

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2013

Commission File No. 1-15579



MINE SAFETY APPLIANCES COMPANY

(Exact name of registrant as specified in its charter)

Pennsylvania
(State or other jurisdiction of
incorporation or organization)

25-0668780
(IRS Employer Identification No.)

1000 Cranberry Woods Drive
Cranberry Township, Pennsylvania
(Address of principal executive offices)

16066-5207
(Zip code)

(Title of each class)
Common Stock, no par value

Registrant's telephone number, including area code: (724) 776-8600

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

(Name of each exchange on which registered)
New York Stock Exchange

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

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

As of February 17, 2014, there were outstanding 37,212,881 shares of common stock, no par value, not including 282,120 shares held by the Mine Safety Appliances Company Stock Compensation Trust. The aggregate market value of voting stock held by non-affiliates as of June 30, 2013 was approximately \$1.4 billion.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the May 6, 2014 Annual Meeting of Shareholders are incorporated by reference into Part III.

Table of Contents

<u>Item No.</u>		<u>Page</u>
Part I		
1.	Business	4
1A.	Risk Factors	8
1B.	Unresolved Staff Comments	12
2.	Properties	13
3.	Legal Proceedings	14
4.	Mine Safety Disclosures	16
	Executive Officers of the Registrant	16
Part II		
5.	Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	17
6.	Selected Financial Data	19
7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	19
7A.	Quantitative and Qualitative Disclosures About Market Risk	31
8.	Financial Statements and Supplementary Data	33
9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	65
9A.	Controls and Procedures	65
9B.	Other Information	65
Part III		
10.	Directors, Executive Officers and Corporate Governance	66
11.	Executive Compensation	66
12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	66
13.	Certain Relationships and Related Transactions, and Director Independence	66
14.	Principal Accountant Fees and Services	66
Part IV		
15.	Exhibits and Financial Statement Schedules	67
	Signatures	70

Forward-Looking Statements

This report may contain (and verbal statements made by Mine Safety Appliances Company (MSA) may contain) forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These risks and other factors include, but are not limited to, those listed in this report under “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and elsewhere in this report. In some cases, you can identify forward-looking statements by words such as “may,” “will,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential” or other comparable words. Actual results, performance or outcomes may differ materially from those expressed or implied by these forward-looking statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We are under no duty to update publicly any of the forward-looking statements after the date of this report, whether as a result of new information, future events or otherwise.

PART I

Item 1. Business

Overview—Mine Safety Appliances Company was founded in Pennsylvania in 1914. We are a global leader in the development, manufacture and supply of products that protect people’s health and safety. Our safety products typically integrate a combination of electronics, mechanical systems and advanced materials to protect users against hazardous or life threatening situations. Our comprehensive line of safety products is used by workers in many industries as well as the military around the world. Notably, we primarily serve the oil and gas, fire service, mining, and construction industries. Our broad product offering includes self-contained breathing apparatus, or SCBA, gas masks, gas detection instruments, head protection, respirators, thermal imaging cameras and fall protection. We also provide a broad offering of consumer and contractor safety products through retail channels.

We dedicate significant resources to research and development, which allows us to produce innovative safety products that are often first to market and exceed industry standards. Our global product development teams include cross-geographic and cross-functional members from various areas throughout the company, including research and development, marketing, sales, operations and quality management. Our engineers and technical associates work closely with the safety industry’s leading standards-setting groups and trade associations, such as the National Institute for Occupational Safety and Health, or NIOSH, and the National Fire Protection Association, or NFPA, and their overseas counterparts, to develop industry product requirements and standards and to anticipate their impact on our product lines.

Segments—We tailor our product offerings and distribution strategy to satisfy distinct customer preferences that vary across geographic regions. To best serve these customer preferences, we have organized our business into eleven geographic operating segments that are aggregated into three reportable geographic segments: North America, Europe and International. Segment information is presented in the note entitled “Segment Information” in Item 8—Financial Statements and Supplementary Data.

Because our financial statements are stated in U.S. dollars and much of our business is conducted outside the U.S., currency fluctuations may affect our results of operations and financial position and may affect the comparability of our results between financial periods.

Principal Products—We manufacture and sell a comprehensive line of safety products to protect workers around the world in the oil and gas, fire service, mining, construction and other industries, as well as the military. We also provide a broad offering of consumer and contractor safety products through retail channels. Our products protect people against a wide variety of hazardous or life-threatening situations.

The following is a brief description of each of our principal product categories:

Core Products. MSA’s strategy includes a focus on driving profitable core product sales. Core products include breathing apparatus, industrial head protection, fixed gas and flame detection, portable gas detection and fall protection products. These products receive the highest levels of investment and resources in alignment with our commitment to grow core products sales in both emerging and developed markets.

Adjacent products. MSA provides a series of adjacent product offerings to its customers that complement its core products. These products reinforce and extend the core, drawing upon our customer relationships, distribution channels, geographical presence and technical experience. These products tend to have their roots within the core product value chain, but receive a smaller allocation of corporate resources than core products. Adjacent product sales comprise approximately one fourth of consolidated sales.

Peripheral products. MSA provides a series of peripheral product offerings to its customers. MSA’s competitive advantage in serving peripheral product customers tends to be related to our channels of distribution or customer access. These products are primarily sold to the mining industry and represent a small portion of consolidated sales.

The following is a brief description of our significant product offerings included in the above product categories:

Respiratory protection. We offer a broad and comprehensive line of respiratory protection products. These products are used to protect against the harmful effects of contamination caused by dust, gases, fumes, volatile chemicals, sprays, micro-organisms, fibers and other contaminants. These products include:

Self Contained Breathing Apparatus. SCBA are used by first responders, petrochemical plant workers and anyone entering an environment deemed immediately dangerous to life and health. SCBA are also used by first responders to protect against exposure to chemical, biological, radiological and nuclear agents, which are collectively referred to as CBRN.

Air-purifying respirators. Air-purifying respirators range from the simple filtering types to powered full-facepiece versions for many hazardous applications, including:

- full-face gas masks for industrial workers and first responders exposed to known concentrations of hazardous gases, chemicals, vapors and particulates, or for escape from unknown concentrations of these hazards;
- half-mask respirators for industrial workers, painters and construction workers exposed to known concentrations of gases, vapors and particulates;
- powered-air purifying respirators for industrial, hazmat and remediation workers who have longer term exposures to hazards in their work environment; and
- dust and pollen masks for maintenance workers, contractors and at-home consumers exposed to nuisance dusts, allergens and other particulates.

Escape respirators. Escape respirators are used by law enforcement personnel, government workers, chemical and pharmaceutical workers and anyone needing to escape from unknown concentrations of a chemical, biological or radiological release of toxic gases and vapors. Escape respirators give users respiratory protection to help them escape from threatening situations quickly and easily.

Portable and fixed gas detection instruments. Our portable and fixed gas detection instruments are used to detect the presence or absence of various gases in the air. These instruments can be either hand-held or permanently installed. Typical applications of these instruments include the detection of an oxygen deficiency in confined spaces or the presence of combustible or toxic gases. Products include:

Single- and multi-gas hand-held detectors. Our single- and multi-gas detectors provide portable solutions for detecting the presence of oxygen, combustible gases and various toxic gases, including hydrogen sulfide, carbon monoxide, ammonia and chlorine, either singularly or up to six gases at once. Our hand-held portable instruments are used by chemical workers, oil and gas workers and utility workers entering confined spaces, or anywhere a user needs to continuously monitor the quality of the atmosphere they are working in and around. Our ALTAIR® 4X and ALTAIR® 5X Multigas Detectors with XCell® sensor technology provide faster response times and unsurpassed durability in a tough, easy-to-operate package.

Multi-point permanently installed gas detection systems. Our comprehensive line of fixed gas detection systems, was greatly expanded with the acquisition of General Monitors in 2010. This line is used to monitor for combustible and toxic gases and oxygen deficiency in virtually any application where continuous monitoring is required. Our systems are used for gas detection in petrochemical, pulp and paper, wastewater, refrigerant monitoring, and general industrial applications. These systems utilize a wide array of sensing technologies including electrochemical, catalytic, infrared and ultrasonic.

Flame detectors and open-path infrared gas detectors. MSA's line of fixed flame and combustible gas detection was greatly expanded with the acquisition of General Monitors in 2010. These instruments are used for plant-wide monitoring of toxic gases for detecting the presence of flames. These systems use infrared optics to detect potentially hazardous conditions across long distances, making them suitable for use in such applications as offshore oil rigs, storage vessels, refineries, pipelines and ventilation ducts. First used in the oil and gas industry, our systems currently have broad applications in petrochemical facilities, the transportation industry and in pharmaceutical production.

Thermal imaging cameras. Our hand-held infrared thermal imaging cameras, or TICs, are used in the global fire service market. TICs detect sources of heat in order to locate downed firefighters and other people trapped inside burning or smoke-filled structures. TICs can also be used to detect the central source of the fire in order to direct hose streams in a structural fire attack, as well as to locate remaining embers during post-fire overhaul operations. Our Evolution® 6000 series TICs are unmatched for ease of use and durability and meet the stringent requirements of the National Fire Protection Association performance standard.

Head, eye, face and hearing protection. Head, eye, face and hearing protection is used in work environments where hazards present dangers such as dust, flying particles, metal fragments, chemicals, extreme glare, optical radiation and items dropped from above.

- Industrial hard hats. We have a complete line of industrial head protection that includes the flagship V-Gard® helmet brand. We offer customers a wide range of color choices and we are a world leader in the application of customized logos. Our industrial head protection has a wide user base including oil, gas and petrochemical workers, steel and construction workers, miners and industrial workers.
- Fire helmets. Our fire service products include leather, traditional, modern, jet-style and specialty helmets designed to satisfy the preferences of firefighters across geographic regions. We believe that our Cairns Helmet is the number one helmet in the North American fire service market. Similarly, we believe that our Gallet firefighting helmet has the number one market position in Europe.

- Ballistic helmets. These helmets provide ballistic head protection in combat and other high-risk environments and are sold in international markets outside of North America.
- Eye, face and hearing protection. Our broad line of hearing protection products, non-prescription protective eyewear and face shields is used by workers in a wide variety of industries.

Fall protection. Our broad line of fall protection equipment includes confined space equipment, harnesses, fall arrest equipment, lanyards and lifelines. Fall protection equipment is used by construction, oil and gas, utilities and plant workers and anyone working at height.

Customers—Our customers generally fall into three categories: industrial and military end-users, distributors and retail consumers. In North America, nearly all of our sales are made through our distributors. In our European and International segments, sales are made through both indirect and direct sales channels. For the year ended December 31, 2013, no individual customer represented 10% of our sales.

Industrial and military end-users—Examples of the primary industrial and military end-users of our core products are listed below:

<u>Products</u>	<u>Primary End-Users (in order of magnitude)</u>
Supplied Air Respirators	First Responders; General Industry Workers; Oil, Gas, and Petrochemical Workers; Military & Police Personnel; and Miners
Portable Gas Detection	Oil, Gas and Petrochemical Workers; General Industry Workers; Miners; and First Responders
Fixed Gas & Flame Detection	Oil, Gas and Petrochemical Workers; General Industry Workers; and Miners
Industrial Head Protection	General Industry Workers; Oil, Gas, and Petrochemical Workers; Construction Workers and Contractors; and Miners
Fall Protection	General Industry Workers; Construction Workers and Contractors; Miners; and Oil, Gas, and Petrochemical Workers

Sales and Distribution—Our sales and distribution team consists of distinct marketing, field sales and customer service organizations. We believe our sales and distribution team, totaling over 800 dedicated associates, is the largest in our industry. In most geographic areas, our field sales organizations work jointly with select distributors to call on end-users and educate them about hazards, exposure limits, safety requirements and product applications, as well as the specific performance attributes of our products. In our International segment and Eastern Europe where distributors are not as well established, our sales associates often work with and sell directly to end-users. We believe that understanding end-user requirements is critical to increasing MSA's market share.

The in-depth customer training and education provided by our sales associates to our customers are critical to ensuring proper use of many of our products, such as SCBA and gas detection instruments. As a result of our sales associates working closely with end-users, they gain valuable insight into customer preferences and needs. To better serve our customers and to ensure that our sales associates are among the most knowledgeable and professional in the industry, we place significant emphasis on training our sales associates in product application, industry standards and regulations.

We believe our sales and distribution strategy allows us to deliver a customer value proposition that differentiates our products and services from those of our competitors, resulting in increased customer loyalty and demand.

In areas where we use indirect selling, we promote, distribute and service our products to general industry through authorized national, regional and local distributors. Some of our key distributors include Airgas, W.W. Grainger Inc., Fastenal and Hagemeyer. In North America, we distribute fire service products primarily through specially trained local and regional distributors who provide advanced training and service capabilities to volunteer and paid municipal fire departments. In our European and International segments, we primarily sell to and service the fire service market directly. Because of our broad and diverse product line and our desire to reach as many markets and market segments as possible, we have over 4,000 authorized distributor locations worldwide.

Our Safety Works, LLC joint venture provides a broad range of safety products and gloves to the North American do-it-yourself and independent contractor market through various channels. These include distributors such as Orgill, hardware and equipment rental outlets such as United Rentals, and retail chains such as The Home Depot, TrueValue and Do-it Best.

Competition—We believe the worldwide personal protection equipment market, including the sophisticated safety products market in which we compete, generates annual sales in excess of \$20 billion. The industry supplying this market is broad and highly fragmented with few participants offering a comprehensive line of safety products. Over the long-term, we believe global demand for safety products will continue to grow. Purchases of these products are non-discretionary, protecting workers' health in hazardous and life-threatening work environments. Their use is often mandated by government and industry regulations, which are increasing on a global basis. Moreover, safety products industry revenues reflect the need to consistently replace many safety products that have limited life spans due to normal wear and tear or because they are one time use products by design.

The safety products market is highly competitive, with participants ranging in size from small companies focusing on a single type of personal protection equipment to a few large multinational corporations that manufacture and supply many types of sophisticated safety products. Our main competitors vary by region and product. We believe that participants in this industry compete primarily on the basis of product characteristics (such as functional performance, agency approvals, design and style), price, brand name recognition and support.

We believe we compete favorably within each of our operating segments as a result of our high quality and cost-efficient product offerings and strong brand trust and recognition.

Research and Development—To maintain our position at the forefront of safety equipment technology, we operate several sophisticated research and development facilities. We believe our dedication and commitment to innovation and research and development allows us to produce innovative safety products that are often first to market and exceed industry standards. In 2013, 2012 and 2011, on a global basis, we spent \$45.9 million, \$40.9 million and \$39.2 million, respectively, on research and development. Our primary engineering groups are located in the United States, Germany, China and France. Our global product development teams include cross-geographic and cross-functional members from various areas throughout the company, including research and development, marketing, sales, operations and quality management. These teams are responsible for setting product line strategy based on their understanding of customers' needs and available technology, as well as the opportunities and challenges they foresee in each product area. We believe our team-based, cross-geographic and cross-functional approach to new product development is a source of competitive advantage. Our approach to the new product development process allows us to tailor our product offerings and product line strategies to satisfy distinct customer preferences and industry regulations that vary across our operating segments.

We believe another important aspect of our approach to new product development is that our engineers and technical associates work closely with the safety industry's leading standards-setting groups and trade associations. These organizations include the National Institute for Occupational Safety and Health, or NIOSH, and the National Fire Protection Association, or NFPA, and their overseas counterparts. We work with these organizations to develop industry product requirements and standards and anticipate their impact on our product lines. Key members of our management team understand the impact that these standard-setting organizations have on our new product development pipeline. As such, management devotes significant time and attention to anticipating a new standard's impact on our sales and operating results. Because of our understanding of customer needs, membership on global standard-setting bodies, investment in research and development and our unique new product development process, we believe we are well-positioned to anticipate and adapt to the needs of changing product standards. We also believe that we are well positioned to gain the approvals and certifications necessary to meet new government and multinational product regulations.

Patents and Intellectual Property—We own significant intellectual property, including a number of domestic and foreign patents, patent applications and trademarks related to our products, processes and business. Although our intellectual property plays an important role in maintaining our competitive position in a number of markets that we serve, no single patent, or patent application, trademark or license is, in our opinion, of such value to us that our business would be materially affected by the expiration or termination thereof, other than the "MSA" trademark. Our patents expire at various times in the future not exceeding 20 years. Our general policy is to apply for patents on an ongoing basis in the United States and other countries, as appropriate, to perfect our patent development. In addition to our patents, we have also developed or acquired a substantial body of manufacturing know-how that we believe provides a significant competitive advantage over our competitors'.

Raw Materials and Suppliers—Many of the components of our products are formulated, machined, tooled or molded in-house from raw materials. For example, we rely on integrated manufacturing capabilities for breathing apparatus, gas masks, ballistic helmets, hard hats and circuit boards. The primary raw materials that we source from third parties include rubber, chemical filter media, eye and face protective lenses, air cylinders, certain metals, electronic components and ballistic resistant and non-ballistic fabrics. We purchase these materials both domestically and internationally, and we believe our supply sources are both well established and reliable. We have close vendor relationship programs with the majority of our key raw material suppliers. Although we generally do not have long-term supply contracts, thus far we have not experienced any significant problems in obtaining adequate raw materials.

Associates—At December 31, 2013, we had approximately 5,000 associates, approximately 2,900 of whom were employed by our European and International segments. None of our U.S. associates are subject to the provisions of a collective bargaining agreement. Some of our associates outside the United States are members of unions. We have not experienced a significant work stoppage in over 10 years and believe our relations with our associates are strong.

Available Information—Our internet address is www.MSAafety.com. We post the following filings on the Investor Relations page on our website as soon as reasonably practicable after they have been electronically filed with or furnished to the Securities and Exchange Commission: our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as well as our proxy statement. Information contained on our website is not part of this annual report on Form 10-K or our other filings with the Securities and Exchange Commission. The SEC maintains an Internet site at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers like us who file electronically with the SEC.

Item 1A. Risk Factors

Unfavorable economic and market conditions could materially and adversely affect our business, results of operations and financial condition.

We are subject to risks arising from adverse changes in global economic conditions. Although economic conditions generally improved in 2013, the global economy remains unstable and we expect economic conditions will continue to be challenging for the foreseeable future. Adverse changes in economic conditions could result in declines in revenue, profitability and cash flow due to reduced orders, payment delays, supply chain disruptions or other factors caused by the economic challenges faced by our customers and suppliers.

Over the past several years our sales have been positively impacted by the General Monitors acquisition and our organic growth within MSA's line of core products. The increase in sales, primarily to the oil, gas and petrochemical market, exposes MSA to the risks of doing business in that global market. It is possible that the volatility in this market, driven partly by geopolitical factors, could negatively impact our business and our results of operations and financial condition.

A reduction in the spending patterns of government agencies or delays in obtaining government approval for our products could materially and adversely affect our net sales, earnings and cash flow.

The demand for our products sold to the fire service market, the homeland security market and other government agencies is, in large part, driven by available government funding. Government budgets are set annually and we cannot assure you that government funding will be sustained at the same level in the future. A significant reduction in available government funding could materially and adversely affect our net sales, earnings and cash flow.

Our ability to market and sell our products is subject to existing government regulations and standards. Changes in such regulations and standards or our failure to comply with them could materially and adversely affect our results of operations.

Most of our products are required to meet performance and test standards designed to protect the health and safety of people around the world. Our inability to comply with these standards may materially and adversely affect our results of operations. Changes in regulations could reduce the demand for our products or require us to re-engineer our products, thereby creating opportunities for our competitors. Regulatory approvals for our products may be delayed or denied for a variety of reasons that are outside of our control. Additionally, market anticipation of significant new standards can cause customers to accelerate or delay buying decisions.

Our SCBA in North America must be approved by the National Institute for Occupational Safety and Health, or NIOSH. NIOSH has informed respirator manufacturers that CBRN Respirator Approval Testing, which was conducted from July 2012 to October 2013, is invalid due to the concentrations of agents used in testing being lower than the level required by NIOSH test procedures. NIOSH has informed MSA that the Company does not have any respiratory protective equipment in use which requires retesting. CBRN testing will restart in January 2014 and priority will be given to retest previously tested units. This retesting will further delay product approvals and will likely delay the launch of MSA's M7XT until second quarter 2014. In addition, the backlog of re-testing which resulted from this issue may negatively impact the approval timing of MSA's entirely new global platform SCBA product, the G1. This new product was to be submitted for CBRN testing in the first quarter of 2014. The issues noted above will now delay the launch of this new product until at least the second quarter of 2014. It is possible that the delays associated with this product launch could negatively impact our business and our results of operations and financial condition.

We are subject to various federal, state and local laws and any violation of these laws could adversely affect our results of operations.

We are subject to extensive regulation from federal, state, local and international governments. Failure to comply with these regulations could result in severe civil or criminal penalties, sanctions or significant changes to our operations. These actions could have a materially adverse effect on our business, results of operations and financial condition.

We are subject to various environmental laws and any violation of these laws could adversely affect our results of operations.

Included in the extensive federal, state and local laws, regulations and ordinances, to which we are subject, are those relating to the protection of the environment. Examples include those governing discharges to air and water, handling and disposal practices for solid and hazardous wastes and the maintenance of a safe workplace. These laws impose penalties for noncompliance and liability for response costs and certain damages resulting from past and current spills, disposals, or other releases of hazardous materials. We could incur substantial costs as a result of noncompliance with or liability for cleanup pursuant to these environmental laws. Environmental laws have changed rapidly in recent years, and we may be subject to more stringent environmental laws in the future. If more stringent environmental laws are enacted, these future laws could have a materially adverse effect on our results of operations.

The markets in which we compete are highly competitive, and some of our competitors have greater financial and other resources than we do. The competitive pressures faced by us could materially and adversely affect our business, results of operations and financial condition.

The safety products market is highly competitive, with participants ranging in size from small companies focusing on single types of safety products, to large multinational corporations that manufacture and supply many types of safety products. Our main competitors vary by region and product. We believe that participants in this industry compete primarily on the basis of product characteristics (such as functional performance, agency approvals, design and style), price, name trust and recognition and customer service. Some of our competitors have greater financial and other resources than we do and our business could be adversely affected by competitors' new product innovations, technological advances made to competing products and pricing changes made by us in response to competition from existing or new competitors. We may not be able to compete successfully against current and future competitors and the competitive pressures faced by us could materially and adversely affect our business, results of operations and financial condition.

If we fail to introduce successful new products or extend our existing product lines, we may lose our market position and our financial performance may be materially and adversely affected.

In the safety products market, there are frequent introductions of new products and product line extensions. If we are unable to identify emerging consumer and technological trends, maintain and improve the competitiveness of our products and introduce new products, we may lose our market position, which could have a materially adverse effect on our business, financial condition and results of operations. We continue to invest significant resources in research and development and market research. However, continued product development and marketing efforts are subject to the risks inherent in the development process. These risks include delays, the failure of new products and product line extensions to achieve anticipated levels of market acceptance and the risk of failed product introductions.

Product liability claims and our inability to collect related insurance receivables could have a materially adverse effect on our business, operating results and financial condition.

We face an inherent business risk of exposure to product liability claims arising from the alleged failure of our products to prevent the types of personal injury or death against which they are designed to protect. Although we have not experienced any material uninsured losses due to product liability claims, it is possible that we could experience material losses in the future. In the event any of our products prove to be defective, we could be required to recall or redesign such products. In addition, we may voluntarily recall or redesign certain products that could potentially be harmful to end users. A successful claim brought against us in excess of available insurance coverage, or any claim or product recall that results in significant expense or adverse publicity against us, could have a materially adverse effect on our business, operating results and financial condition.

