration of specified events beyond the control of the affected party.

# Quality Specifications

Most of Corsa's coal supply agreements will contain provisions requiring the delivery of coal meeting quality specifications for certain characteristics such as sulfur content, ash content, hardness, ash fusion temperature, FSI, volatile matter and reflectance and other matters such as phosphorous. Failure to meet these specifications could result in economic penalties, including price adjustments, the rejection of deliveries or, in the extreme, termination of the contracts. Corsa could also be obligated to pay the additional costs incurred by the buyer to purchase compliant coal.

#### Title to Assets

Corsa has leased or optioned mineral rights in order to conduct a number of its mining operations. If defects in title or boundaries are found to exist after Corsa commences mining, its right to mine may be limited or prohibited. No assurance can be given that there are no title defects affecting Corsa's, or its third-party suppliers, coal properties or those which it proposes to acquire or those

upon which it has operations. The coal or operations properties may be subject to prior unregistered liens, agreements or transfers or other undetected title defects. There can be no assurance that title to Corsa's coal properties or those on which it has operations will not be challenged or impugned or defeated by a holder of superior title or registered liens or adverse claims. Third parties may have valid claims underlying portions of Corsa's interests and the permits or tenures may be subject to prior unregistered agreements or transfers and title may be affected by undetected defects. If a title defect exists, it is possible that Corsa may lose all or part of its interest in the properties to which such defects relate. If there are title defects with respect to any properties, Corsa might be required to compensate other persons or perhaps reduce its interest in the property. Also, in any such case, the investigation and resolution of title issues may divert management's time from on-going exploration and development programs.

### Acquisition Risks

Corsa's future success may depend upon it conducting successful exploration and development activities and acquiring properties containing additional economic coal reserves. Corsa may also be required to generate capital, either through its operations or through outside financing, to mine these additional reserves. Corsa may increase its coal reserve base through acquisitions of other mineral rights, leases, or producing properties or continuing to use its existing leased properties.

Acquisitions involve a number of inherent risks, any of which could cause Corsa to not realize the anticipated benefits. Corsa may be unable to successfully integrate the companies, businesses or properties it acquires. Acquisition transactions involve various inherent risks, including:

- uncertainties in assessing the value, strengths, and potential profitability of, and identifying the extent of all weaknesses, risks, contingent and other liabilities (including environmental or mine safety liabilities) of, acquisition candidates;
- the potential loss of key customers, management and employees of an acquired business;
- the ability to achieve identified operating and financial synergies anticipated to result from an acquisition;
- problems that could arise from the integration of the acquired business; and
- unanticipated changes in business, industry or general economic conditions that affect the assumptions underlying Corsa's rationale for pursuing the acquisition.

Any one or more of these factors could cause Corsa not to realize the benefits anticipated to result from an acquisition. Any acquisition opportunities Corsa may pursue could materially affect its liquidity and capital resources and may require Corsa to incur indebtedness, seek equity capital or both. In addition, future acquisitions could result in Corsa assuming more long-term liabilities relative to the value of the acquired assets.

#### Surety Bonds

U.S. federal and state laws require Corsa to obtain surety bonds to secure payment of certain long-term obligations such as mine closure or reclamation costs, federal and state workers' compensation costs, coal leases and other obligations. These bonds are typically renewable annually. Surety bond issuers and holders may not continue to renew the bonds or may demand additional collateral or other less favorable terms upon those renewals. The ability of surety bond issuers and holders to demand additional collateral or other less favorable terms has increased as the number of companies willing to issue these bonds has decreased over time. Failure to obtain or renew surety bonds on acceptable terms could affect Corsa's ability to secure reclamation and coal lease obligations in the United States and its ability to mine or lease coal properties. That failure could result from a variety of factors, including, without limitation: (i) lack of availability, higher expense or unfavorable market terms of new bonds; (ii) restrictions on availability of collateral for current and future third-party surety bond issuers under the terms of Corsa's current debt instruments; and (iii) the exercise by third-party surety bond issuers of their right to refuse to renew the surety.

# **Risk Factors Relating to Capital Resources**

#### Additional Funding Requirements

Capital expenditures for the exploration, development, production, and acquisition of coal reserves in the future may depend in part on funds not entirely raised by internally generated cash flow. As a result, Corsa may need external equity or debt financing and there is no assurance that it will be able to secure either kind of external financing at an economically viable cost and under reasonable conditions, if at all.

Additional equity financing could be dilutive to shareholders and could substantially decrease the trading price of Corsa's securities. Corsa may issue Common Shares or other equity securities in the future for a number of reasons. Additional debt financing, if secured, could involve restrictions being placed on financing and operating activities which could reduce the scope of Corsa's

operations or anticipated expansion, or involve forfeiting its interest in some or all of its properties and licenses, incurring financial penalties, or reducing or terminating its operations.

### Taxation in Canada and the United States

Corsa, a Canadian corporation, is subject to income tax under Canadian tax rules. The principal business operations of Corsa in the United States are conducted through its wholly owned direct U.S. subsidiary, Wilson Creek Holdings, Inc. ("WCH"), which owns approximately 81.0% of WCE, a U.S. limited liability company and 100% of Mincorp Acquisition Corp. ("MAC"), a U.S. corporation. WCE owns Maryland Energy ("MER"), a U.S. limited liability company. MAC owns Mincorp, Inc., PBS Coals, Inc., Rox Coal, Inc., Norwich Services, Inc. Quecreek Mining, Inc., Croner, Inc. and Elk Lick Energy, Inc., all of which are U.S. Corporations. Corsa's subsidiaries are U.S. companies and subject to taxation under U.S. tax rules. WCE and MER are treated as disregarded entities for U.S. tax purposes, and as such, their income and losses will be treated as incurred directly by WCH (on a pro rata basis based on its ownership interest in WCE), their parent company, which is subject to U.S. tax laws. WCH will file a consolidated tax return which will include MAC and all of its subsidiaries. The payment of dividends from Corsa's subsidiaries to Corsa will be subject to U.S. withholding tax in certain circumstances.

### Risk Factors Relating to Equipment and Labor

Availability of Equipment and Access Restrictions

Natural resource exploration, development and exploitation activities are dependent on the availability of particular types of drilling, cutting, conveying and other excavating equipment and related supplies and equipment in the particular areas where such activities will be conducted as well as their parts in the case that maintenance is needed on such equipment. Demand for or restrictions on access to such limited equipment and supplies may affect the availability of such equipment and may delay exploration, development and exploitation activities. Future operations could be adversely affected if Corsa encounters difficulty obtaining equipment, tires and other supplies on a timely basis, or such equipment and supplies are available only at significantly increased prices.

#### Labor

If either the rail, truck or barge carrier or port facilities upon which Corsa will be dependent to deliver coal to its customers are or will become unionized, there is potential for strikes, lockouts or other work stoppages or slow-downs involving the unionized employees of its key service suppliers which could have a material adverse effect on Corsa. There is competition for qualified personnel in the Appalachian coal mining industry and there can be no assurance that Corsa will be able to continue to attract and retain all personnel necessary for the development and operations of its business. Coal mining is a labor-intensive industry. From time to time, Corsa may encounter a shortage of experienced mine workers. In addition, the employees of Corsa may choose to unionize, which may disrupt operations on account of contract negotiations, grievances, arbitrations, strikes, lockouts or other work stoppages or actions. As a result, Corsa may be forced to substantially increase labor costs to remain competitive in terms of attracting and retaining skilled laborers. Furthermore, it is possible that a decreased supply of skilled labor may cause a delay in Corsa's operations and negatively affect its ability to expand production.

### Equipment Breakdown

Breakdowns of equipment, difficulties or delays in obtaining replacement shovels and other equipment, natural disasters, industrial accidents or other causes could temporarily disrupt Corsa's operations, which in turn may also materially and adversely affect its business, prospects, financial condition and results of operations.

# **Risk Factors Relating to Market Conditions**

#### Competition

The resource exploration and coal mining business is competitive in all of its phases. Competitive factors in the distribution and marketing of coal include price and methods and reliability of delivery. Corsa will compete with numerous other companies and individuals, including competitors with greater financial, technical and other resources, in the search for and the acquisition of attractive resource properties. The principal factors that determine the price for which Corsa's coal can be sold are demand, competition, coal quality, efficiency in extracting and transporting coal, and proximity to customers. Increases in transportation costs could make Corsa's coal less competitive as a source of energy or could make some of Corsa's operations less competitive than other sources of coal. An oversupply of coal will also likely adversely affect the price of coal on the market. There can be no

assurance that Corsa will be able to compete successfully with other coal producers and suppliers and its failure to compete effectively could adversely affect its operations and performance.

In recent years, the competitive environment for coal was impacted by sustained growth in a number of the largest markets in the world, including the U.S., China, Japan and India, where demand for steel has supported pricing for metallurgical coal. The economic stability of these markets has a significant effect on the demand for coal and the level of competition in supplying these markets. The cost of ocean transportation and the value of the U.S. dollar in relation to foreign currencies significantly impact the relative attractiveness of Corsa's coal as it competes on price with other foreign coal producing sources. During the last several years, the U.S. coal industry has experienced increased consolidation, which has contributed to the industry becoming more competitive. Increased competition by competing coal producers in the markets in which Corsa serves could cause a decrease in demand and/or pricing for Corsa's coal.

### Foreign Currency Exchange

Corsa reports its financial results in U.S. dollars; however, it incurs certain costs and expenses in Canadian dollars. As a result, Corsa's operating results and cash flows could be negatively affected by currency exchange rates between the Canadian and U.S. dollars.

# Foreign Currency Fluctuations

Corsa may compete in international markets against coal produced in other countries. Coal is sold internationally in U.S. dollars. As a result, mining costs in competing producing countries may be reduced in U.S. dollar terms based on currency exchange rates, providing an advantage to coal producers in other countries. Currency fluctuations among countries purchasing and selling coal could adversely affect the competitiveness of Corsa's coal in international markets.

# Commodity Prices

Commodity prices, including coal prices, fluctuate widely and may be affected by numerous factors beyond the control of Corsa such as the sale or purchase by various dealers, central banks and financial institutions, interest rates, exchange rates, inflation or deflation, currency exchange fluctuation, global and regional supply and demand, production and consumption patterns, speculative activities, increased production due to improved mining and production methods, government regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of resources, environmental protection and international political and economic trends, conditions and events. The price of commodities, including coal, has fluctuated widely in recent years, and future serious price declines could cause continued development of Corsa's properties to be impracticable. Further, reserve calculations and life-of-mine plans using significantly lower commodity prices could result in material write downs of Corsa's investment in mining properties and increased amortization, reclamation and closure charges.

In addition to adversely affecting reserve estimates and its financial condition, declining commodity prices could impact operations by requiring a reassessment of the feasibility of a particular project. Such a reassessment may be the result of a management decision or may be required under financing arrangements related to a particular project. Even if a project is ultimately determined to be economically viable, the need to conduct such a reassessment may cause substantial delays or may interrupt operations until the reassessment can be completed.

### Coal Price and Volume Volatility

Coal demand and price are determined by numerous factors beyond the control of Corsa including the domestic and international demand for steel and steel products; coal consumption by the domestic utility industry; the demand for electricity; the availability of competitive coal supplies; the supply and demand for domestic and foreign coal; seasonal changes in the demand for Corsa's coal; interruptions due to transportation delays; proximity to, and capacity and cost of, transportation facilities; air emission standards for coal fired power plants; inflation; political and economic conditions; global or regional political events and trends; international events and trends; international exchange rates; the cost implications to Corsa in response to regulatory changes, administrative and judicial decisions; production costs in major coal producing regions; the price and availability of alternative fuels, including the effects of technology developments; the effect of worldwide energy conservation efforts; future limitations on utilities' ability to use coal as an energy source due to the regulation and/or taxation of greenhouse gases under climate change initiatives; and various other market forces.

An increase in demand for coal could attract new investors to the coal industry, which could result in the development of new mines and increased production capacity throughout the industry. An oversupply in world markets could occur. The general downturn in the economies of Corsa's significant markets occurred in 2012 and continued throughout 2013, 2014, 2015 and part

of 2016. A significant reduction in the demand for steel products has reduced and could continue to reduce the demand for metallurgical coal. Similarly, if less expensive ingredients could be used in substitution for metallurgical coal in the integrated steel mill process, the demand for metallurgical coal would materially decrease. The combined effects of any or all of these factors on coal price or volume cannot be predicted.

Corsa's results of operations may also be dependent upon the prices it charges for its coal as well as its ability to improve productivity and control costs. Decreased demand would cause spot prices to decline and require an increase in productivity and lower costs in order to maintain margins. Corsa may not be able to maintain its margins. Declining prices may adversely affect operating results for future periods and Corsa's ability to generate cash flows necessary to improve productivity and invest in operations.

#### Financial Market Fluctuations

In recent years, the securities markets in Canada and elsewhere have experienced a high level of price and volume volatility, and the market prices of securities of many public companies have experienced significant fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. It may be anticipated that any quoted market for Corsa's securities will be subject to such market trends and that the value of such securities may be affected accordingly. The turmoil in the global financial markets has had and may continue to have an impact on Corsa. Numerous factors, including many over which Corsa has no control, may have a significant impact on the market price of its securities.

In addition, the current economic environment has reduced the availability of credit in the marketplace. Volatility and disruption of financial markets could limit Corsa's customers' ability to obtain adequate financing to maintain operations and result in a decrease in sales volumes that could have a negative impact on operational results.

# Volatility in Market Price

The market price of the Common Shares has experienced and may experience significant volatility. Numerous factors, including many over which Corsa has no control, may have a significant impact on the market price of the Common Shares.

#### Raw Material Costs

Unexpected increases in raw material costs could greatly impair Corsa's operations. The coal mining operations of Corsa use significant amounts of steel, petroleum products and other raw materials for mining equipment, supplies and materials. If the price of steel, petroleum products and other commodities such as rubber products and liquid fuels increase, Corsa's operational expenses will increase.

#### Coal Hedging Risk

Corsa may, in the future, hedge its projected future coal production by entering into customer contracts that require it to deliver coal with established pricing over a period of time. If the price of coal increases, Corsa may be materially adversely affected by having hedged its future production pursuant to these contracts. Alternatively, should coal prices decrease below the levels stated in the contracts, Corsa could be materially adversely affected should these contracts not be honored.

Terrorist Attacks and Threats, Escalation of Military Activity in Response to Such Attacks or Acts of War

Corsa's business will be affected by general economic conditions, fluctuations in consumer confidence and spending, and market liquidity, which may decline as a result of numerous factors outside of Corsa's control, such as terrorist attacks and acts of war. Future terrorist attacks against U.S. targets, rumors or threats of war, actual conflicts involving the U.S. or its allies, or military or trade disruptions affecting customers may materially adversely affect operations. As a result, there could be delays or losses in transportation and deliveries of coal to customers, decreased sales of coal and extension of time for payment of accounts receivable from customers. Strategic targets such as energy-related assets may be at greater risk of future terrorist attacks than other targets in the U.S. In addition, such disruption may lead to significant increases in energy prices that could result in government-imposed price controls. It is possible that any, or a combination, of these occurrences could have a material impact on cash flows, results of operations or financial condition.

### Foreign currency risk

Corsa's foreign exchange risk arises primarily with respect to the U.S. dollar as a result of its activities evaluating potential opportunities and the development and operation of its assets in the United States. Corsa has elected not to actively manage its foreign exchange exposure at this time.

#### Price risk

Corsa is exposed to price risk with respect to commodity and equity prices. Equity price risk is defined as the potential adverse impact on Corsa's earnings due to movements in individual equity prices or general movements in the level of the stock market. Commodity price risk is defined as the potential adverse impact on earnings and economic value due to commodity price movements and volatilities. Corsa closely monitors commodity prices of resources, individual equity movements, and the stock market to determine the appropriate course of action to be taken by Corsa.

# **Risk Factors Relating to Legal Matters**

### Litigation

Due to the nature of mining operations, it is possible for legal proceedings to arise from time to time in the course of Corsa's business and operations. There is always the potential that an individual matter or the aggregation of many matters could adversely affect Corsa.

#### Environmental Risks, Hazards and Liabilities

Corsa's operations may inadvertently and substantially impact the environment or cause exposure to hazardous materials, either of which could result in material liabilities to Corsa. Corsa may be subject to claims under U.S. federal and state statutes, and/or common law doctrines, for toxic torts, natural resource damages, and other damages as well as the investigation and clean-up of soil, surface water and groundwater. Such claims may arise, for example, out of current, former or future activities at sites that Corsa owns or operates, as well as at sites that Corsa or its predecessor entities owned or operated in the past, or at contaminated sites that have always been owned or operated by third parties. Mining operations can also impact flows and water quality in surface water bodies and remedial measures may be required, such as lining of stream beds, to prevent or minimize such impacts. Many of Corsa's mining operations take place in the vicinity of streams, and similar impacts could be asserted or identified at other streams in the future. Corsa's liability for such claims may be joint and several, so that it may be held responsible for more than its share of the remediation costs or other damages, or even for the entire share.

