

NEW YORK, NY--(Marketwired - April 13, 2015) - [Applied Minerals Inc.](#) (OTCQB: AMNL) (the "Company" or "Applied Minerals"), a leading global producer of halloysite clay and high-grade, advanced natural iron oxide, has provided a corporate update for the year ended December 31, 2014.

## Management Commentary

"2014 was a year of continued progress for Applied Minerals," said Andre Zeitoun, CEO and President of [Applied Minerals Inc.](#) "We made significant advancements with respect to moving further along the path toward commercialization for both our DRAGONITE® halloysite and AMIRON® iron oxide product lines. Our R&D efforts with potential customers over the last few years are beginning to generate results. Further, our marketing and distribution agreements with The Lorama Group, Inc. ("Lorama"), Mitsui Plastics, Inc. ("Mitsui") and OPF Enterprises, LLC ("OPF") have produced a number of commercial opportunities for us. With our recently commissioned processing facility, we now have up to 55,000 tons of combined annual production to meet an increase in product demand.

"Looking into 2015, we expect to continue the progress that characterized our business in 2014. We currently have an attractive pipeline of opportunities across a range of industry verticals. The time and effort required to commercialize value-added, disruptive technologies can be significant, but we feel our efforts are beginning to bear fruit in light of recent commercial developments. Management continues to focus intently on increasing its sales and distribution channels to execute on the opportunities that lie before it."

## Corporate Update

Below is an overview of the markets Applied Minerals is pursuing and the progress that has been made in commercializing its products within those markets.

### Halloysite Clay - DRAGONITE

#### *Adhesive, Elastomer & Thermoset Additives*

DRAGONITE continues to attract significant interest from adhesive, epoxy, and thermoset manufacturers as an all-natural, high value additive. Through a combination of reinforcement, impact resistance, and adhesive properties imparted at low loadings, DRAGONITE provides an unmatched value proposition. The Company estimates the size of the global adhesives market alone to be approximately 9.4 million tons per annum, presenting a significant volume opportunity for DRAGONITE even at low loading rates.

During 2014, a Fortune 100 customer and leading global producer of structural adhesives continued the roll out of its next-generation acrylic product containing DRAGONITE. This customer is also developing a number of new products utilizing DRAGONITE as a high performance additive. Also during 2014, a global tire manufacturer advanced to a large-scale pilot test of an application that utilized DRAGONITE for rubber reinforcement.

#### *Polymer Additives for Nucleation*

Nucleating agents are used to speed up the process of crystallization of a resin in order to reduce the manufacturing (cycle) time of molded plastic parts. Unlike many other nucleating agents, DRAGONITE has been shown to both improve cycle time and increase a number of mechanical properties of molded parts. DRAGONITE allows a molder to reduce costs both through a reduction in manufacturing time and an ability to thin wall molded parts.

While nucleating agents exist for a wide range of resins, DRAGONITE is one of only two additives that can nucleate polyethylene, the largest volume resin in the world. Only a small percentage of the 50 million tons of polyethylene produced annually are nucleated, presenting a significant market opportunity for the Company.

DRAGONITE continues to gain traction in the polymer industry. During 2014, one of Applied Minerals' customers, a large manufacturer of lawn and garden equipment, expanded the use of DRAGONITE to a second product offering. Additionally, in early 2015, the Company successfully acquired a large injection molder as a new customer. Management believes the utilization of DRAGONITE by these large, established customers provides a critical validation of the product for the industry as a whole. The Company continues to rigorously market this application and is currently in various stages of trials with additional customer prospects.

#### *Foaming Additives for Plastics*

Foaming agents are used primarily to lightweight molded plastic parts for applications in industries such as packaging and

automotive components. Light weighting, however, can often result in a loss of mechanical properties. When DRAGONITE is used in conjunction with a foaming agent, it has been shown to prevent the degradation of the mechanical integrity of a foamed plastic part, while retaining the benefit of weight savings.Â

During 2014, a customer and leading manufacturer of chemical foaming agents, KibbeChem, successfully achieved several end-customer wins through the marketing of both a formulation comprised of DRAGONITE and its proprietary foaming agent as well as DRAGONITE as a nucleating agent. To meet initial end-user demand, KibbeChem purchased product in late 2014. KibbeChem expects to realize increased demand in 2015 for both its DRAGONITE-based foaming agent and DRAGONITE nucleating agent as it expands its marketing efforts and achieves additional customer wins.