In the normal course of business, we make payments to settle product liability claims and for related legal fees and we record receivables for the amounts covered by insurance. Our insurance receivables totaled \$124.8 million at December 31, 2013. Various factors could affect the timing and amount of recovery of insurance receivables, including: the outcome of negotiations with insurers, legal proceedings with respect to product liability insurance coverage and the extent to which insurers may become insolvent in the future. Amounts due from insurance carriers are subject to insolvency risk. Failure to recover amounts due from our insurance carriers could have a materially adverse effect on our business, operating results and financial condition.

Damage to the reputation of MSA or to one or more of our product brands could adversely affect our business.

Developing and maintaining our reputation, as well as the reputation of our brands, is a critical factor in our relationship with customers, distributors and others. Our inability to address adverse publicity or other issues, including concerns about product safety or quality, real or perceived, could negatively impact our business which could have a materially adverse effect on our business, operating results and financial condition.

A failure of our information systems could materially and adversely affect our business, results of operations and financial condition.

The proper functioning and security of our information systems is critical to the operation of our business. Our information systems may be vulnerable to damage or disruption from natural or man-made disasters, computer viruses, power losses or other system or network failures. In addition, hackers and cybercriminals could attempt to gain unauthorized access to our information systems with the intent of harming our company or obtaining sensitive information such as intellectual property, trade secrets, financial and business development information, and customer and vendor related information. If our information systems or security fail, our business, results of operations and financial condition could be materially and adversely affected.

Like many companies, from time to time, we have experienced attacks on our computer systems by unauthorized outside parties; however, we do not believe that such attacks have resulted in any material damage to us or our customers. Because the techniques used by computer hackers and others to access or sabotage networks constantly evolve and generally are not recognized until launched against a target, we may be unable to anticipate, prevent or detect these attacks. As a result, our technologies and processes may be misappropriated and the impact of any future incident cannot be predicted. Any loss of such information could harm our competitive position, or cause us to incur significant costs to remedy the damages caused by the incident. We routinely implement improvements to our network security safeguards and we expect to devote increasing resources to the security of our information technology systems. We cannot assure that such system improvements will be sufficient to prevent or limit the damage from any future cyber-attack or network disruptions.

The Company's plans to continue to improve productivity and reduce complexity and costs associated with its European Segment may not be successful, which could adversely affect its ability to compete.

The Company is currently engaged in an extensive European Transformation Project. Under the organization of a Principal Operating Company, this program will integrate our historically individually managed entities, into one that is a centrally managed organization. We plan to leverage the benefits of scale created from this approach and are in the process of implementing a more efficient and cost-effective enterprise resource planning system. The Company runs the risk that these and similar initiatives may not be completed substantially as planned, may be more costly to implement than expected, or may not have the positive effects anticipated. In addition, these various initiatives require the Company to implement a significant amount of organizational change which could divert management's attention from other concerns, and if not properly managed, could cause disruptions in the Company's day-to-day operations and have a negative impact on the Company's financial results. It is also possible that other major productivity and streamlining programs may be required in the future.

We have significant international operations and are subject to the risks of doing business in foreign countries.

We have business operations in over 40 foreign countries. In 2013, approximately half of our net sales were made by operations located outside the United States. Our international operations are subject to various political, economic and other risks and uncertainties, which could adversely affect our business. These risks include the following:

- unexpected changes in regulatory requirements;
- changes in trade policy or tariff regulations;
- changes in tax laws and regulations;
- changes to the company's legal structure could have unintended tax consequences;
- intellectual property protection difficulties;
- difficulty in collecting accounts receivable;
- complications in complying with a variety of foreign laws and regulations, some of which may conflict with U.S. laws;
- trade protection measures and price controls;
- trade sanctions and embargoes;

- nationalization and expropriation;
- increased international instability or potential instability of foreign governments;
- effectiveness of worldwide compliance with MSA's anti-bribery policy, local laws and the Foreign Corrupt Practices Act
- the need to take extra security precautions for our international operations; and
- costs and difficulties in managing culturally and geographically diverse international operations.

Any one or more of these risks could have a negative impact on the success of our international operations and, thereby, materially and adversely affect our business as a whole.

Our future results are subject to availability of, and fluctuations in the costs of, purchased components and materials due to market demand, currency exchange risks, material shortages and other factors.

We depend on various components and materials to manufacture our products. Although we have not experienced any difficulty in obtaining components and materials, it is possible that any of our supplier relationships could be terminated. Any sustained interruption in our receipt of adequate supplies could have a materially adverse effect on our business, results of operations and financial condition. We cannot assure you that we will be able to successfully manage price fluctuations due to market demand, currency risks or material shortages, or that future price fluctuations will not have a materially adverse effect on our business, results of operations and financial condition.

Because we derive a significant portion of our sales from the operations of our foreign subsidiaries, future currency exchange rate fluctuations may adversely affect our results of operations and financial condition, and may affect the comparability of our results between financial periods.

For the year ended December 31, 2013, the operations in our European and International segments accounted for approximately half of our net sales. The results of our foreign operations are reported in the local currency and then translated into U.S. dollars at the applicable exchange rates for inclusion in our consolidated financial statements. The exchange rates between some of these currencies and the U.S. dollar have fluctuated significantly in recent years, and may continue to do so in the future. In addition, because our financial statements are stated in U.S. dollars, such fluctuations may affect our results of operations and financial position, and may affect the comparability of our results between financial periods. We cannot assure you that we will be able to effectively manage our exchange rate risks or that any volatility in currency exchange rates will not have a materially adverse effect on our results of operations and financial condition.

If we lose any of our key personnel or are unable to attract, train and retain qualified personnel, our ability to manage our business and continue our growth would be negatively impacted.

Our success depends in large part on the continued contributions of our key management, engineering and sales and marketing personnel, many of whom are highly skilled and would be difficult to replace. Our success also depends on the abilities of new personnel to function effectively, both individually and as a group. If we are unable to attract, effectively integrate and retain management, engineering or sales and marketing personnel, then the execution of our growth strategy and our ability to react to changing market requirements may be impeded, and our business could suffer as a result. Competition for personnel is intense, and we cannot assure you that we will be successful in attracting and retaining qualified personnel. In addition, we do not currently maintain key person life insurance.

Our inability to successfully identify, consummate and integrate future acquisitions or to realize anticipated cost savings and other benefits could adversely affect our business.

One of our operating strategies is to selectively pursue acquisitions. Any future acquisitions will depend on our ability to identify suitable acquisition candidates and successfully consummate such acquisitions. Acquisitions involve a number of risks including:

- failure of the acquired businesses to achieve the results we expect;
- diversion of our management's attention from operational matters;
- our inability to retain key personnel of the acquired businesses;
- risks associated with unanticipated events or liabilities;
- potential disruption of our existing business; and
- customer dissatisfaction or performance problems at the acquired businesses.

If we are unable to integrate or successfully manage businesses that we have recently acquired or may acquire in the future, we may not realize anticipated cost savings, improved manufacturing efficiencies and increased revenue, which may result in materially adverse short- and long-term effects on our operating results, financial condition and liquidity. Even if we are able to integrate the operations of our acquired businesses into our operations, we may not realize the full benefits of the cost savings, revenue enhancements or other benefits that we may have expected at the time of acquisition. In addition, even if we achieve the expected benefits, we may not be able to achieve them within the anticipated time frame, and such benefits may be offset by costs incurred in integrating the acquired companies and increases in other expenses.

Our continued success depends on our ability to protect our intellectual property. If we are unable to protect our intellectual property, our business could be materially and adversely affected.

Our success depends, in part, on our ability to obtain and enforce patents, maintain trade secret protection and operate without infringing on the proprietary rights of third parties. We have been issued patents and have registered trademarks with respect to many of our products, but our competitors could independently develop similar or superior products or technologies, duplicate any of our designs, trademarks, processes or other intellectual property or design around any processes or designs on which we have or may obtain patents or trademark protection. In addition, it is possible that third parties may have, or will acquire, licenses for patents or trademarks that we may use or desire to use, so that we may need to acquire licenses to, or to contest the validity of, such patents or trademarks of third parties. Such licenses may not be made available to us on acceptable terms, if at all, and we may not prevail in contesting the validity of third party rights.

We also protect trade secrets, know-how and other confidential information against unauthorized use by others or disclosure by persons who have access to them, such as our employees, through contractual arrangements. These agreements may not provide meaningful protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use, misappropriation or disclosure of such trade secrets, know-how or other proprietary information. If we are unable to maintain the proprietary nature of our technologies, our results of operations and financial condition could be materially and adversely affected.

If we fail to meet our debt service requirements or the restrictive covenants in our debt agreements or if interest rates increase, our results of operations and financial condition could be materially and adversely affected.

We have a substantial amount of debt upon which we are required to make scheduled interest and principal payments and we may incur additional debt in the future. A significant portion of our debt bears interest at variable rates that may increase in the future. Our debt agreements require us to comply with certain restrictive covenants. If we are unable to generate sufficient cash to service our debt or if interest rates increase, our results of operations and financial condition could be materially and adversely affected. Additionally, a failure to comply with the restrictive covenants contained in our debt agreements could result in a default, which if not waived by our lenders, could substantially increase borrowing costs and require accelerated repayment of our debt. Please refer to Note 11 of the Consolidated Financial Statements in Part II Item 8 of this Form 10-K for commentary on our compliance with the restrictive covenants in our debt agreements as of December 31, 2013.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our principal executive offices are located at 1000 Cranberry Woods Drive, Cranberry Township, PA 16066 in a 212,000 square-foot building owned by us. We own or lease our primary facilities in the United States and in a number of other countries. We believe that all of our facilities, including the manufacturing facilities, are in good repair and in suitable condition for the purposes for which they are used.

The following table sets forth a list of our primary facilities:

Location	Function	Square Feet	Owned or Leased
North America			
Murrysville, PA	Manufacturing	295,000	Owned
Cranberry Twp., PA	Office, Research and Development and Manufacturing	212,000	Owned
New Galilee, PA	Distribution	120,000	Leased
Jacksonville, NC	Manufacturing	107,000	Owned
Queretaro, Mexico	Office, Manufacturing and Distribution	77,000	Leased
Cranberry Twp., PA	Research and Development	68,000	Owned
Lake Forest, CA	Office, Research and Development and Manufacturing	62,000	Leased
Corona, CA	Manufacturing	19,000	Leased
Torreon, Mexico	Office	15,000	Leased
Lake Forest, CA	Office	6,000	Owned
Europe			
Berlin, Germany	Office, Research and Development, Manufacturing and Distribution	340,000	Leased
Chatillon sur Chalaronne, France	Office, Research and Development, Manufacturing and Distribution	94,000	Owned
Milan, Italy	Office	43,000	Owned
Glasgow, Scotland	Office	25,000	Leased
Mohammedia, Morocco	Manufacturing	24,000	Owned
Barcelona, Spain	Office	23,000	Owned
Galway, Ireland	Office and Manufacturing	20,000	Owned
Varnamo, Sweden	Office, Manufacturing and Distribution	18,000	Leased
Hoorn, Netherlands	Office and Distribution	12,000	Owned
International			
Suzhou, China	Office, Research and Development, Manufacturing and Distribution	193,000	Owned
Sydney, Australia	Office, Manufacturing and Distribution	84,000	Owned
Johannesburg, South Africa	Office, Manufacturing and Distribution	74,000	Leased
Sao Paulo, Brazil	Office, Manufacturing and Distribution	74,000	Owned
Lima, Peru	Office and Distribution	34,000	Owned
Santiago, Chile	Office and Distribution	32,000	Leased
Rajarhat, India	Office and Distribution	10,000	Leased
Buenos Aires, Argentina	Office and Distribution	9,000	Owned

Item 3. Legal Proceedings

We categorize the product liability losses that we experience into two main categories; single incident and cumulative trauma. Single incident product liability claims are discrete incidents that are typically known to us when they occur and involve observable injuries and, therefore, more quantifiable damages. Therefore, we maintain a reserve for single incident product liability claims based on expected settlement costs for pending claims and an estimate of costs for unreported claims derived from experience, sales volumes and other relevant information. Our reserve for single incident product liability claims at December 31, 2013 and 2012 was \$4.0 million and \$4.4 million, respectively. Single incident product liability expense was negligible during year ended December 31, 2013. During the years ended December 31, 2012 and 2011, single incident product liability expense was \$0.7 million and \$1.5 million, respectively. We evaluate our single incident product liability exposures on an ongoing basis and make adjustments to the reserve as new information becomes available.

Cumulative trauma product liability claims involve exposures to harmful substances (e.g., silica, asbestos and coal dust) that occurred many years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis or coal worker's pneumoconiosis. We are presently named as a defendant in 2,840 lawsuits in which plaintiffs allege to have contracted certain cumulative trauma diseases related to exposure to silica, asbestos, and/or coal dust. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by us. We are unable to estimate total damages sought in these lawsuits as they generally do not specify the injuries alleged or the amount of damages sought, and potentially involve multiple defendants.

Cumulative trauma product liability litigation is difficult to predict. In our experience, until late in a lawsuit, we cannot reasonably determine whether it is probable that any given cumulative trauma lawsuit will ultimately result in a liability. This uncertainty is caused by many factors, including the following: cumulative trauma complaints generally do not provide information sufficient to determine if a loss is probable; cumulative trauma litigation is inherently unpredictable and information is often insufficient to determine if a lawsuit will develop into an actively litigated case; and even when a case is actively litigated, it is often difficult to determine if the lawsuit will be dismissed or otherwise resolved until late in the lawsuit. Moreover, even once it is probable that such a lawsuit will result in a loss, it is difficult to reasonably estimate the amount of actual loss that will be incurred. These amounts are highly variable and turn on a case-by-case analysis of the relevant facts, which are often not learned until late in the lawsuit.

Because of these factors, we cannot reliably determine our potential liability for such claims until late in the lawsuit. Therefore, we do not record cumulative trauma product liability losses when a lawsuit is filed, but rather, when we learn sufficient information to determine that it is probable that we will incur a loss and the amount of loss can be reasonably estimated. We record expenses for defense costs associated with open cumulative trauma product liability lawsuits as incurred.

We cannot estimate any amount or range of possible losses related to resolving pending and future cumulative trauma product liability lawsuits that we may face because of the factors described above. As new information about cumulative trauma product liability cases and future developments becomes available, we reassess our potential exposures.

A summary of cumulative trauma product liability lawsuit activity follows:

	2013	2012	2011
Open lawsuits, January 1	2,609	2,321	1,900
New lawsuits	489	750	479
Settled and dismissed lawsuits	(258)	(462)	(58)
Open lawsuits, December 31	2,840	2,609	2,321

Nearly half of the open lawsuits at December 31, 2013 have had a de minimus level of activity over the last five years. It is possible that these cases could become active again at any point due to changes in circumstances.

With some common contract exclusions, we maintain insurance for cumulative trauma product liability claims. We have purchased insurance policies for the policy years from 1952-1986 from over 20 different insurance carriers that provide coverage for cumulative trauma product liability losses and, in many instances, related defense costs. In the normal course of business, we make payments to settle product liability lawsuits and for related defense costs. We record receivables for the amounts that are covered by insurance. The available limits of these policies are many times our recorded insurance receivable balance.

Various factors could affect the timing and amount of recovery of our insurance receivables, including the outcome of negotiations with insurers, legal proceedings with respect to product liability insurance coverage and the extent to which insurers may become insolvent in the future.

Our insurance receivables at December 31, 2013 and 2012 totaled \$124.8 million and \$130.0 million, respectively, all of which is reported in other non-current assets.

A summary of insurance receivable balances and activity related to cumulative trauma product liability losses follows:

(In millions)	2013	2012	2011
Balance January 1	\$ 130.0	\$ 112.1	\$ 89.0
Additions	34.0	29.7	35.6
Collections and settlements	(39.2)	(11.8)	(12.5)
Balance December 31	124.8	130.0	112.1

Additions to insurance receivables in the above table represent insured cumulative trauma product liability losses and related defense costs. Uninsured cumulative trauma product liability losses during the years ended December 31, 2013, 2012, and 2011 were \$1.7 million, \$2.1 million and \$1.1 million, respectively. Collections primarily represent agreements with insurance companies to pay amounts due that are applicable to cumulative trauma claims. In cases where the payment stream covers multiple years, the present value of the payments is recorded as a note receivable (current and long term) in the balance sheet within prepaid expenses and other current assets and other noncurrent assets.

Our aggregate cumulative trauma product liability losses and administrative and defense costs for the three years ended December 31, 2013, totaled approximately \$104.2 million, substantially all of which was insured.

We believe that the increase in the insurance receivable balance that we have experienced since 2005 is primarily due to disagreements among our insurance carriers, and consequently with us, as to when their individual obligations to pay us are triggered and the amount of each insurer's obligation, as compared to other insurers. We believe that our insurers do not contest that they have issued policies to us or that these policies cover certain cumulative trauma product liability claims. We believe that our ability to successfully resolve our insurance litigation with various insurance carriers in recent years demonstrates that we have strong legal positions concerning our rights to coverage.

We regularly evaluate the collectability of our insurance receivables and record the amounts that we conclude are probable of collection. Our conclusions are based on our analysis of the terms of the underlying insurance policies, our experience in successfully recovering cumulative trauma product liability claims from our insurers under other policies, the financial ability of our insurance carriers to pay the claims, our understanding and interpretation of the relevant facts and applicable law and the advice of legal counsel, who believe that our insurers are required to provide coverage based on the terms of the policies.

Although the outcome of cumulative trauma product liability matters cannot be predicted with certainty and unfavorable resolutions could materially affect our results of operations, based on information currently available and the amounts of insurance coverage available to us, we believe that the disposition of cumulative trauma product liability lawsuits that are pending against us will not have a materially adverse effect on our future results of operations, financial condition, or liquidity.

We are currently involved in insurance coverage litigations with a number of our insurance carriers.

In 2009, we sued The North River Insurance Company (North River) in the United States District Court for the Western District of Pennsylvania, alleging that North River breached one of its insurance policies by failing to pay amounts owed to us and that it engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under the policy for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Motions for summary judgment on certain issues will be submitted to the court at the earliest possible date. A trial date has not yet been scheduled.

In 2010, North River sued us in the Court of Common Pleas of Allegheny County, Pennsylvania seeking a declaratory judgment concerning their responsibilities under three additional policies. We assert claims against North River for breaches of contract for failures to pay amounts owed to us. We also allege that North River engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under these policies for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Summary judgment on certain issues is pending with the court. A trial date has not yet been scheduled.

In July 2010, we filed a lawsuit in the Superior Court of the State of Delaware seeking declaratory and other relief from the majority of our excess insurance carriers concerning the future rights and obligations of MSA and our excess insurance carriers under various insurance policies. The reason for this insurance coverage action is to secure a comprehensive resolution of our rights under the insurance policies issued by our insurers. The case is currently in discovery. We have resolved our claims against certain of our insurance carriers on some of their policies through negotiated settlements. When settlement is reached, we dismiss the settling carrier from this action in Delaware.

During September 2013, we resolved coverage litigation with Associated International Insurance Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Associated International Insurance Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Allstate Insurance Company, through a negotiated settlement. As part of this settlement, both parties dismissed all claims against one another under the above-referenced coverage litigations in the Court of Common Pleas of Allegheny County, Pennsylvania and the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Columbia Casualty Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Columbia Casualty Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

Item 4. Mine Safety Disclosures

Not applicable.

Executive Officers of the Registrant

The following sets forth the names and ages of our executive officers as of February 24, 2014, indicating all positions held during the past five years:

<u>Name</u>	<u>Age</u>	<u>Title</u>
William M. Lambert	55	President and Chief Executive Officer since May 2008.
Joseph A. Bigler ^(a)	64	Vice President and Chief Customer Officer since August 2013.
Steven C. Blanco ^(b)	47	Vice President, Global Operational Excellence since April 2012.
Kerry M. Bove ^(c)	55	Vice President and President, MSA International, Asia-Pacific Zone and Africa/Latin America Zone since November 2011.
Ronald N. Herring, Jr. ^(d)	53	Vice President and President, MSA International, Western Europe Zone and Middle Eurasia Zone since November 2011.
Douglas K. McClaine	56	Vice President, Secretary and General Counsel since May 2005.
Stacy McMahan ^(e)	50	Senior Vice President, Chief Financial Officer and Treasurer since August 2013.
Thomas Muschter ^(f)	53	Vice President, Global Product Leadership since November 2011.
Paul R. Uhler	55	Vice President, Global Human Resources since May 2007.
Nishan Vartanian ^(g)	54	Vice President and President, MSA North America since August 2013.
Markus H. Weber ^(h)	49	Vice President and Chief Information Officer since April 2010.

(a) Prior to his present position, Mr. Bigler served as Vice President and President, MSA North America.

(b) Prior to joining MSA, Mr. Blanco served as Vice President of Manufacturing for the Electrical Sector of Eaton Corporation, a diversified power management company.

(c) Prior to his present position, Mr. Bove was Vice President, Global Operational Excellence.

(d) Prior to his present position, Mr. Herring was Vice President, Global Product Leadership.

(e) Prior to her current position, Ms. McMahan served as Senior Vice President of Finance, MSA. Prior to joining MSA, Ms. McMahan served as Customer Channels Group Vice President, Finance, for Thermo Fisher Scientific, Inc., a global provider of laboratory equipment and supplies.

(f) Prior to his present position, Dr. Muschter held the positions of Director, Research & Development, International; and Director, Research & Development, Europe.

(g) Prior to his present position, Mr. Vartanian was Vice President, Fixed Gas and Flame Detection.

(h) Prior to joining MSA, Mr. Weber served as Chief Information Officer of Berlin-Chemie AG, an international research-based pharmaceutical company.

PART II**Item 5. Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

Our common stock is traded on the New York Stock Exchange under the symbol "MSA." Stock price ranges and dividends declared were as follows:

	Price Range of Our Common Stock		Dividends
	High	Low	
Year ended December 31, 2012			
First Quarter	\$ 42.47	\$ 32.65	\$ 0.26
Second Quarter	44.34	37.38	0.28
Third Quarter	40.81	32.93	0.28
Fourth Quarter	42.87	35.37	0.56
Year ended December 31, 2013			
First Quarter	\$ 51.07	\$ 43.04	\$ 0.28
Second Quarter	51.12	43.97	0.30
Third Quarter	55.38	46.60	0.30
Fourth Quarter	54.84	46.54	0.30

On February 17, 2014, there were 502 registered holders of our shares of common stock.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
October 1 — October 31, 2013	2,475	\$ 48.91	—	1,011,217
November 1 — November 30, 2013	6,934	44.91	—	977,523
December 1 — December 31, 2013	2,370	42.37	—	950,990

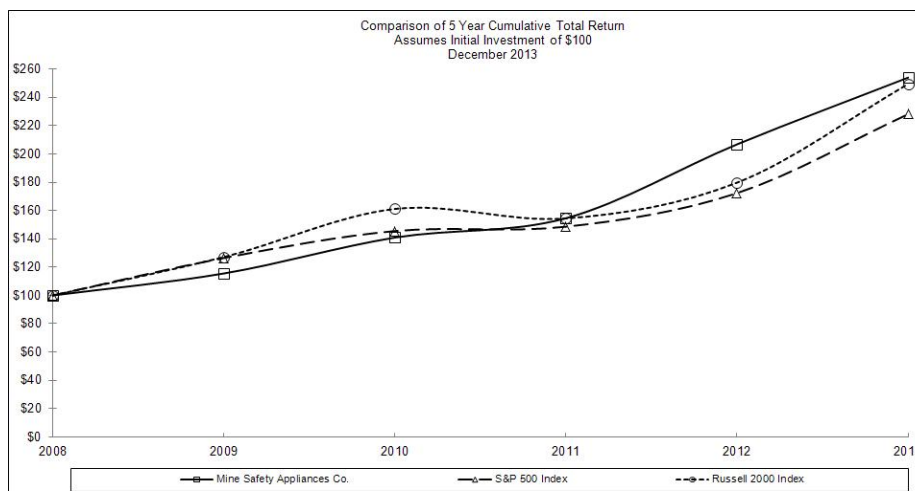
In November 2005, the Board of Directors authorized the purchase of up to \$100 million of MSA common stock either through private transactions or open market transactions. The share purchase program has no expiration date. The maximum shares that may yet be purchased is calculated based on the dollars remaining under the program and the respective month-end closing share price. We do not have any other share purchase programs. The above share purchases are related to stock compensation transactions.