Corsa has reclamation, water treatment and may have mine closure obligations. It is difficult to determine the exact amounts which may be required to complete all reclamation activities in connection with their properties. Estimates of total reclamation, water treatment and mine-closure liabilities are based upon permit requirements and its experience. The amounts recorded are dependent upon a number of variables, including the estimated future retirement and treatment costs, estimated proven reserves, assumptions involving profit margins and inflation rates. If these accruals are insufficient or liability in a particular year becomes greater than may be anticipated, Corsa's operating results could be adversely affected.

# Environmental Regulation

All phases of the natural resources business present environmental risks and hazards and are subject to environmental regulation pursuant to a variety of international conventions and Canadian and U.S. laws and regulations. Environmental legislation provides for, among other things, restrictions and prohibitions on spills, releases or emission of various substances produced in association with operations. The legislation also requires that facility sites and mines be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. Compliance with such legislation can require significant expenditures and a breach may result in the imposition of fines and penalties, and in some cases, enforcement actions including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed or permits revoked and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Corsa's total compliance with the full spectrum of U.S. environmental regulation may not always be possible, and significant penalties may be incurred as a result of violations of environmental laws.

Environmental legislation has evolved in a manner that resulted in stricter standards and enforcement, larger fines and liability and increased capital expenditures and operating costs, however, with changes in the state and U.S. Administration, there may be changes in the promulgation of stricter regulation. The environmental issues affecting Corsa's mining operations include permitting and reclamation requirements, air pollution laws and regulations, regulations relating to climate change, water pollution laws and regulations, including the United States Clean Water Act, hazardous waste regulation, Comprehensive Environmental Response, Compensation, and Liability Act, and similar state superfund statutes, Endangered Species Act, U.S. mine safety regulations and restrictions against greenhouse gas emissions. The discharge of pollutants into the air, soil or water may give rise to liabilities to governments and third parties and may require Corsa to incur costs to remedy such discharge. No assurance can be given that environmental laws will not result in a curtailment of production or a material increase in the costs of production, development or exploration activities or otherwise adversely affect Corsa's financial condition, results of operations or prospects. Corsa may

also be subject under such regulations to clean-up costs and liability for toxic or hazardous substances that may exist on or under or near any of its properties or that may be produced as a result of its operations.

# Black Lung Laws (pneumoconiosis)

Under U.S. federal black lung benefits laws, businesses that conduct current mining operations must make payments of black lung benefits to coal miners diagnosed with black lung disease and to certain survivors of a miner who dies from the disease. To fund these benefits, a tax is levied on coal production per ton for underground-mined and surface-mined coal to compensate miners who are diagnosed with black lung disease and certain survivors of miners who died from the disease, who worked after 1970, but no responsible coal mine operators were identified for the claims. In addition, some claims for which coal operators had previously been responsible will be obligations of the government trust funded by the tax. The Revenue Act of 1987 extended the termination date of this tax from January 1, 1996, to January 1, 2014, or the date on which the government trust becomes solvent. The majority of benefits are paid by coal mine operators to miners and survivors through self-insurance or commercial insurance policies.

The U.S. Patient Protection and Affordable Care Act of 2010 includes significant changes to the federal black lung program. These changes include provisions, retroactive to 2005, which (1) provide an automatic survivor benefit paid upon the death of a miner with an awarded black lung claim, without requiring proof that the death was due to pneumoconiosis and (2) establish a rebuttable presumption that miners with 15 or more years of coal mine employment are disabled due to pneumoconiosis. These legislative changes could have a material impact on Corsa's costs expended in association with the federal black lung program.

Corsa may be liable under state statutes for black lung payments and is covered through insurance policies, self-insurance or state programs. U.S. Congress and state legislatures regularly consider various items of black lung legislation, which, if enacted, could adversely affect Corsa's business, results of operations and financial position.

# Land Use Regulation and Conflicting Land Uses

Land use regulation on the U.S. federal, state and local level may negatively impact the ability to begin or carry out mining operations in particular locations. Zoning laws control land use and often prohibit mining entirely. New land use restrictions may be enacted in areas of current or planned mining operations by new legislation or regulation. Existing U.S. federal and state surface mining statutes also allow citizens to file petitions deeming certain land unsuitable for surface mining for a variety of reasons. It is difficult to predict when a "lands unsuitable" petition will be filed, and even more difficult to determine in advance whether the petition will be granted.

Corsa's properties may be affected by oil and gas development that may impact coal development by increasing the cost of coal recovery and decreasing the amount of coal recoverable. As determinations that lands are unsuitable are awarded more frequently, the amount of land available for mining declines and the risk that mining in planned areas will be prohibited increases. There is a risk that certain lands will not be open for mining, decreasing the number of operations Corsa can maintain or acquire in the future. Even in areas where mining may not be prohibited outright, the presence of other land uses restricts the ability of mining companies to operate efficiently. Residential structures, other buildings, gas wells, pipelines, roads, electric transmission lines, and numerous land uses other than mining are commonly located in areas where Corsa operates. These land uses may inhibit Corsa's operations, and negative impacts on these land uses that may result from Corsa's operations could create liability exposure. Additionally, the need to accommodate other land uses may result in a less efficient use of the mining property.

### U.S. Mine Safety Regulation

Employee safety and health regulation in the U.S. mining industry is comprehensive and pervasive. The cost of complying with numerous state and federal safety and health laws applicable to the mining industry is substantial. Negative publicity surrounding a series of tragic accidents in the U.S. mining industry over the past decade has resulted in expensive new safety requirements and substantially increased penalties for failure to comply with these regulations. Given the complexity of the mine safety and health regulations, there is a risk that Corsa's business operations will be affected by these regulations.

# Climate Change

Climate change continues to attract considerable public and scientific attention. There is widespread concern about the contributions of human activity to such changes, especially through the emission of greenhouse gasses ("GHGs"). There are three primary sources of GHGs associated with the coal industry. First, the end use of our coal by our customers in electricity generation, coke plants, and steel making is a source of GHGs. Second, combustion of fuel by equipment used in coal production and to transport our coal to our customers is a source of GHGs. Third, coal mining itself can release methane, which is considered to be a more

potent GHG than CO<sub>2</sub>, directly into the atmosphere. These emissions from coal consumption, transportation and production are subject to pending and proposed regulation as part of initiatives to address global climate change.

There are many legal and regulatory approaches currently in effect or being considered to address GHGs, including international treaty commitments, new foreign, federal and state legislation that may impose a carbon emissions tax or establish a "cap and trade" program, and regulation by the EPA. As a result, numerous proposals have been made and are likely to continue to be made at the international, national, regional and state levels of government to monitor and limit emissions of GHGs. Collectively, these initiatives could result in higher electric costs to our customers or lower the demand for coal used in electric generation, which could in turn adversely impact our business.

At present, we are principally focused on metallurgical coal production, which is not used in connection with the production of power generation. However, we may produce and sell coal into the power-generation market. The market for our coal may be adversely impacted if comprehensive legislation or regulations focusing on GHG emission reductions are adopted, or if our customers are unable to obtain financing for their operations.

### Restriction against Greenhouse Gas Emissions

U.S. federal and state laws restricting the emissions of greenhouse gases in areas where Corsa will conduct its business or sell its coal could adversely affect its operations and demand for coal. Corsa may be subject to regulation of greenhouse gas emissions from stationary sources as well as mobile sources such as cars and trucks. Current and proposed laws, regulations and trends, electricity generators may influence the switch to other fuels that generate less greenhouse gas emissions, possibly further reducing demand for coal.

### Anti-Corruption Legislation

Corsa is subject to anti-corruption legislation including the Corruption of Foreign Public Officials Act (Canada) and other similar acts (collectively "Anti-Corruption Legislation"), which prohibit Corsa or any of its officers, directors, employees or agents acting on its behalf from paying, offering to pay or authorizing the payment of anything of value to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an office capacity. The Anti-Corruption Legislation also requires public companies to make and keep books and records that accurately and fairly reflect their transactions and to devise and maintain an adequate system of internal accounting controls. Corsa's international activities create the risk of unauthorized payments or offers of payments by its employees, consultants or agents, even though they may not always be subject to its control. Corsa strictly prohibits these practices by its employees and agents. However, Corsa's existing safeguards and any future improvements may provide to be less than effective, and its employees, consultants and agents may engage in conduct for which Corsa may be held responsible. Any failure by Corsa to adopt appropriate compliance procedures and to ensure that its employees and agents comply with Anti-Corruption Legislation and applicable laws and regulations in foreign jurisdictions could result in substantial penalties or restrictions on its ability to conduct its business, which may have a material adverse impact on Corsa or its share price.

### **Risk Factors Relating to Corporate Governance**

The Interests of Corsa's Principal Shareholder May Differ From Those of Other Shareholders

As of date of this AIF, assuming the tender for redemption of all units of WCE (the "WCE Units") and exchange for Common Shares, Quintana would exercise control or direction over an aggregate of 46,877,551 Common Shares, representing approximately 45.4% of Corsa's then issued and outstanding Common Shares. The interests of Quintana may conflict with the interests of other shareholders and there is no assurance that Quintana would vote its Common Shares in a way that benefits minority shareholders. Accordingly, unless applicable laws or regulations would require approval by the minority shareholders, Quintana is in a position to: (i) control Corsa's policies, management and affairs; (ii) subject to applicable laws, regulations and Corsa's articles and bylaws, adopt amendments to certain provisions of Corsa's articles; and (iii) otherwise determine the outcome of most corporate actions, including a change in control, merger or sale of all or substantially all of Corsa's assets.

# Potential Conflicts of Interest

Certain directors and officers of Corsa are, and may continue to be, involved in the mining and resource exploration industry through their direct and indirect participation in corporations, partnerships or joint ventures which are potential competitors of members of Corsa. As a result, situations may arise in connection with potential acquisitions in investments where the other interests of these directors and officers may conflict with the interests of members of Corsa. Directors and officers of Corsa with

conflicts of interest will be subject to and will follow the procedures set out in applicable corporate and securities legislation, regulation, rules and policies.

#### Dividends

Corsa has no dividend record and is unlikely to pay any dividends in the foreseeable future as it may employ available funds for resource exploration and development. Any future determination to pay dividends will be at the discretion of the board of directors and will depend on Corsa's financial condition, results of operations, capital requirements and such other factors as the board of directors then deems relevant.

# Reliance on Key Employees and Experience of Management

Corsa will be dependent on the experience of key executives and a small number of highly skilled and experienced executive officers, consultants and personnel, whose contributions to the immediate and future operations of Corsa and the implementation of Corsa's business plan are of great importance. Locating resource deposits depends on a number of factors, not the least of which is the technical skill of the exploration personnel involved. Given the competition for qualified management personnel in the coal industry, the loss of the services of any key management personnel may have an adverse effect on Corsa's business and prospects. Corsa may not be able to retain some or all of its key management personnel, and even if replaceable, it may be time consuming and costly to recruit qualified replacements. Corsa does not currently have any key man insurance policies on key employees and therefore there is a risk that the death or departure of any member of management or any key employee could have an adverse effect on Corsa.

#### Forward-Looking Information May Prove Inaccurate

Shareholders and prospective investors are cautioned not to place undue reliance on forward-looking information. By its nature, forward-looking information involves numerous assumptions, known and unknown risks and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking information or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate.

### Historical Resource Estimates and U.S. Disclosure Standards

This AIF sets forth certain historical estimates of "reserves" (the "Reserves Presentation") based on methodologies acceptable in Canada pursuant to NI 43-101, which are not compliant with the SEC Industry Guide 7 as discussed below.

NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes in Canada of scientific and technical information concerning mineral projects. Of note to U.S. investors, these standards differ significantly from the requirements of the SEC (including under its Industry Guide 7).

Under U.S. standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. U.S. investors are cautioned not to assume that all or any part of historical estimates of "reserves" in the Reserves Presentation will ever be converted into reserves, or if converted, what actual poundage and grade they may have. Accordingly, information concerning descriptions or mineralization, "resources" and "reserves" contained in the Reserves Presentation are not comparable to information made public by U.S. companies subject to the reporting and disclosure requirements of the SEC.

#### 5. COAL PROPERTIES

### 5.1 NAPP Division Properties

#### Introduction

The NAPP Division Properties consist of the Wilson Creek properties, which were acquired by the Company on December 7, 2010 through the purchase of WCE, on April 5, 2011 through the purchase of the Alumbaugh Property and on May 18, 2011 through the purchase of Maryland Energy, and the PBS properties, which were acquired by the Company on August 19, 2014 through the purchase of PBS Coals, Inc. The NAPP Division is based in Friedens, Pennsylvania, U.S.A. and focused on metallurgical coal production and sales in the Northern Appalachia coal region of the United States.

The following information in this section is based on or reproduced from the NAPP Technical Report. For a complete description of the assumptions, qualifications and procedures associated with this information, reference should be made to the full text of the NAPP Technical Report, which is available on Corsa's profile at www.sedar.com.

### Property Description and Location

The NAPP Division Properties are located in Pennsylvania and Maryland, approximately 60 miles southeast of Pittsburgh and 120 miles west of Pennsylvania's capital city of Harrisburg, within the Northern Appalachian coal-producing region of the eastern USA.

Two active underground mines and two active surface mines exist in Somerset County, Pennsylvania and another active underground mine is in Garrett County, Maryland. The division office is in Friedens, Pennsylvania. The coal resource properties consist of approximately 36,500 acres of mineral and/or surface control located in Somerset County Pennsylvania and Garrett County, Maryland. The properties are located on portions of eleven United States Geological Survey (USGS) quadrangles and generally consist of a complex assemblage of owned and/or leased tracts that range from a few acres to several hundred acres in size. Segregation of mineral and surface ownership is common to the properties, with Corsa acquiring the necessary rights to support development through purchase or lease agreements with predominately private owners or entities. Corsa typically only acquires rights for areas required for development of resources and therefore does not have contiguous property control throughout the project area.

Corsa operations currently consists of five active mines (see table below). Three of which are underground (Casselman, Acosta and Horning) and two active surface mines (Hamer and Schrock Run). Corsa operates two preparation plants and rail load-out facilities, the Cambria preparation plant which is serviced by the CSX rail line and the Shade Creek preparation plant which is serviced by the Norfolk Southern rail line. In addition, Corsa has another preparation plant, the Rockwood plant, which is on care-and-maintenance status. In addition to the active mines, Corsa is currently developing the Rhoads surface mine.

# **Active and Development Mines**

| Mine        | Type               | Status | Coal Seam                         |
|-------------|--------------------|--------|-----------------------------------|
| Casselman   | Underground        | Active | Upper Freeport                    |
| Acosta      | Underground        | Active | Middle Kittanning                 |
| Horning     | Underground        | Active | Lower Freeport                    |
| Schrock Run | Surface / Highwall | Active | Lower Freeport & Upper Kittanning |
| Hamer       | Surface / Highwall | Active | Upper & Middle Kittanning         |
| Rhoads      | Surface / Highwall | Active | Upper, Middle & Lower Kittanning  |

Typical royalty rates range from 6% to 7% of the gross sales price. All surface facilities for accessing the coal seams and processing, storing and shipping the production are controlled by Corsa.

# **Permits**

The NAPP Division Properties are the subject of numerous permits for surface and underground mining, for coal preparation and related facilities, and for haul roads and other incidental permits necessary for mining to occur. A listing of all current Pennsylvania Department of Environmental Protection ("PaDEP") permits is provided in the table below. Permits generally require that the permittee post a performance bond in an amount established by the regulatory program to provide assurance that any disturbance

or liability created during the course of mining operations is properly restored to an approved post-mining land use and that all regulations and requirements of the permits are fully satisfied before the bond is returned to the permittee. Significant penalties exist for any permittee who fails to meet the obligations of the permits including cessation of mining operations, which can lead to potential forfeiture of the bond. Any company, and its directors, owners and officers, which are subject to bond forfeiture, can be denied future permits under the program. Monitored under the Applicant Violator System (AVS) by the Federal Office of Surface Mining.

New permits or permit revisions will be necessary from time to time to facilitate the expansion or addition of new mining areas on the properties. New or modified mining permits are subject to a public advertisement process and comment period, and the public is provided an opportunity to raise an objection to any proposed mining operation. While there is some public opposition to mining in the USA, it is rare for objections to cause issuance of a permit to be denied. However, recent United States Environmental Protection Agency ("EPA") intervention in the surface mine permitting process in Pennsylvania and other states has resulted in lengthy delays in issuance of Section 401, 402 and 404 permits required under the Clean Water Act. Unless specific prohibitions against surface mining impacts were identified, other delays in obtaining necessary mining permits and authorizations for mining to occur are not reflected herein. MM&A is not aware of any prohibition of mining on the properties and, given sufficient time and planning, Corsa should be able to secure new permits to maintain its planned mining operations within the context of the current regulations. Necessary permits are in place to support current production on the properties.