### *Flame Retardant Additives*

Flame retardant additives ("FR") are widely used in flame retardant and flame resistant plastics, which are needed for applications such as electronics, building insulation, polyurethane foam, and jackets and insulation for wire and cable. The market for FR additives for plastics continues to move away from toxic halogenated compounds to non-toxic, mineral-based compounds such as ATH and MDH. Unfortunately, ATH and MDH, when used at loading levels necessary to achieve required UL ratings, often impair the mechanical properties of a polymer. DRAGONITE solves this issue when used as a partial replacement. Additionally, DRAGONITE has been shown to be an effective partial replacement for antimony trioxide, a widely used FR additive that costs approximately \$4.50 per pound, a significant premium to the cost of DRAGONITE. The Company estimates the annual global demand for FR additives is approximately 2.2 million metric tons, or \$6.0 billion.

The Company successfully secured two customers in 2014 for its flame retardant product. One of these customers is a Fortune 500 company, which launched, and is currently rolling out, a new flame retardant coating utilizing DRAGONITE. Additionally, a specialty polymer compounder began to incorporate DRAGONITE in a commercial FR formulation. A number of cable and wire manufacturers have ongoing projects developing the use of DRAGONITE as an FR additive in jacket and insulation applications.

Finally, one of the Company's distributors, Lorama Group, has begun marketing DRAGONITE to its paints and coatings customers for use in flame retardant paints. In late 2014, a large manufacturer in South America announced its intention to commercialize a new flame retardant coating based on DRAGONITE. The formulation was tested to meet industry requirements and the customer is currently moving to a pilot-scale trial. If successful, it is believed that commercialization of the product will occur during 2015.

Additional commercial-scale trials are expected to continue in 2015 and Lorama has purchased material to meet initial customer demand.

### *Catalysts & Molecular Sieves*

Molecular sieves are used for the purification of gas streams, the separation of compounds and the drying of reaction-starting materials. DRAGONITE is an excellent additive that provides a combination of strength, porosity and reactivity to catalysts and molecular sieves, enhancing their performance and productivity in critical end-use applications. The global adsorbent market is estimated to be approximately \$2.9 billion.

During 2014, two customers advanced their projects to commercial field trials. If successful, both individual opportunities present attractive volume and revenue potential.Â

### *Ceramic Additives*

Within the ceramic market, DRAGONITE acts as an effective additive that enhances the green strength of the ceramic body while also improving the casting rate, which equates to increased productivity. Competing additives are predominantly hectorite and bentonite-based organoclays, which are organically modified and cost between \$2.00 and \$5.00 per pound, a significant premium to the cost of DRAGONITE. These organoclays provide similar green strength but typically reduce productivity. Additionally, Dragonite contains no chemical modification and is the whitest firing additive in the market, two especially important product qualities for porcelain manufacturers.

The Company is currently supplying DRAGONITE as a ceramic additive to a well-known supplier of ceramic body formulations, which are used by many high-value ceramic tile and porcelain customers. The performance of DRAGONITE has compelled this customer to completely replace the use of its traditional incumbent binder product with DRAGONITE. Applied Minerals continues to aggressively market its binder product to this industry. The marketing brochure for DRAGONITE as a ceramic additive can be found at the following link: brochure. The Company will be attending the upcoming 2015 Ceramics Expo to be held in Cleveland, OH from April 28<sup>th</sup> through April 30<sup>th</sup>. Details of the expo can be found at <http://www.ceramicsexpousa.com/>.

### *Cosmetics*

The tubular morphology, absorptive nature and purity of DRAGONITE position it as a unique material with which cosmetic products can be developed. DRAGONITE, among other things, is able to remove unwanted toxins and oils from skin without the use of harsh chemicals, hydrate the skin, and deliver a range of beneficial active ingredients to the skin in a controlled-release fashion. The Company estimates the total global market for skincare and beauty products to be approximately \$52.8 billion.

In early 2015, the Company signed a term sheet to form a joint venture with a global leader in cosmetics. The joint venture will own and market a brand of cosmetic products utilizing the unique characteristics of DRAGONITE-PUREWHITE®. A significant amount of work related to product development and brand creation has occurred over the past 18 months. Through a series of clinical trials, the products developed to date have demonstrated superior performance characteristics compared to leading benchmark products. Through its stake in the joint venture, the Company will obtain a material ownership interest in the consumer brand. Applied Minerals expects to finalize the joint venture agreement in the latter half of 2015.

## Iron Oxide - AMIRON

### *Pigmentary*

In 2014, the Company launched its AMIRON line of advanced natural iron oxide pigments to the construction, wood coatings, paints, industrial coatings, plastics and rubber markets. Traditionally, natural iron oxides, due to their variance in quality, have not been able to compete with synthetic versions in the pigment market. The consistent purity (high level of Fe<sub>2</sub>O<sub>3</sub>) and other characteristics of the Company's iron oxide resource qualify AMIRON as an advanced natural iron oxide, enabling it to compete with higher cost synthetic iron oxides, offering manufacturers a compelling value proposition.

Additionally, the Company launched a family of semi-transparent pigment grades for use in interior and exterior wood stains. Transparent iron oxide colorants are not widespread on the market because they are prohibitively expensive, difficult to produce, and extremely challenging and costly to disperse; whereas, AMIRON is an advanced-natural iron oxide-based pigment line that offers excellent dispersability in addition to color consistency and UV protection.