Comparison of Five-Year Cumulative Total Return

The following paragraph compares the most recent five year performance of MSA stock with (1) the Standard & Poor’s 500 Composite Index and (2) the Russell 2000 Index. Because our competitors are principally privately held concerns or subsidiaries or divisions of corporations engaged in multiple lines of business, we do not believe it feasible to construct a peer group comparison on an industry or line-of-business basis. The Russell 2000 Index, while including corporations both larger and smaller than MSA in terms of market capitalization, is composed of corporations with an average market capitalization similar to us.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Mine Safety Appliance Company, the S&P 500 Index,
and the Russell 2000 Index



* \$100 invested on 12/31/08 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

	Value at December 31,					
	2008	2009	2010	2011	2012	2013
Mine Safety Appliances Co	\$ 100.00	\$ 115.55	\$ 140.90	\$ 154.61	\$ 206.83	\$ 254.02
S&P 500 Index	100.00	126.46	145.51	148.59	172.37	228.19
Russell 2000 Index	100.00	127.09	161.17	154.44	179.75	249.53

Prepared by Zacks Investment Research, Inc. Used with permission. All rights reserved. Copyright 1980-2014.

Index Data: Copyright Standard and Poor’s, Inc. Used with permission. All rights reserved.

Index Data: Copyright Russell Investments, Inc. Used with permission. All rights reserved.

Item 6. Selected Financial Data

(In thousands, except as noted)	2013	2012	2011	2010	2009
Statement of Income Data:					
Net sales	\$ 1,112,058	\$ 1,110,443	\$ 1,112,814	\$ 922,552	\$ 865,718
Income from continuing operations	85,858	87,557	67,518	35,886	42,072
Income from discontinued operations	2,389	3,080	2,334	2,218	1,223
Net income attributable to Mine Safety Appliances Company	88,247	90,637	69,852	38,104	43,295
Earnings per share attributable to MSA common shareholders:					
Basic per common share (in dollars):					
Income from continuing operations	\$ 2.31	\$ 2.37	\$ 1.85	\$ 1.00	\$ 1.18
Income from discontinued operations	0.06	0.08	0.06	0.06	0.03
Net income	2.37	2.45	1.91	1.06	1.21
Diluted per common share (in dollars):					
Income from continuing operations	\$ 2.28	\$ 2.34	\$ 1.81	\$ 0.99	\$ 1.18
Income from discontinued operations	0.06	0.08	0.06	0.06	0.03
Net income	2.34	2.42	1.87	1.05	1.21
Dividends paid per common share (in dollars)	1.18	1.38	1.03	0.99	0.96
Weighted average common shares outstanding—basic	36,868	36,564	36,221	35,880	35,668
Weighted average common shares outstanding—diluted	37,450	37,042	36,831	36,422	35,879
Balance Sheet Data:					
Total assets	\$ 1,234,270	\$ 1,111,746	\$ 1,115,052	\$ 1,197,188	\$ 875,228
Long-term debt	260,667	272,333	334,046	367,094	82,114
Shareholders' Equity	566,452	462,955	433,666	451,368	436,616

The data presented in the Selected Financial Data table should be read in conjunction with comments provided in Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II Item 7 and the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read in conjunction with the historical financial statements and other financial information included elsewhere in this annual report on Form 10-K. This discussion may contain forward-looking statements that involve risks and uncertainties. The forward-looking statements are not historical facts, but rather are based on current expectations, estimates, assumptions and projections about our industry, business and future financial results. Our actual results could differ materially from the results contemplated by these forward-looking statements due to a number of factors, including those discussed in the sections of this annual report entitled "Forward-Looking Statements" and "Risk Factors."

MSA's South African personal protective equipment distribution business and MSA's Zambian operations had historically been part of the International reportable segment. In accordance with generally accepted accounting principles, these results are excluded from continuing operations and are presented as discontinued operations in all periods presented. Please refer to Note 19 Assets Held for Sale and Discontinued Operations, which is included in Part II Item 8 of this form 10-K for further commentary on these discontinued operations.

BUSINESS OVERVIEW

We are a global leader in the development, manufacture and supply of products that protect people's health and safety. Our safety products typically integrate any combination of electronics, mechanical systems and advanced materials to protect users against hazardous or life threatening situations. Our comprehensive lines of safety products are used by workers around the world in the oil and gas, fire service, mining, construction and other industries, as well as the military. We are committed to providing our customers with service unmatched in the safety industry and, in the process, enhancing our ability to provide a growing line of safety solutions for customers in key global markets.

We tailor our product offerings and distribution strategy to satisfy distinct customer preferences that vary across geographic regions. To best serve these customer preferences, we have organized our business into eleven geographical operating segments that are aggregated into three reportable geographic segments: North America, Europe and International. Each segment includes a number of operating segments. In 2013, 50%, 26% and 24% of our net sales were made by our North American, European and International segments, respectively.

North America. Our largest manufacturing and research and development facilities are located in the United States. We serve our North American markets with sales and distribution functions in the U.S., Canada and Mexico.

Europe. Our European segment includes companies in most Western European countries, and a number of Eastern European countries along with locations in the Middle East and Russia. Our largest European companies, based in Germany and France, develop, manufacture and sell a wide variety of products. Operations in other European segment countries focus primarily on sales and distribution in their respective home country markets. While some of these companies may perform limited production, most of their sales are of products that are manufactured in our plants in Germany, France, the U.S. and China, or are purchased from third party vendors.

International. Our International segment includes companies in South America, Africa and the Asia Pacific region, some of which are in developing regions of the world. Principal International segment manufacturing operations are located in Australia, Brazil, China and South Africa. These companies manufacture products that are sold primarily in each company's home country and regional markets. The other companies in the International segment focus primarily on sales and distribution in their respective home country markets. While some of these companies may perform limited production, most of their sales are of products that are manufactured in our plants in China, Germany, France and the U.S., or are purchased from third party vendors.

RESULTS OF OPERATIONS**Year Ended December 31, 2013 Compared to Year Ended December 31, 2012**

Net Sales from continuing operations. Net sales for the year ended December 31, 2013 were \$1,112.1 million, an increase of \$1.7 million, from \$1,110.4 million for the year ended December 31, 2012.

For the year ended December 31, 2013, local currency core product sales increased by 6%, now comprising 73% of our total business, up from 70% for the year ended December 31, 2012. By product group, portable instruments increased 11%, fixed gas & flame detection instruments and fall protection each increased 6%, breathing apparatus increased 4%, and head protection increased 3% on a local currency basis. The remaining 27% of sales decreased 10% on a lower level of mining related business in the International segment, lower gas mask sales in the United States, and the absence of ballistic helmet sales in North America due to the divestiture of this business in the first half of 2012.

The unfavorable translation effects of weaker foreign currencies decreased net sales from continuing operations, when stated in U.S. dollars, by \$9.5 million. Excluding the impact of weakening foreign currencies and the divestiture of our North American ballistic helmet business of \$9.6 million, net sales from continuing operations increased \$20.8 million or 2%.

(Dollars in millions)	2013	2012	Dollar Increase (Decrease)	Percent Increase (Decrease)
North America	\$ 559.2	\$ 551.9	\$ 7.3	1 %
Europe	289.8	289.5	0.3	—
International	263.1	269.0	(5.9)	(2)%
Total	1,112.1	1,110.4	1.7	— %

Net sales by the North American segment were \$559.2 million for the year ended December 31, 2013, an increase of \$7.3 million, or 1%, compared to \$551.9 million for the year ended December 31, 2012. Excluding the effects of the divestiture of the North American ballistic helmet business, North American segment sales increased \$16.9 million, or 3%, when compared to 2012. North American ballistic helmet sales were \$9.6 million lower in the current year, reflecting the divestiture. During the year ended December 31, 2013, we continued to see growth in the fire service and industrial markets. Shipments of instruments, self-contained breathing apparatus (SCBA) and head, eye and face protection were up \$21.3 million, \$3.2 million and \$2.9 million, respectively. These increases were partially offset by a \$7.6 million decrease in shipments of gas masks to military markets and other small decreases across a broad range of product lines.

Net sales for the European segment were \$289.8 million for the year ended December 31, 2013, an increase of \$0.3 million from \$289.5 million for the year ended December 31, 2012. Local currency sales in Europe decreased \$5.6 million. Shipments of fixed gas & flame detection decreased \$3.2 million on a local currency basis, while the remaining decrease in local currency sales was primarily due to lower adjacent product shipments to military markets. The favorable translation effects of a stronger euro in the current year increased European segment sales, when stated in U.S. dollars, by \$5.9 million.

Net sales for the International segment were \$263.1 million for the year ended December 31, 2013, a decrease of \$5.9 million, or 2%, compared to \$269.0 million for the year ended December 31, 2012. Currency translation effects decreased International segment sales, when stated in U.S. dollars, by \$16.1 million, primarily related to a weaker Australian dollar and Brazilian real. Local currency sales in the International segment increased \$10.2 million, as strength in the industrial markets was partially offset by weakness in the fire service and military markets. Shipments of instruments, self-contained breathing apparatus (SCBA) and fall protection, up \$9.1 million, \$5.7 million and \$2.0 million, respectively, were partially offset by lower shipments of head, eye, and face protection and circuit breathing apparatus, down \$3.1 million and \$2.7 million, respectively.

Other (loss) income. Other loss for the year ended December 31, 2013 was \$0.2 million. A \$1.6 million land impairment loss in the North American segment was partially offset by interest income of \$1.1 million and small gains from asset dispositions. The 2013 loss compares with income of \$10.9 million for the year ended December 31, 2012. In 2012, we recognized gains totaling \$8.4 million on property sales in our Cranberry Woods office park. In December 2012, we sold the last available parcel in Cranberry Woods. Other income for 2012 also included a \$4.8 million gain on an escrow settlement related to our October 2010 acquisition of the General Monitors group of companies. These improvements were partially offset by impairment losses on intangible assets and tooling related to our firefighter location project of \$4.3 million and \$0.5 million, respectively.

Cost of products sold. Cost of products sold was \$615.2 million for the year ended December 31, 2013, a decrease of \$5.7 million, or 1%, from \$620.9 million for the year ended December 31, 2012. Cost of products sold as a percentage of net sales was 55.3% in the year ended December 31, 2013 compared to 55.9% in 2012. The effect of LIFO liquidations during 2013 reduced cost of sales by \$2.1 million. The decrease in cost of products sold in relation to sales was also due to a more favorable product mix, lower manufacturing costs, and improved pricing.

Gross profit. Gross profit for the year ended December 31, 2013 was \$496.8 million, an increase of \$7.3 million, or 1%, from \$489.5 million for the year ended December 31, 2012. The ratio of gross profit to net sales was 44.7% for 2013 compared to 44.1% in 2012. The higher gross profit ratio in 2013 was primarily related to a more favorable proportion of core product sales, lower manufacturing costs including the effect of LIFO liquidations, and improved pricing.

Selling, general and administrative expenses. Selling, general and administrative expenses for the year ended December 31, 2013 were \$309.2 million, a decrease of \$3.7 million, or 1%, from \$312.9 million for the year ended December 31, 2012. Selling, general and administrative expenses were 27.8% of net sales in 2013 compared to 28.2% of net sales in 2012. Local currency selling, general and administrative expenses decreased \$0.9 million in the current period. The decrease reflects reduced administrative expense in our International and European segments and lower legal expense associated with the product liability matters, partially offset by higher pension expense. Currency translation effects decreased selling, general and administrative expenses for the year ended December 31, 2013, when stated in U.S. dollars, by \$2.8 million. The decrease was primarily related to a Australian dollar, Brazilian real and South African rand, partially offset by a stronger euro.

Research and development expenses. Research and development expenses were \$45.9 million for the year ended December 31, 2013, an increase of \$5.0 million, or 12%, from \$40.9 million for the year ended December 31, 2012. The increase reflects our ongoing focus on developing innovative new core products, including the G1 SCBA and FAS-Trac III Industrial Helmet Suspension.

Restructuring and other charges. For the year ended December 31, 2013, we recorded non-recurring charges of \$5.3 million. European segment charges of \$3.0 million related primarily to staff reductions in Germany and the Netherlands. International segment charges of \$2.3 million were primarily related to staff reductions in Australia and South Africa.

Charges for the year ended December 31, 2012 were related to severance costs associated with staff reductions in our North American, European and International segments of \$1.5 million, \$1.1 million and \$0.2 million, respectively.

Interest expense. Interest expense for the year ended December 31, 2013 was \$10.7 million, a decrease of \$0.6 million, or 5%, from \$11.3 million for the year ended December 31, 2012. The decrease in interest expense reflects lower borrowing levels in the current year.

Currency exchange. Currency exchange losses were \$5.5 million during the twelve months ended December 31, 2013, compared to losses of \$3.2 million during the same period in 2012. Currency exchange losses in both periods were mostly unrealized and relate primarily to the effect of the strengthening U.S. dollar on intercompany balances.

Income tax provision. Our effective tax rate from continuing operations for the year ended December 31, 2013 was 29.3% compared to 32.0% for the year ended December 31, 2012. The lower effective tax rate for the year was primarily related to a tax benefit recognized for the research and development tax credit, including the benefit related to the recognition of the 2012 credit in January 2013. A favorable mix of income sourced from lower tax jurisdictions also contributed to the lower effective tax rate in 2013.

Net income from continuing operations. Net income from continuing operations for the year ended December 31, 2013 was \$85.9 million, a decrease of \$1.7 million, or 2%, from net income from continuing operations for the year ended December 31, 2012 of \$87.6 million. Local currency net income decreased by \$0.9 million. Currency translation effects decreased current period net income when stated in U.S. dollars, by \$0.8 million. Basic earnings per share from continuing operations was \$2.31 in 2013 compared to \$2.37 in 2012, a decrease of 6 cents per share, or 3%.

North American segment net income for the year ended December 31, 2013 was \$70.6 million, an improvement of \$6.3 million, or 10%, from \$64.3 million for the year ended December 31, 2012. The increase in North American segment net income reflects higher sales and gross profits and decreased restructuring expense, partially offset by increased selling, general and administrative expenses from higher payroll, legal fees, and other professional services fees.

European segment net income for the year ended December 31, 2013 was \$18.4 million, a decrease of \$2.0 million, or 10%, from \$20.4 million for the year ended December 31, 2012. Local currency net income decreased by \$3.1 million, reflecting lower gross profits on lower sales and increased restructuring expense, partially offset by lower selling, general and administrative expense. The favorable translation effects of a stronger euro in the current year increased European segment net income, when stated in U.S. dollars, by \$1.1 million.

International segment net income for the year ended December 31, 2013 was \$20.4 million, an increase of \$1.2 million, or 6%, from \$19.2 million for the year ended December 31, 2012. Currency translation effects decreased current period International segment net income when stated in U.S. dollars, by \$1.2 million, primarily due to a weaker Australian dollar and Brazilian real. Higher local currency net income was primarily related to increased gross profits from increased sales, lower selling, general and administrative expenses, partially offset by increased restructuring expense.

The net loss reported in reconciling items for the year ended December 31, 2013 was \$23.5 million, compared to a net loss of \$16.4 million for the year ended December 31, 2012. The higher loss during the year ended December 31, 2013 reflects higher currency exchange losses. Additionally, the year ended December 31, 2012 benefited from the previously-discussed one-time gain on the sale of land in our Cranberry Woods office park.

Year Ended December 31, 2012 Compared to Year Ended December 31, 2011

Net sales. Net sales for the year ended December 31, 2012 were \$1,110.4 million, a decrease of \$2.4 million, from \$1,112.8 million for the year ended December 31, 2011. Excluding the effects of weakening currencies and the divestitures of our ballistic vest and North American ballistic helmet businesses, sales increased \$67.4 million, or 6%. Sales of ballistic vests and helmets were \$36.0 million lower in 2012, reflecting the divestiture of those businesses. The unfavorable translation effects of weaker foreign currencies decreased sales, when stated in U.S. dollars, by \$33.8 million.

Net Sales (Dollars in millions)	2012	2011	Dollar Increase (Decrease)	Percent Increase (Decrease)
North America	\$ 551.9	\$ 561.1	\$ (9.2)	(2)%
Europe	289.5	286.8	2.7	1 %
International	269.0	264.9	4.1	2 %
Total	1,110.4	1,112.8	(2.4)	— %

Net sales by the North American segment were \$551.9 million for the year ended December 31, 2012, a decrease of \$9.2 million, or 2%, compared to \$561.1 million for the year ended December 31, 2011. During the year ended December 31, 2012, we continued to see growth in the fire service and industrial markets. Shipments of instruments, head, eye and face protection and self-contained breathing apparatus (SCBA) were up \$25.1 million, \$4.7 million and \$2.2 million, respectively. These increases were offset by a \$4.7 million decrease in shipments of communication devices and a \$36.0 million decrease in shipments of ballistic helmets and vests to military markets. We divested our ballistic vest and North American ballistic helmet businesses during the fourth quarter of 2011 and the second quarter of 2012, respectively.

Net sales for the European segment were \$289.5 million for the year ended December 31, 2012, an increase of \$2.7 million, or 1%, from \$286.8 million for the year ended December 31, 2011. Local currency sales increased \$22.4 million, reflecting higher shipments of instruments, SCBA, ballistic helmets, and respirators, up \$10.8 million, \$4.8 million, \$4.2 million, and \$3.3 million, respectively. The increase was partially offset by a \$2.1 million decrease in shipments of gas masks to military markets. Currency translation effects decreased European segment sales, when stated in U.S. dollars, by \$19.7 million, primarily related to a weaker euro.

Net sales of our International segment were \$269.0 million for the year ended December 31, 2012, an increase of \$4.1 million, or 2%, compared to \$264.9 million for the year ended December 31, 2011. Local currency sales in the International segment increased \$16.6 million during the year ended December 31, 2012. Growth in fire service markets in China and Latin America led to increases in sales of SCBA and fire helmets of \$10.0 million and \$3.9 million, respectively. In addition, sales of head, eye and face protection to industrial markets improved by \$7.6 million, offset by decreased shipments of circuit breathing apparatus and gas masks of \$4.5 million and \$0.4 million, respectively. Currency translation effects decreased International segment sales, when stated in U.S. dollars, by \$12.5 million, primarily related to a weaker Brazilian real and South African rand.

Other income. Other income for the year ended December 31, 2012 was \$10.9 million, an increase of \$5.4 million, from \$5.5 million for the year ended December 31, 2011. During the year ended December 31, 2012, we recognized gains on the sale of assets totaling \$8.4 million compared to gains of \$3.3 million in 2011. These gains in both years were primarily related to property sales in our Cranberry Woods office park. In December 2012, we sold the last available parcel in Cranberry Woods. Other income for the year ended December 31, 2012 also includes a \$4.8 million gain on an escrow settlement related to our October 2010 acquisition of the General Monitors group of companies. These improvements were partially offset by impairment losses on intangible assets and tooling related to our firefighter location project of \$4.3 million and \$0.5 million, respectively.

Cost of products sold. Cost of products sold was \$620.9 million for the year ended December 31, 2012, a decrease of \$33.5 million, or 5%, from \$654.4 million for the year ended December 31, 2011. Cost of products sold as a percentage of sales was 55.9% in the year ended December 31, 2012 compared to 58.8% in 2011. The decrease in cost of products sold in relation to sales was primarily due to lower manufacturing costs, a more favorable product mix, and improved pricing.

Gross profit. Gross profit for the year ended December 31, 2012 was \$489.5 million, an increase of \$31.1 million, or 7%, from \$458.4 million for the year ended December 31, 2011. The ratio of gross profit to sales was 44.1% for 2012 compared to 41.2% in 2011. The higher gross profit ratio in 2012 was primarily related to lower manufacturing costs, a more favorable product mix, and improved pricing.

Selling, general and administrative expenses. Selling, general and administrative expenses for the year ended December 31, 2012 were \$312.9 million, an increase of \$15.1 million, or 5%, from \$297.8 million for the year ended December 31, 2011. Selling, general and administrative expenses were 28.2% of sales in 2012 compared to 26.8% of sales in 2011. Local currency selling, general and administrative expenses increased \$24.2 million across all segments, reflecting higher selling costs, an increase in due diligence and consulting expense related to special projects and an increase in product liability related legal and administrative expenses. Currency translation effects decreased selling, general and administrative expenses for the year ended December 31, 2012, when stated in U.S. dollars, by \$9.1 million, primarily related to a weaker euro, Brazilian real and South African rand.

Research and development expenses. Research and development expenses were \$40.9 million for the year ended December 31, 2012, an increase of \$1.7 million, or 4%, from \$39.2 million for the year ended December 31, 2011. The increase reflected our ongoing focus on developing innovative new core products.

Restructuring and other charges. For the year ended December 31, 2012, we recorded charges of \$2.8 million. Charges for the year ended December 31, 2012 were related to severance costs associated with staff reductions in our North American, European and International segments of \$1.5 million, \$1.1 million and \$0.2 million, respectively.

For the year ended December 31, 2011, we recorded charges of \$8.6 million. European segment charges of \$5.8 million for the year ended December 31, 2011, related primarily to staff reductions and the transfer of certain production activities to China. North American segment charges for the year ended December 31, 2011 of \$1.7 million included costs associated with the relocation of certain administrative and production activities. International segment charges for the year ended December 31, 2011 of \$1.1 million were related primarily to severance costs associated with the relocation of our Wuxi, China operations to Suzhou, China.

Interest expense. Interest expense for the year ended December 31, 2012 was \$11.3 million, a decrease of \$2.8 million, or 20%, from \$14.1 million for the year ended December 31, 2011. The decrease in interest expense reflects lower borrowing on our revolving credit line and lower interest rates.

Income tax provision. Our effective tax rate for the year ended December 31, 2012 was 32.0% compared to 33.4% for the year ended December 31, 2011. The lower effective tax rate for the year was primarily related to a tax benefit associated with a non cash charitable contribution of land at our Cranberry Woods office park and a higher manufacturing deduction credit. These gains were partially offset by the expiration of the research and development tax credit at the end of 2011. In January 2013, the research and development tax credit was reinstated retroactively to the beginning of 2012.

Net income from continuing operations. Net income from continuing operations for the year ended December 31, 2012 was \$87.6 million, an increase of \$20.1 million, or 30%, from net income for the year ended December 31, 2011 of \$67.5 million. Local currency net income increased by \$23.0 million. Currency translation effects decreased current period net income when stated in U.S. dollars, by \$2.9 million, primarily due to a weaker Australian dollar, Brazilian real, and euro. Basic earnings per share from continuing operations was \$2.37 in 2012 compared to \$1.85 in 2011, an increase of 52 cents per share, or 28%.