The NAPP Division Properties and adjacent properties have supported surface and underground mining operations for more than 70 years. Consequently, numerous abandoned mines and related facilities exist within and adjacent to the properties. Each of the known abandoned mines and facilities within or adjacent to the properties has been identified to assess their potential impact on the remaining coal reserves. To the extent past mining impacts classification of coal reserves, all relevant factors were taken into consideration. The extent of these abandoned mines is shown in the figures accompanying the technical report or on the detailed maps included in MM&A's files. MM&A largely depends on data provided by Corsa and obtained from state agencies to identify the presence of previous mining.

Portions of the properties are located near local communities. Regulations prohibit mining activities within 300 feet of a residential dwelling, school, church or similar structure unless written consent is first obtained from the owner of the structure. Where required, such consents have been obtained where mining is proposed beyond the regulatory limits. All known mining restrictions have been considered for estimation of reserves herein.

# **Summary of NAPP Division Permits**

| SMCRA<br>Permit No. | Facility Name                     | Туре        | Current Permit<br>Status       | Permitted<br>Acres | Expiration<br>Date |
|---------------------|-----------------------------------|-------------|--------------------------------|--------------------|--------------------|
| 56110106            | Hamer                             | Surface     | Active                         | 107.7              | 7/25/18*           |
| 56120104            | Byers                             | Surface     | Active                         | 63.0               | 10/28/23           |
| 08-30               | Casselman                         | Underground | Active                         | 3,040.0            | 6/15/19            |
| 56111302            | Acosta MK Mine                    | Underground | Active                         | 2,776.4            | 10/18/18*          |
| Pending             | Keyser                            | Underground | Pending                        | 6,942.1            | **                 |
| 56951301            | Augustus Mine                     | Underground | Active                         | 1,341.0            | 4/28/22            |
| 56101301            | A-Seam Mine                       | Underground | Active                         | 163.0              | 2/15/18*           |
| 56101302            | A-Seam Mine                       | Underground | Active                         | 3,174.4            | 10/31/19           |
| 56851303            | Barbara B                         | Underground | Water Treatment <sup>(1)</sup> | 2,668.8            | 7/31/17*           |
| 56971301            | Geronimo Mine                     | Underground | Reclaimed                      | 3,009.7            | 8/18/22            |
| 56071301            | Horning Mine                      | Underground | Active                         | 2,545.4            | 5/8/19*            |
| 56061301            | Kimberly Run Mine                 | Underground | Active                         | 2,638.0            | 3/13/18*           |
| 56961302            | Miller Mine                       | Underground | _                              | _                  | 4/28/19*           |
| 32981301            | North Branch Mine                 | Underground | Not Active                     | 2,670.0            | 7/1/14*            |
| 56981301            | Quecreek Mine                     | Underground | Active                         | 3,666.0            | 3/31/19*           |
| 56021301            | Roytown Mine                      | Underground | Active                         | 1,104.8            | 3/30/19*           |
| 56961301            | Sarah Mine                        | Underground | Active                         | 895.7              | 11/19/16*          |
| 56841608            | Cambria Preparation Plant         | Plant       | Active                         | 56.0               | 11/13/16*          |
| 56841603            | Shade Preparation Plant           | Plant       | Active                         | 103.3              | 11/12/21           |
| 56950702            | Cambria Refuse Area (Job 93)      | Refuse      | Water Treatment <sup>(1)</sup> | 67.1               | 1/4/23             |
| 56910701            | Job 10 Refuse Area                | Refuse      | Water Treatment <sup>(1)</sup> | 68.1               | 8/5/22             |
| 56900701            | Job 12 Expansion                  | Refuse      | Active                         | 296.8              | 5/24/16*           |
| 32980701            | North Branch Rock Refuse          | Refuse      | Not Active                     | 24.0               | 2/7/16             |
| 56773707            | Area<br>Cambria Fuels Refuse Area | Refuse      | Water Treatment <sup>(1)</sup> | 38.7               | 4/29/21            |
| 56090701            | Schrock Run Refuse Area           | Refuse      | Active                         | 263.0              | 10/3/17*           |
| 56960107            | Acosta Mine                       | Surface     | Water Treatment <sup>(1)</sup> | 135.0              | 3/13/22            |
| 56090102            | Barta Mine                        | Surface     | Active                         | 83.5               | 8/20/19            |
| 56120106            | Bassett Mine                      | Surface     | Active                         | 150.4              | 6/11/23            |
| 56823033            | Bluelick #2 Strip                 | Surface     | Active                         | 126.6              | 4/11/19            |
| 56880109            | Bluelick #3 Strip                 | Surface     | Active                         | 154.2              | 4/18/19            |
| 56880108            | Bluelick #4 Strip                 | Surface     | Active                         | 377.7              | 8/31/19            |
| 56030105            | Buffalo Operation                 | Surface     | Active                         | 317.2              | 5/12/19            |
| 56000104            | Camper Mine                       | Surface     | Reclaimed                      | 147.2              | 3/26/21            |
| 56090111            | Friedens Mine                     | Surface     | Active                         | 233.6              | 8/30/21            |
| 56823143            | Fritz No. 2 Mine                  | Surface     | Inactive                       | 202.0              | 8/7/17             |
| 56120111            | GAZ Mine                          | Surface     | Not Active                     | 91.1               | 11/21/18*          |
| 56100102            | Hart Mine                         | Surface     | Active                         | 448.0              | 10/14/21           |
| 56960110            | Hartman Mine                      | Surface     | Reclaimed                      | 312.2              | 6/2/17             |
| 56823008            | Hauger Mine                       | Surface     | Reclaimed                      | 176.0              | 10/31/18           |
| 40A77AM1            | Job 21 Surface                    | Surface     | Water Treatment <sup>(1)</sup> | 1,128.0            | 7/19/20            |
| 56100101            | Berwind-Lohr Mine                 | Surface     | Active                         | 238.9              | 12/19/21           |
| 3366BSM2            | Magnetto                          | Surface     | Water Treatment <sup>(1)</sup> | 299.6              | 9/6/21             |
| 56020102            | Merrill III Strip                 | Surface     | Active                         | 170.8              | 10/7/17            |
|                     |                                   |             |                                |                    |                    |

| 56900109 | Mostoller             | Surface | Active                         | 48.2  | 1/9/22    |
|----------|-----------------------|---------|--------------------------------|-------|-----------|
| 56890115 | Paxton                | Surface | Active                         | 299.2 | 9/25/20   |
| 56890101 | Pine Hill Strip       | Surface | Reclaimed                      | 226.6 | 8/4/19    |
| 56120113 | Rhoads #2 Strip       | Surface | Active                         | 228.7 | 11/21/18* |
| 56753119 | Rhoads Strip          | Surface | Active                         | 485.9 | 2/13/20   |
| 56813104 | Roberts Mine          | Surface | Water Treatment <sup>(1)</sup> | 344.7 | 4/18/20   |
| 56070110 | Schrock Run Mine      | Surface | Active                         | 348.3 | 6/24/18   |
| 56150102 | Schrock Run Extension | Surface | Active                         | 569.9 | **        |
| 56080109 | Sheep Ridge Mine      | Surface | Reclamation Only               | 320.7 | 12/7/19   |
| 56050109 | Spoerlein Mine        | Surface | Active                         | 43.0  | 9/28/16   |
| 56090113 | Tipple Mine           | Surface | Active                         | 204.9 | 3/3/21    |
| 56070103 | Trent Mine            | Surface | Active                         | 338.3 | 10/23/22  |
| 56950106 | Walker II Mine        | Surface | Active                         | 62.8  | 2/21/21   |
| 56823123 | Walker Mine           | Surface | Active                         | 231.0 | 7/9/20    |
| 56663135 | Walker-Zubek          | Surface | Reclaimed                      | 27.5  | 7/11/20   |
| 56060111 | Weaver Mine           | Surface | Reclaimed                      | 111.3 | 12/12/18  |
| 56120105 | Yachere Mine          | Surface | Active                         | 44.3  | 3/20/19   |
| 56920112 | Clear Run             | Surface | Water Treatment <sup>(1)</sup> | 285.9 | 5/26/08   |
| 4074AM28 | Garrett               | Surface | Water Treatment <sup>(1)</sup> | 377.2 | 9/6/21    |
| _        | Jolin Strip           | Surface | Water Treatment <sup>(1)</sup> | _     | 3/31/16   |
| 56841605 | Goodtown Prep Plant   | Plant   | Water Treatment <sup>(1)</sup> | 13.5  | 9/2/21    |

<sup>\*</sup>Renewal application is pending with DEP.

(1) Water Treatment refers to perpetual water treatment sites covered under the Consent Order & Agreement ("COA") dated March 22, 2012 with the Commonwealth of Pennsylvania Department of Environmental Protection.

### Liabilities against the Property

The United States Department of Labor Mine Safety and Health Administration (MSHA) conducts regular inspections of the mines and related facilities. Notices of violations, often accompanied by fines, are issued as a result of the inspections if the inspector determines that regulatory requirements are not fulfilled. It is Corsa's practice to attempt to rectify the violations promptly to secure the termination of the violation. The fines are typically considered to not be material.

Certain environmental liabilities have been created from previous mining operations under the approved permits. An assessment of the reclamation liabilities for the properties is updated on an annual basis. Corsa is aware of the liabilities created under its permits. The timing to satisfy all liabilities under the permits will vary based on the extent to which the permits support current or planned mining operations. As such, these liabilities are expected to be satisfied on an ongoing basis as part of the execution of Corsa's business plan.

Long-term water treatment liabilities exist for 18 of the PBS/Wilson Creek properties. These liabilities are covered under three separate Consent Order & Agreements (COA) between PBS/Wilson Creek and the PA DEP. Under these COAs, three trust funds designed to cover operating and capital expenses associated with the treatment of the 18 perpetual water treatment sites were established. The first, dated March 17, 1999 for the Clear Run watershed Permits (#s 56813006, 56840107, 56920112 and 56663112) is currently fully funded at approximately \$3.8 million.

<sup>\*\*</sup>Interim permit received and/or initial permit application is pending with DEP.

The second fund, The Global Treatment Trust under the COA dated March 22, 2012 covers 12 properties:

### **Permits Included in Global Treatment Trust**

| Property                  | Permit #         |
|---------------------------|------------------|
| Acosta Mine               | 56960107         |
| Cambria Fuels Refuse Area | 56773707         |
| Garrett                   | 4074AM28         |
| Goodtown Prep Plant       | 56841605         |
| Job 21                    | 40A77AM12        |
| Job 10 Refuse Area        | 56910701         |
| Jolin Strip               | no longer exists |
| Magnetto                  | 3366BSM2         |
| Roberts                   | 56813104         |
| Job 12 Expansion          | 56900701         |
| Cambria Refuse (Job 93)   | 56950702         |
| Barbara B                 | 56851303         |

The Global Trust was established on March 30, 2012 with a \$1.0 million payment, and PBS has continued to deposit funds into the account each year. The trust is currently fully funded at \$19.49 million. The Trent and Acosta 2 Treatment Trust, established in December 2018, includes two additional surface mines: Trent Mine and Acosta 2 Mine. The permit numbers are #56070103 and #56980103 respectively. Under the agreement, PBS is required to deposit a total of approximately \$4.54 million via quarterly payments through early 2021.

MM&A visited each of these properties in July 2014, and observed them to be well-maintained.

Reclamation activities at the active operations are an ongoing process completed contemporaneously with production activities in keeping with industry standards and regulations of federal law.

# Accessibility, Climate, Local Resources, Infrastructure and Physiography

The NAPP Division Properties are situated within the northern portion of the Appalachian Plateau physiographic province, where terrain is typically characterized by gently undulating hills with narrow to relatively shallow dendritic patterned erosional valleys. Ground surface elevations are typically between 1,400 and 2,000 feet above-mean sea level (MSL) along the major drainages to greater than 2,500 feet on the higher hilltop areas. Normal topography relief between areas of higher elevation on the property and the adjacent drainages are 300 to 600 feet. The properties are moderately vegetated, with a mixture of mature hardwood and conifer forest and pasture land typical of rural farmland. The properties are not situated close to any major urban centers.

General access to the properties is via a well-developed network of primary, secondary and unimproved roads. Primary highways include Interstate 76 (Pennsylvania Turnpike) and Interstate 68 in Maryland both of which travel east-west, passing through Somerset County, Pennsylvania and Garrett County, Maryland respectively. Numerous secondary and unimproved roads maintained by state and local governments provide direct access to the properties, although it is common for municipalities to require a surety bond from mining companies for possible damages incurred during use or to maintain/upgrade roadways for heavy truck usage. These roads are typically open throughout the year.

There are currently railroad service and unit train load-outs at the active Cambria and Shade preparation plants operated by Corsa.

The general location of the Pennsylvania properties lies 60 miles southeast of Pittsburgh, near the town of Somerset. The western Maryland property is located near the town of Grantsville in Garrett County approximately 30 miles southeast of the Pennsylvania properties. As of the 2010 census, the population of Somerset County was approximately 77,742 and Garrett County was 30,097.

Transportation of coal from Corsa's mines and processing facility to market is predominately by rail, which is serviced by CSX (Cambria and Rockwood Preparation Plants) and NS (Shade Preparation Plant). Coal transportation within the properties and between mine and processing facility is typically performed by third-party trucking contractors.

The climate in the northern portion of the Appalachian Plateau physiographic province is humid continental, with four distinct seasons: cold winters, warm summers, and moderate fall and spring seasons. Average annual rainfall is approximately 43 inches per year in most of the region, with a greater percentage occurring during winter and spring months. Winters (mid-November to early-March) are typically cold with temperatures generally in the low-10s to lower-30 degrees Fahrenheit. Primary precipitation during winter months is in the form of snow, with the occasional severe snowstorm. Summer (late-May to mid-September) temperatures range from high-40s to lower-80s degrees Fahrenheit.

Seasonal variations in the weather seldom limit the ability to conduct mining operations in Pennsylvania; however, efficiency may be negatively impacted at surface and preparation plant operations.

As is common in the mining industry, it is necessary to acquire surface rights to conduct and support surface mining operations. Corsa reports it controls adequate surface rights to sustain current mining operations in the near future, however, typical of mines producing in the northern Appalachian region, additional surface rights will be required to support future mine plans. While these rights cannot be guaranteed, operating companies typically are able to secure those rights under favorable economic terms. For the purposes of the technical report, only resources for which Corsa controls both surface and mineral rights have been considered as surface-mineable reserves. Proposed surface mining requiring acquisition of surface rights after the effective date of this report have been excluded from reserve estimates provided herein.

Sources of power, water, supplies, and materials are readily available to the properties. Power service is provided to mines and facilities by regional utility companies Penelec (subsidiary of First Energy) or Somerset Rural Electric Cooperative. Water is supplied to some of the mines and facilities by public water services. Water is also supplied from surface impoundments, or water wells installed and operated by Corsa.

The three Corsa coal preparation plants have permitted areas for disposal of coal refuse.

### History

Prior to acquisition by Corsa, extensive surface and underground mining has occurred by previous owners and operators. The extent of previous mining shown in the technical report is a result of MM&A's interpretation of information provided by Corsa. MM&A did not perform an independent verification of previous mining, as it was beyond the scope of this report.

The extent of previous mining and its effects on Corsa's ability to exploit the reserves on the NAPP Division Property has been examined carefully. Records of previous mining were provided by Corsa, or in the case of past surface mining, were projected from USGS topographic or flown maps or taken from maps generated by prior owners of the Property. Other sources of previous mining include USGS (1997) and National Agricultural Imagery Program (NAIP) aerial photography.

The properties have been extensively developed by mining activities for more than 50 years. Drilling has been carried out by numerous entities during that period. A significant amount of exploration was carried out by the previous entities, prior to acquisition by Corsa. Upon acquisition of the property, Corsa obtained copies of drilling records within or adjacent to its mineral leases. All exploration data that has been made available to MM&A has been incorporated into the technical report, where appropriate.

Coal mining has occurred within the region for well over 100 years. Rapid growth in the coal industry was led by extensive operations within the large, easily accessible coal deposits throughout the Appalachian coal fields. Over the years, with the depletion of the larger, thicker coal deposits, and the introduction of mechanization, traditional labor was replaced by more economical means of extracting coal. With the introduction of mechanization came the ability to mine thinner seams through both surface and underground mining methods. The development of improved technology and increased demand for high quality coal products has resulted in the feasibility of extracting previously uneconomical and unmineable coal deposits.