The global iron oxide pigment market is estimated to be approximately 1.34 million tons, or \$1.35 billion. Domestic U.S. consumption of iron oxide pigments in 2014 was 210,000 metric tons, 170,000 of which were imported. According to USGS data, the average price realized domestically was approximately \$0.73 per pound. Market prices for synthetic semi-transparent grades range from \$1.50 to \$5.00 per pound. The performance characteristics and low production costs of AMIRON enable it to be competitively priced with respect to high value synthetic pigment products.

Lorama is both a customer and an exclusive distributor for the AMIRON line of iron oxide pigments for paints and coatings. During 2014 they aggressively introduced AMIRON to its paints and coatings customers located in Europe, Asia, South America and North America. These customers have indicated strong interest in the product and several commercial projects have been initiated and are ongoing.

Finally, the Company anticipates strong commercial acceptance for its AMIRON iron oxides for use as an all-natural range of colorants for decorative landscape mulch. The U.S. market for iron oxide mulch colorants is estimated to be 200 million pounds per year, valued at nearly \$140 million.

### *Technical*

The Company's AMIRON OH40, due to its high purity, large surface area and high reactivity, is an effective hydrogen sulfide scavenger for applications within the energy and biogas industries. Hydrogen sulfide is a chemical compound with the formula H<sub>2</sub>S. It is a colorless gas, which, among other things, is both environmentally damaging and highly corrosive. To date, most iron oxide-based desulphurization catalysts have utilized synthetic oxides. AMIRON, however, competes effectively with synthetics on both a performance and cost basis.

During 2014, a company, operating within the energy industry, successfully carried out product development activities and pilot-scale tests utilizing AMIRON OH40 as a scavenger material. This project has successfully advanced to field-testing at the company's end-customers' locations. The Company believes meaningful sales from this opportunity could commence before the end of 2015.

During the fourth quarter of 2014, Applied Minerals began marketing AMIRON as a desulphurization catalyst to the biogas market both in Europe and the United States. The removal of hydrogen sulfide, a by-product of the anaerobic conversion of biomass, protects the reactor from corrosion. The marketing brochure of AMIRON for use as a biogas desulphurization catalyst can be found at the following link: [brochure](#). The Company will be attending the Biocycle West Coast Conference 2015 to be held in Portland, OR from April 13<sup>th</sup> through April 16<sup>th</sup>. Further information can be found at <http://www.biocyclewestcoast.com/>.

AMIRON is an effective additive for foundry sands used in the casting of metals. Iron oxide is added to foundry sand to reduce

product defects that often occur during the casting process. The market for sand additives in metal casting, such as iron oxide, is driven by product specification and price. AMIRON meets the product specification for iron oxide as a foundry sand additive.

Finally, during 2014, a large international producer of foundry molding additives approved AMIRON as a foundry sand additive for iron casting. This potential customer has indicated that it plans to begin purchasing AMIRON for this application in 2015. The customer is also testing AMIRON for use in steel casting, which could lead to additional opportunities once validated.

#### About Applied Minerals, Inc.

Applied Minerals is the leading producer of halloysite clay and advanced natural iron oxide solutions from its wholly owned Dragon Mine property in Utah. Halloysite is aluminosilicate clay that forms naturally occurring nanotubes. In addition to serving the traditional halloysite markets for use in technical ceramics and catalytic applications, the Company has developed niche applications that benefit from the tubular morphology of its halloysite. These applications include carriers of active ingredients in paints, coatings and building materials, environmental remediation, agricultural applications and high-performance additives & fillers for plastic composites. Applied Minerals markets its halloysite products under the DRAGONITE® trade name.

From its Dragon Mine property, the Company also produces a range of ultra-pure natural iron oxides consisting of hematite and goethite. Combining ultra-high purity and consistent quality, the inherent properties of the iron oxide from the Dragon Mine allow for a wide range of end uses in pigment and technical applications. Applied Minerals markets its comprehensive line of advanced natural iron oxide pigments under the AMIRON® trade name. Additional information on the Company can be found at [www.appliedminerals.com](http://www.appliedminerals.com) and [www.AMIRONoxides.com](http://www.AMIRONoxides.com).

#### Safe Harbor Statements

The following are safe harbor statements under the Private Securities Litigation Reform Act of 1995 for [Applied Minerals Inc.](http://www.appliedminerals.com) Some statements contained or implied in this news release may be considered forward-looking statements, which by their nature are uncertain. Consequently, actual results could materially differ. For more detailed information concerning how risks and uncertainties could affect the Company's financial results, please refer to Applied Minerals' most recent filings with the SEC. The Company assumes no obligation to update any forward-looking information.

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