North American segment net income for the year ended December 31, 2012 was \$64.3 million, an improvement of \$10.6 million, or 20%, from \$53.7 million for the year ended December 31, 2011. The increase in North American segment net income reflects higher gross profits driven by controlled manufacturing costs, a more favorable sales mix and improved pricing, partially offset by an increase in selling, general and administrative expenses.

European segment net income for the year ended December 31, 2012 was \$20.4 million, an increase of \$8.7 million, or 74%, from \$11.7 million for the year ended December 31, 2011. Local currency net income increased by \$9.4 million, reflecting improved gross profits and lower restructuring charges. Currency translation effects decreased European segment net income, when stated in U.S. dollars, by \$0.7 million, mainly due to a weaker euro.

International segment net income for the year ended December 31, 2012 was \$19.2 million, a decrease of \$5.6 million, or 23%, from \$24.8 million for the year ended December 31, 2011. Currency translation effects decreased current period International segment net income when stated in U.S. dollars, by \$2.4 million, primarily due to a weaker Australian dollar and Brazilian real. Lower local currency net income decreased \$3.2 million reflecting higher selling, general and administrative expenses and higher income taxes, partially offset by improved gross profits.

The net loss reported in reconciling items for the year ended December 31, 2012 was \$16.4 million, compared to a net loss of \$22.7 million for the year ended December 31, 2011. The lower loss during the year ended December 31, 2012 reflects the one-time gain on the sale of land in our Cranberry Woods office park.

LIQUIDITY AND CAPITAL RESOURCES

Our main source of liquidity is operating cash flows, supplemented by borrowings. Our principal liquidity requirements are for working capital, capital expenditures, principal and interest payments on debt, dividend payments, and acquisitions. Approximately half of our long-term debt is at fixed interest rates with repayment schedules through 2021. The remainder of our long-term debt is at variable rates on an unsecured revolving credit facility that is due in 2016. Substantially all of our borrowings originate in the U.S., which has limited our exposure to non-U.S. credit markets and to currency exchange rate fluctuations.

At December 31, 2013, we had cash and cash equivalents totaling \$96.3 million, of which \$87.2 million was held by our foreign subsidiaries. The \$87.2 million of cash and cash equivalents are held by our foreign subsidiaries whose earnings are considered indefinitely reinvested at December 31, 2013. These funds could be subject to additional income taxes if repatriated. It is not practical to determine the potential income tax liability that we would incur if these funds were repatriated to the U.S. because the time and manner of repatriation is uncertain. We believe that domestic cash and cash equivalents, domestic cash flows from operations, annual repatriation of a portion of the current period's foreign earnings, and the availability of our domestic line of credit are sufficient to fund our domestic liquidity requirements.

Our unsecured senior revolving credit facility provides for borrowings up to \$300.0 million through 2016 and is subject to certain commitment fees. Loans made under the senior revolving credit facility bear interest at a variable rate. Loan proceeds may be used for general corporate purposes, including working capital, permitted acquisitions, capital expenditures and repayment of existing indebtedness. The credit agreement also provides for an uncommitted incremental facility that permits us, subject to certain conditions, to request an increase in the senior credit facility of up to \$50.0 million. At December 31, 2013, \$184.0 million of the \$300.0 million senior revolving credit facility was unused.

In January 2014 the Company determined that it was in technical violation of one loan covenant related to the threshold for priority indebtedness in its 2006 Senior Note Purchase Agreement dated December 20, 2006 which resulted in cross default violations in two other loan agreements. The Company obtained the appropriate waivers from its lenders which were fully executed on February 12, 2014. The underlying financial covenants of the Note Purchase Agreement were amended at the same time. We are currently in compliance with all of our debt covenants.

During 2013 and 2012, we reduced borrowings on the senior revolving credit facility by \$5.0 million and \$55.0 million, respectively.

Management has filed to redeem the \$4.0 million of Industrial development debt on February 28, 2014.

Cash and cash equivalents increased \$13.5 million during the year ended December 31, 2013, compared to an increase of \$22.8 million during 2012 and an increase of \$0.2 million during 2011.

Operating activities. Operating activities provided cash of \$110.8 million in 2013, compared to providing cash of \$150.5 million in 2012. Lower operating cash flow in 2013 is primarily related to changes in working capital, higher notes receivables from insurance companies, and lower net income. Insurance receivables related to cumulative trauma product liability losses were \$124.8 million at December 31, 2013 compared to \$130.0 million at December 31, 2012. Trade receivables were \$200.4 million at December 31, 2013 compared to \$191.3 million at December 31, 2012, reflecting a local currency increase of \$13.2 million on strong sales results in December, partially offset by unfavorable currency translation effects of \$4.1 million. Inventories were \$136.8 million at December 31, 2013, compared to \$136.3 million at December 31, 2012. Local currency inventory increased \$6.3 million, partially due to anticipated demand for new products. Local currency increases were offset by unfavorable currency translation effects of \$5.8 million. Accounts payable were \$66.9 million at December 31, 2013 compared to \$59.5 million at December 31, 2012. Local currency accounts payable increased \$8.8 million, primarily in International and North America reflecting our ongoing initiative to improve operating cash flow, partially offset by favorable currency translation effects of \$1.4 million.

Operating activities provided cash of \$150.5 million in 2012, compared to providing cash of \$85.3 million in 2011. Significantly higher cash from operating activities in 2012 was primarily related to working capital improvements and higher net income. Trade receivables were \$191.3 million at December 31, 2012, a decrease of \$1.3 million, compared to \$192.6 million at December 31, 2011. The \$1.3 million decrease in trade receivables reflects a \$2.3 million decrease in local currency balances, partially offset by a \$1.0 million increase due to currency translation effects. LIFO inventories were \$136.3 million at December 31, 2012, a decrease of \$5.2 million, compared to \$141.5 million at December 31, 2011. The \$5.2 million decrease in inventories reflects a \$6.1 million decrease in local currency inventories, partially offset by a \$0.9 million increase due to currency translation effects. The decrease in local currency inventories reflects the divestiture of the ACH business, as well as our ongoing initiative to manage inventory levels. Accounts payable were \$59.5 million at December 31, 2012, an increase of \$9.3 million, compared to \$50.2 million at December 31, 2011. The \$9.3 million increase in accounts payable reflects our focus on extending payments by negotiating favorable terms with our vendors. Currency translation effects on accounts payable were negligible.

Investing activities. Investing activities used cash of \$35.2 million for the year ended December 31, 2013, compared to using \$17.3 million in 2012. The increase in cash used by investing activities in 2013 was due to lower cash generated by property disposals. Cash generated from property disposals was \$1.4 million in 2013 compared to \$20.2 million in 2012. The cash received from property disposals in 2012 include proceeds from the sale of land in our Cranberry Woods office park. Capital expenditures were \$36.5 million compared to \$32.2 million in 2012. The \$4.3 million increase in expenditures was driven primarily from higher investment in manufacturing in the International segment.

Investing activities used cash of \$17.3 million for the year ended December 31, 2012, compared to using \$11.7 million in 2012. The higher use of cash in 2012 relates to a \$5.3 million short-term investment in the International segment. This investment was liquidated in 2013.

Financing activities. Financing activities used cash of \$58.2 million for the year ended December 31, 2013, compared to using cash of \$110.5 million in 2012. During 2013, we paid down \$11.7 million of long-term debt compared to paying down \$63.0 million in 2012. We made dividend payments of \$44.0 million during 2013, compared to \$51.0 million during 2012. Dividends paid on our common stock during 2013 (our 97th consecutive year of dividend payment) were \$1.18 per share. Dividends paid on our common stock in 2012 and 2011 were \$1.38 and \$1.03 per share, respectively. The 2012 dividend included a special one-time dividend of \$0.28 per share that was paid on December 28, 2012. Restricted cash balances were \$2.8 million at December 31, 2013 and were primarily used to support letter of credit balances.

Financing activities used cash of \$110.5 million in 2012 compared to using cash of \$71.3 million in 2011. During 2012, we paid down \$63.0 million of long-term debt compared to paying down \$35.0 million in 2011. We made dividend payments of \$51.0 million during 2012, compared to \$37.7 million during 2011.

CUMULATIVE TRANSLATION ADJUSTMENTS

The year-end position of the U.S. dollar relative to international currencies resulted in a translation loss of \$6.1 million being credited to cumulative translation adjustments for the year ended December 31, 2013. This compares to a translation gain of \$4.1 million in 2012 and a translation loss of \$14.7 million in 2011. The translation loss in 2013 was primarily related to the weakening of the Australian Dollar, Brazilian Real and the Argentine Peso. The translation gain in 2012 was primarily related to the strengthening of the euro. The translation loss in 2011 was primarily related to the weakening of the euro and South African rand.

COMMITMENTS AND CONTINGENCIES

We are obligated to make future payments under various contracts, including debt and lease agreements. Our significant cash obligations as of December 31, 2013 were as follows:

(In millions)	Total	2014	2015	2016	2017	2018	Thereafter
Long-term debt	\$ 267.3	\$ 6.7	\$ 6.7	\$ 116.7	\$ 26.7	\$ 26.7	\$ 83.8
Operating leases	32.9	11.9	9.8	4.2	2.4	1.8	2.8
Totals	300.2	18.6	16.5	120.9	29.1	28.5	86.6

The significant obligations table does not include obligations to taxing authorities due to uncertainty surrounding the ultimate settlement of amounts and timing of these obligations.

We expect to meet our 2014, 2015, and 2017 debt service obligations through cash provided by operations. Approximately \$110.0 million of debt payable in 2016 relates to our unsecured senior revolving credit facility. We expect to generate sufficient operating cash flow to make payments against this amount each year. To the extent that a balance remains when the facility matures in 2016, we expect to refinance the remaining balance through new borrowing facilities.

The Company had outstanding bank guarantees and standby letters of credit with banks as of December 31, 2013 totaling \$9.0 million, of which \$6.0 million relate to the senior revolving credit facility. These letters of credit serve to cover customer requirements in connection with certain sales orders, insurance companies and the Company's industrial development debt. No amounts were drawn on these arrangements at December 31, 2013. The Company is also required to provide cash collateral in connection with certain arrangements. At December 31, 2013, the Company has \$2.2 million of restricted cash in support of these arrangements. At December 31, 2013, the Company also has a \$4.1 million guarantee relating to voluntary retirement payments for its unionized workers in Germany.

We expect to make net contributions of \$4.5 million to our pension plans in 2014.

We have purchase commitments for materials, supplies, services and property, plant and equipment as part of our ordinary conduct of business. In addition to these commitments, we also have contingencies related to product liability losses.

We categorize the product liability losses that we experience into two main categories; single incident and cumulative trauma. Single incident product liability claims are discrete incidents that are typically known to us when they occur and involve observable injuries and, therefore, more quantifiable damages. Therefore, we maintain a reserve for single incident product liability claims based on expected settlement costs for pending claims and an estimate of costs for unreported claims derived from experience, sales volumes and other relevant information. Our reserve for single incident product liability claims at December 31, 2013 and 2012 was \$4.0 million and \$4.4 million, respectively. Single incident product liability expense was negligible during the year ended December 31, 2013. During the years ended December 31, 2012 and 2011, single incident product liability expense was \$0.7 million and \$1.5 million, respectively. We evaluate our single incident product liability exposures on an ongoing basis and make adjustments to the reserve as new information becomes available.

Cumulative trauma product liability claims involve exposures to harmful substances (*e.g.*, silica, asbestos and coal dust) that occurred many years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis or coal worker's pneumoconiosis. We are presently named as a defendant in 2,840 lawsuits in which plaintiffs allege to have contracted certain cumulative trauma diseases related to exposure to silica, asbestos, and/or coal dust. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by us. We are unable to estimate total damages sought in these lawsuits as they generally do not specify the injuries alleged or the amount of damages sought, and potentially involve multiple defendants.

Cumulative trauma product liability litigation is difficult to predict. In our experience, until late in a lawsuit, we cannot reasonably determine whether it is probable that any given cumulative trauma lawsuit will ultimately result in a liability. This uncertainty is caused by many factors, including the following: cumulative trauma complaints generally do not provide information sufficient to determine if a loss is probable; cumulative trauma litigation is inherently unpredictable and information is often insufficient to determine if a lawsuit will develop into an actively litigated case; and even when a case is actively litigated, it is often difficult to determine if the lawsuit will be dismissed or otherwise resolved until late in the lawsuit. Moreover, even once it is probable that such a lawsuit will result in a loss, it is difficult to reasonably estimate the amount of actual loss that will be incurred. These amounts are highly variable and turn on a case-by-case analysis of the relevant facts, which are often not learned until late in the lawsuit.

Because of these factors, we cannot reliably determine our potential liability for such claims until late in the lawsuit. Therefore, we do not record cumulative trauma product liability losses when a lawsuit is filed, but rather, when we learn sufficient information to determine that it is probable that we will incur a loss and the amount of loss can be reasonably estimated. We record expenses for defense costs associated with open cumulative trauma product liability lawsuits as incurred.

We cannot estimate any amount or range of possible losses related to resolving pending and future cumulative trauma product liability lawsuits that we may face because of the factors described above. As new information about cumulative trauma product liability cases and future developments becomes available, we reassess our potential exposures.

A summary of cumulative trauma product liability lawsuit activity follows:

	2013	2012	2011
Open lawsuits, January 1	2,609	2,321	1,900
New lawsuits	489	750	479
Settled and dismissed lawsuits	(258)	(462)	(58)
Open lawsuits, December 31	2,840	2,609	2,321

Nearly half of the open lawsuits at December 31, 2013 have had a de minimus level of activity over the last five years. It is possible that these cases could become active again at any point due to changes in circumstances.

With some common contract exclusions, we maintain insurance for cumulative trauma product liability claims. We have purchased insurance policies for the policy years from 1952-1986 from over 20 different insurance carriers that provide coverage for cumulative trauma product liability losses and, in many instances, related defense costs. In the normal course of business, we make payments to settle product liability claims and for related defense costs. We record receivables for the amounts that are covered by insurance. The available limits of these policies are many times our recorded insurance receivable balance.

Various factors could affect the timing and amount of recovery of our insurance receivables, including the outcome of negotiations with insurers, legal proceedings with respect to product liability insurance coverage and the extent to which insurers may become insolvent in the future.

Our insurance receivables at December 31, 2013 and 2012 totaled \$124.8 million and \$130.0 million, respectively, all of which is reported in other non-current assets.

A summary of insurance receivable balances and activity related to cumulative trauma product liability losses follows:

(In millions)	2013		2012		2011	
Balance January 1	\$	130.0	\$	112.1	\$	89.0
Additions		34.0		29.7		35.6
Collections and settlements		(39.2)		(11.8)		(12.5)
Balance December 31		124.8		130.0		112.1

Additions to insurance receivables in the above table represent insured cumulative trauma product liability losses and related defense costs. Uninsured cumulative trauma product liability losses during the years ended December 31, 2013, 2012, and 2011 were \$1.7 million, \$2.1 million and \$1.1 million, respectively. Collections primarily represent agreements with insurance companies to pay amounts due that are applicable to cumulative trauma claims. In cases where the payment stream covers multiple years, the present value of the payments is recorded as a note receivable (current and long term) in the balance sheet within prepaid expenses and other current assets and other noncurrent assets.

Our aggregate cumulative trauma product liability losses and administrative and defense costs for the three years ended December 31, 2013, totaled approximately \$104.2 million, substantially all of which was insured.

We believe that the increase in the insurance receivable balance that we have experienced since 2005 is primarily due to disagreements among our insurance carriers, and consequently with us, as to when their individual obligations to pay us are triggered and the amount of each insurer's obligation, as compared to other insurers. We believe that our insurers do not contest that they have issued policies to us or that these policies cover certain cumulative trauma product liability claims. We believe that our ability to successfully resolve our insurance litigation with various insurance carriers in recent years demonstrates that we have strong legal positions concerning our rights to coverage.

We regularly evaluate the collectability of the insurance receivables and record the amounts that we conclude are probable of collection. Our conclusions are based on our analysis of the terms of the underlying insurance policies, our experience in successfully recovering cumulative trauma product liability claims from our insurers under other policies, the financial ability of our insurance carriers to pay the claims, our understanding and interpretation of the relevant facts and applicable law and the advice of legal counsel, who believe that our insurers are required to provide coverage based on the terms of the policies.

Although the outcome of cumulative trauma product liability matters cannot be predicted with certainty and unfavorable resolutions could materially affect our results of operations on a quarter-to-quarter basis, based on information currently available and the amounts of insurance coverage available to us, we believe that the disposition of cumulative trauma product liability lawsuits that are pending against us will not have a materially adverse effect on our future results of operations, financial condition, or liquidity.

We are currently involved in insurance coverage litigations with a number of our insurance carriers.

In 2009, we sued The North River Insurance Company (North River) in the United States District Court for the Western District of Pennsylvania, alleging that North River breached one of its insurance policies by failing to pay amounts owed to us and that it engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under the policy for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Motions for summary judgment on certain issues will be submitted to the court at the earliest possible date. A trial date has not yet been scheduled.

In 2010, North River sued us in the Court of Common Pleas of Allegheny County, Pennsylvania seeking a declaratory judgment concerning their responsibilities under three additional policies. We assert claims against North River for breaches of contract for failures to pay amounts owed to us. We also allege that North River engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under these policies for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Summary judgment on certain issues is pending with the court. A trial date has not yet been scheduled.

In July 2010, we filed a lawsuit in the Superior Court of the State of Delaware seeking declaratory and other relief from the majority of our excess insurance carriers concerning the future rights and obligations of MSA and our excess insurance carriers under various insurance policies. The reason for this insurance coverage action is to secure a comprehensive resolution of our rights under the insurance policies issued by our insurers. The case is currently in discovery. We have resolved our claims against certain of our insurance carriers on some of their policies through negotiated settlements. When settlement is reached, we dismiss the settling carrier from this action in Delaware.

During September 2013, we resolved coverage litigation with Associated International Insurance Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Associated International Insurance Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Allstate Insurance Company, through a negotiated settlement. As part of this settlement, both parties dismissed all claims against one another under the above-referenced coverage litigations in the Court of Common Pleas of Allegheny County, Pennsylvania and the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Columbia Casualty Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Columbia Casualty Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

We prepare our consolidated financial statements in accordance with U.S. generally accepted accounting principles (GAAP). The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the related disclosures. We evaluate these estimates and judgments on an on-going basis based on historical experience and various assumptions that we believe to be reasonable under the circumstances. However, different amounts could be reported if we had used different assumptions and in light of different facts and circumstances. Actual amounts could differ from the estimates and judgments reflected in our financial statements. A summary of the Company's significant accounting policies is included in Note 1 to the Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

We believe that the following are the more critical judgments and estimates used in the preparation of our financial statements.

Accounting for contingencies. We accrue for contingencies when we believe that it is probable that a liability or loss has been incurred and the amount can be reasonably estimated. Contingencies relate to uncertainties that require our judgment both in assessing whether or not a liability or loss has been incurred and in estimating the amount of the probable loss. Significant contingencies affecting our financial statements include pending or threatened litigation, including product liability claims and product warranties.

Product liability. We face an inherent business risk of exposure to product liability claims arising from the alleged failure of our products to prevent the types of personal injury or death against which they are designed to protect. We categorize the product liability losses that we experience into two main categories; single incident and cumulative trauma. Single incident product liability claims are discrete incidents that are typically known to us when they occur and involve observable injuries and, therefore, more quantifiable damages. We maintain a reserve for single incident product liability claims, based on expected settlement costs for pending claims and an estimate of costs for unreported claims derived from experience, sales volumes and other relevant information. We evaluate our single incident product liability exposures on an ongoing basis and make adjustments to the reserve as new information becomes available.

Cumulative trauma product liability claims involve exposures to harmful substances that occurred many years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis, or coal worker's pneumoconiosis. In our experience, until late in a lawsuit, we cannot reasonably determine whether it is probable that any given cumulative trauma lawsuit will ultimately result in a liability. This uncertainty is caused by many factors, including the following: cumulative trauma complaints generally do not provide information sufficient to determine if a loss is probable; cumulative trauma litigation is inherently unpredictable and information is often insufficient to determine if a lawsuit will develop into an actively litigated case; and even when a case is actively litigated, it is often difficult to determine if the lawsuit will be dismissed or otherwise resolved until late in the lawsuit. Moreover, even once it is probable that such a lawsuit will result in a loss, it is difficult to reasonably estimate the amount of actual loss that will be incurred. These amounts are highly variable and turn on a case-by-case analysis of the relevant facts, which are often not learned until late in the lawsuit. Therefore, we do not record cumulative trauma product liability losses when a lawsuit is filed, but rather, when we learn sufficient information to determine that it is probable that we will incur a loss and the amount of loss can be reasonably estimated.

We cannot estimate any amount or range of possible losses related to resolving pending and future cumulative trauma product liability claims that we may face because of the factors described above. As new information about cumulative trauma product liability claims and future developments becomes available, we reassess our potential exposures.

We record expenses for defense costs associated with open product liability lawsuits as incurred.

With some common contract exclusions, we maintain insurance for single incident and pre-1986 cumulative trauma product liability claims and related defense costs. In the normal course of business, we make payments to settle product liability claims and for related defense costs. We record receivables for the amounts that are covered by insurance.

Due to uncertainty as to the ultimate outcome of pending and threatened claims, as well as the incidence of future claims, it is possible that future results could be materially affected by changes in our assumptions and estimates related to product liability matters, including our estimates of amounts receivable from insurance carriers. Our product liability expense averaged less than 1% of net sales during the three years ended December 31, 2013.

Product warranties. We accrue for the estimated probable cost of product warranties at the time that sales are recognized. Our estimates are principally based on historical experience. We also accrue for our estimates of the probable costs of corrective action when significant product quality issues are identified. These estimates are principally based on our assumptions regarding the cost of corrective action and the probable number of units to be repaired or replaced. Our product warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Due to the uncertainty and potential volatility of these factors, it is possible that future results could be materially affected by changes in our assumptions or the effectiveness of our strategies related to these matters. Our product warranty expense averaged approximately 1% of net sales during the three years ended December 31, 2013.

Income taxes. We recognize deferred tax assets and liabilities using enacted tax rates to record the tax effect of temporary differences between the book and tax basis of recorded assets and liabilities. We record valuation allowances to reduce deferred tax assets to the amounts that we estimate are probable to be realized. When assessing the need for valuation allowances, we consider projected future taxable income and prudent and feasible tax planning strategies. Should a change in circumstances lead to a change in our judgments about the realizability of deferred tax assets in future years, we adjust the related valuation allowances in the period that the change in circumstances occurs. We had valuation allowances of \$4.9 million and \$4.0 million at December 31, 2013 and 2012, respectively.

We record an estimated income tax liability based on our best judgment of the amounts likely to be paid in the various tax jurisdictions in which we operate. We record tax benefits related to uncertain tax positions taken or expected to be taken on a tax return when such benefits meet a more likely than not threshold. We recognize interest related to unrecognized tax benefits in interest expense and penalties in operating expenses. The tax liabilities ultimately paid are dependent on a number of factors, including the resolution of tax audits, and may differ from the amounts recorded. Tax liabilities are adjusted through income when it becomes probable that the actual liability differs from the amount recorded.