Primary seams found on the properties have been extensively mined throughout the history of coal mining in the region. The remaining coal deposits within the properties are typically characterized by thinner coal horizons that were generally passed over in favor for thicker, more easily accessible coal in the past. Mining on the property typically consists of single seam mining by underground methods. In areas lying close to the surface, surface mining methods typically mine multiple seams through area removal, contour mining, and highwall mining, which allow for the recovery of thin coal seams, which may or may not exhibit continuity across the entire mining area, and do not exhibit adequate thickness and continuity for mining by underground mining methods.

A summary of clean coal production for prior years for the Corsa properties is provided in the table below.

|                      | 2013              | 2014              | 2015              | 2016              | 2017              | 2018              |
|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Location             | <b>Clean Tons</b> |
| Casselman            | 248,522           | 291,947           | 471,111           | 518,982           | 525,620           | 386,556           |
| Wilson Creek Surface | 106,896           | 61,646            | 44,663            | 9,613             | 32,181            | 20,486            |
| Wilson Creek HWM     | 98,355            | 36,678            | 39,956            | 23,943            | 10,095            | 41,751            |
| PBS Mines            | 108,484           | 15,210            | 5,308             | 4,133             | 26,699            | 45,592            |
| Horning              | _                 | _                 | _                 | _                 | _                 | 32,616            |
| Barbara B            | 59,689            | 33,792            | _                 | _                 | _                 | _                 |
| Acosta               | _                 | _                 | _                 | _                 | 71,273            | 375,379           |
| Quecreek             | 312,558           | 313,959           | 273,017           | 239,333           | 167,444           | 133,747           |
| Kimberly Run         | 652,325           | 406,037           | _                 | _                 | _                 | _                 |
| Roytown              | 55,217            | _                 | _                 | _                 | _                 | _                 |
| Sarah                | 31,450            | _                 | _                 | _                 | _                 | _                 |
| Total                | 1,673,496         | 1,159,269         | 834,055           | 796,004           | 833,312           | 1,036,127         |

Note: Totals may not agree to 43-101 reserve report due to rounding.

# Geological Setting, Deposit Types and Mineralization

The coal deposits in the eastern USA are the oldest and most extensively developed coal deposits in the country. The coal-bearing formations on the properties are Carboniferous in age, being in the Pennsylvanian system, which includes the Monongahela, Conemaugh, Alleghany, and Upper Pottsville groups. These coal-bearing formations contain two-fifths of the nation's bituminous coal deposits, extend over 900 miles from northern Alabama to Pennsylvania, and are part of what is known as the Appalachian Basin. The Appalachian Basin is more than 250 miles wide and in some portions, contains over 60 coal seams of varying economic significance. Seams are typically between 1 foot and 6 feet in thickness, with relatively little structural deformation. Coal in the region is classified as high- to low-volatile bituminous with rank increasing to the east. Coals are typically characterized as low to medium sulfur and high heat content.

Seams in which reserves and/or resources are reported by Corsa include the following (in descending stratigraphic order). Within each seam, there may be multiple benches consisting of riders (overlying the main seam), leaders (underlying the main seam), and splits (where main seam separates into two or more benches).

List of Coal Seams in which NAPP Division Reserves/Resources Are Located

| Seam              | Alternate<br>Name 1 | Alternate<br>Name 2 |
|-------------------|---------------------|---------------------|
| Sewickley         | _                   | _                   |
| Redstone          |                     |                     |
| Upper Freeport    | E                   | Kelly               |
| Lower Freeport    | D                   | <del></del>         |
| Upper Kittanning  | C'                  | _                   |
| Middle Kittanning | C                   | <del>_</del>        |
| Lower Kittanning  | В                   | _                   |
| Brookville        | A                   | Gordon              |

NAPP Division Properties reserves and resources are found primarily within four Pennsylvanian-age coal-bearing formations: Pittsburgh, Glenshaw, Allegheny, and Pottsville. Generalized lithologic composition of each formation in which the major coal beds are enclosed includes: claystone, shale, sandy shale, sandstone, limestone, and various marine zones. The majority of the NAPP Division reserves occur within the Allegheny formation.

#### Stratigraphy

Monongahela Group: The Monongahela Group is named after the Monongahela River in West Virginia and southwestern Pennsylvania. The formations in this group are the Pittsburgh and Uniontown, of which the majority of coal-bearing unit strata are located in the Pittsburgh formation. The formations are comprised of sequences of limestone, calcareous mudstone, shale, siltstone, and coal. The only significant sandstone occurrences lie directly above the Pittsburgh coal seam. The formations extend from the top of the Conemaugh Group, or base of the Pittsburgh coal seam, upward to the top of the Waynesburg coal seam and include the Sewickley, Redstone, and Pittsburgh coal seams, which are of economic importance on the properties.

**Conemaugh Group:** The Conemaugh Group is named after Conemaugh River in western Pennsylvania and includes the Glenshaw and Casselman formations. These formations are comprised of sequences of limestone, mudstone, shale, siltstone, sandstone, and coal. The formations extend form the Mahoning Limestone near the base of the Glenshaw Formation to the Pittsburgh Limestone, occurring at the top of the Casselman Formation and base of the Monongahela Group. The Bakerstown coal seam, which is of economic importance on portions of the properties, lies within the Glenshaw Formation.

Allegheny Group: The Allegheny Group is named after the Allegheny River in Pennsylvania and contains the majority of economically mineable coal in Pennsylvania. The formations in this group are comprised of sequences of sandstone, siltstone, shale, thin limestone, clay, and coal. The Allegheny Formation includes the following coal seams of economic importance in stratigraphically descending order: Upper Freeport, Lower Freeport, Upper Kittanning, Middle Kittanning, Lower Kittanning, and Brookville.

**Pottsville Group:** The Pottsville Group is named after the locality of which it was first described near Pottsville, Pennsylvania and contains major coal-bearing formation from Pennsylvania to Alabama. The Pottsville Group contains the majority of economically mineable coal within the Appalachian Basin outside of Pennsylvania and includes more than 10 formations, depending on the state in which it occurs. The formations are comprised of sequences of sandstone, siltstone, clay, and coal.

**Structure:** The counties in which the properties are located are situated along the eastern edge of the Alleghany Plateau, bordering the Alleghany Front, the major southeast facing escarpment of the Alleghany Mountains. Regional structure is typically characterized as gently dipping with a series of north-northeast trending folds (anticlinal and synclinal) including the Youghiogheny, New Lexington/Johnstown, Somerset, Berlin, and Wellersburg synclines and Laurel Hill, Centerville Dome, Boswell Dome, and Negro Mountain anticlines. Within the major structural trends, there are typically minor undulations and local flexures. No major structural faulting or tectonic features are known to occur on the properties.

#### Geology of the NAPP Division Properties

The geology of the properties is consistent with regional trends. Coal seams of economic importance on the properties typically range from 1 foot to 6 feet in thickness and are primarily low-volatile in rank. There are 11 coal seams on the properties that demonstrate reserve or resource potential including (not all of which are included within this report), in descending stratigraphic order: Sewickley, Redstone, Pittsburgh, Bakerstown, Upper Freeport, Lower Freeport, Upper Kittanning, Middle Kittanning, Lower Kittanning, Brookville, and Mercer.

#### Mineralization

Mineable coal seams within the properties are typically low-ash, low to high-sulfur, and high-thermal content bituminous coals. Regionally, the coals are typically low-volatile in rank, with rank increasing from west to east. The maximum seam thickness may reach over 6.0 feet where multiple coal benches occur in proximity to one another; however, the average mineable thickness of the seams in this evaluation generally ranges from 1 foot to 4 feet. Seams are generally continuous, but may be locally absent. Secondary discontinuity due to erosional features is present in most areas, resulting in seam outcropping, or visible exposure of the seam at the surface. Other than oxidation of the coal exposed at the surface, erosion of the seams has no significant impact on the mineralized deposits. Mineable seams associated with the properties are generally outcrop-accessible. Coal seams are characterized by both single-bench and multiple-bench coal horizons with parting (non-coal) material varying by seam and area. Seam parting is common within the coal seams on the properties with intra-seam parting material increasing drastically in some areas. Roof strata are typically shale or sandy shale with zones of sandstone roof being common. Floor strata are typically sandstone, shale, sandy shale, fireclay, or in the case of the Upper Kittanning, limestone.

Limestone beds occur within the various stratigraphic groups of the region. Some of these limestone beds are extracted in conjunction with surface mining of the Sewickley coal in particular.

### Coal Seams of Interest

**Surface-mineable Seams:** There are seven primary coal seams (and associated splits) identified on the properties exhibiting surface-mineable potential. Surface-mineable coal seams are contained within the upper and middle portions of the stratigraphic section and include coal seams from the Sewickley through the Lower Kittanning coal seam. There are 11 areas within the properties where coal seams exhibit surface-mineable potential including: Bassett, Berwind Lohr, Bluelick 4, Byers, GAZ, Downey, Hart, Rhoads II, Schrock Run, Hamer and Shaffer. Hamer and Byers are directly adjacent to each other and are therefore reported together herein as Hamer-Byers.

**Underground-mineable Seams:** There are six coal seams identified on the properties exhibiting underground-mineable potential. These coal seams are contained within the middle to lower portions of the stratigraphic section and include the Upper Freeport (E), Lower Freeport (D), Upper Kittanning (C'), Middle Kittanning (C), Lower Kittanning (B), and Brookville (A) coal seams.

### **Exploration**

The properties have been extensively explored through exploratory drilling by Corsa and predecessors. Records from exploration drilling comprise the primary data used in the evaluation of resources on the properties. Drill records, in most cases, have been compiled by Corsa into geologic databases which include drill hole location, coal thickness, and detailed lithologic data (thickness, description, and elevation). Details such as drill dates, drilling company, and other header information are generally excluded from the database, but are contained on hard or digital copies of drill logs in Corsa's records. Additional supplemental exploration data is available on the properties in the form of coal outcrop or surface exposure measurements, or in-mine measurements from ongoing or previous underground mining. This data is utilized to a lesser extent, but is incorporated into the geologic database in the absence of drill data or to aid in delineation of geologic conditions not evident from exploration drilling.

The extent of exploration varies by property and is largely dependent on the intended development and geologic conformity. Exploration is typically extensive for areas of proposed surface and/or underground mining (which total approximately 36,000 acres), unless adverse mining or geologic conditions are encountered or expected; at which time additional, and often more closely-spaced drilling will then be carried out in order to identify such conditions. Drilling on the properties is generally sufficient for delineation and estimation of surface and underground mineable reserves such as those on the property, which are of low geologic complexity. However, available exploration data limits the ability to map future underground mineable conditions, specifically related to the roof and floor rock. Data is typically in the form of simplified drillers' logs that are general in nature and do not describe with sufficient detail, the roof and floor rock of each coal seam. Data typically consists of coal thickness and seam interval information and does not contain detailed lithologic or geotechnical descriptions. Thus, definitive mapping for the prediction of future mining conditions is not possible.

A total of more than 3,000 individual exploration data points, including drill holes, in-mine measurements, pit measurements, and outcrop measurements were incorporated into the digital geologic database, and were used for modeling the geology of the properties. This data is used to delineate the resources on the property and to determine geologic reliability of coal resource and coal reserve estimates. The drill hole data density is sufficient enough to adequately support the geological trends and projected reserves on the properties. MM&A has reviewed all new exploration data provided by Corsa for this report and checked it against previously completed MM&A work for consistency.

MM&A reviewed and verified exploration data through the generation of stratigraphic columnar sections using cross-sectional analysis to confirm coal seam correlations. After establishing that correlations were consistent, or determining that edits to coal seam correlations were needed, coal seams were identified in the geologic database. During the course of the investigation, some of the data from a relatively small number of holes were deemed to be questionable (e.g., unlikely or uncharacteristic elevations, thicknesses or intervals) and were not honored for the purposes of geologic mapping. The locations of drill holes and outcrop measurements have not been independently verified by MM&A.

### **Drilling**

The properties have been extensively explored, primarily through continuous (diamond) core and air-rotary drilling methods, which are standard industry practice. Drilling is conducted by Corsa on an on-going basis, and performed by a third-party contractor, to identify and delineate coal reserves, identify mine and geologic conditions in advance of mining, and collect core for quality sampling and analysis. Drilling on the properties typically requires drilling to depths typically within the range of 50 feet to 1,000 feet depending on the target coal seam(s). In the past, Corsa typically employed air-rotary (6-inch diameter) methods due to lower cost and shorter drilling duration. Air-rotary drilling provides general geologic information such as depth and approximate thickness, but does not provide details of coal seam or strata unless used in conjunction with "spot coring" and/or downhole geophysical logging. Spot coring utilizes the advantages of the air-rotary method to drill to within proximity of the coal seam,

then employs coring for an interval that typically includes the coal seam and immediate roof and floor. The air-rotary method is typically used to economically explore for coal seams in areas of sparse data to identify target coal seams for "twin" drilling of an offset continuous core or spot core drill hole to obtain detailed geologic data and/or obtain core samples for analysis. The air-rotary method is also used to obtain general geologic data between existing exploration drill holes where only general geologic data is needed to confirm the presence of coal seams or to locate coal seam subcrop for surface mineable areas. Air-rotary drilling does not provide sufficient geologic data alone to allow for classification of reserves, but is a useful method of economical exploration.

Corsa utilizes continuous core drilling to a lesser extent, typically employing when greater geologic detail is needed or for recovery of core for sampling and analysis. Core drilling provides continuous recovery of typically NX-size (2.16 inch or 5.4 centimeter) core. Recovery of core, specifically coal core, is supervised by a geologist or representative of Corsa prior to delivery to an inhouse laboratory for examination by a staff geologist and sampling for analysis. Core recovery for coal seams on the properties is reported by Corsa to generally be greater than 90 percent, however the coal seams are typically soft in nature and core recoveries of less than 90 percent are not uncommon. In order to ensure adequate recovery of core prior to sampling and analysis, downhole geophysical logging is performed, typically consisting of natural gamma and density logs and allowing for differentiation of lithology and determination of thickness. Although utilized in recent exploration efforts, downhole geophysical logging has been performed on relatively few of the total holes drilled on the properties.

Although MM&A has not had direct involvement with implementing and supervising the drilling on the properties, drilling information has been reviewed in detail and deemed reliable and sufficient for delineation and estimation of resources and reserves. Drill records were provided by Corsa in digital format in the form of electronic databases, driller logs, and geophysical logs. Additional data was obtained from previous geologic evaluations conducted by MM&A and others on the properties.

The strata encountered during drilling are generally horizontal to gently dipping and therefore considered perpendicular to drilling. As such, thicknesses recorded on drill hole records represent the true thickness and do not demonstrate vertical exaggeration.

#### Sampling

### Sample Preparation Methods

Application tests are laboratory procedures that measure some characteristic of coal that has been empirically related to some application or handling or processing step. Typically, these procedures attempt to duplicate some aspect of the commercial application at laboratory scale and may produce information in the form of an index. Application procedures do not measure a single component of the coal but infer the combined effect of multiple components.

The American Society for Testing and Materials (ASTM) publishes the most inclusive reference to analytical procedures. This publication, which is revised annually, provides extensive information concerning generally accepted methods of laboratory analysis. ASTM also provides standards for sampling and some information concerning sample handling.

Ultimate analysis is a process typically used which gives the composition of coal in terms of carbon, hydrogen, nitrogen, oxygen, ash, and sulfur without regard to origin. The ash determination can be found by ASTM D-3174. Sulfur is determined either by wet chemistry methods (ASTM D-3177) or by measuring the sulfur content of the gas released through high temperature combustion of the coal sample (ASTM D-4239). Carbon and hydrogen are also determined through a combustion process (ASTM D-3178) and nitrogen by a wet chemistry method (D-3179). Oxygen is not determined directly. The sum of the carbon, hydrogen, nitrogen, sulfur, and ash are subtracted from 100 to calculate oxygen percent (ASTM D-3176).

Heating value or calorific value is a measure of the heat produced from a unit weight of coal. In the United States, it is commonly expressed in British thermal units per pound (Btu/lb.). Other units are calories per gram (cal/g) and joules per gram (J/g). Heating value is generally determined by burning a weighed coal sample, in oxygen, in a calorimeter.

The ASTM method used by the laboratories to determine calorific value (in Btu/lb.), was D-5865. These labs determined sulfur content with ASTM Method D-4239, Method B. Ash content was calculated from ASTM method D-3174.

The extent of sampling for geological data is generally sufficient to define characteristics of the mineable coal horizons based on the qualified professionals examination of the data. The sampling of quality data from drill holes is less than the total drill holes; however, available data appears to be representative of the coal seams based on historical knowledge and regional trends.

#### Integrity of Sampling Process

Corsa previously maintained an in-house laboratory staffed by experienced laboratory personnel, which conducted coal analysis using ASTM testing procedures (except for minimum sample sizes too small to meet ASTM weight specifications). The laboratory performed proximate, screen sizing, washability, and other basic coal analyses. Procedures such as sulfur forms, ultimate analysis, ash fusion and mineral, trace element, and metallurgical analyses were outsourced to independent commercial laboratories including: Geochemical Testing in Somerset, Pennsylvania; Summit Technical Laboratories in Meyersdale, Pennsylvania; CoalTech Petrographic Associates, Inc. in Murrysville, Pennsylvania; and Clark Coal and Coke Laboratory, Jefferson Hills, Pennsylvania. All of the independent commercial laboratories utilized by Corsa strictly conform and adhere to ASTM and ISO practices and procedures. These laboratories have varied accreditations and certifications, and all routinely submit to audits of their laboratory quality control/quality assurance systems. The commercial laboratory used most often by Corsa is Geochemical Testing. Geochemical Testing holds accreditation under the NELAC Institute (TNI) 2009 standard. The purpose of the National Environmental Laboratory Accreditation Program (NELAP) is to establish and implement a program for the accreditation of environmental laboratories. The TNI standard for laboratories is modeled after ISO/IEC 17025:2005 "General Requirements for the Competence of Testing and Calibration Laboratories." The Laboratory Accreditation Program of PaDEP has accredited Geochemical Testing (Pennsylvania DEP Lab # 56-00306) for coal testing methods in the Solid and Chemical Materials (SCM) category.

Independent laboratories contracted for outsourced analyses are privately-owned companies that are paid a fee for analytical work performed and to MM&A's knowledge hold no equity or material interest in any of its client's operations or businesses.

## Security Methods

For coal exploration practice in the United States, it is unusual to employ security methods (other than those described in the chain-of-custody procedures) for the shipping and storage of samples, because coal is a low value bulk commodity and good security conditions prevail domestically. MM&A is aware Corsa's procedures for handling and shipping coal samples and for sample security was essentially the same as that of other operators in the region. Since only a minority of the drill holes have coal seam thickness verification by downhole geophysical logging, most of the available sample analyses do not have qualitative assurance of complete and representative coal core sample recovery. However, efforts have been made by both mining company and MM&A geologists to disqualify coal samples which clearly have material core loss problems. While many of the samples do not meet current best practice standards for recovery assurance, the lab data verification procedures and sample preparation methods (as described above) do meet typical industry standards. It is the QP's opinion that the sample preparation, security measures, and analytical procedures, as reported to Corsa by the laboratories, are adequate.

The following procedures summarize the major aspects of chain of custody.

- Sample Labels include the following information: a unique sample number, sample type, name of collector, date and time of collection, place of collection, and sample preservative.
- Sample Seals to detect unauthorized tampering with samples up to the time of analysis.
- Field Log Book or approved electronic data collector to record all information pertinent to a field survey.
- Chain of Custody Record including the sample number, name of collector, date and time of collection, signatures of
  persons involved in the chain of possession, and inclusive dates and times of possession.
- Sample analysis request sheet including pertinent information from driller's log book, and information completed by company engineer or technician regarding sample number, date of receipt and condition of sample.
- Delivery to the laboratory as soon as practicable after collection, typically within one week.
- Receipt and logging of sample general core description is completed by the driller (contractor). Detailed core description is performed by Corsa. Geophysical logging is performed by a contractor.
- Assignment of sample for analysis sample is delivered to laboratory by Corsa.
- Disposal, after the data has been reviewed and accepted, in accordance with local, state and U.S. EPA-approved standards.

It is MM&A's opinion that there are no known factors that may materially impact the accuracy or reliability of the results of the samples.

# **Data Verification**

MM&A has carefully examined and relied upon geologic information and mapping provided by Corsa in the technical report. Any data deemed anomalous or unreliable has been excluded from the technical report.

MM&A reviewed and verified drill hole exploration data through the generation of stratigraphic columnar sections for cross-sectional analysis to identify and confirm coal seam correlations. After establishing that stratigraphic correlations were consistent,

coal seams were identified in the geologic database, which was used to generate individual coal seam thickness and elevation data maps. During the course of the investigation, some of the data from a relatively small number of holes were deemed to be questionable (e.g., unlikely or uncharacteristic elevations, thicknesses or intervals) and were not honored for the purposes of geologic mapping.

For the coal and limestone resource estimates in the technical report, MM&A conducted a detailed independent geological evaluation. This included: the review of exploration drill holes and detailed seam correlation; the coordination, assembly and analysis of data into a digital resource database; and mapping and estimation of coal resources and coal reserves and associated coal quality. Furthermore, an independent evaluation consists of delineating and/or verifying seam thickness trends, defining intra-seam splitting, characterizing seam quality, estimating projected surface mining ratios and overburden volumes. Coal quality analyses were performed to ASTM standards by a qualified laboratory. The exploration data evaluated and processed in preparation of the technical report are considered adequate for estimation of coal resources and provide reliable and reasonable prospects for development and extraction of such coal resources.

MM&A did not conduct an independent verification of property-control surveys or other property-control instruments, but relied upon representations supplied by Corsa. MM&A has not independently surveyed the mining locations, but has relied on information compiled from maps prepared by current or previous owners, and does not warrant or otherwise certify the location of such mining or associated features, nor have the location of data points been independently verified. Most of the mining activity represented on the maps occurred in the past and the mines are now abandoned, sealed, and are inaccessible. Final maps prepared by previous mine operators are filed with state and federal agencies. Overall, the available data, used for reporting the mineral resource and mineral reserve, was sufficient for the low geologic complexity deposit.

# Mineral Resource and Mineral Reserve Estimates

#### **Coal Resources**

The coal resource estimates were prepared in accordance with CIMDS (as adopted May 10, 2014). The tonnage estimates provided herein report in-situ resources as measured and indicated, and those resources are reported inclusive of the reported reserve tons, since they include the in-situ tons from which the recoverable coal reserve is derived. Inferred coal resources are also reported. No coal reserve tons have been estimated from inferred coal resources.

As is customary in the USA, the categories for Measured, Indicated, and Inferred coal resources are based on the distances from valid points of measurement as prescribed in USGS Circular 891.

## Definitions and Applicable Standards

In accordance with NI 43-101, MM&A has classified the coal as "resource" and "reserve" as defined in CIMDS as adopted in May 2014. In this standard, a Mineral Resource is defined as "...a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

Coal resources are subdivided into classes of Measured, Indicated, and Inferred, with the level of confidence reducing for each class, respectively. Coal resources are reported as in-situ tonnage and are not adjusted for mining losses or mining recovery.

Coal resources have been estimated and classified as Measured, Indicated, and Inferred following USA guidelines provided for in the USGS Circular 891. Measured coal resources are those lying within ½-mile radius of a valid point of measurement. Indicated coal resources are those lying between ¼-mile and ¾-mile radius from such an observation point. Inferred coal resources lie more than a ¾-mile radius from a valid point of measurement, but less than 3 miles from one. These classifications connote the degree of resource estimation reliability based on distance from known points of measurements.

As referenced in the CIMDS, coal resources and coal reserves are reported in the NAPP Technical Report. The tonnage estimates provided therein report in-situ coal resources as measured and indicated, and those coal resources are reported inclusive of the reported reserve tons, since they include the in-situ tons from which the recoverable coal reserve is derived. Inferred coal resources are also reported. No coal reserve tons have been estimated from inferred coal resources.

#### Methodology Used to Estimate Coal Resources

After establishing that correlations were consistent, or determining that edits to coal seam correlations were needed, coal seams were identified in the geologic database, which was used to generate coal seam data control maps. These maps form the basis for coal seam mapping and coal resource estimations. During the course of the investigation, some of the data from a relatively small number of holes were deemed to be questionable (e.g., unlikely or uncharacteristic elevations, thicknesses or intervals) and were not honored for the purposes of geologic mapping. The locations of drill holes and outcrop measurements have not been independently verified.

A model of the deposit was created to estimate coal resources. Seam grids, including seam thickness roof and floor grids, plus the topographic surfaces were generated for individual coal seams using Carlson Software® for Mining (Carlson). The grids were then used in conjunction with coal resource criteria to delineate resource boundaries used for the generation of coal resource estimates. Base-of-coal-seam structure and topographic surface grids were generated in order to determine the intersection between projected coal horizons and topography of the properties. Coal seam outcrop boundaries were generated at the intersection points of these grid files, defining the limits of coal deposits where eroded by dendritic patterned erosional valleys. Once delineated, resource area acreage, average seam thickness, and coal tonnages were generated in Carlson, Vulcan<sup>TM</sup>, and MM&A proprietary software and tabulated in Microsoft® Excel (Excel) computer spreadsheets. After processing, independent estimate of coal resources was prepared using guidelines outlined in CIMDS.

# Summary of Coal Resource Estimates

The results of the NAPP Technical Report define an estimated 181.5 million tons of measured and indicated coal resources. Of the total measured and indicated tons, 80% are measured and 20% are indicated. An additional 1.50 million inferred in-situ coal tons have been identified. Coal resource tons are presented on a dry, in-situ basis and provide reasonable prospects for economic extraction.

The following table summarizes the coal resource controlled by the NAPP Division.

|                      | <b>Total Resource (in situ) Tons</b> |            |             |           |  |
|----------------------|--------------------------------------|------------|-------------|-----------|--|
| Type/Seam            | Measured                             | Indicated  | Total       | Inferred  |  |
| Surface-mineable     |                                      |            |             |           |  |
| Sewickley            | 157,400                              | _          | 157,400     | <u> </u>  |  |
| Redstone             | 240,400                              | _          | 240,400     | _         |  |
| Upper Freeport       | 232,100                              | _          | 232,100     | <u> </u>  |  |
| Lower Freeport       | 1,169,500                            | _          | 1,169,500   | _         |  |
| Upper Kittanning     | 3,425,600                            | _          | 3,425,600   | _         |  |
| Middle Kittanning    | 469,800                              | _          | 469,800     | _         |  |
| Lower Kittanning     | 175,900                              | _          | 175,900     | _         |  |
| Total                | 5,870,700                            | _          | 5,870,700   | _         |  |
| Highwall-mineable    |                                      |            |             |           |  |
| Upper Freeport       | 18,000                               | _          | 18,000      | _         |  |
| Upper Kittanning     | 1,089,900                            | _          | 1,089,900   | _         |  |
| Middle Kittanning    | 91,100                               | _          | 91,100      | <u> </u>  |  |
| Lower Kittanning     | 165,600                              | _          | 165,600     | _         |  |
| Total                | 1,346,600                            | _          | 1,346,600   | _         |  |
| Underground-mineable |                                      |            |             |           |  |
| Upper Freeport       | 14,657,500                           | 4,393,000  | 19,050,500  | _         |  |
| Lower Freeport       | 12,498,600                           | 109,800    | 12,608,400  | _         |  |
| Upper Kittanning     | 39,060,500                           | 7,387,300  | 46,447,800  | _         |  |
| Middle Kittanning    | 19,708,500                           | 5,045,000  | 24,753,500  | _         |  |
| Lower Kittanning     | 28,400,900                           | 14,785,300 | 43,186,200  | 1,500,200 |  |
| Brookville           | 23,737,000                           | 4,487,900  | 28,224,900  |           |  |
| Total                | 138,063,000                          | 36,208,300 | 174,271,300 | 1,500,200 |  |
| Grand Total          |                                      |            |             |           |  |
| Sewickley            | 157,400                              | _          | 157,400     | <u> </u>  |  |
| Redstone             | 240,400                              | _          | 240,400     | _         |  |
| Upper Freeport       | 14,907,600                           | 4,393,000  | 19,300,600  | _         |  |
| Lower Freeport       | 13,668,100                           | 109,800    | 13,777,900  | _         |  |
| Upper Kittanning     | 43,576,000                           | 7,387,300  | 50,963,300  | _         |  |
| Middle Kittanning    | 20,269,400                           | 5,045,000  | 25,314,400  | _         |  |
| Lower Kittanning     | 28,742,400                           | 14,785,300 | 43,527,700  | 1,500,200 |  |
| Brookville           | 23,737,000                           | 4,487,900  | 28,224,900  | _         |  |
| Grand Total          | 145,298,300                          | 36,208,300 | 181,506,600 | 1,500,200 |  |

Note: Resource tons are inclusive of reserve tons since they include the in-situ tons from which recoverable coal reserves are derived. Totals may not agree to 43-101 reserve report due to rounding.

Because the coal resources are reported inclusive of the coal reserves, the extent to which the coal resources may be affected by any known environmental, permitting, legal, title, variation, socio-economic, marketing, political, or other relevant issues is less rigorously tested than the coal reserves. Similarly, the extent to which the coal resource estimate may be materially affected by mining, metallurgical, infrastructure, and other relevant factors has also not been rigorously reviewed for estimation of coal resources.

#### **Limestone Resources**

Corsa controls limestone resources that will be extracted as part of the Bluelick surface mine operations. MM&A has reviewed the testing results for the limestone; it appears that this formation has potential for use as coarse aggregate. As a result, it is MM&A's opinion that the limestone at Bluelick has reasonable prospects for economic extraction.

MM&A estimates the in-situ resource for the Fishpot limestone at Bluelick 4 to be 0.99 million tons. Due to the limited testing data, and absence of a market study or sales history, no reserve estimate has been made for the limestone.

# **Bluelick 4 Fishpot Limestone Resource Summary**

|           | <b>Total Resource (in situ) Tons</b> |           |         |          |  |  |
|-----------|--------------------------------------|-----------|---------|----------|--|--|
| Type/Seam | Measured                             | Indicated | Total   | Inferred |  |  |
| Limestone | 999,300                              | <u>—</u>  | 999,300 |          |  |  |

#### **Coal Reserves**

The coal reserve estimates were prepared in accordance with CIMDS (as adopted May 10, 2014). Proven and probable coal reserves were derived from the defined coal resource considering relevant processing, economic (including independent estimates of capital, revenue, and cost), marketing, legal, environmental, socio-economic, and regulatory factors and are presented on a moist, recoverable basis.

As is customary in the USA, the categories for Proven and Probable coal reserves are based on the distances from valid points of measurement used for Measured and Indicated coal resources prescribed in USGS Circular 891. The Mineral Reserves are subdivided into classes of: Proven Mineral Reserves, those lying within ¼-mile radius of a valid point of measurement; Probable Mineral Reserves are those lying between ¼-mile and ¾-mile of a valid point of measurement.

#### Methodology Used to Estimate Coal Reserves

Coal reserve estimates were derived from the defined coal resource considering relevant processing, economic (including independent estimates of capital, revenue, and cost), marketing, legal, environmental, socio-economic, and regulatory factors and are presented herein on a moist, recoverable basis.

Upon completion of delineation and calculation of coal resources, MM&A generated life of mine ("LOM") plans for each mining complex. Mine plans were generated based on forecasted mine plans and permit plans provided by Corsa with modifications by MM&A in certain areas. Previous reserve evaluations defined general locations for the primary coal reserve areas. Additional drilling, detailed topography maps, aerial photography, and updated reserve criteria refined these earlier selected locations. MM&A used property development plans established by Corsa, and modified plans where necessary due to current property control limits, modifications to geologic mapping due to additional exploration, etc.

Carlson - (or other software) generated grid files were used to build geologic elevation models for coal seams demonstrating mineable potential. Coal seam thickness and base-of-coal-seam structure grid files were used to define the top and bottom of each coal horizon. The developed grid models were used to develop LOM and timing sequence plans for underground-mineable coal seams, based on volume productivity schedules provided by Corsa for active mining operations. Average underground mining heights of 42 to 44 inches, based on current mining practices and/or equipment capabilities, were used to determine OSD and project raw production tons. In the case of the active Casselman Mine, MM&A applied a minimum OSD of 6 inches in addition to the minimum 42-inch mining height after inspection of the extraction heights posted on the mine map. The same 6-inch minimum OSD and 42-inch minimum mining height assumptions were also applied to the proposed Acosta deep mines.

For surface-mineable coal seams, surface topography grids were generated using USGS digital elevation models or more detailed digital flown topography provided by Corsa, where available. Surface LOM and timing sequence plans were sequenced using Carlson based on surface equipment productivity and equipment expansion plans determined to be reasonable by MM&A.

Estimates of surface-mineable coal reserves and associated bank cubic yards (bcy) overburden volumes were generated based on an economic ratio limit (bcy of overburden to recoverable coal tons), which is a function of coal prices and operating costs. For coal seams that demonstrate the potential for surface mining methods, seam product thickness grid files, excluding scalpable (removable) in-seam partings, were generated for the surface-mineable seam thickness.