No deferred U.S. income taxes have been provided on undistributed earnings of non-U.S. subsidiaries, which amounted to \$290.5 million as of December 31, 2013. These earnings are considered to be reinvested for an indefinite period of time. Because we currently do not have any plans to repatriate these funds, we cannot determine the impact of local taxes, withholding taxes and foreign tax credits associated with the future repatriation of such earnings and, therefore, cannot reasonably estimate the associated tax liability. In cases where we intend to repatriate a portion of the undistributed earnings of our foreign subsidiaries, we provide U.S. income taxes on such earnings.

Pensions and other postretirement benefits. We sponsor certain pension and other postretirement benefit plans. Accounting for the net periodic benefit costs and credits for these plans requires us to estimate the cost of benefits to be provided well into the future and to attribute these costs over the expected work life of the employees participating in these plans. These estimates require our judgment about discount rates used to determine these obligations, expected returns on plan assets, rates of future compensation increases, rates of increase in future health care costs, participant withdrawal and mortality rates and participant retirement ages. Differences between our estimates and actual results may significantly affect the cost of our obligations under these plans and could cause net periodic benefit costs and credits to change materially from year-to-year. The discount rate assumptions used in determining projected benefit obligations are based on published long-term bond indices or a company-specific yield curve model.

Goodwill. In the third quarter of each year, or more frequently if indicators of impairment exist or if a decision is made to sell a business, we evaluate goodwill for impairment. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include a decline in expected cash flows, a significant adverse change in the business climate, unanticipated competition, slower growth rates, or negative developments in equity and credit markets, among others.

All goodwill is assigned to reporting units. For goodwill impairment testing purposes, we consider our operating segments to be our reporting units. We test goodwill for impairment by either performing a qualitative evaluation or a two-step quantitative test. The qualitative evaluation is an assessment of factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value, including goodwill. Factors considered as part of the qualitative assessment include entity-specific industry, market and general economic conditions. In 2013 we performed a qualitative assessment for all of our reporting units. However, in the future, we may elect to bypass this qualitative evaluation for some or all of our reporting units and perform a two-step quantitative test. Quantitative testing involves comparing the estimated fair value of each reporting unit to its carrying value. We estimate reporting unit fair value using discounted cash flow (DCF) methodologies, as we believe forecasted cash flows are the best indicator of fair value. A number of significant assumptions and estimates are involved in the application of the DCF model, including sales volumes and prices, costs to produce, tax rates, capital spending, discount rates, and working capital changes. Cash flow forecasts are generally based on approved business unit operating plans for the early years and historical relationships in later years. The betas used in calculating the individual reporting units' weighted average cost of capital (WACC) rate are estimated for each reporting unit based on peer data.

In the event the estimated fair value of a reporting unit per the DCF model is less than the carrying value, additional analysis would be required. The additional analysis would compare the carrying amount of the reporting unit's goodwill with the implied fair value of that goodwill, which may involve the use of valuation experts. The implied fair value of goodwill is the excess of the fair value of the reporting unit over the fair value amounts assigned to all of the assets and liabilities of that unit as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit represented the purchase price. If the carrying value of goodwill exceeds its implied fair value, an impairment loss equal to such excess would be recognized, which could significantly and adversely impact reported results of operations and shareholders' equity. For 2013, based on our qualitative valuation, none of our reporting units were close to an impairment.

RECENTLY ADOPTED AND RECENTLY ISSUED ACCOUNTING STANDARDS

In July, 2013, the FASB issued ASU 2013-11, Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists. This ASU requires an unrecognized tax benefit, or a portion of an unrecognized tax benefit, to be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward. The ASU will be effective beginning in 2014. The adoption of this ASU will not have a material effect on our consolidated statements.

In March 2013, FASB issued ASU 2013-05, Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity. This ASU 2013-05 addresses the accounting for the cumulative translation adjustment when a parent either sells a part or all of its investment in a foreign entity or no longer holds a controlling financial interest in a subsidiary or group of assets that is a business within a foreign entity. The guidance outlines the events when cumulative translation adjustments should be released into net income. This ASU will be effective beginning in 2014. The adoption of this ASU may have a material effect on our consolidated financial statements, in the event that we were to divest of a foreign affiliate.

In February 2013, the FASB issued ASU 2013-02, Comprehensive Income-Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income. This ASU requires additional information about the amounts reclassified out of accumulated other comprehensive income by component. The adoption of this ASU on January 1, 2013 did not have a material effect on our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Market risk represents the risk of adverse changes in the value of a financial instrument caused by changes in currency exchange rates, interest rates and equity prices. We are exposed to market risks related to currency exchange rates and interest rates.

Currency exchange rates. We are subject to the effects of fluctuations in currency exchange rates on various transactions and on the translation of the reported financial position and operating results of our non-U.S. companies from local currencies to U.S. dollars. A hypothetical 10% strengthening or weakening of the U.S. dollar would increase or decrease our reported sales and net income for the year ended December 31, 2013 by approximately \$57.5 million and \$4.6 million, respectively.

When appropriate, we may attempt to limit our transactional exposure to changes in currency exchange rates through contracts or other actions intended to reduce existing exposures by creating offsetting currency exposures. At December 31, 2013, we had open foreign currency forward contracts with a U.S. dollar notional value of \$54.4 million. A hypothetical 10% increase in December 31, 2013 forward exchange rates would result in a \$5.4 million increase in the fair value of these contracts.

Interest rates. We are exposed to changes in interest rates primarily as a result of borrowing and investing activities used to maintain liquidity and fund business operations. Because of the relatively short maturities of temporary investments and the variable rate nature of our revolving credit facility and industrial development debt, these financial instruments are reported at carrying values which approximate fair values.

We have \$160.0 million of fixed rate debt which matures at various dates through 2021. The incremental increase in the fair value of fixed rate long-term debt resulting from a hypothetical 10% decrease in interest rates would be approximately \$2.6 million. However, our sensitivity to interest rate declines and the corresponding increase in the fair value of our debt portfolio would unfavorably affect earnings and cash flows only to the extent that we elected to repurchase or retire all or a portion of our fixed rate debt portfolio at prices above carrying values.

Actuarial assumptions. The most significant actuarial assumptions affecting our net periodic pension credit and pension obligations are discount rates, expected returns on plan assets and plan asset valuations. Discount rates and plan asset valuations are point-in-time measures. Expected returns on plan assets are based on our historical returns by asset class.

The following table summarizes the impact of changes in significant actuarial assumptions on our December 31, 2013 actuarial valuations.

(In thousands)	Impact of Changes in Actuarial Assumptions					
	Change in Discount Rate		Change in Expected Return		Change in Market Value of Assets	
	1%	(1)%	1%	(1)%	5%	(5)%
(Decrease) increase in net benefit cost	\$ (5,610)	\$ 6,742	\$ (3,815)	\$ 3,813	\$ (898)	\$ 894
(Decrease) increase in projected benefit obligation	(55,802)	64,198	—	—	—	—
Increase (decrease) in funded status	55,802	(64,198)	—	—	21,728	(21,728)

Item 8. Financial Statements and Supplementary Data

Management's Reports to Shareholders

Management's Report on Responsibility for Financial Reporting

Management of Mine Safety Appliances Company (the Company) is responsible for the preparation of the financial statements included in this annual report. The financial statements were prepared in accordance with accounting principles generally accepted in the United States of America and include amounts that are based on the best estimates and judgments of management. The other financial information contained in this annual report is consistent with the financial statements.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

The Company's internal control over financial reporting includes policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of management and the directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2013. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework (1992)*. Based on our assessment and those criteria, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2013.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2013 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

/s/ WILLIAM M. LAMBERT

William M. Lambert
Chief Executive Officer

/s/ STACY P. McMAHAN

Stacy P. McMahan
Senior Vice President of Finance and Chief Financial Officer

February 24, 2014

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Mine Safety Appliances Company:

In our opinion, the consolidated balance sheets and related consolidated statements of income, comprehensive income, cash flows and changes in retained earnings and accumulated other comprehensive loss present fairly, in all material respects, the financial position of Mine Safety Appliances Company and its subsidiaries (the "Company") at December 31, 2013 and 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15 presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control - Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 8. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 24, 2014

MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED STATEMENT OF INCOME

(In thousands, except per share amounts)	Year ended December 31,		
	2013	2012	2011
Net sales	\$ 1,112,058	\$ 1,110,443	\$ 1,112,814
Other (loss) income, net (Note 14)	(175)	10,876	5,458
	1,111,883	1,121,319	1,118,272
Costs and expenses			
Cost of products sold	615,213	620,895	654,447
Selling, general and administrative	309,206	312,858	297,779
Research and development	45,858	40,900	39,245
Restructuring and other charges (Note 2)	5,344	2,787	8,559
Interest expense	10,677	11,344	14,116
Currency exchange losses, net	5,452	3,192	3,051
	991,750	991,976	1,017,197
Income from continuing operations before income taxes	120,133	129,343	101,075
Provision for income taxes (Note 9)	35,145	41,401	33,807
	84,988	87,942	67,268
Income from discontinued operations (Note 19)	3,061	3,819	2,777
Net income	88,049	91,761	70,045
Net loss (income) attributable to noncontrolling interests	198	(1,124)	(193)
	88,247	90,637	69,852
Net income attributable to Mine Safety Appliances Company	88,247	90,637	69,852
Amounts attributable to Mine Safety Appliances Company common shareholders:			
Income from continuing operations	85,858	87,557	67,518
Income from discontinued operations (Note 19)	2,389	3,080	2,334
Net income	88,247	90,637	69,852
Earnings per share attributable to Mine Safety Appliances Company common shareholders (Note 8)			
Basic			
Income from continuing operations	\$ 2.31	\$ 2.37	\$ 1.85
Income from discontinued operations (Note 19)	\$ 0.06	\$ 0.08	\$ 0.06
Net income	\$ 2.37	\$ 2.45	\$ 1.91
Diluted			
Income from continuing operations	\$ 2.28	\$ 2.34	\$ 1.81
Income from discontinued operations (Note 19)	\$ 0.06	\$ 0.08	\$ 0.06
Net income	\$ 2.34	\$ 2.42	\$ 1.87

The accompanying notes are an integral part of the consolidated financial statements.

MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(In thousands)	Year ended December 31,		
	2013	2012	2011
Net income	\$ 88,049	\$ 91,761	\$ 70,045
Foreign currency translation adjustments	(7,281)	3,846	(15,980)
Pension and post-retirement plan adjustments (Note 13)	54,951	(28,018)	(44,218)
Comprehensive income	135,719	67,589	9,847
Comprehensive loss (income) attributable to noncontrolling interests	1,331	(840)	1,137
Comprehensive income attributable to Mine Safety Appliances	137,050	66,749	10,984

The accompanying notes are an integral part of the consolidated financial statements.

MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED BALANCE SHEET

(In thousands, except share amounts)	December 31,	
	2013	2012
Assets		
Cash and cash equivalents	\$ 96,265	\$ 82,718
Trade receivables, less allowance for doubtful accounts of \$7,306 and \$7,402	200,364	191,289
Inventories (Note 3)	136,837	136,300
Deferred tax assets (Note 9)	22,458	17,727
Income taxes receivable	9,181	6,342
Prepaid expenses and other current assets (Note 16)	35,861	29,172
Total current assets	500,966	463,548
Property, plant, and equipment (Note 4)	152,755	147,465
Prepaid pension cost (Note 13)	121,054	42,818
Deferred tax assets (Note 9)	14,996	17,018
Goodwill (Note 12)	260,134	258,400
Intangible assets (Note 12)	35,029	38,648
Other noncurrent assets	149,336	143,849
Total assets	1,234,270	1,111,746
Liabilities		
Notes payable and current portion of long-term debt (Note 11)	\$ 7,500	\$ 6,823
Accounts payable	66,902	59,519
Employees' compensation	38,164	41,602
Insurance and product liability	14,251	15,025
Taxes on income (Note 9)	3,662	4,389
Other current liabilities	61,085	61,442
Total current liabilities	191,564	188,800
Long-term debt (Note 11)	260,667	272,333
Pensions and other employee benefits (Note 13)	152,084	151,536
Deferred tax liabilities (Note 9)	49,621	17,249
Other noncurrent liabilities	7,987	11,124
Total liabilities	661,923	641,042
Commitments and Contingencies (Note 18)		
Shareholders' Equity		
Preferred stock, 4 1/2% cumulative, \$50 par value (Note 6)	3,569	3,569
Common stock, no par value (Note 6)	132,055	112,135
Stock compensation trust (Note 10)	(1,585)	(3,891)
Treasury shares, at cost (Note 6)	(281,524)	(269,739)
Accumulated other comprehensive loss	(78,269)	(127,072)
Retained earnings	792,206	747,953
Total shareholders' equity	566,452	462,955
Noncontrolling interests	5,895	7,749
Total shareholders' equity	572,347	470,704
Total liabilities and shareholders' equity	1,234,270	1,111,746

The accompanying notes are an integral part of the consolidated financial statements.

MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED STATEMENT OF CASH FLOWS

(In thousands)	Year ended December 31,		
	2013	2012	2011
Operating Activities			
Net income	\$ 88,049	\$ 91,761	\$ 70,045
Depreciation and amortization	30,764	31,702	32,866
Pensions (Note 13)	12,268	3,673	(4,967)
Net gain from investing activities—asset disposals (Note 14)	(436)	(8,396)	(3,328)
Stock-based compensation (Note 10)	10,337	10,010	7,732
Deferred income tax provision (Note 9)	(3,234)	213	8,800
Other noncurrent assets and liabilities	(18,162)	(14,104)	(24,130)
Currency exchange losses, net	5,127	3,151	2,511
Excess tax benefit related to stock plans (Note 6)	(2,246)	(2,799)	(632)
Other, net	4,386	1,103	(1,335)
Operating cash flow before changes in certain working capital items	126,853	116,314	87,562
(Increase) decrease in trade receivables	(13,171)	2,346	(217)
(Increase) decrease in inventories (Note 3)	(6,296)	2,677	(1,230)
Increase (decrease) in accounts payable and accrued liabilities	10,732	17,776	(398)
(Increase) decrease in income taxes receivable, prepaid expenses and other current assets	(7,337)	11,363	(459)
(Increase) decrease in certain working capital items	(16,072)	34,162	(2,304)
Cash Flow From Operating Activities	110,781	150,476	85,258
Investing Activities			
Capital expenditures	(36,517)	(32,209)	(30,390)
Property disposals	1,360	20,193	18,687
Other investing	—	(5,269)	—
Cash Flow From Investing Activities	(35,157)	(17,285)	(11,703)
Financing Activities			
Proceeds from (payments on) short-term debt, net (Note 11)	662	(128)	137
Payments on long-term debt (Note 11)	(306,766)	(246,500)	(199,000)
Proceeds from long-term debt (Note 11)	295,100	183,500	164,000
Restricted cash	(2,790)	—	—
Cash dividends paid	(43,994)	(50,990)	(37,741)
Distributions to noncontrolling interests	(556)	—	—
Company stock purchases (Note 6)	(11,785)	(3,508)	(624)
Exercise of stock options (Note 6)	9,643	4,306	1,316
Excess tax benefit related to stock plans (Note 6)	2,246	2,799	632
Cash Flow From Financing Activities	(58,240)	(110,521)	(71,280)
Effect of exchange rate changes on cash and cash equivalents	(3,837)	110	(2,097)
Increase in cash and cash equivalents	13,547	22,780	178
Beginning cash and cash equivalents	82,718	59,938	59,760
Ending cash and cash equivalents	96,265	82,718	59,938
Supplemental cash flow information:			
Interest payments	\$ 10,884	\$ 10,772	\$ 13,969
Income tax payments	36,242	29,807	21,739

The accompanying notes are an integral part of the consolidated financial statements.

MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED STATEMENT OF CHANGES IN RETAINED EARNINGS AND
ACCUMULATED OTHER COMPREHENSIVE LOSS

(In thousands)	Retained Earnings	Accumulated Other Comprehensive (Loss)
Balances January 1, 2011	\$ 676,195	\$ (44,316)
Net income	70,045	—
Foreign currency translation adjustments	—	(15,980)
Pension and post-retirement plan adjustments, net of tax of \$28,636	—	(44,218)
(Income) loss attributable to noncontrolling interests	(193)	1,330
Common dividends	(37,699)	—
Preferred dividends	(42)	—
Balances December 31, 2011	708,306	(103,184)
Net income	91,761	—
Foreign currency translation adjustments	—	3,846
Pension and post-retirement plan adjustments, net of tax of \$11,364	—	(28,018)
(Income) loss attributable to noncontrolling interests	(1,124)	284
Common dividends	(50,948)	—
Preferred dividends	(42)	—
Balances December 31, 2012	747,953	(127,072)
Net income	88,049	—
Foreign currency translation adjustments	—	(7,281)
Pension and post-retirement plan adjustments, net of tax of \$30,849	—	54,951
Loss attributable to noncontrolling interests	198	1,133
Common dividends	(43,952)	—
Preferred dividends	(42)	—
Balances December 31, 2013	792,206	(78,269)

Components of accumulated other comprehensive loss are as follows:

(In thousands)	December 31,		
	2013	2012	2011
Cumulative translation adjustments	\$ (1,189)	\$ 4,959	\$ 829
Pension and post-retirement plan adjustments (Note 13)	(77,080)	(132,031)	(104,013)
Accumulated other comprehensive loss	(78,269)	(127,072)	(103,184)

The accompanying notes are an integral part of the consolidated financial statements.

MINE SAFETY APPLIANCES COMPANY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1—Significant Accounting Policies

Basis of Presentation—The Consolidated Financial Statements of Mine Safety Appliances Company are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) and require management to make certain judgments, estimates, and assumptions. These may affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements. They also may affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates upon subsequent resolution of identified matters. Certain amounts in previously issued financial statements were reclassified to conform to the 2013 presentation. See Note 19 for further information regarding Discontinued Operations.

Principles of Consolidation—The consolidated financial statements include the accounts of the company and all subsidiaries. Intercompany accounts and transactions are eliminated.

Noncontrolling Interests—Noncontrolling interests reflect noncontrolling shareholders' investments in certain consolidated subsidiaries and their proportionate share of the income and accumulated other comprehensive income of those subsidiaries.

Currency Translation—The functional currency of all significant non-U.S. subsidiaries is the local currency. Assets and liabilities of these operations are translated at year-end exchange rates. Income statement accounts are translated using the average exchange rates for the reporting period. Translation adjustments for these companies are reported as a component of shareholders' equity and are not included in income. Foreign currency transaction gains and losses are included in net income for the reporting period.

Cash Equivalents—Cash equivalents include temporary deposits with financial institutions and highly liquid investments with original maturities of 90 days or less.

Restricted Cash—Restricted cash, which is designated for use other than current operations is included in the Prepaid Expenses and Other Current Assets in the Consolidated Balance Sheet. Restricted cash balances were \$2.8 million at December 31, 2013 and were used to support letter of credit balances. The Company did not have restricted cash at December 31, 2012 or 2011.

Inventories—Inventories are stated at the lower of cost or market. Most U.S. inventories are valued on the last-in, first-out (LIFO) cost method. Other inventories are valued on the average cost method or at standard costs which approximate actual costs.

Property and Depreciation—Property is recorded at cost. Depreciation is computed using straight-line and accelerated methods over the estimated useful lives of the assets, generally as follows: buildings 20 to 40 years and machinery and equipment 3 to 10 years. Expenditures for significant renewals and improvements are capitalized. Ordinary repairs and maintenance are expensed as incurred. Gains or losses on property dispositions are included in other income and the cost and related depreciation are removed from the accounts. Depreciation expense for the years ended December 31, 2013, 2012 and 2011 was \$27.1 million, \$27.5 million and \$27.1 million, respectively. Properties, plants, and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of assets is determined by comparing the estimated undiscounted net cash flows of the operations related to the assets to their carrying amount. An impairment loss would be recognized when the carrying amount of the assets exceeds the estimated undiscounted net cash flows. The amount of the impairment loss to be recorded is calculated as the excess of the carrying value of the assets over their fair value, with fair value determined using the best information available, which generally is a discounted cash flow model.

Goodwill and Other Intangible Assets—Intangible assets are amortized on a straight-line basis over their useful lives. Intangible assets are reviewed for possible impairment whenever circumstances change such that the recorded value of the asset may not be recoverable. Goodwill is not amortized, but is subject to impairment write-down tests. We test the goodwill of each of our reporting units for impairment at least annually. The annual goodwill impairment tests are performed as of September 30 each year. All goodwill is assigned to reporting units. For this purpose, we consider our operating segments to be our reporting units. We test goodwill for impairment by either performing a qualitative evaluation or a two-step quantitative test. The qualitative evaluation is an assessment of various factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value, including goodwill.

Factors considered as part of the qualitative assessment include entity-specific industry, market and general economic conditions. We may elect to bypass the qualitative assessment for some or all of our reporting units and perform a two-step quantitative test. Quantitative testing involves estimating a reporting unit's fair value. We estimate reporting unit fair value using discounted cash flow methodologies. There has been no impairment of our goodwill as of December 31, 2013.

Revenue Recognition—Revenue from the sale of products is recognized when title, ownership and the risk of loss have transferred to the customer, which generally occurs either when product is shipped to the customer or, in the case of most U.S. distributor customers, when product is delivered to the customer's delivery site. We establish our shipping terms according to local practice and market characteristics. We do not ship product unless we have an order or other documentation authorizing shipment to our customers. We make appropriate provisions for uncollectible accounts receivable and product returns, both of which have historically been insignificant in relation to our net sales. Certain distributor customers receive price rebates based on their level of purchases and other performance criteria that are documented in established distributor programs. These rebates are accrued as a reduction of net sales as they are earned by the customer.

Shipping and Handling—Shipping and handling expenses for products sold to customers are charged to cost of products sold as incurred. Amounts billed to customers for shipping and handling are included in net sales.

Product Warranties—Estimated expenses related to product warranties and additional service actions are charged to cost of products sold in the period in which the related revenue is recognized or when significant product quality issues are identified.

Research and Development—Research and development costs are expensed as incurred.

Income Taxes—Deferred income taxes are provided for temporary differences between financial and tax reporting. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. If it is more likely than not that some portion or all of a deferred tax asset will not be realized, a valuation allowance is recognized. We record tax benefits related to uncertain tax positions taken or expected to be taken on a tax return when such benefits meet a more likely than not threshold. We recognize interest related to unrecognized tax benefits in interest expense and penalties in operating expenses. No provision is made for possible U.S. taxes on the undistributed earnings of foreign subsidiaries that are considered to be reinvested indefinitely.

Stock-Based Compensation—We account for stock-based compensation in accordance with the FASB guidance on share-based payment, which requires that we recognize compensation expense for employee and non-employee director stock-based compensation based on the grant date fair value. Except for retirement-eligible participants, for whom there is no requisite service period, this expense is recognized ratably over the requisite service periods following the date of grant. For retirement-eligible participants, this expense is recognized at the grant date.

Derivative Instruments—We may use derivative instruments to minimize the effects of changes in currency exchange rates. We do not enter into derivative transactions for speculative purposes and do not hold derivative instruments for trading purposes. Changes in the fair value of derivative instruments designated as fair value hedges are recorded in the balance sheet as adjustments to the underlying hedged asset or liability. Changes in the fair value of derivative instruments that do not qualify for hedge accounting treatment are recognized in the income statement as currency exchange (income) loss in the current period.