Raw, ROM production data outputs from LOM sequencing were processed into Excel spreadsheets and summarized on an annual basis for processing into the economic model. Average seam densities for underground and surface-mineable coal seams were estimated to determine raw coal tons produced from the LOM plan. Average mine recovery and wash recovery factors, determined by available quality or estimated from specific gravities, were applied to determine recoverable tons.

Coal reserve tons in this evaluation are reported on a moist (8.0 percent for washed product and 4.25 percent for raw product), recoverable basis, and represent the saleable product from the NAPP Division Properties.

# Summary of Coal Reserve Estimates

The coal reserves reported below represents the economically viable coal tonnage controlled by Corsa on a moist recoverable basis. The coal reserves are based on an independent evaluation of the coal geology and a pre-feasibility study of the coal reserve deposits.

|                      | Tot        | Total Demonstrated |            | By Permit Status |               |  |  |
|----------------------|------------|--------------------|------------|------------------|---------------|--|--|
| Type/Seam            | Proven     | Probable           | Total      | Permitted        | Not Permitted |  |  |
| Surface-mineable     |            |                    |            |                  |               |  |  |
| Sewickley            | 117,400    | _                  | 117,400    | 117,400          | _             |  |  |
| Redstone             | 178,900    | _                  | 178,900    | 178,900          | _             |  |  |
| Upper Freeport       | 36,600     | _                  | 36,600     | 36,600           | _             |  |  |
| Lower Freeport       | 455,700    | _                  | 455,700    | 455,700          | _             |  |  |
| Upper Kittanning     | 2,457,400  | _                  | 2,457,400  | 2,457,400        | _             |  |  |
| Middle Kittanning    | 279,800    | _                  | 279,800    | 279,800          | _             |  |  |
| Lower Kittanning     | 116,300    | _                  | 116,300    | 116,300          | _             |  |  |
| Total                | 3,642,100  |                    | 3,642,100  | 3,642,100        |               |  |  |
| Highwall-mineable    |            |                    |            |                  |               |  |  |
| Upper Freeport       | 4,200      | _                  | 4,200      | 4,200            | _             |  |  |
| Upper Kittanning     | 365,200    | _                  | 365,200    | 365,200          | <u> </u>      |  |  |
| Middle Kittanning    | 18,600     | _                  | 18,600     | 18,600           | _             |  |  |
| Lower Kittanning     | 48,700     | _                  | 48,700     | 48,700           |               |  |  |
| Total                | 436,700    | _                  | 436,700    | 436,700          | _             |  |  |
| Underground-mineable |            |                    |            |                  |               |  |  |
| Upper Freeport       | 5,161,700  | 1,370,800          | 6,532,500  | 3,613,700        | 2,918,800     |  |  |
| Lower Freeport       | 1,736,000  | 7,400              | 1,743,400  | 1,743,400        | _             |  |  |
| Upper Kittanning     | 7,247,500  | 1,469,100          | 8,716,600  | _                | 8,716,600     |  |  |
| Middle Kittanning    | 4,650,600  | 1,081,400          | 5,732,000  | 3,781,200        | 1,950,800     |  |  |
| Lower Kittanning     | 9,180,700  | 4,604,300          | 13,785,000 | _                | 13,785,000    |  |  |
| Brookville           | 6,446,400  | 17,400             | 6,463,800  | 6,431,400        | 32,400        |  |  |
| Total                | 34,422,900 | 8,550,400          | 42,973,300 | 15,569,700       | 27,403,600    |  |  |
| Grand Total          |            |                    |            |                  |               |  |  |
| Sewickley            | 117,400    | _                  | 117,400    | 117,400          | _             |  |  |
| Redstone             | 178,900    | _                  | 178,900    | 178,900          | _             |  |  |
| Upper Freeport       | 5,202,500  | 1,370,800          | 6,573,300  | 3,654,500        | 2,918,800     |  |  |
| Lower Freeport       | 2,191,700  | 7,400              | 2,199,100  | 2,199,100        | _             |  |  |
| Upper Kittanning     | 10,070,100 | 1,469,100          | 11,539,200 | 2,822,600        | 8,716,600     |  |  |
| Middle Kittanning    | 4,949,000  | 1,081,400          | 6,030,400  | 4,079,600        | 1,950,800     |  |  |
| Lower Kittanning     | 9,345,700  | 4,604,300          | 13,950,000 | 165,000          | 13,785,000    |  |  |
| Brookville           | 6,446,400  | 17,400             | 6,463,800  | 6,431,400        | 32,400        |  |  |
| Grand Total          | 38,501,700 | 8,550,400          | 47,052,100 | 19,648,500       | 27,403,600    |  |  |

Totals may not agree to 43-101 reserve report due to rounding.

The extent to which the coal reserves may be affected by any known environmental, permitting, legal, title, variation, socio-economic, marketing, political, or other relevant issues has been reviewed rigorously for estimation of coal reserves. Similarly, the extent to which the estimates of coal reserves may be materially affected by mining, metallurgical, infrastructure, and other relevant factors has also been considered. MM&A is not aware of any of these factors that impede classification of the reserves.

# **Coal Quality**

Coal seam quality data, available from exploration drill holes, have been utilized to assist in the determination of coal quality. Drill hole quality data was tabulated on a seam-by-seam basis for individual reserve areas on computer spreadsheets (using Microsoft Excel software) to allow for computation of basic statistical analyses (average, maximum, minimum) of the data sets.

# Summary of Coal Reserve Quality by Seam by Property - Proximate Analysis

**Weighted Composite (Moist Basis)** 

|                      |                   |                         | weighteu v | Composite (Mi | JIST Dasis) |                        |  |
|----------------------|-------------------|-------------------------|------------|---------------|-------------|------------------------|--|
| Reserve Area         | Seam              | Wash<br>Recovery<br>(%) | Ash (%)    | Sulfur (%)    | Btu/lb.     | Volatile<br>Matter (%) |  |
| Surface-mineable     |                   |                         | <u> </u>   |               |             | <u> </u>               |  |
| GAZ                  | Upper Kittanning  | 89.35                   | 15.00      | 1.72          | 10,971      |                        |  |
| Downey               | Upper Freeport    | 84.29                   | 23.27      | 5.65          | 10,880      | 17.00                  |  |
| Downey               | Lower Freeport    | 87.10                   | 15.72      | 2.53          | 12,144      | 17.00                  |  |
| Downey               | Upper Kittanning  | 88.19                   | 16.61      | 2.48          | 12,173      | 17.00                  |  |
| Downey               | Middle Kittanning | 84.55                   | 19.82      | 2.68          | 11,366      | 17.00                  |  |
| Hart                 | Lower Freeport    | 87.18                   | 13.95      | 1.45          | 11,677      | _                      |  |
| Hart                 | Upper Kittanning  | 85.14                   | 18.49      | 1.46          | 11,650      |                        |  |
| Rhoads               | Upper Kittanning  | 93.95                   | 8.18       | 0.53          | 12,420      | _                      |  |
| Rhoads               | Middle Kittanning | 85.47                   | 17.94      | 2.08          | 11,752      | _                      |  |
| Rhoads               | Lower Kittanning  | 87.81                   | 14.15      | 2.62          | 12,416      | _                      |  |
| Schrock Run          | Lower Freeport    | 95.00                   | 7.35       | 0.69          | 13,336      |                        |  |
| Schrock Run          | Upper Kittanning  | 92.34                   | 11.26      | 1.82          | 12,801      | _                      |  |
| Hamer                | Upper Freeport    | 58.43                   | 6.92       | 0.68          | 13,466      | 16.30                  |  |
| Hamer                | Upper Kittanning  | 94.77                   | 19.48      | 3.36          | _           | 15.10                  |  |
| Hamer                | Middle Kittanning | 61.81                   | 8.55       | 1.06          | 11,004      | 15.50                  |  |
| Blue Lick            | Redstone          | 91.37                   | 14.75      | 2.11          | 12,252      | _                      |  |
| Total                |                   | 89.05                   | 14.60      | 1.87          | 12,119      | 16.92                  |  |
| Highwall-mineable    |                   |                         |            |               |             |                        |  |
| Gaz                  | Upper Kittanning  | 89.35                   | 15.00      | 1.72          | 10,971      | _                      |  |
| Rhoades              | Upper Kittanning  | 93.95                   | 8.18       | 0.53          | 12,420      | _                      |  |
| Rhoades              | Middle Kittanning | 85.47                   | 17.94      | 2.08          | 11,752      | _                      |  |
| Rhoades              | Lower Kittanning  | 87.81                   | 14.15      | 2.62          | 12,416      | _                      |  |
| Schrock Run          | Lower Freeport    | 95.00                   | 7.35       | 0.69          | 13,336      | _                      |  |
| Schrock Run          | Upper Kittanning  | 92.34                   | 11.26      | 1.82          | 12,801      | _                      |  |
| Hamer                | Middle Kittanning | 61.51                   | 7.93       | 0.90          | 12,466      | 16.20                  |  |
| Total                |                   | 90.42                   | 11.87      | 1.82          | 12,510      | 16.20                  |  |
| Underground-mineable |                   |                         |            |               |             | '                      |  |
| Casselman            | Upper Freeport    | 81.17                   | 6.98       | 1.01          | 13,450      | 16.20                  |  |
| Horning              | Lower Freeport    | 90.49                   | 5.51       | 0.93          | 13,533      | 16.20                  |  |
| Acosta               | Upper Kittanning  | 78.63                   | 9.03       | 1.61          | 13,002      | 19.70                  |  |
| Acosta               | Middle Kittanning | 63.20                   | 11.28      | 1.17          | 12,601      | 15.40                  |  |
| Acosta               | Lower Kittanning  | 65.67                   | 10.18      | 1.79          | 12,812      | 17.40                  |  |
| Keyser               | Lower Kittanning  | 74.06                   | 6.68       | 1.37          | 13,402      | 18.90                  |  |
| A Seam               | Brookville        | 56.03                   | 10.07      | 0.79          | 12,698      | 17.90                  |  |
| Total                |                   | 71.50                   | 8.72       | 1.29          | 13,046      | 17.73                  |  |

## **Mining Operations**

The resource base for the NAPP Division Properties consists of eight coal seams extending from the Sewickley coal seam at the top of the stratigraphic column down through the Brookville coal seam. The majority of the resource tons occurs in the coal seams from the Upper Freeport to the Lower Kittanning. The topographic location of the many coal seams and the physical characteristics of the coal seams provide abundant opportunities to apply several of the coal mining methods routinely employed in Northern Appalachia.

Coal seams that outcrop along the hillside or that are located near the surface may be considered for surface mining methods including, contour and/or area removal. The surface mining methods allow recovery of resources that lie close to the surface and are not suitable for safe underground mining. Coal seams that are too thin to be underground mined economically can often be recovered successfully with surface mining methods. Contour mines advance along the coal seam outcrops with overburden back-stacked in the pit to eliminate the highwall. The proposed mine plan and financial model forecast approximately 4.2 million surface mine tons; however, only 4.1 million surface-mineable tons were determined to be economical for inclusion as reserves.

Underground mine reserves are mined using continuous mining room and pillar methods. Production sections are configured as single-unit sections, employing one continuous miner and one roof bolter per section. The basic production design employed at the active mines was applied to projected operations where possible. The mine plan and financial model includes approximately 1.3 million underground tons in 2019, ramping up to approximately 2.1 million tons per year in 2025 and up to a maximum of 2.6 million tons in 2026.

## **Mining Methods**

## **Surface Mining Methods**

There are currently two active surface mines on the property; however, Corsa has numerous idled and planned surface mines within its operational plan.

The proposed surface mines are planned to be operated by a mobile equipment spread built around a Hitachi EX3600 or Komatsu PC 2000 shovels, which is the principal excavator. The surface mine operations are linked in the financial model by the progression of equipment spreads and crews from resource area to resource area. The configuration of this equipment spread, or fleet is projected to be maintained for the future mine projections. Surface-mining activities are projected to occur from 2018 through 2032 at annual production rates up to 429,000 tons. Equipment replacements are scheduled at appropriate times over the period for the equipment.

## **Underground Mining Methods**

There are currently three active underground mines operated by Corsa: Acosta, Horning and Casselman. The Quecreek underground mine is now fully depleted. The Keyser underground mine is expected to begin production early in 2020. Production in Acosta will be expanded to include all 3 seams being mined simultaneously at any given time.

Projected annual production peaks at approximately 2.6 million clean tons. Mine plans are designed to project operating each resource area to depletion. Crews and equipment are scheduled to move to subsequent resource areas as depletion occurs.

The projected mines are assumed to operate similarly to the active mines, using the same equipment, crews, and methodology. Each mine is scheduled to operate one or two production sections, each configured as a single continuous miner sections, most using continuous haulage. In all cases, mines are forecasted to produce coal two shifts each day and reserve the third shift for maintenance, as well as belt and power moves. Production is scheduled Monday through Friday each week, and on shift every Saturday.

All of the mines can be accessed by box cut openings or highwall exposed by surface mining operations. Pillar extraction is not assumed for any of the current or future operations since no such plan has been approved by the appropriate regulatory agencies for those operations.

## **Markets and Contracts for Sale of Coal**

Corsa is a reliable supplier of high quality metallurgical coal to the Mid-Atlantic region and metallurgical coal to international customers in Asia, Europe and South America, via export terminals in Baltimore, Maryland and Norfolk, Virginia.

## **Environmental Condition**

Mining is one of the most heavily regulated industries in the USA. Mining activities are controlled and regulated by both federal and state laws, which establish policy, set goals, and provide a system of enforcement. Each of the properties is thus subject to certain environmental permits authorized by federal authorities. The federal laws relevant to mining include:

- The Clean Air Act of 1970, as amended
- The Clean Water Act of 1977
- The Surface Mining Control and Reclamation Act (SMCRA) of 1977, and
- The Resource Conservation and Recovery Act of 1976

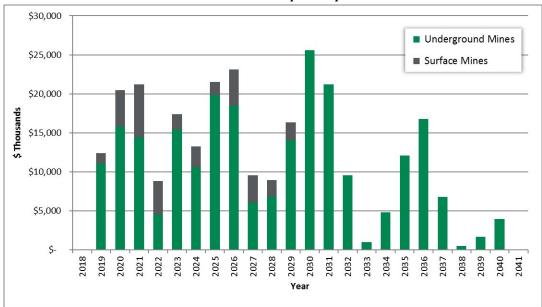
The Commonwealth of Pennsylvania Department of Environmental Protection (PaDEP) has responsibility of enforcing these Acts with aid of numerous state laws and legislative rules defined in the Codes of State Rules (CS). Relevant codes governing coal exploration, mining and preparation include:

- The Surface Mining Conservation and Reclamation Act, of May 31, 1945 (P.L. 1198, No. 412), as amended, 52 P.S. §§1396.1 et seq.
- Clean Streams Law, Act of June 22, 1937 (P.L>1984) 35 P.S. §§ 691.1 et seq.
- Bituminous Mine Subsidence and Land Conservation Act, Act of April 27 1966 (P.L. 31, No.1), as amended, 52 P.S. §§ 1406.1 et seq. 25 Pa. Code §§ 86-90.

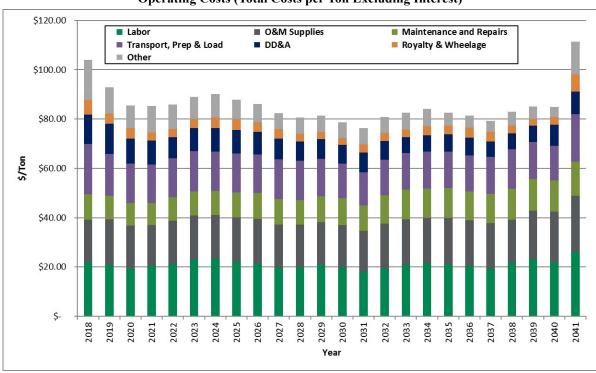
## **Capital and Operating Costs**

Capital expenditures total \$80.3 million during the first five years (through 2023) and \$277.0 million over the life of the NAPP Division Properties. Underground mine capital is projected by mine and includes the purchase and rebuilds of major equipment such as continuous miners, roof bolters, continuous haulage systems and shuttle cars, as well as construction and development capital. Surface mine capital is projected for equipment owned by Corsa, which move to the various reserve areas, including the Hitachi EX3600 excavator. Surface mine capital also includes the related dozers, overburden haulers and coal haulers, as well as the necessary support equipment. Projected capital also includes the necessary replacement expenditures in subsequent years. Below is a chart depicting the consolidated annual capital expenditures. Additional details regarding capital expenditures can be found in the NAPP Technical Report Appendices 2 and 3.