Commitments and Contingencies—For asserted claims and assessments, liabilities are recorded when an unfavorable outcome of a matter is deemed to be probable and the loss is reasonably estimable. Management determines the likelihood of an unfavorable outcome based on many factors such as the nature of the matter, available defenses and case strategy, progress of the matter, views and opinions of legal counsel and other advisors, applicability and success of appeals processes, and the outcome of similar historical matters, among others. Once an unfavorable outcome is deemed probable, management weighs the probability of estimated losses, and the most reasonable loss estimate is recorded. If an unfavorable outcome of a matter is deemed to be reasonably possible, then the matter is disclosed and no liability is recorded. With respect to unasserted claims or assessments, management must first determine that the probability that an assertion will be made is likely, then, a determination as to the likelihood of an unfavorable outcome and the ability to reasonably estimate the potential loss is made. Legal matters are reviewed on a continuous basis to determine if there has been a change in management's judgment regarding the likelihood of an unfavorable outcome or the estimate of a potential loss.

Discontinued Operations and Assets Held For Sale—For those businesses where management has committed to a plan to divest, each business is valued at the lower of its carrying amount or estimated fair value less cost to sell. If the carrying amount of the business exceeds its estimated fair value, an impairment loss is recognized. Fair value is estimated using accepted valuation techniques such as a DCF model, valuations performed by third parties, earnings multiples, or indicative bids, when available. A number of significant estimates and assumptions are involved in the application of these techniques, including the forecasting of markets and market share, sales volumes and prices, costs and expenses, and multiple other factors. Management considers historical experience and all available information at the time the estimates are made; however, the fair value that is ultimately realized upon the divestiture of a business may differ from the estimated fair value reflected in the Consolidated Financial Statements. Depreciation and amortization expense is not recorded on assets of a business to be divested once they are classified as held for sale.

For businesses classified as discontinued operations, the results of operations are reclassified from their historical presentation to discontinued operations on the Consolidated Statement of Income, for all periods presented. The gains or losses associated with these divested businesses are recorded in discontinued operations on the Consolidated Statement of Income. Additionally, segment information does not include the operating results of businesses classified as discontinued operations for all periods presented. Management does not expect any continuing involvement with these businesses following their divestiture, and these businesses are expected to be disposed of within one year.

Recently Adopted and Recently Issued Accounting Standards—In July, 2013, the FASB issued ASU 2013-11, Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists. This ASU requires an unrecognized tax benefit, or a portion of an unrecognized tax benefit, to be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward. The ASU will be effective beginning in 2014. The adoption of this ASU will not have a material effect on our consolidated statements.

In March 2013, FASB issued ASU 2013-05, Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity. This ASU 2013-05 addresses the accounting for the cumulative translation adjustment when a parent either sells a part or all of its investment in a foreign entity or no longer holds a controlling financial interest in a subsidiary or group of assets that is a business within a foreign entity. The guidance outlines the events when cumulative translation adjustments should be released into net income. This ASU will be effective beginning in 2014. The adoption of this ASU may have a material effect on our consolidated financial statements, in the event that we were to divest of a foreign affiliate.

In February 2013, the FASB issued ASU 2013-02, Comprehensive Income-Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income. This ASU requires additional information about the amounts reclassified out of accumulated other comprehensive income by component. The adoption of this ASU on January 1, 2013 did not have a material effect on our consolidated financial statements.

Note 2—Restructuring and Other Charges

During the years ended December 31, 2013, 2012 and 2011, we recorded restructuring charges of \$5.3 million, \$2.8 million and \$8.6 million, respectively. These charges were primarily related to reorganization activities.

For the year ended December 31, 2013, European segment charges of \$3.0 million were primarily related to staff reductions in Germany and the Netherlands. \$1.7 million of the European restructuring charges are accrued at December 31, 2013 and are expected to be paid in the next year. International segment charges of \$2.3 million for the year ended December 31, 2013 were primarily related to staff reductions in Australia and South Africa and were paid out in cash in 2013.

For the year ended December 31, 2012, North American, European and International segment charges of \$1.5 million, \$1.1 million and \$0.2 million, respectively, were primarily related to severance costs associated with staff reductions. At December 31, 2012, the North American, European and International segments each had accrued restructuring charges of \$0.3 million, \$2.5 million and \$0.2 million, respectively.

For the year ended December 31, 2011, European segment charges of \$5.8 million related primarily to staff reductions and the transfer of certain production activities to China. \$4.3 million of the European restructuring charges were accrued at December 31, 2011. North American segment charges for the year ended December 31, 2011 of \$1.7 million included costs associated with the relocation of certain administrative and production activities. International segment charges for the year ended December 31, 2011 of \$1.1 million were primarily related to severance costs associated with the relocation of our Wuxi, China operations to Suzhou, China.

Note 3—Inventories

(In thousands)	December 31,	
	2013	2012
Finished products	\$ 74,466	\$ 72,658
Work in process	8,108	13,473
Raw materials and supplies	54,263	50,169
Total inventories	136,837	136,300
Excess of FIFO costs over LIFO costs	44,670	46,519
Total FIFO inventories	181,507	182,819

Inventories stated on the LIFO basis represent 15% and 16% of total inventories at December 31, 2013 and 2012, respectively.

Reductions in certain inventory quantities during the years ended December 31, 2013 and 2012 resulted in liquidations of LIFO inventories carried at lower costs prevailing in prior years. The effect of LIFO liquidations during 2013 reduced cost of sales by \$2.1 million and increased net income by \$1.4 million. The effect of LIFO liquidations during 2012 reduced cost of sales by \$0.8 million and increased net income by \$0.5 million.

Note 4—Property, Plant, and Equipment

(In thousands)	December 31,	
	2013	2012
Land	\$ 3,835	\$ 5,267
Buildings	110,534	107,082
Machinery and equipment	349,667	334,951
Construction in progress	16,364	10,444
Total	480,400	457,744
Less accumulated depreciation	(327,645)	(310,279)
Net property	152,755	147,465

Note 5—Reclassifications Out of Accumulated Other Comprehensive Loss

(In thousands)	Year ended December 31,		
	2013	2012	2011
Amortization of prior service cost	\$ (322)	\$ (353)	\$ (351)
Recognized net actuarial losses	13,875	6,764	1,503
Total reclassifications	13,553	6,411	1,152
Tax benefit	5,066	2,469	411
Total reclassifications, net of tax	8,487	3,942	741

Note 6—Capital Stock

Preferred Stock - The Company has authorized 100,000 shares of \$50 par value 4.5% cumulative preferred nonvoting stock which is callable at \$52.50. There are 71,373 shares issued and 52,878 shares held in treasury at December 31, 2013. There were no treasury purchases of preferred stock during the three years ended December 31, 2013. The Company has also authorized 1,000,000 shares of \$10 par value second cumulative preferred voting stock. No shares have been issued as of December 31, 2013.

Common Stock - The Company has authorized 180,000,000 shares of no par value common stock. There were 37,202,099 and 37,007,799 shares outstanding at December 31, 2013 and December 31, 2012, respectively. Common stock activity is summarized as follows:

(Dollars in thousands)	Shares			Dollars		
	Issued	Stock Compensation Trust	Treasury	Common Stock	Stock Compensation Trust	Treasury Cost
Balances January 1, 2011	62,081,391	(1,360,714)	(24,200,951)	\$ 88,629	\$ (7,103)	\$ (263,855)
Restricted stock awards	—	103,815	—	(542)	542	—
Restricted stock expense	—	—	—	4,376	—	—
Restricted stock forfeitures	—	—	(7,469)	(6)	—	—
Stock options exercised	—	94,115	—	825	491	—
Stock option expense	—	—	—	2,343	—	—
Performance stock expense	—	—	—	1,019	—	—
Tax benefit related to stock plans	—	—	—	632	—	—
Treasury shares purchased	—	—	(17,597)	—	—	(624)
Balances December 31, 2011	62,081,391	(1,162,784)	(24,226,017)	97,276	(6,070)	(264,479)
Restricted stock awards	—	136,295	—	(711)	711	—
Restricted stock expense	—	—	—	4,891	—	—
Restricted stock forfeitures	—	—	(10,815)	(147)	—	—
Stock options exercised	—	223,022	—	3,141	1,165	—
Stock option expense	—	—	—	2,435	—	—
Performance stock issued	—	58,037	—	(303)	303	—
Performance stock expense	—	—	—	2,831	—	—
Tax benefit related to stock plans	—	—	—	2,799	—	—
Treasury shares purchased	—	—	(91,330)	—	—	(3,508)
Other, net	—	—	—	(77)	—	—
Balances December 31, 2012	62,081,391	(745,430)	(24,328,162)	112,135	(3,891)	(267,987)
Restricted stock awards	—	96,686	—	(505)	505	—
Restricted stock expense	—	—	—	4,244	—	—
Restricted stock forfeitures	—	—	(7,365)	(115)	—	—
Stock options exercised	—	277,687	—	8,194	1,449	—
Stock option expense	—	—	—	2,825	—	—
Performance stock issued	—	67,389	—	(352)	352	—
Performance stock expense	—	—	—	3,383	—	—
Tax benefit related to stock plans	—	—	—	2,246	—	—
Treasury shares purchased	—	—	(240,097)	—	—	(11,785)
Balances December 31, 2013	62,081,391	(303,668)	(24,575,624)	132,055	(1,585)	(279,772)

The Mine Safety Appliances Company Stock Compensation Trust was established to provide shares for certain benefit plans, including the management and non-employee directors' equity incentive plans. Shares held by the Stock Compensation Trust, and the corresponding cost of those shares, are reported as a reduction of common shares issued. Differences between the cost of the shares held by the Stock Compensation Trust and the market value of shares released for stock-related benefits are reflected in common stock issued.

In November 2005, the Board of Directors authorized the purchase of up to \$100 million of MSA common stock either through private transactions or open market transactions. The share purchase program has no expiration date. The maximum shares that may yet be purchased is calculated based on the dollars remaining under the program and the respective month-end closing share price. We do not have any other share purchase programs. The above treasury share purchases are related to stock compensation transactions.

Note 7—Segment Information

We are organized into eleven geographic operating segments based on management responsibilities. The operating segments have been aggregated (based on economic similarities, the nature of their products, end-user markets and methods of distribution) into three reportable segments: North America, Europe and International.

Reportable segment information is presented in the following table:

(In thousands)	North America	Europe	International	Reconciling Items	Consolidated Totals
2013					
Sales to external customers	\$ 559,193	\$ 289,760	\$ 263,105	\$ —	\$ 1,112,058
Intercompany sales	122,013	98,491	21,075	(241,579)	—
Net income:					
Continuing operations	70,577	18,398	20,373	(23,490)	85,858
Discontinued operations	—	—	2,389	—	2,389
Total assets	836,418	394,463	222,427	(219,038)	1,234,270
Interest income	243	90	809	—	1,142
Interest expense	52	175	2	10,448	10,677
Noncash items:					
Depreciation and amortization	19,732	5,357	5,675	—	30,764
Pension expense	(4,765)	(6,328)	(1,268)	—	(12,361)
Income tax provision	35,602	6,133	6,182	(12,772)	35,145
Capital expenditures	17,963	11,833	6,721	—	36,517
Net Property	85,087	33,162	34,505	1	152,755
2012					
Sales to external customers	551,927	289,549	268,967	—	1,110,443
Intercompany sales	114,354	98,096	18,641	(231,091)	—
Net income:					
Continuing operations	64,270	20,424	19,238	(16,375)	87,557
Discontinued operations	—	—	3,080	—	3,080
Total assets	726,476	352,601	205,959	(173,290)	1,111,746
Interest income	364	147	886	14	1,411
Interest expense	106	350	78	10,810	11,344
Noncash items:					
Depreciation and amortization	21,446	5,354	4,902	—	31,702
Pension income (expense)	2,138	(4,700)	(1,111)	—	(3,673)
Income tax provision	39,125	7,362	8,085	(13,171)	41,401
Capital expenditures	20,129	5,106	6,974	—	32,209
Net Property	85,923	25,460	36,081	1	147,465
2011					
Sales to external customers	561,140	286,753	264,921	—	1,112,814
Intercompany sales	100,094	116,471	18,305	(234,870)	—
Net income:					
Continuing operations	53,674	11,689	24,818	(22,663)	67,518
Discontinued operations	—	—	2,334	—	2,334
Total assets	742,707	340,305	194,127	(162,087)	1,115,052
Interest income	78	192	1,215	324	1,809
Interest expense	29	253	137	13,697	14,116
Noncash items:					
Depreciation and amortization	22,036	6,239	4,591	—	32,866
Pension income (expense)	10,800	(5,638)	(195)	—	4,967
Income tax provision	31,821	6,187	5,726	(9,927)	33,807
Capital expenditures	20,035	4,384	5,971	—	30,390
Net property	85,643	25,273	34,846	1	145,763

Reconciling items consist primarily of intercompany eliminations and items reported at the corporate level.

Geographic information on sales to external customers, based on country of origin:

(In thousands)	2013	2012	2011
United States	\$ 528,178	\$ 527,550	\$ 538,257
Germany	71,139	74,557	75,536
Other	512,741	508,336	499,021
Total	1,112,058	1,110,443	1,112,814

Geographic information on net property, based on country of origin:

(In thousands)	2013	2012	2011
United States	\$ 82,274	\$ 82,820	\$ 82,318
Germany	16,882	8,781	9,303
China	16,010	14,780	14,817
Other	37,589	41,084	39,325
Total	152,755	147,465	145,763

Sales are allocated to each country based on the destination of the end-customer. Core product sales represented 73% of total sales for the year ended December 31, 2013, up from 70% for the year ended December 31, 2012. The percentage of total sales by core product group were as follows: fixed gas & flame detection instruments, 22%; breathing apparatus, 20%; portable gas detection instruments, 14%; industrial head protection, 13%; and fall protection at 4% of total sales. The remaining 27% of total sales represented non-core product sales for the year ended December 31, 2013, an improvement from 30% of total sales for the year ended December 31, 2012.

Note 8—Earnings per Share

Basic earnings per share is computed by dividing net income, after the deduction of preferred stock dividends and undistributed earnings allocated to participating securities, by the weighted average number of common shares outstanding during the period. Diluted earnings per share assumes the issuance of common stock for all potentially dilutive share equivalents outstanding not classified as participating securities. Participating securities are defined as unvested stock-based payment awards that contain nonforfeitable rights to dividends.

(In thousands, except per share amounts)	2013	2012	2011
Net income attributable to continuing operations	\$ 85,858	\$ 87,557	\$ 67,518
Preferred stock dividends	(41)	(41)	(41)
Income from continuing operations available to common equity	85,817	87,516	67,477
Dividends and undistributed earnings allocated to participating securities	(643)	(836)	(730)
Income from continuing operations available to common shareholders	85,174	86,680	66,747
Net income attributable to discontinued operations	\$ 2,389	\$ 3,080	\$ 2,334
Preferred stock dividends	(1)	(1)	(1)
Income from discontinued operations available to common equity	2,388	3,079	2,333
Dividends and undistributed earnings allocated to participating securities	(18)	(29)	(25)
Income from discontinued operations available to common shareholders	2,370	3,050	2,308
Basic weighted-average shares outstanding	36,868	36,564	36,221
Stock options and other stock compensation	582	478	610
Diluted weighted-average shares outstanding	37,450	37,042	36,831
Antidilutive stock options	15	744	894
Earnings per share attributable to continuing operations:			
Basic	\$2.31	\$2.37	\$1.85
Diluted	\$2.28	\$2.34	\$1.81
Earnings per share attributable to discontinued operations:			
Basic	\$0.06	\$0.08	\$0.06
Diluted	\$0.06	\$0.08	\$0.06

Note 9—Income Taxes

(In thousands)	2013	2012	2011
Components of income before income taxes*			
U.S. income	\$ 48,621	\$ 67,043	\$ 58,817
Non-U.S. income	71,512	62,300	42,258
Income before income taxes	120,133	129,343	101,075
Provision for income taxes*			
Current			
Federal	\$ 18,656	\$ 18,774	\$ 6,829
State	1,492	2,556	872
Non-U.S.	18,453	19,438	17,449
Total current provision	38,601	40,768	25,150
Deferred			
Federal	(3,582)	(518)	10,853
State	(483)	(125)	772
Non-U.S.	609	1,276	(2,968)
Total deferred provision	(3,456)	633	8,657
Provision for income taxes	35,145	41,401	33,807

*The components of income before income taxes and the provision for income taxes relate to continuing operations.

Included in discontinued operations is tax expense of \$1.4 million in 2013, \$1.1 million in 2012 and \$1.0 million in 2011.

Cash flows from operations in the Consolidated Statement of Cash Flows include a deferred income tax provision (benefit) from discontinued operations of \$0.2 million, \$(0.4) million and \$0.1 million in 2013, 2012 and 2011, respectively.

Reconciliation of the U.S. federal income tax rates to our effective tax rate:

	2013	2012	2011
U.S. federal income tax rate	35.0 %	35.0 %	35.0 %
State income taxes—U.S.	0.6	1.2	1.0
Taxes on non-U.S. income	(4.5)	(1.0)	(2.0)
Research and development credit	(1.5)	—	(1.3)
Manufacturing deduction credit	(1.1)	(2.0)	(0.3)
Valuation allowances	0.5	(0.2)	0.1
Other	0.3	(1.0)	0.9
Effective income tax rate	29.3 %	32.0 %	33.4 %

Components of deferred tax assets and liabilities:

(In thousands)	December 31,	
	2013	2012
Deferred tax assets		
Book expenses capitalized for tax	\$ 7,204	\$ 8,213
Postretirement benefits	18,027	19,282
Inventory reserves	5,550	4,780
Vacation allowances	1,036	1,240
Net operating losses and tax credit carryforwards	6,711	7,558
Post employment benefits	757	1,006
Foreign tax credit carryforwards (expiring in 2019)	2,227	212
Stock options	10,185	9,672
Liability insurance	3,686	2,754
Basis of capital assets	891	1,013
Warranties	3,049	3,078
Reserve for doubtful accounts	1,569	1,547
Other	9,313	5,063
Total deferred tax assets	70,205	65,418
Valuation allowances	(4,938)	(3,961)
Net deferred tax assets	65,267	61,457
Deferred tax liabilities		
Property, plant and equipment	(8,935)	(10,547)
Pension	(40,833)	(10,915)
Intangibles	(25,212)	(21,492)
Other	(2,455)	(1,110)
Total deferred tax liabilities	(77,435)	(44,064)
Net deferred taxes	(12,168)	17,393

At December 31, 2013, we had net operating loss carryforwards of approximately \$28.0 million, all of which are in non-U.S. tax jurisdictions. Net operating loss carryforwards of \$0.2 million and \$0.9 million will expire in 2014 and 2015 respectively. The remainder either have a valuation allowance or may be carried forward indefinitely.

No deferred U.S. income taxes have been provided on undistributed earnings of non-U.S. subsidiaries, which amounted to \$290.5 million as of December 31, 2013. These earnings are considered to be reinvested for an indefinite period of time. Because we currently do not have any plans to repatriate these funds, we cannot determine the impact of local taxes, withholding taxes and foreign tax credits associated with the future repatriation of such earnings and, therefore, cannot reasonably estimate the associated tax liability. In cases where we intend to repatriate a portion of the undistributed earnings of our foreign subsidiaries, we provide U.S. income taxes on such earnings.

A reconciliation of the change in the tax liability for unrecognized tax benefits for the years ended December 31, 2013 and 2012 is as follows:

(In thousands)	2013		2012	
	2013	2012	2012	2011
Beginning balance	\$ 9,520	\$ 12,827		
Adjustments for tax positions related to the current year	(3,628)	(2,672)		
Adjustments for tax positions related to prior years	97	(367)		
Statute expiration	(101)	(268)		
Ending balance	5,888	9,520		

The total amount of unrecognized tax benefits, if recognized, would reduce our future effective tax rate. We have recognized tax benefits associated with these liabilities in the amount of \$5.1 million and \$8.6 million at December 31, 2013 and 2012, respectively.

We recognize interest related to unrecognized tax benefits in interest expense and penalties in operating expenses. Our liability for accrued interest and penalties related to uncertain tax positions was \$0.7 million at December 31, 2012. During 2013, we reduced interest related to uncertain tax positions by \$0.2 million. Our liability for accrued interest and penalties related to uncertain tax positions was \$0.5 million at December 31, 2013.

We file a U.S. federal income tax return along with various state and foreign income tax returns. Examinations of our U.S. federal returns have been completed through 2010, with the 2009 tax year closed by statute. Various state and foreign income tax returns may be subject to tax audits for periods after 2007.

Note 10—Stock Plans

The 2008 Management Equity Incentive Plan provides for various forms of stock-based compensation for eligible key employees through May 2018. Management stock-based compensation includes stock options, restricted stock and performance stock units. The 2008 Non-Employee Directors' Equity Incentive Plan provides for grants of stock options and restricted stock to non-employee directors through May 2018. Stock options are granted at market prices and expire after 10 years. Stock options are exercisable beginning three years after the grant date. Restricted stock is granted without payment to the company and generally vests three years after the grant date. In general, unvested stock options, restricted stock and performance stock units are forfeited if the participant's employment with the company terminates for any reason other than retirement, death or disability. Restricted stock is valued at the market price on the grant date. The final number of shares to be issued for performance stock units may range from zero to 200% of the target award based on achieving the specified performance targets over the performance period. Performance stock units with a market condition are valued at an estimated fair value using a Monte Carlo model. We issue Stock Compensation Trust shares or Treasury shares for stock option exercises and grants of restricted stock and performance stock. As of December 31, 2013, there were 1,752,369 and 183,702 shares, respectively, reserved for future grants under the management and non-employee directors' equity incentive plans.

Stock-based compensation expense was as follows:

(In thousands)	2013	2012	2011
Restricted stock	\$ 4,129	\$ 4,744	\$ 4,370
Stock options	2,825	2,435	2,343
Performance stock	3,383	2,831	1,019
Total compensation expense before income taxes	10,337	10,010	7,732
Income tax benefit	3,810	3,700	2,825
Total compensation expense, net of income tax benefit	6,527	6,310	4,907

We did not capitalize any stock-based compensation expense in 2013, 2012, or 2011.

Stock option expense is based on the fair value of stock option grants estimated on the grant dates using the Black-Scholes option pricing model and the following weighted average assumptions for options granted in 2013, 2012 and 2011.

	2013	2012	2011
Fair value per option	\$ 14.17	\$ 10.77	\$ 9.94
Risk-free interest rate	1.2%	1.2%	2.6%
Expected dividend yield	2.8%	3.1%	3.6%
Expected volatility	39%	41%	40%
Expected life (years)	6.1	6.1	6.1

The risk-free interest rate is based on the U.S. Treasury Constant Maturity rates as of the grant date converted into an implied spot rate yield curve. Expected dividend yield is based on the most recent annualized dividend divided by the 1 year average closing share price. Expected volatility is based on the ten year historical volatility using daily stock prices. Expected life is based on historical stock option exercise data.

A summary of option activity follows:

	Shares	Weighted Average Exercise Price	Exercisable at Year-end
Outstanding January 1, 2011	1,749,003	\$ 29.74	
Granted	166,247	34.09	
Exercised	(94,115)	13.99	
Expired	(2,495)	44.08	
Outstanding December 31, 2011	1,818,640	30.94	907,598
Granted	196,469	37.33	
Exercised	(223,022)	18.93	
Expired	(5,093)	43.33	
Forfeited	(2,334)	36.69	
Outstanding December 31, 2012	1,784,660	33.05	1,100,300
Granted	188,407	49.03	
Exercised	(277,687)	34.72	
Outstanding December 31, 2013	1,695,380	34.55	1,178,657

For various exercise price ranges, characteristics of outstanding and exercisable stock options at December 31, 2013 were as follows:

Range of Exercise Prices	Stock Options Outstanding		
	Shares	Weighted-Average	
		Exercise Price	Remaining Life
\$17.83 – \$29.33	609,820	\$ 21.76	5.5 years
\$33.55 – \$40.88	560,795	37.34	5.6
\$41.26 – \$49.92	524,765	46.42	5.4
\$17.83 – \$49.92	1,695,380	34.55	5.5

Range of Exercise Prices	Stock Options Exercisable		
	Shares	Weighted-Average	
		Exercise Price	Remaining Life
\$17.83 – \$29.33	609,820	\$ 21.76	5.5 years
\$33.55 – \$40.88	246,903	39.80	2.9
\$41.26 – \$48.95	321,934	45.10	3.1
\$17.83 – \$48.95	1,178,657	31.91	4.3

Cash received from the exercise of stock options was \$9.6 million, \$4.3 million and \$1.3 million for the years ended December 31, 2013, 2012 and 2011, respectively. The tax benefit we realized from these exercises was \$0.5 million, \$1.6 million and \$0.7 million for the years ended December 31, 2013, 2012 and 2011, respectively.

The aggregate intrinsic value of stock options exercisable at December 31, 2013 was \$22.7 million. The aggregate intrinsic value of all stock options outstanding at December 31, 2013 was \$28.2 million.

A summary of restricted stock activity follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested at January 1, 2011	473,637	\$ 26.56
Granted	125,603	33.61
Vested	(76,505)	44.39
Forfeited	(10,481)	24.87
Unvested at December 31, 2011	512,254	25.66
Granted	130,985	37.61
Vested	(209,897)	20.44
Forfeited	(15,499)	28.37
Unvested at December 31, 2012	417,843	31.92
Granted	92,448	48.98
Vested	(197,465)	27.42
Forfeited	(9,407)	40.23
Unvested at December 31, 2013	303,419	39.79

A summary of performance stock unit activity follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested at January 1, 2011	85,629	\$ 20.53
Granted	48,820	33.09
Performance adjustments	(7,506)	21.14
Forfeited	(1,500)	30.53
Unvested at December 31, 2011	125,443	25.27
Granted	54,928	41.33
Vested	(47,706)	18.23
Performance adjustments	5,679	26.39
Forfeited	(672)	41.45
Unvested at December 31, 2012	137,672	35.85
Granted	53,357	57.58
Vested	(45,809)	26.08
Performance adjustments	4,169	25.84
Unvested at December 31, 2013	149,389	46.32

During the years ended December 31, 2013, 2012 and 2011, the total intrinsic value of stock options exercised (the difference between the market price on the date of exercise and the option price paid to exercise the option) was \$4.0 million, \$4.4 million and \$1.8 million, respectively. The fair values of restricted stock vested during the years ended December 31, 2013, 2012 and 2011 were \$9.7 million, \$8.0 million and \$2.6 million, respectively. The fair value of performance stock units vested during the year ended December 31, 2013 was \$2.3 million.

On December 31, 2013, there was \$5.4 million of unrecognized stock-based compensation expense. The weighted average period over which this expense is expected to be recognized was approximately one year.

Note 11—Short and Long-Term Debt**Short-Term Debt**

Short-term borrowings with banks, which excludes the current portion of long-term debt, was \$0.8 million and \$0.2 million at December 31, 2013 and 2012, respectively. The average month-end balance of total short-term borrowings during 2013 was \$0.4 million. The maximum month-end balance of \$1.3 million occurred at March 31, 2013. The weighted average interest rates on short-term borrowings at both December 31, 2013 and 2012 was 7%.

Long-Term Debt

(In thousands)	December 31,	
	2013	2012
Industrial development debt issues payable through 2022, 0.30%	\$ 4,000	\$ 4,000
2006 Senior Notes payable through 2021, 5.41%	53,334	60,000
2010 Senior Notes payable through 2021, 4.00%	100,000	100,000
Senior revolving credit facility maturing in 2016	110,000	115,000
Total	267,334	279,000
Amounts due within one year	6,667	6,667
Long-term debt	260,667	272,333

Our unsecured senior revolving credit facility provides for borrowings of up to \$300.0 million through November 2016 and is subject to certain commitment fees. Loans made under the senior revolving credit facility bear interest at a variable rate, which ranged from 1.42% to 1.71% in 2013. Loan proceeds may be used for general corporate purposes, including working capital, permitted acquisitions, capital expenditures and repayment of existing indebtedness. The credit agreement also provides for an uncommitted incremental facility that permits us, subject to certain conditions, to request an increase in the senior credit facility of up to \$50.0 million. At December 31, 2013, \$184.0 million of the \$300.0 million senior revolving credit facility was unused including letters of credit.

The Company had outstanding bank guarantees and standby letters of credit with banks as of December 31, 2013 totaling \$9.0 million, of which \$6.0 million relate to the senior revolving credit facility. These letters of credit serve to cover customer requirements in connection with certain sales orders, insurance companies and the Company's industrial development debt. No amounts were drawn on these arrangements at December 31, 2013. The Company is also required to provide cash collateral in connection with certain arrangements. At December 31, 2013, the Company has \$2.2 million of restricted cash in support of these arrangements. At December 31, 2013, the Company also has a \$4.1 million guarantee relating to voluntary retirement payments for its unionized workers in Germany.

Approximate maturities on our long-term debt over the next five years are \$6.7 million in 2014, \$6.7 million in 2015, \$116.7 million in 2016, \$26.7 million in 2017, \$26.7 million in 2018, and \$83.8 million thereafter. Some debt agreements require us to maintain certain financial ratios and minimum net worth and also contain restrictions on the total amount of debt. We were in compliance with all but one of our debt covenants at December 31, 2013.

In January 2014 the Company determined that it was in technical violation of one loan covenant related to the threshold for priority indebtedness in its 2006 Senior Note Purchase Agreement dated December 20, 2006 which resulted in cross default violations in two other loan agreements. The Company obtained the appropriate waivers from its lenders which were fully executed on February 12, 2014. The underlying financial covenants of the Note Purchase Agreement were amended at the same time. We are currently in compliance with all of our debt covenants.

Management has filed to redeem the \$4.0 million of Industrial development debt on February 28, 2014.

Note 12—Goodwill and Intangible Assets

Changes in goodwill during the years ended December 31, 2013 and 2012 were as follows:

(In thousands)	2013	2012
Net balance at January 1	\$ 258,400	\$ 259,084
Disposals	—	(1,800)
Currency translation	1,734	1,116
Net balance at December 31	260,134	258,400

At December 31, 2013, goodwill of \$196.5 million, \$61.3 million and \$2.3 million related to the North American, European and International reporting segments, respectively.

Changes in intangible assets, net of accumulated amortization, during the years ended December 31, 2013 and 2012 were as follows:

(In thousands)	2013	2012
Net balance at January 1	\$ 38,648	\$ 47,119
Amortization expense	(3,708)	(4,181)
Impairment losses	—	(4,272)
Currency translation	89	(18)
Net balance at December 31	35,029	38,648

At December 31, 2013, gross intangible assets totaled \$67.0 million, while impairment reserves and accumulated amortization of intangibles was \$32.0 million. Gross intangible assets include \$27.6 million of distribution agreements; \$14.3 million of patents, trademarks and copyrights; \$11.0 million of technology related assets; \$7.1 million of license agreements; and \$7.0 million of other intangible assets. Accumulated amortization on these intangible assets was \$5.5 million, \$8.8 million, \$4.7 million, \$7.0 million, and \$6.0 million, respectively. Intangible asset amortization expense over the next five years is expected to be approximately \$3.5 million in 2014, \$3.5 million in 2015, \$3.3 million in 2016, \$2.9 million in 2017, and \$1.9 million in 2018.

In December 2012, we discontinued our firefighter location development project and commenced an active program to sell the related intangible assets. As a result of this decision, we recognized an impairment loss \$4.3 million to write-off the carrying value of these intangibles, consisting primarily of patents and trade secrets. The impairment loss is reported in other income in the income statement and included in Reconciling Items in segment information.

During 2012, we sold certain assets related to our North American ballistic helmet business, resulting in the disposal of \$1.8 million of goodwill. The impact of this transaction and the operating results of the North American ballistic helmet businesses was not material to net income or earnings per share for all periods presented and are not expected to be significant to future results.

Note 13—Pensions and Other Postretirement Benefits

We maintain various defined benefit and defined contribution plans covering the majority of our employees. Our principal U.S. plan is funded in compliance with the Employee Retirement Income Security Act (ERISA). It is our general policy to fund current costs for the international plans, except in Germany and Mexico, where it is common practice and permissible under tax laws to accrue book reserves.

We provide health care benefits and limited life insurance for certain retired employees who are covered by our principal U.S. defined benefit pension plan until they become Medicare-eligible.

Information pertaining to defined benefit pension plans and other postretirement benefits plans is provided in the following table:

(In thousands)	Pension Benefits		Other Benefits	
	2013	2012	2013	2012
Change in Benefit Obligations				
Benefit obligations at January 1	\$ 463,806	\$ 394,269	\$ 30,551	\$ 30,425
Service cost	11,132	9,511	687	694
Interest cost	17,934	19,018	1,050	1,265
Participant contributions	136	137	—	—
Plan Amendments	(239)	—	144	—
Actuarial (gains) losses	(34,248)	58,102	(4,107)	(191)
Benefits paid	(19,232)	(17,804)	(1,593)	(1,642)
Settlements	(1,474)	(2,542)	—	—
Termination benefits	—	387	—	—
Currency translation	2,544	2,728	—	—
Benefit obligations at December 31	440,359	463,806	26,732	30,551
Change in Plan Assets				
Fair value of plan assets at January 1	384,452	357,967	—	—
Actual return on plan assets	67,391	41,478	—	—
Employer contributions	4,053	4,448	1,449	1,642
Participant contributions	136	137	143	222
Settlements	(1,474)	(2,542)	—	—
Benefits paid	(16,316)	(15,198)	(1,592)	(1,864)
Reimbursement of German benefits	(2,916)	(2,606)	—	—
Currency translation	(757)	768	—	—
Fair value of plan assets at December 31	434,569	384,452	—	—
Funded Status				
Funded status at December 31	(5,790)	(79,354)	(26,732)	(30,551)
Unrecognized transition losses	21	24	—	—
Unrecognized prior service cost	374	712	(2,193)	(2,618)
Unrecognized net actuarial losses	116,945	198,169	6,832	11,492
Net amount recognized	111,550	119,551	(22,093)	(21,677)
Amounts Recognized in the Balance Sheet				
Noncurrent assets	121,054	42,818	—	—
Current liabilities	(5,518)	(5,021)	(1,695)	(1,882)
Noncurrent liabilities	(121,326)	(117,151)	(25,037)	(28,669)
Net amount recognized	(5,790)	(79,354)	(26,732)	(30,551)
Amounts Recognized in Accumulated Other Comprehensive Income				
Net actuarial losses	116,945	198,169	6,832	11,492
Prior service cost (credit)	374	712	(2,193)	(2,618)
Unrecognized net initial obligation	21	24	—	—
Total (before tax effects)	117,340	198,905	4,639	8,874
Accumulated Benefit Obligations for all Defined Benefit Plans	403,682	414,957	—	—

(In thousands)	Pension Benefits			Other Benefits		
	2013	2012	2011	2013	2012	2011
Components of Net Periodic Benefit Cost (Credit)						
Service cost	\$ 11,132	\$ 9,511	\$ 8,674	\$ 687	\$ 694	\$ 785
Interest cost	17,934	19,018	19,531	1,050	1,265	1,501
Expected return on plan assets	(30,884)	(32,328)	(34,125)	—	—	—
Amortization of transition amounts	3	2	4	—	—	—
Amortization of prior service cost	102	101	104	(424)	(454)	(455)
Recognized net actuarial losses	13,323	6,235	793	552	529	710
Curtailement loss	658	747	52	—	—	—
Termination benefits	—	387	—	—	—	—
Net periodic benefit cost (credit)	12,268	3,673	(4,967)	1,865	2,034	2,541

Amounts included in accumulated other comprehensive income expected to be recognized in 2014 net periodic benefit costs.

(In thousands)	Pension Benefits	Other Benefits
Loss recognition	\$ 9,039	\$ 332
Prior service cost (credit) recognition	84	(335)
Transition obligation recognition	2	—

	Pension Benefits		Other Benefits	
	2013	2012	2013	2012
Assumptions used to determine benefit obligations				
Average discount rate	4.5%	4.0%	4.6%	3.8%
Rate of compensation increase	3.1%	3.8%	—	—
Assumptions used to determine net periodic benefit cost				
Average discount rate	4.0%	5.0%	3.8%	4.8%
Expected return on plan assets	8.2%	8.2%	—	—
Rate of compensation increases	3.8%	3.9%	—	—

Discount rates were determined using various corporate bond indexes as indicators of interest rate levels and movements and by matching our projected benefit obligation payment stream to current yields on high quality bonds.

The expected return on assets for the 2013 net periodic pension cost was determined by multiplying the expected returns of each asset class (based on historical returns) by the expected percentage of the total portfolio invested in that asset class. A total return was determined by summing the expected returns over all asset classes.

	Pension Plan Assets at December 31,	
	2013	2012
Equity securities	71%	64%
Fixed income securities	19	25
Pooled investment funds	5	6
Insurance contracts	3	3
Cash and cash equivalents	2	2
Total	100%	100%

The overall objective of our pension investment strategy is to earn a rate of return over time to satisfy the benefit obligations of the pension plans and to maintain sufficient liquidity to pay benefits and meet other cash requirements of our pension funds. Investment policies for our primary U.S. pension plan are determined by the plan's Investment Committee and set forth in the plan's investment policy. Asset managers are granted discretion for determining sector mix, selecting securities and timing transactions, subject to the guidelines of the investment policy. An aggressive, flexible management of the portfolio is permitted and encouraged, with shifts of emphasis among equities, fixed income securities and cash equivalents at the discretion of each manager. No target asset allocations are set forth in the investment policy. For our non-U.S. pension plans, our investment objective is generally met through the use of pooled investment funds and insurance contracts.

The following table summarizes our pension plan assets measured at fair value on a recurring basis by fair value hierarchy level (See Note 17):

December 31, 2013				
(In thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Equity securities	\$ 307,486	\$ —	\$ 428	\$ 307,914
Fixed income securities	36,749	47,545	—	84,294
Pooled investment funds	—	22,430	—	22,430
Insurance contracts	—	—	13,512	13,512
Cash and cash equivalents	6,067	—	352	6,419
Total	350,302	69,975	14,292	434,569

December 31, 2012				
(In thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Equity securities	\$ 245,840	\$ —	\$ —	\$ 245,840
Fixed income securities	43,600	52,762	—	96,362
Pooled investment funds	—	22,030	—	22,030
Insurance contracts	—	—	12,254	12,254
Cash and cash equivalents	7,966	—	—	7,966
Total	297,406	74,792	12,254	384,452

Equity securities consist primarily of publicly traded U.S. and non-U.S. common stocks. Equities are valued at closing prices reported on the listing stock exchange.

Fixed income securities consist primarily of U.S. government and agency bonds and U.S. corporate bonds. Fixed income securities are valued at closing prices reported in active markets or based on yields currently available on comparable securities of issuers with similar credit ratings. When quoted prices are not available for identical or similar bonds, the bond is valued under a discounted cash flow approach that maximizes observable inputs, such as current yields of similar instruments, and may include adjustments, for certain risks that may not be observable, such as credit and liquidity risks.

Pooled investment funds consist of mutual and collective investment funds that invest primarily in publicly traded non-U.S. equity and fixed income securities. Pooled investment funds are valued at net asset values calculated by the fund manager based on fair value of the underlying securities. The underlying securities are generally valued at closing prices reported in active markets, quoted prices of similar securities, or discounted cash flows approach that maximizes observable inputs such as current value measurement at the reporting date.

Insurance contracts are valued in accordance with the terms of the applicable collective pension contract.

Cash equivalents consist primarily of money market and similar temporary investment funds. Cash equivalents are valued at closing prices reported in active markets.

The preceding methods may produce fair value measurements that are not indicative of net realizable value or reflective of future fair values. Although we believe the valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table presents a reconciliation of Level 3 assets:

(In thousands)	Insurance Contracts	Other
Balance January 1, 2012	\$ 11,562	\$ —
Net realized and unrealized gains included in earnings	1,933	—
Net purchases, issuances and settlements	(1,241)	—
Balance December 31, 2012	12,254	—
Net realized and unrealized gains included in earnings	1,074	780
Net purchases, issuances and settlements	173	—
Transfers into Level 3	11	—
Balance December 31, 2013	13,512	780

We expect to make net contributions of \$4.5 million to our pension plans in 2014.

For measurement purposes, 7.5% increase in the costs of covered health care benefits was assumed for the year 2013, decreasing by 0.5% for each successive year to 4.5% in 2019 and thereafter. A one-percentage-point change in assumed health care cost trend rates would have increased or decreased the other postretirement benefit obligations and current year plan expense by approximately \$1.5 million and \$1.7 million, respectively.

Expense for defined contribution pension plans was \$5.8 million in 2013, \$5.9 million in 2012 and \$5.7 million in 2011.

Estimated pension benefits to be paid under our defined benefit pension plans during the next five years are \$20.4 million in 2014, \$20.6 million in 2015, \$21.2 million in 2016, \$22.3 million in 2017, \$23.2 million in 2018, and are expected to aggregate \$133.3 million for the five years thereafter. Estimated other postretirement benefits to be paid during the next 5 years are \$1.7 million in 2014, \$1.8 million in 2015, \$1.9 million in 2016, \$2.0 million in 2017, \$2.1 million in 2018, and are expected to aggregate \$11 million for the five years thereafter.

Note 14—Other (Loss) Income, Net

(In thousands)	2013	2012	2011
Interest income	\$ 1,142	\$ 1,411	\$ 1,809
Land impairment loss	(1,557)	—	—
Gain on asset dispositions, net	436	8,396	3,328
Escrow settlement	—	4,790	—
Intangible asset impairment loss (See Note 10)	—	(4,272)	—
Other, net	(196)	551	321
Total	(175)	10,876	5,458

During the year ended December 31, 2013, impairment charges were taken on land not used in operations.

During the year ended December 31, 2012, we settled an escrow claim for indemnification with the sellers of General Monitors. Under the terms of the settlement, we received \$4.8 million in December 2012. The settlement proceeds have been recognized in other income because the settlement occurred after the business combination measurement period ended. The escrow agreement has now expired and the remaining escrow account balance was released to the sellers. In addition, we recognized gains on the sale of assets totaling \$8.4 million in 2012 compared to gains of \$3.3 million in 2011. These gains were primarily related to property sales in our Cranberry Woods office park.

Note 15—Leases

We lease office space, manufacturing and warehouse facilities, automobiles and other equipment under operating lease arrangements. Rent expense was \$12.9 million in 2013, \$12.5 million in 2012 and \$12.2 million in 2011. Minimum rent commitments under noncancellable leases are \$11.9 million in 2014, \$9.8 million in 2015, \$4.2 million in 2016, \$2.4 million in 2017, \$1.8 million in 2018 and \$2.8 million thereafter.

Note 16—Derivative Financial Instruments

As part of our currency exchange rate risk management strategy, we enter into certain derivative foreign currency forward contracts that do not meet the GAAP criteria for hedge accounting, but which have the impact of partially offsetting certain foreign currency exposures. We account for these forward contracts on a full mark-to-market basis and report the related gains or losses in currency exchange losses (gains) in the consolidated statement of income. At December 31, 2013, the notional amount of open forward contracts was \$54.4 million and the unrealized gain on these contracts was \$1.3 million. All open forward contracts will mature during the first quarter of 2014.

The following table presents the balance sheet location and fair value of assets and liabilities associated with derivative financial instruments.

(In thousands)	December 31,	
	2013	2012
Derivatives not designated as hedging instruments:		
Foreign exchange contracts - Prepaid expenses and other current assets	\$ 1,308	\$ 801

The following table presents the income statement location and impact of derivative financial instruments:

(In thousands)	Income Statement Location	(Gain) Recognized in Income	
		Year ended December 31,	
		2013	2012
Derivatives not designated as hedging instruments:			
Foreign exchange contracts	Currency exchange (gains), net	\$ (755)	\$ (1,139)

Note 17—Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are:

Level 1—Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3—Unobservable inputs for the asset or liability.

The valuation methodologies we used to measure financial assets and liabilities were limited to the pension plan assets described in Note 13 and the derivative financial instruments described in Note 16. See Note 13 for the fair value hierarchy classification of pension plan assets. We estimate the fair value of the derivative financial instruments, consisting of foreign currency forward contracts, based upon valuation models with inputs that generally can be verified by observable market conditions and do not involve significant management judgment. Accordingly, the fair values of the derivative financial instruments are classified within Level 2 of the fair value hierarchy.

With the exception of fixed rate long-term debt, we believe that the reported carrying amounts of our financial assets and liabilities approximate their fair values. At December 31, 2013, the reported carrying amount of our fixed rate long-term debt (including the current portion) was \$153.3 million and the fair value was \$160.3 million. The fair value of our long-term debt was determined using cash flow valuation models to estimate the market value of similar transactions as of December 31, 2013. The fair value of this debt was determined using Level 2 inputs as described above.

Note 18—Contingencies

We categorize the product liability losses that we experience into two main categories; single incident and cumulative trauma. Single incident product liability claims are discrete incidents that are typically known to us when they occur and involve observable injuries and, therefore, more quantifiable damages. Therefore, we maintain a reserve for single incident product liability claims based on expected settlement costs for pending claims and an estimate of costs for unreported claims derived from experience, sales volumes and other relevant information. Our reserve for single incident product liability claims at December 31, 2013 and 2012 was \$4.0 million and \$4.4 million, respectively. Single incident product liability expense was negligible during year ended December 31, 2013. During the years ended December 31, 2012 and 2011, single incident product liability expense was \$0.7 million and \$1.5 million, respectively. We evaluate our single incident product liability exposures on an ongoing basis and make adjustments to the reserve as new information becomes available.

Cumulative trauma product liability claims involve exposures to harmful substances (*e.g.*, silica, asbestos and coal dust) that occurred many years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis or coal worker's pneumoconiosis. We are presently named as a defendant in 2,840 lawsuits in which plaintiffs allege to have contracted certain cumulative trauma diseases related to exposure to silica, asbestos, and/or coal dust. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by us. We are unable to estimate total damages sought in these lawsuits as they generally do not specify the injuries alleged or the amount of damages sought, and potentially involve multiple defendants.

Cumulative trauma product liability litigation is difficult to predict. In our experience, until late in a lawsuit, we cannot reasonably determine whether it is probable that any given cumulative trauma lawsuit will ultimately result in a liability. This uncertainty is caused by many factors, including the following: cumulative trauma complaints generally do not provide information sufficient to determine if a loss is probable; cumulative trauma litigation is inherently unpredictable and information is often insufficient to determine if a lawsuit will develop into an actively litigated case; and even when a case is actively litigated, it is often difficult to determine if the lawsuit will be dismissed or otherwise resolved until late in the lawsuit. Moreover, even once it is probable that such a lawsuit will result in a loss, it is difficult to reasonably estimate the amount of actual loss that will be incurred. These amounts are highly variable and turn on a case-by-case analysis of the relevant facts, which are often not learned until late in the lawsuit.