# **Consolidated Annual Capital Expenditures**



Operating costs are projected for each mine, taking into account projected annual tonnage, overburden moved and feet of advance, as appropriate. Operating cost projections are based on MM&A estimates of staffing, wage and salary levels, employee benefits, operating and maintenance ("O&M") and supply costs per yard of overburden, per foot of advance and per ton produced or processed. A breakdown of the projected total costs per ton before interest expense is shown in the chart below. Key operating cost assumptions are provided in the NAPP Technical Report tables 16-1 and 16-3, and a summary of the operating costs for each proposed mine is provided in Appendices 2 and 3 to the NAPP Technical Report.



**Operating Costs (Total Costs per Ton Excluding Interest)** 

# 6. DIVIDENDS AND DISTRIBUTIONS

The term loan facility includes a negative covenant that restricts the Company from declaring or paying dividends. The Company does not expect to pay dividends in the near future. If the Company generates earnings in the future, it expects that earnings will be retained to finance further growth. The Company's dividend policy is for the Company's board of directors to determine if and when to declare a dividend based upon its financial position at the relevant time.

## 7. DESCRIPTION OF CAPITAL STRUCTURE

# **Share Capital**

Authorized capital stock of the Company consists of an unlimited number of Common Shares without par value and an unlimited number of preferred shares issuable in series, with such rights, privileges, restrictions and conditions as the board of directors of the Company may determine from time to time. Each holder of Common Shares is entitled to one vote per share at meetings of shareholders, to receive any dividends declared by the Company's board of directors and to receive pro rata upon liquidation, dissolution or winding-up the remaining property. As of the date of this AIF, there are 94,759,245 Common Shares issued and outstanding and no issued and outstanding preferred shares.

## **Stock Options**

The Company has granted stock options to directors, officers, employees and service providers. Each stock option entitles the holder to purchase one Common Share of the Company at an exercise price set at the time of grant. As of the date of this AIF, there are 9,238,407 stock options, with exercise prices ranging from CDN\$0.90 to CDN\$5.40, issued and outstanding. The expiry date and the number of stock options outstanding for each exercise price are as follows:

| cise Price<br>CDN\$) | Expiry Date       | Stock Options<br>Outstanding |
|----------------------|-------------------|------------------------------|
| \$<br>0.90           | November 6, 2023  | 2,687,500                    |
| \$<br>1.00           | November 10, 2020 | 2,073,750                    |
| \$<br>1.39           | December 13, 2022 | 15,000                       |
| \$<br>1.40           | May 17, 2021      | 564,657                      |
| \$<br>1.53           | November 15, 2022 | 2,085,000                    |
| \$<br>1.58           | September 4, 2022 | 70,000                       |
| \$<br>1.83           | January 14, 2023  | 55,000                       |
| \$<br>2.30           | November 8, 2021  | 1,177,500                    |
| \$<br>2.40           | March 6, 2022     | 150,000                      |
| \$<br>3.50           | December 2, 2019  | 255,000                      |
| \$<br>5.40           | August 18, 2019   | 105,000                      |
|                      |                   | 9,238,407                    |

# **Common Share Purchase Warrants**

As consideration for the Facility, the Company issued 1.8 million Common Share purchase warrants of Corsa (the "Bonus Warrants") to SRLC. Each Bonus Warrant entitles the holder to purchase one Common Share for CDN\$3.90. As of the date of this AIF, there are 1,805,000 Bonus Warrants issued and outstanding.

# **WCE Units**

WCE, a subsidiary of the Company, has 897,265,035 WCE Units issued and outstanding as of the date of this AIF. The Company owns 726,948,396 units resulting in an 81% ownership interest in WCE and QKGI Legacy Holdings LP ("Legacy QKGI") owns 170,316,639 units resulting in a 19% interest in WCE. The WCE Units owned by Legacy QKGI entitle them to a pro-rata interest in the net and comprehensive income (loss) and net assets of WCE and are redeemable at the option of Legacy QKGI for cash equal to the product of (i) the number of membership units to be redeemed; and (ii) the 10-day volume weighted average trading price, prior to date of notice of redemption, of the Company's Common Shares. The Company has the option to satisfy the redemption price for the Redeemable Units with Common Shares on a 20 to 1 basis.

# 8. MARKET FOR SECURITIES

The Common Shares have been listed and posted for trading on the TSX-V under the symbol "CSO" since April 17, 2008. The following table sets out trading information for the Common Shares for the Company's financial year ended December 31, 2018.

|                | (CDN\$) |         |      |         |  |  |
|----------------|---------|---------|------|---------|--|--|
| Period         | F       | Iigh    | Low  | Volume  |  |  |
| January 2018   | \$      | 2.30 \$ | 1.69 | 367,100 |  |  |
| February 2018  | \$      | 2.05 \$ | 1.69 | 158,600 |  |  |
| March 2018     | \$      | 1.91 \$ | 1.60 | 282,800 |  |  |
| April 2018     | \$      | 1.77 \$ | 1.20 | 539,000 |  |  |
| May 2018       | \$      | 1.64 \$ | 1.12 | 548,400 |  |  |
| June 2018      | \$      | 1.30 \$ | 1.01 | 799,700 |  |  |
| July 2018      | \$      | 1.30 \$ | 1.05 | 292,900 |  |  |
| August 2018    | \$      | 1.34 \$ | 1.06 | 909,100 |  |  |
| September 2018 | \$      | 1.45 \$ | 1.14 | 466,400 |  |  |
| October 2018   | \$      | 1.39 \$ | 0.89 | 219,200 |  |  |
| November 2018  | \$      | 0.90 \$ | 0.68 | 340,900 |  |  |
| December 2018  | \$      | 0.88 \$ | 0.61 | 819,100 |  |  |

## **Prior Sales**

The following table discloses the securities issued during the year ended December 31, 2018 that are outstanding but not listed or quoted on a marketplace.

|           |               |  | CDN\$)                     |
|-----------|---------------|--|----------------------------|
| 55,000    | Common Shares | \$   | 1.83                       |
| 2,687,500 | Common Shares | \$   | 0.90                       |
| 2,742,500 |               |  |                            |
|           | 2,687,500     | 55,000 Common Shares<br>2,687,500 Common Shares<br>2,742,500 | 2,687,500 Common Shares \$ |

# 9. ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER

As of December 31, 2018, there were no escrowed securities or securities subject to a contractual restriction on transfer.

# 10. DIRECTORS AND OFFICERS

The name, province or state, and country of residence of the directors and officers of the Company, their respective positions and offices held with the Company, their respective principal occupations during the last five preceding years, periods during which each director has served as a director and when their term of office expires and the members of each committee of the board of directors are as follows:

| Name, Residence and<br>Position(s) Held | <b>Director Since</b> | Principal Occupation(s) Over Past 5 Years or Most Recent Prior Position         |
|---|-----------------------|---|
| Robert C. Sturdivant                    | 2017                  | Vice President of Finance and Managing Director of Risk Management at           |
| Houston, Texas                          |                       | Quintana Capital Group  |
| United States                           |                       |   |
| Director and Chairman                   |                       |   |
| John H. Craig                           | 2010                  | Senior Counsel at Cassels Brock and Blackwell LLP; Partner at Cassels Brock     |
| Toronto, Ontario                        |                       | and Blackwell LLP   |
| Canada                                  |                       |   |
| Director                                |                       |   |
| Alan M. De'Ath <sup>(1)(3)</sup>        | 2013                  | Director and President of AMDresources; President, CEO and Director of          |
| Oakville, Ontario                       |                       | Ivernia Inc.  |
| Canada                                  |                       |   |
| Director                                |                       |   |
| George G. Dethlefsen                    | 2013                  | Chief Executive Officer of Corsa Coal Corp.; Managing Director - Investments,   |
| Venetia, Pennsylvania                   |                       | Quintana Capital Group  |
| United States                           |                       |   |
| Director and CEO                        |                       |   |
| Kai Xia                                 | 2017                  | President of Great Northern Properties; Vice President of Corporate Development |
| Houston, Texas                          |                       | at Corsa Coal Corp.; VP, Quintana Energy Partners                               |
| United States                           |                       |   |
| Director                                |                       |   |
| Robert Scott <sup>(1)(2)(3)</sup>       | 2009                  | Retired; President and CEO of PBS Coals Inc                                     |
| Bonita Springs, Florida                 |                       |   |
| United States                           |                       |   |
| Director                                |                       |   |
| Arthur Einav <sup>(2)</sup>             | 2014                  | Managing Director, General Counsel and Corporate Secretary of Sprott Resource   |
| Toronto, Ontario                        |                       | Holdings, Inc.  |
| Canada                                  |                       |   |
| Director                                |                       |   |
| Ronald G. Stovash <sup>(1)(2)(3)</sup>  | 2013                  | Retired; President, CEO and Director Colombia Energy Resources                  |
| Naples, Florida                         |                       |   |
| United States                           |                       |   |
| Director                                |                       |   |

- (1) Current member of the Audit Committee of the Board.
- (2) Current member of the Compensation, Nominating and Governance Committee of the Board.
- (3) Current member of the Health, Safety and Environment Committee of the Board.

Each of the directors is elected to hold office until the next annual general meeting of the Company or until a successor is duly elected or appointed.

| Name, Residence and Position(s) Held | Principal Occupation(s) Over Past 5 Years                                   |
|--------------------------------------|---|
| Kevin M. Harrigan                    | Chief Financial Officer and Corporate Secretary of Corsa; Chief Accounting  |
| Venetia, Pennsylvania                | Officer of Walter Energy Inc.; U.S. Controller of Walter Energy Inc.        |
| United States                        |   |
| Chief Financial Officer              |   |
| and Corporate Secretary              |   |
| Peter V. Merritts                    | President - NAPP Division of Corsa; President and General Manager of Amfire |
| Greensburg, Pennsylvania             | Mining Company, LLC   |
| United States                        |   |
| President - NAPP Division            |   |
| Ken Lund                             | General Counsel and Vice President Administration of Corsa; General Counsel |
| Pittsburgh, Pennsylvania             | and Vice President, Commercial of the Americas region of the DRA Group;     |
| United States                        | General Counsel and President of Taggart Global, LLC                        |
| General Counsel and                  |   |
| VP - Administration                  |   |
| Matthew M. Schicke                   | Chief Commercial Officer of Corsa; Head of Americas, Noble Group; Managing  |
| Pittsburgh, Pennsylvania             | Director, Mercuria Energy Trading.  |
| United States                        |   |
| Chief Commercial Officer             |   |

## Ownership by Directors and Officers

As of the date of this AIF, the directors and executive officers as a group beneficially own or exercise control or direction, directly or indirectly, over the following Common Shares issued by the Company:

|               | Shares beneficially owned or over which control or direction is exercised | As a % of the total<br>outstanding Common<br>Shares |
|---------------|---|---|
| Common Shares | 201,650   | 0.21%   |

# **Corporate Cease Trade Orders or Bankruptcies**

Other than as set forth below:

- (a) no director or executive officer of the Company is, or has been in the last ten years, a director, chief executive officer or chief financial officer of any company that, while that person was acting in that capacity, (a) was the subject of a cease trade order or similar order, or an order that denied the relevant company access to any exemptions under securities legislation, for a period of more than 30 consecutive days; or (b) was subject to an event that resulted, after that person ceased to be a director or executive officer, in the relevant company being the subject of a cease trade or similar order, or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days; and
- (b) no director, executive officer or shareholder holding a sufficient number of securities to materially affect control of the Company (a) is or has been in the last ten years a director or executive officer of any company that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets or (b) has within the last ten years made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

Mr. Craig was a director of Sirocco Mining Inc. ("Sirocco") until November 8, 2013. On October 13, 2014, RB Energy Inc. ("RB Energy"), a successor company to Sirocco, filed for protection under the *Companies' Creditors Arrangement Act* (Canada) ("CCAA"). Although Mr. Craig was never a director, officer or insider of RB Energy, he was a director of Sirocco within the 12 month period prior to RB Energy filing under the CCAA.

#### **Penalties or Sanctions**

No director or officer of the Company has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or been subject to any other penalties or sanctions imposed by a court or regulatory body, including a self-regulatory body, that would be likely to be considered important to a reasonable investor in making an investment decision.

#### **Conflicts of Interest**

There are potential conflicts of interest to which the directors and officers of the Company may be subject to in connection with the operations of the Company. Some of the directors and officers are engaged in and will continue to be engaged in corporations or businesses which may be in competition with the business of the Company. Accordingly, situations may arise where the directors and officers will be in direct competition with the Company. Conflicts, if any, will be subject to the procedures and remedies as provided under the CBCA. See also "Risk Factors".

# 11. PROMOTERS

No person or company is considered to have acted as, or has been within the last two years, a promoter of the Company within the meaning of securities laws of Canada.

# 12. LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Other than as set forth below, during the year ended December 31, 2018:

- (i) there have been no actual or pending material legal proceedings to which Corsa was, or is likely to be, a party or of which any of its assets was, or is likely to be, subject;
- (ii) there have been no penalties or sanctions imposed against the Company by: (i) a court relating to securities legislation; (ii) a securities regulatory authority; or (iii) any other court or regulatory body where the penalty or sanction would likely be considered important to a reasonable investor in making an investment decision; and
- (iii) the Company has not entered into any settlement agreements with a court or securities regulatory authority.

# Clean Water Act Settlement

Prior to the consummation of the PBS Transaction, the United States Environmental Protection Agency ("EPA") initiated an audit of Clean Water Act compliance by PBS Coals, Inc., Croner, Inc., Elk Lick Energy, Inc., Quecreek Mining, Inc. and Rox Coal, Inc. (collectively, "PBS"). The Company acquired PBS as a result of the PBS Transaction. Based on the audit, on April 19, 2016, the EPA and the Pennsylvania Department of Environmental Protection ("PA DEP") filed a complaint for civil penalty and injunctive relief against PBS. The complaint alleged that PBS exceeded the permit effluent limitations in its water permits primarily during the period prior to the consummation of the PBS Transaction, including principally from 2007 to 2012.

In September 2016, PBS reached a settlement of this matter with the EPA and PA DEP in which PBS paid \$6.5 million as a civil penalty. As part of the PBS Transaction, \$10 million of the consideration was deposited into an escrow account (instead of being released to the seller) to address claims of this nature. As a result, \$6.5 million civil penalty payment that resolved the EPA and PA DEP's complaint was funded from such escrow account. An additional \$246,000 was released from the escrow account to the Company to reimburse it for PBS' legal fees related to the foregoing and the balance of the \$10 million of escrowed funds was released to the seller.

# Lucchini Litigation

In January 2016, the Company's subsidiary, PBS Coals, Inc. became the subject of a claim by Lucchini S.P.A. ("Lucchini") for \$52 million which arose from coal purchase and sale transactions between PBS Coals, Inc., as seller, and Lucchini, as purchaser. The transactions all occurred between November 2010 and April 2012, before Corsa acquired PBS Coals, Inc. The claim alleges

that during the relevant time period, both PBS Coals, Inc. and Lucchini were owned and/or controlled by OAO Severstal and/or entities controlled by Alexey Mordashov (the "Mordashov Group"). According to the claim, among other things, (i) PBS Coals, Inc. sold Lucchini \$52 million of coal between October 2010 and November 2011, (ii) under Italian law, insolvent companies, such as Lucchini, may claw back payments from a group of companies without regard to value given, (iii) Lucchini was insolvent at all relevant times, (iv) PBS Coals, Inc. was part of the OAO Severstal/Mordashov Group at all relevant times, (v) PBS Coals, Inc. 's knowledge of the insolvency can be imputed, and (vi) PBS Coals, Inc. had actual knowledge of the insolvency. PBS Coals, Inc. settled this claim in January 2019 for a cash payment of \$2,500 and legal fees and other expenses of \$211.

# Contingent Receivable - A Seam Condemnation

In December 2014, PBS Coals, Inc. filed a Petition with the Court of Common Pleas of Somerset County, Pennsylvania, seeking to convene a State Mining Commission (the "SMC") in order to determine the quantity and value of coal required to be left in place as a result Pennsylvania Department of Transportation's construction of State Route 219 over coal estates leased by PBS Coals, Inc. from Penn Pocahontas Coal Co. The SMC was convened in January 2015 and then bifurcated the proceedings into quantity and valuation phases. The SMC heard testimony on the quantity phase during dates between November 2016 and June 2017. On August 24, 2017, the SMC issued a ruling on the support quantity favorable to PBS Coals, Inc. and directed further hearings regarding the tonnages, valuation and mineability of the support coal. The hearings were completed in September 2018 and a ruling from the SMC is expected within the next three months. Presently, the Company has not recognized this contingent receivable and cannot provide a reasonable estimate for the potential magnitude of the claim.

# 13. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

On March 13, 2018, Corsa completed pursuant to a Membership Interest Purchase Agreement with Industrial Minerals Group, LLC (the "Buyer") a sale of the membership interests in Kopper Glo Mining, LLC (the "Kopper Glo Sale"). Principals of the Buyer include Hunter Hobson, the president of the Company's CAPP Division, Keith Dyke, former president of the Company's CAPP Division and the Buyer received financing from entities controlled by a member of the Robertson family. The Robertson family controls the general partner of Quintana Energy Partners, L.P. and its affiliated investment funds (collectively, "Quintana"). Quintana currently controls approximately 40% of the Company's issued and outstanding common shares. The board of directors of the Company unanimously (with conflicted directors abstaining) determined that the Kopper Glo Sale was in the best interests of the Company and approved the Kopper Glo Sale.

# 14. TRANSFER AGENTS AND REGISTRARS

The transfer agent and registrar for Corsa is Computershare Investor Services Inc., which is located at 100 University Avenue, 8<sup>th</sup> floor, Toronto, Ontario, M5J 2Y1.

# 15. MATERIAL CONTRACTS

Corsa is not a party to any material contract not otherwise disclosed, other than contracts entered into in the ordinary course of business, except:

- a. the Investor Rights Agreement between Legacy QKGI, New QKGI and the Company dated July 31, 2013;
- b. the Registration Rights Agreement between Legacy QKGI, New QKGI and the Company dated July 31, 2013;
- c. the Wilson Creek LLC Second Amended and Restated Limited Liability Company Agreement agreed to by Legacy QKGI and the Company dated July 31, 2013;
- d. the Registration Rights Agreement between Sprott Resource Partners and the Company dated August 19, 2014; and
- e. the Credit Agreement between Sprott Resource Lending and the Company dated August 19, 2014, as amended.

Copies of these agreements are available on SEDAR at www.sedar.com.

## 16. INTERESTS OF EXPERTS

The following persons are considered experts:

- The audited consolidated financial statements of Corsa for the years ended December 31, 2018, 2017 and 2016 have been
  audited by Urish Popeck & Co., LLC. Urish Popeck & Co., LLC has advised Corsa that it is independent with respect
  to Corsa within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of Ontario.
- Information relating to Corsa's NAPP Division mineral properties in this AIF has been derived from reports prepared by Marshall Miller & Associates, Inc. under the supervision of Justin S. Douthat, P.E., M.B.A., Michael G. McClure, C.P.G., and John W. Eckman, C.P.G., each of the aforementioned persons is a "qualified person" as such term is defined NI 43-101.

None of the persons referred to in this section 16, nor any director, officer, employee, consultant or partner thereof, as applicable, received or has received a direct or indirect interest in the Company or in the property of any of the Company's associates or affiliates. To the Company's knowledge as at the date of this AIF, the aforementioned persons specified above who participated in the preparation of such reports, or any director, officer, employee, consultant or partner thereof, as applicable, as a group, beneficially own, directly or indirectly, less than 1% of any class of shares of the Company.

## 17. AUDIT COMMITTEE INFORMATION

# 17.1 The Audit Committee's Charter

The Audit Committee adopted a charter of the Audit Committee on September 30, 2009, which was amended and reconfirmed on April 26, 2011 and subsequently amended and reconfirmed on March 6, 2017 (the "Audit Committee Charter"). The Audit Committee Charter is set out in full in Schedule A to this AIF.

# 17.2 Composition of the Audit Committee

As of the date of this AIF, the Audit Committee is comprised of Messrs. Alan M. De'Ath, Robert Scott and Ronald G. Stovash. All members of the Audit Committee are "independent" and "financially literate" as such terms are defined in National Instrument 52-110, Audit Committees ("NI 52-110"). Mr. De'Ath is the Chairman of the Audit Committee.

## 17.3 Relevant Education and Experience

The following provides a summary of the relevant education and experience of the members of the Audit Committee.

| Member            | Relevant Education and/or Experience  |
|-------------------|---|
| Chairman          | Mr. De'Ath has over 40 years of international financial, marketing, corporate and operational experience as a senior executive in the mining industry in a range of commodities. Mr. De'Ath has been both the CEO and the CFO of public companies responsible for the oversight of financial reporting and he is a Fellow of the Chartered Institute of Management Accountants (UK) and a Chartered Global Management Accountant. |
| Robert Scott      | Mr. Scott has over 40 years of experience in the coal industry, most recently as President and CEO of PBS Coals Ltd. Mr. Scott is a Scottish Chartered Accountant and a Chartered Management Accountant.  |
| Ronald G. Stovash | Mr. Stovash has been president and CEO of public and private companies and has spent over 45 years in the coal industry as a senior industry executive with experience in operations, engineering, marketing, transportation and corporate administration.  |

# 17.4 Pre-Approval Policies and Procedures

In accordance with NI 52-110 and with the Audit Committee Charter, the Audit Committee has the sole authority to pre-approve: (i) all auditing services, including all engagement fees and terms, and (ii) all non-audit services, including certain tax services to be performed by the Company's independent auditor. The Audit Committee currently approves any such proposed audit and non-audit matters prior to the services being performed.

# 17.5 External Auditor Service Fees (By Category)

The following table presents, by category, the fees paid by the Company to Urish Popeck & Co., LLC, the external auditor of the Company during the years ended December 31, 2018 and 2017.

| Category of Fee | Description  | 2018          | 2017          |
|-----------------|--|---------------|---------------|
| Audit Fees      | Fees billed by the Company's external auditor in connection with the audit of the Company's annual financial statements and with the review of the Company's interim financial statements. | \$<br>375,178 | \$<br>435,942 |
| Tax Fees        | Tax compliance and the preparation of tax returns.   | 112,358       | 5,679         |
| All Other Fees  | Fees billed by the Company's external auditor in connection with a review of certain regulatory submissions and due diligence matters  | 21,479        | 6,215         |
| Total Fees      |  | \$<br>509,015 | \$<br>447,836 |

# 18. ADDITIONAL INFORMATION

Additional information relating to the Company can be found on SEDAR at www.sedar.com. Further, additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans is contained in the Company's information circular dated June 26, 2018 for the annual and special meeting of shareholders that took place on August 8, 2018. Additional financial information is provided in the Company's consolidated financial statements and management's discussion and analysis for the years ended December 31, 2018 and 2017.

#### Schedule A - Audit Committee Charter

This charter (the "Charter") sets forth the purpose, composition, responsibilities and authority of the Audit Committee (the "Committee") of the Board of Directors (the "Board") of Corsa Coal Corp. ("Corsa").

## 1.0 Purpose

The purpose of the Committee is to assist the Board in fulfilling its oversight responsibilities with respect to:

- financial reporting and disclosure requirements;
- ensuring that an effective risk management and financial control framework has been implemented and tested by management of Corsa; and
- external and internal audit processes.

## 2.0 Composition and Membership

- (a) The Board will appoint the members ("**Members**") of the Committee. The Members will be appointed to hold office until the next annual general meeting of shareholders of Corsa or until their successors are appointed. The Board may remove a Member at any time and may fill any vacancy occurring on the Committee. A Member may resign at any time and a Member will automatically cease to be a Member upon ceasing to be a director.
- (b) The Committee will consist of at least three directors. Each Member will meet the criteria for independence and financial literacy established by applicable laws and the rules of any stock exchanges upon which Corsa's securities are listed, including National Instrument 52-110 Audit Committees. In addition, each director will be free of any relationship which could, in the view of the Board, reasonably interfere with the exercise of a Member's independent judgment.
- (c) The Board will appoint one of the Members to act as the chairman of the Committee (the "Chairman"). The secretary of Corsa (the "Secretary") will be the secretary of all meetings and will maintain minutes of all meetings and deliberations of the Committee. If the Secretary is not in attendance at any meeting, the Committee will appoint another person who may, but need not, be a Member to act as the secretary of that meeting.

#### 3.0 Meetings

- (a) Meetings of the Committee will be held at such times and places as the Chairman may determine, but in any event not less than four (4) times per year. Twenty-four (24) hours advance notice of each meeting will be given to each Member orally, by telephone, by facsimile or email, unless all Members are present and waive notice, or if those absent waive notice before or after a meeting. Members may attend all meetings either in person or by telephone.
- (b) At the request of the external auditors of Corsa, the Chief Executive Officer or the Chief Financial Officer of Corsa or any Member, the Chairman will convene a meeting of the Committee. Any such request will set out in reasonable detail the business proposed to be conducted at the meeting so requested.
- (c) The Chairman, if present, will act as the chairman of meetings of the Committee. If the Chairman is not present at a meeting of the Committee the Members in attendance may select one of their number to act as chairman of the meeting.
- (d) A majority of Members will constitute a quorum for a meeting of the Committee. Each Member will have one vote and decisions of the Committee will be made by an affirmative vote of the majority. The Chairman will not have a deciding or casting vote in the case of an equality of votes. Powers of the Committee may also be exercised by written resolutions signed by all Members.
- (e) The Committee may invite from time to time such persons as it sees fit to attend its meetings and to take part in the discussion and consideration of the affairs of the Committee. The Committee will meet in camera without members of management in attendance for a portion of each meeting of the Committee.

(f) In advance of every regular meeting of the Committee, the Chairman, with the assistance of the Secretary, will prepare and distribute to the Members and others as deemed appropriate by the Chairman, an agenda of matters to be addressed at the meeting together with appropriate briefing materials. The Committee may require officers and employees of Corsa to produce such information and reports as the Committee may deem appropriate in order for it to fulfill its duties.

## 4.0 Duties and Responsibilities

The duties and responsibilities of the Committee as they relate to the following matters, are as follows:

# 4.1 Financial Reporting and Disclosure

- (a) review and recommend to the Board for approval, the audited annual financial statements, including the auditors' report thereon, the quarterly financial statements, management discussion and analysis, financial reports, and any guidance with respect to earnings per share to be given, prior to the public disclosure of such information, with such documents to indicate whether such information has been reviewed by the Board or the Committee;
- (b) review and recommend to the Board for approval, where appropriate, financial information contained in any prospectuses, annual information forms, annual report to shareholders, management proxy circular, material change disclosures of a financial nature and similar disclosure documents prior to the public disclosure of such information;
- (c) review with management of Corsa, and with external auditors, significant accounting principles and disclosure issues and alternative treatments under International Financial Reporting Standards ("IFRS"), with a view to gaining reasonable assurance that financial statements are accurate, complete and present fairly Corsa's financial position and the results of its operations in accordance with IFRS, as applicable; and
- (d) seek to ensure that adequate procedures are in place for the review of Corsa's public disclosure of financial information extracted or derived from Corsa's financial statements, periodically assess the adequacy of those procedures and recommend any proposed changes to the Board for consideration;

# 4.2 Internal Controls and Audit

- (a) review the adequacy and effectiveness of Corsa's system of internal control and management information systems through discussions with management and the external auditor to ensure that Corsa maintains: (i) the necessary books, records and accounts in sufficient detail to accurately and fairly reflect Corsa's transactions; (ii) effective internal control systems; and (iii) adequate processes for assessing the risk of material misstatement of the financial statement and for detecting control weaknesses or fraud. From time to time the Committee shall assess whether it is necessary or desirable to establish a formal internal audit department having regard to the size and stage of development of Corsa at any particular time;
- (b) satisfy itself that management has established adequate procedures for the review of Corsa's disclosure of financial information extracted or derived directly from Corsa's financial statements;
- (c) satisfy itself, through discussions with management, that the adequacy of internal controls, systems and procedures has been periodically assessed in order to ensure compliance with regulatory requirements and recommendations;
- (d) review and discuss Corsa's major financial risk exposures and the steps taken to monitor and control such exposures, including the use of any financial derivatives and hedging activities;
- (e) review, and in the Committee's discretion make recommendations to the Board regarding, the adequacy of Corsa's risk management policies and procedures with regard to identification of Corsa's principal risks and implementation of appropriate systems to manage such risks including an assessment of the adequacy of insurance coverage maintained by Corsa;
- (f) recommend the appointment, or if necessary, the dismissal of the head of Corsa's internal audit process;

# 4.3 External Audit

- (a) recommend to the Board a firm of external auditors to be nominated for appointment as the external auditor of Corsa:
- (b) ensure the external auditors report directly to the Committee on a regular basis;
- review the independence of the external auditors, including a written report from the external auditors respecting their independence and consideration of applicable auditor independence standards;

- (d) review and recommend to the Board the fee, scope and timing of the audit and other related services rendered by the external auditors;
- (e) review the audit plan of the external auditors prior to the commencement of the audit;
- (f) establish and maintain a direct line of communication with Corsa's external and internal auditors;
- (g) meet in camera with only the auditors, with only management, and with only the members of the Committee at every Committee meeting where, and to the extent that, such parties are present;
- (h) oversee the performance of the external auditors who are accountable to the Committee and the Board as representatives of the shareholders, including the lead partner of the independent auditors team;
- (i) oversee the work of the external auditors appointed by the shareholders of Corsa with respect to preparing and issuing an audit report or performing other audit, review or attest services for Corsa, including the resolution of issues between management of Corsa and the external auditors regarding financial disclosure;
- (j) review the results of the external audit and the report thereon including, without limitation, a discussion with the external auditors as to the quality of accounting principles used, any alternative treatments of financial information that have been discussed with management of Corsa, the ramifications of their use as well as any other material changes. Review a report describing all material written communication between management and the auditors such as management letters and schedule of unadjusted differences;
- (k) discuss with the external auditors their perception of Corsa's financial and accounting personnel, records and systems, the cooperation which the external auditors received during their course of their review and availability of records, data and other requested information and any recommendations with respect thereto;
- (l) discuss with the external auditors their perception of Corsa's identification and management of risks, including the adequacy or effectiveness of policies and procedures implemented to mitigate such risks;
- (m) review the reasons for any proposed change in the external auditors which is not initiated by the Committee or Board and any other significant issues related to the change, including the response of the incumbent auditors, and enquire as to the qualifications of the proposed auditors before making its recommendations to the Board;
- (n) review annually a report from the external auditors in respect of their internal quality-control procedures, any material issues raised by the most recent internal quality-control review, or peer review of the external auditors, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the external auditors, and any steps taken to deal with any such issues;

# 4.4 Associated Responsibilities

- (a) if applicable, monitor and periodically review associated procedures for:
  - the receipt, retention and treatment of complaints received by Corsa regarding accounting, internal accounting controls or auditing matters;
  - ii. the confidential, anonymous submission by directors, officers and employees of Corsa of concerns regarding questionable accounting or auditing matters;
  - iii. any violations of any applicable law, rule or regulation that relates to corporate reporting and disclosure; and
- (b) if applicable, review and approve Corsa's hiring policies regarding employees and partners, and former employees and partners, of the present and former external auditors of Corsa; and

## 4.5 Non-Audit Services

(a) pre-approve all non-audit services to be provided to Corsa or any subsidiary entities by its external auditors or by the external auditors of such subsidiary entities. The Committee may delegate to one or more of its members the authority to pre-approve non-audit services but pre-approval by such member or members so delegated shall be presented to the full Committee at its first scheduled meeting following such pre-approval.

#### 5.0 Oversight Function

While the Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Committee to plan or conduct audits or to determine that Corsa's financial statements are complete and accurate or comply with IFRS and other applicable requirements. These are the responsibilities of Management and the external auditors. The Committee, the Chairman and any Members identified as having accounting or related financial expertise are members of the Board, appointed to the Committee to provide broad oversight of the financial, risk and control related activities of Corsa, and are specifically not accountable or responsible for the day to day operation or performance of such activities. Although the designation of a Member as having accounting or related financial expertise for disclosure purposes is based on that individual's education and experience,

which that individual will bring to bear in carrying out his or her duties on the Committee, such designation does not impose on such person any duties, obligations or liability that are greater than the duties, obligations and liability imposed on such person as a member of the Committee and Board in the absence of such designation. Rather, the role of a Member who is identified as having accounting or related financial expertise, like the role of all Members, is to oversee the process, not to certify or guarantee the internal or external audit of Corsa's financial information or public disclosure.

# 6.0 Reporting

The Chairman will report to the Board at each Board meeting on the Committee's activities since the last Board meeting. The Committee will annually review and approve the Committee's report for inclusion in the Annual Information Form. The Secretary will circulate the minutes of each meeting of the Committee to the members of the Board.

# 7.0 Access to Information and Authority

The Committee will be granted unrestricted access to all information regarding Corsa that is necessary or desirable to fulfill its duties and all directors, officers and employees will be directed to cooperate as requested by Members. The Committee has the authority to retain, at Corsa's expense, independent legal, financial and other advisors, consultants and experts, to assist the Committee in fulfilling its duties and responsibilities, including sole authority to retain and to approve any such firm's fees and other retention terms without prior approval of the Board. The Committee also has the authority to communicate directly with internal and external auditors.

#### 8.0 Review of Charter

The Committee will annually review and assess the adequacy of this Charter and recommend any proposed changes to the Board for consideration.