Because of these factors, we cannot reliably determine our potential liability for such claims until late in the lawsuit. We, therefore, do not record cumulative trauma product liability losses when a lawsuit is filed, but rather, when we learn sufficient information to determine that it is probable that we will incur a loss and the amount of loss can be reasonably estimated. We record expenses for defense costs associated with open cumulative trauma product liability lawsuits as incurred.

We cannot estimate any amount or range of possible losses related to resolving pending and future cumulative trauma product liability lawsuits that we may face because of the factors described above. As new information about cumulative trauma product liability cases and future developments becomes available, we reassess our potential exposures.

A summary of cumulative trauma product liability lawsuit activity follows:

	2013	2012	2011
Open lawsuits, January 1	2,609	2,321	1,900
New lawsuits	489	750	479
Settled and dismissed lawsuits	(258)	(462)	(58)
Open lawsuits, December 31	2,840	2,609	2,321

Nearly half of the open lawsuits at December 31, 2013 have had a de minimus level of activity over the last 5 years. It is possible that these cases could become active again at any point due to changes in circumstances.

With some common contract exclusions, we maintain insurance for cumulative trauma product liability claims. We have purchased insurance policies for the policy years from 1952-1986 from over 20 different insurance carriers that provide coverage for cumulative trauma product liability losses and, in many instances, related defense costs. In the normal course of business, we make payments to settle product liability claims and for related defense costs. We record receivables for the amounts that are covered by insurance. The available limits of these policies are many times our recorded insurance receivable balance.

Various factors could affect the timing and amount of recovery of our insurance receivables, including the outcome of negotiations with insurers, legal proceedings with respect to product liability insurance coverage and the extent to which insurers may become insolvent in the future.

Our insurance receivables at December 31, 2013 and 2012 totaled \$124.8 million and \$130.0 million, respectively, all of which is reported in other non-current assets.

A summary of insurance receivable balances and activity related to cumulative trauma product liability losses follows:

(In millions)	2013	2012	2011
Balance January 1	\$ 130.0	\$ 112.1	\$ 89.0
Additions	34.0	29.7	35.6
Collections and settlements	(39.2)	(11.8)	(12.5)
Balance December 31	124.8	130.0	112.1

Additions to insurance receivables in the above table represent insured cumulative trauma product liability losses and related defense costs. Uninsured cumulative trauma product liability losses during the years ended December 31, 2013, 2012, and 2011 were \$1.7 million, \$2.1 million and \$1.1 million, respectively. Collections primarily represent agreements with insurance companies to pay amounts due that are applicable to cumulative trauma claims. In cases where the payment stream covers multiple years, the present value of the payments is recorded as a note receivable (current and long term) in the balance sheet within prepaid expenses and other current assets and other noncurrent assets.

Our aggregate cumulative trauma product liability losses and administrative and defense costs for the three years ended December 31, 2013, totaled approximately \$104.2 million, substantially all of which was insured.

We believe that the increase in the insurance receivable balance that we have experienced since 2005 is primarily due to disagreements among our insurance carriers, and consequently with us, as to when their individual obligations to pay us are triggered and the amount of each insurer's obligation, as compared to other insurers. We believe that our insurers do not contest that they have issued policies to us or that these policies cover certain cumulative trauma product liability claims. We believe that our ability to successfully resolve our insurance litigation with various insurance carriers in recent years demonstrates that we have strong legal positions concerning our rights to coverage.

We regularly evaluate the collectability of the insurance receivables and record the amounts that we conclude are probable of collection. Our conclusions are based on our analysis of the terms of the underlying insurance policies, our experience in successfully recovering cumulative trauma product liability claims from our insurers under other policies, the financial ability of our insurance carriers to pay the claims, our understanding and interpretation of the relevant facts and applicable law and the advice of legal counsel, who believe that our insurers are required to provide coverage based on the terms of the policies.

Although the outcome of cumulative trauma product liability matters cannot be predicted with certainty and unfavorable resolutions could materially affect our results of operations on a quarter-to-quarter basis, based on information currently available and the amounts of insurance coverage available to us, we believe that the disposition of cumulative trauma product liability lawsuits that are pending against us will not have a materially adverse effect on our future results of operations, financial condition, or liquidity.

We are currently involved in insurance coverage litigation with a number of our insurance carriers.

In 2009, we sued The North River Insurance Company (North River) in the United States District Court for the Western District of Pennsylvania, alleging that North River breached one of its insurance policies by failing to pay amounts owed to us and that it engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under the policy for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Motions for summary judgment on certain issues will be submitted to the court at the earliest possible date. A trial date has not yet been scheduled.

In 2010, North River sued us in the Court of Common Pleas of Allegheny County, Pennsylvania seeking a declaratory judgment concerning their responsibilities under three additional policies. We assert claims against North River for breaches of contract for failures to pay amounts owed to us. We also allege that North River engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under these policies for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Summary judgment on certain issues is pending with the court. A trial date has not yet been scheduled.

In July 2010, we filed a lawsuit in the Superior Court of the State of Delaware seeking declaratory and other relief from the majority of our excess insurance carriers concerning the future rights and obligations of MSA and our excess insurance carriers under various insurance policies. The reason for this insurance coverage action is to secure a comprehensive resolution of our rights under the insurance policies issued by our insurers. The case is currently in discovery. We have resolved our claims against certain of our insurance carriers on some of their policies through negotiated settlements. When settlement is reached, we dismiss the settling carrier from this action in Delaware.

During September 2013, we resolved coverage litigation with Associated International Insurance Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Associated International Insurance Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Allstate Insurance Company, through a negotiated settlement. As part of this settlement, both parties dismissed all claims against one another under the above-referenced coverage litigations in the Court of Common Pleas of Allegheny County, Pennsylvania and the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Columbia Casualty Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Columbia Casualty Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

Note 19—Assets Held for Sale and Discontinued Operations

Assets Held for Sale - In September 2013, we entered into an agreement to sell the detector tube assets. The transaction closed in January, 2014. In addition to the asset sale agreement, we entered into transitional manufacturing and sales agreements with the buyer. Under the terms of the transitional agreements, we will continue to manufacture and sell detector tubes on behalf of the buyer until mid-2014. The gain on the transaction will be recognized in 2014, at the conclusion of the transitional manufacturing period and will not be material to net income or earnings per share.

Certain assets related to detector tube manufacturing are classified as held for sale at December 31, 2013. These assets are reported in the following balance sheet lines:

(In millions)	December 31, 2013
Inventory	\$ 1.4
Property, net of depreciation	0.2
Total assets	1.6

Discontinued Operations - The Company is actively negotiating the sale of substantially all of the assets and liabilities of its South African personal protective equipment distribution business and its Zambian operations. Management has deemed it probable that the sale of these assets and liabilities will close in 2014. The operations of this business qualify as a component of an entity under FASB ASC 205-20 "Presentation of Financial Statements - Discontinued Operations", and thus the operations have been reclassified as discontinued operations and prior periods have been reclassified to conform to this presentation. Management does not believe the assets associated with the South African distribution business or the Zambian operations are impaired at December 31, 2013.

Summarized financial information for discontinued operations is as follows:

(In thousands)	Year ended December 31,		
	2013	2012	2011
Discontinued Operations			
Net Sales	\$ 52,692	\$ 58,461	\$ 60,414
Other income (loss), net	40	115	(78)
Cost and expenses:			
Cost of products sold	41,181	45,277	48,544
Selling, general and administrative	7,389	8,376	8,588
Interest expense	—	17	1
Currency exchange losses, net	(325)	(41)	(540)
Income from discontinued operations before income taxes	4,487	4,947	3,743
Provision for income taxes	1,426	1,128	966
Income from discontinued operations, net of tax	3,061	3,819	2,777

(In thousands)	December 31,	
	2013	2012
Discontinued Operations assets and liabilities		
Cash and Cash Equivalents	\$ 2,980	\$ 2,465
Trade receivables, less allowance for doubtful accounts	7,452	8,870
Inventories	11,359	11,875
Net property	317	286
Other assets	1,326	2,252
Total assets	23,434	25,748
Accounts Payable	5,447	3,356
Accrued and other liabilities	930	1,685
Total liabilities	6,377	5,041
Net assets	17,057	20,707

The assets and liabilities reported above are included in the International Segment detail in Note 7.

The following summary provides financial information for discontinued operations related to net loss (income) related to noncontrolling interests:

(In thousands)	Year ended December 31,		
	2013	2012	2,011
Net loss (income) attributable to noncontrolling interests			
Loss (income) from continuing operations	\$ 870	\$ (385)	\$ 250
(Income) from discontinued operations	(672)	(739)	(443)
Net loss (income)	198	(1,124)	(193)

Note 20—Quarterly Financial Information (Unaudited)

(In thousands, except earnings per share)	2013				
	Quarters				Year
	1st	2nd	3rd	4th	
Continuing Operations:					
Net sales	\$ 269,886	\$ 285,859	\$ 264,884	\$ 291,429	\$ 1,112,058
Gross profit	121,704	129,665	115,426	130,050	496,845
Net income attributable to Mine Safety Appliances Company	18,627	23,315	18,987	24,929	85,858
Earnings per share*					
Basic	0.50	0.63	0.51	0.67	2.31
Diluted	0.49	0.62	0.51	0.66	2.28
Discontinued Operations:					
Net sales	13,353	13,836	13,361	12,142	52,692
Gross profit	3,078	3,215	2,790	2,428	11,511
Net income attributable to Mine Safety Appliances Company	659	734	514	482	2,389
Earnings per share*					
Basic	0.02	0.02	0.01	0.01	0.06
Diluted	0.02	0.02	0.01	0.01	0.06
(In thousands, except earnings per share)	2012				
	Quarters				Year
	1st	2nd	3rd	4th	
Continuing Operations:					
Net sales	\$ 278,255	\$ 279,367	\$ 270,480	\$ 282,341	\$ 1,110,443
Gross profit	123,377	119,538	118,391	128,242	489,548
Net income attributable to Mine Safety Appliances Company	23,090	27,078	18,173	19,216	87,557
Earnings per share*					
Basic	0.63	0.74	0.49	0.52	2.37
Diluted	0.62	0.73	0.48	0.51	2.34
Discontinued Operations:					
Net sales	15,230	15,371	16,087	11,773	58,461
Gross profit	3,614	3,588	3,863	2,119	13,184
Net income attributable to Mine Safety Appliances Company	832	917	1,060	271	3,080
Earnings per share*					
Basic	0.02	0.02	0.03	0.01	0.08
Diluted	0.02	0.02	0.03	0.01	0.08

* Per share amounts are calculated independently for each period presented; therefore, the sum of the quarterly per share amounts may not equal the per share amounts for the year.

Note 21—Subsequent Event

Subsequent to December 31, 2013, our Safety Works joint venture was informed of a significant unfavorable change to the terms of a contract with its largest customer. The future impact of this change is not estimable at February 24, 2014.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

(a) *Evaluation of disclosure controls and procedures.* Based on their evaluation as of the end of the period covered by this Form 10-K, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and (ii) accumulated and communicated to our management, including the principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

(b) *Changes in internal control.* There were no changes in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

See Item 8. Financial Statements and Supplementary Data—"Management's Report on Internal Control Over Financial Reporting" and "Report of Independent Registered Public Accounting Firm."

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance**Item 11. Executive Compensation****Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters****Item 13. Certain Relationships and Related Transactions, and Director Independence****Item 14. Principal Accountant Fees and Services**

With respect to this Part III, incorporated by reference herein pursuant to Rule 12b—23 are (1) “Election of Directors,” (2) “Executive Compensation,” (3) “Other Information Concerning the Board of Directors,” (4) “Stock Ownership,” and (5) “Selection of Independent Registered Public Accounting Firm,” appearing in the Proxy Statement filed pursuant to Regulation 14A in connection with the registrant’s Annual Meeting of Shareholders to be held on May 6, 2014. The information appearing in such Proxy Statement under the caption “Audit Committee Report” and the other information appearing in such Proxy Statement and not specifically incorporated by reference herein is not incorporated herein. As to Item 10 above, also see the information reported in Part I of this Form 10-K, under the caption “Executive Officers of the Registrant,” which is incorporated herein by reference. As to Item 10 above, the Company has adopted a Code of Ethics applicable to its principal executive officer, principal financial officer and principal accounting officer and other Company officials. The text of the Code of Ethics is available on the Company’s website at www.MSAafety.com. Any amendment to, or waiver of, a required provision of the Code of Ethics that applies to the Company’s principal executive, financial or accounting officer will also be posted on the Company’s Internet site at that address.

As to Item 12 above, the following table sets forth information as of December 31, 2013 concerning common stock issuable under the Company’s equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,695,380	\$ 34.55	1,936,071*
Equity compensation plans not approved by security holders	None	—	None
Total	1,695,380	34.55	1,936,071

* Includes 1,752,369 shares available for issuance under the 2008 Management Equity Incentive Plan and 183,702 shares available for issuance under the 2008 Non-Employee Directors’ Equity Incentive Plan.

PART IV**Item 15. Exhibits and Financial Statement Schedules**

(a) 1. Financial Statements and Report of Independent Registered Public Accounting Firm (see Part II, Item 8 of this Form 10-K).

The following information is filed as part of this Form 10-K.

	<u>Page</u>
Management's Report on Responsibility for Financial Reporting and Management's Report on Internal Control Over Financial Reporting	33
Report of Independent Registered Public Accounting Firm	34
Consolidated Statement of Income—three years ended December 31, 2013	35
Consolidated Statement of Comprehensive Income—three years ended December 31, 2013	36
Consolidated Balance Sheet—December 31, 2013 and 2012	37
Consolidated Statement of Cash Flows—three years ended December 31, 2013	38
Consolidated Statement of Changes in Retained Earnings and Accumulated Other Comprehensive Income—three years ended December 31, 2013	39
Notes to Consolidated Financial Statements	40

(a) 2. The following additional financial information for the three years ended December 31, 2013 is filed with the report and should be read in conjunction with the above financial statements:

Schedule II—Valuation and Qualifying Accounts

All other schedules are omitted because they are not applicable, not material or the required information is shown in the consolidated financial statements and consolidated notes to the financial statements listed above.

(a) 3. Exhibits

3(i)	Restated Articles of Incorporation as amended and restated May 23, 1986 and as further amended through May 2007, filed as Exhibit 3.1 to Form 8-K on May 15, 2007, is incorporated herein by reference.
3(ii)	By-laws of the registrant, as amended to February 17, 2012, filed as Exhibit 3.1 to Form 8-K on February 24, 2012, is incorporated herein by reference.
10(a)*	2008 Management Equity Incentive Plan, as amended and restated through February 25, 2011, filed as Exhibit 10.1 to Form 10-Q on July 28, 2011, is incorporated herein by reference.
10(b)*	Retirement Plan for Directors, as amended effective April 1, 2001, filed as Exhibit 10(a) to Form 10-Q on May 10, 2006, is incorporated herein by reference.
10(c)*	Supplemental Pension Plan as of May 5, 1998, filed as Exhibit 10(d) to Form 10-Q on August 12, 2003, is incorporated herein by reference.
10(d)*	Supplemental Pension Plan as amended and restated effective January 1, 2005, filed as Exhibit 10.3 to Form 10-Q on November 27, 2013, is incorporated herein by reference.
10(e)*	2008 Non-Employee Directors' Equity Incentive Plan, as amended through November 27, 2013, filed herewith.
10(f)*	Executive Insurance Program as Amended and Restated as of January 1, 2006, filed as Exhibit 10(a) to Form 10-Q on August 7, 2007, is incorporated herein by reference.
10(g)*	Annual Incentive Bonus Plan as of May 5, 1998, filed as Exhibit 10(g) to Form 10-Q on August 12, 2003, is incorporated herein by reference.
10(h)*	Supplemental Executive Retirement Plan, effective January 1, 2008, filed as Exhibit 10.2 to Form 10-Q on April 30, 2009, is incorporated herein by reference.

- 10(i)* Form of Change-in-Control Severance Agreement between the registrant and its executive officers, filed as Exhibit 10.1 to Form 10-Q on April 30, 2009, is incorporated herein by reference.
- 10(j) Trust Agreement, effective June 1, 1996, as amended through May 15, 2010, between the registrant and PNC Bank, N.A. re the Mine Safety Appliances Company Stock Compensation Trust filed as Exhibit 10.1 to Form 10-Q on July 28, 2010, is incorporated herein by reference.
- 10(k)* 2003 Supplemental Savings Plan, effective January 1, 2003, filed herewith.
- 10(l)* 2005 Supplemental Savings Plan, effective January 1, 2005, filed as Exhibit 10.4 to Form 10-Q on April 30, 2009, is incorporated herein by reference.
- 10(m)* CEO Annual Incentive Award Plan filed as Appendix A to the registrant's definitive proxy statement dated March 29, 2005, is incorporated herein by reference.
- 10(n) Credit Agreement dated October 13, 2010 by and among Mine Safety Appliances Company, each of the guarantors party thereto, each of the lenders party thereto, PNC Bank, National Association, as administrative agent for the lenders, and J.P. Morgan Chase Bank, N.A., as syndication agent for the Lenders, filed as Exhibit 10.1 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(o) Guaranty and Suretyship Agreement dated October 13, 2010 from General Monitors Transnational, LLC in favor of PNC Bank, National Association, and the other lenders party to the Credit Agreement, filed as Exhibit 10.2 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(p) Guaranty and Suretyship Agreement dated October 13, 2010 from Fifty Acquisition Corp. in favor of PNC Bank, National Association, and the other lenders party to the Credit Agreement, filed as Exhibit 10.3 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(q) Note Purchase Agreement and Private Shelf Agreement dated October 13, 2010 by and among Mine Safety Appliances Company, Prudential Investment Management, Inc. and the Series A Purchasers thereto, filed as Exhibit 10.4 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(r) Guarantee Agreement dated as of October 13, 2010 made by General Monitors Transnational, LLC in favor of the Note Purchasers, filed as Exhibit 10.5 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(s) Guarantee Agreement dated as of October 13, 2010 made by Fifty Acquisition Corp. in favor of the Note Purchasers, filed as Exhibit 10.6 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(t) First Amendment to Credit Agreement dated November 16, 2011 by and among Mine Safety Appliances Company, each of the guarantors party thereto, each of the lenders party thereto, PNC Bank, National Association, as administrative agent for the lenders, and J. P. Morgan Chase Bank N.A., as syndication agent for the Lenders, filed as Exhibit 10.1 to Form 8-K on November 21, 2011, is incorporated herein by reference.
- 10(u) Guaranty and Suretyship Agreement effective November 18, 2011 from MSA International, Inc. in favor of PNC Bank, National Association, and other lenders party to the Credit Agreement, filed as Exhibit 10.2 to Form 8-K on November 21, 2011, is incorporated herein by reference.
- 10(v) Amendment No. 1 to 2010 Note Purchase Agreement and Private Shelf Agreement dated April 5, 2012 by and among Mine Safety Appliances Company, Prudential Investment Management, Inc. and the Series A Purchasers thereto, filed herewith.
- 10(w) Guarantee Agreement dated April 5, 2012 from MSA International, Inc. in favor of the note holders under the 2010 Note Purchase Agreement and Private Shelf Agreement, filed herewith.
- 10(x) Amendment No. 3 and Waiver to 2010 Note Purchase Agreement and Private Shelf Agreement dated February 12, 2014 by and among Mine Safety Appliances Company, Prudential Investment Management, Inc. and the Series A Purchasers thereto, filed herewith.
- 10(y) Note Purchase Agreement dated December 20, 2006, by and among Mine Safety Appliances Company and each of the holders of the Notes, filed herewith.
- 10(z) Amendment No. 1 and Waiver to 2006 Note Purchase Agreement dated February 12, 2014 by and among Mine Safety Appliances Company and each of the holders of the Notes, filed herewith.
- 10(aa) Guarantee Agreement dated February 12, 2014 from General Monitors Transnational, LLC in favor of the note holders under the 2006 Note Purchase Agreement, filed herewith.

10(bb)	Guarantee Agreement dated February 12, 2014 from General Monitors, Inc. in favor of the note holders under the 2006 Note Purchase Agreement, filed herewith.
10(cc)	Guarantee Agreement dated February 12, 2014 from MSA International, Inc. in favor of the note holders under the 2006 Note Purchase Agreement, filed herewith.
21	Affiliates of the registrant is filed herewith.
23	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm is filed herewith.
31.1	Certification of W. M. Lambert pursuant to Rule 13a-14(a) is filed herewith.
31.2	Certification of Stacy P. McMahan pursuant to Rule 13a-14(a) is filed herewith.
32	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C.(S)1350 is filed herewith.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* *The exhibits marked by an asterisk are management contracts or compensatory plans or arrangements.*

The registrant agrees to furnish to the Commission upon request copies of all instruments with respect to long-term debt referred to in Note 11 of the Notes to Consolidated Financial Statements filed as part of Item 8 of this annual report which have not been previously filed or are not filed herewith.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MINE SAFETY APPLIANCES COMPANY

February 24, 2014

(Date)

By

/s/ WILLIAM M. LAMBERT

William M. Lambert
President and
Chief Executive Officer

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

Signature	Title	Date
/s/ JOHN T. RYAN III John T. Ryan III	Director, Chairman of the Board	February 24, 2014
/s/ WILLIAM M. LAMBERT William M. Lambert	Director; President and Chief Executive Officer	February 24, 2014
/s/ STACY P. MCMAHAN Stacy P. McMahan	Senior Vice President Finance; Principal Financial and Accounting Officer	February 24, 2014
/s/ ROBERT A. BRUGGEWORTH Robert A. Bruggeworth	Director	February 24, 2014
/s/ ALVARO GARCIA-TUNON Alvaro Garcia-Tunon	Director	February 24, 2014
/s/ THOMAS B. HOTOPP Thomas B. Hotopp	Director	February 24, 2014
/s/ DIANE M. PEARSE Diane M. Pearse	Director	February 24, 2014
/s/ REBECCA B. ROBERTS Rebecca B. Roberts	Director	February 24, 2014
/s/ L. EDWARD SHAW, JR. L. Edward Shaw, Jr.	Director	February 24, 2014
/s/ THOMAS H. WITMER Thomas H. Witmer	Director	February 24, 2014

MINE SAFETY APPLIANCES COMPANY AND AFFILIATES
VALUATION AND QUALIFYING ACCOUNTS
THREE YEARS ENDED DECEMBER 31, 2013

	2013	2012	2011
	<i>(In thousands)</i>		
Allowance for doubtful accounts:			
Balance at beginning of year	\$ 7,402	\$ 7,043	\$ 9,391
Additions—			
Charged to costs and expenses	763	1,289	1,148
Deductions—			
Deductions from reserves, net (1)(2)	859	930	3,496
Balance at end of year	<u>7,306</u>	<u>7,402</u>	<u>7,043</u>
Income tax valuation allowance:			
Balance at beginning of year	\$ 3,961	\$ 2,777	\$ 4,323
Additions—			
Charged to costs and expenses (3)	977	1,184	—
Deductions—			
Deductions from reserves (3)	—	—	1,546
Balance at end of year	<u>4,938</u>	<u>3,961</u>	<u>2,777</u>

(1) Bad debts written off, net of recoveries.

(2) Activity for 2013, 2012 and 2011 includes currency translation gains (losses) of \$(121), \$428 and \$(387), respectively.

(3) Activity for 2013, 2012 and 2011 includes currency translation gains (losses) of \$242, \$97 and \$(123), respectively.

MINE SAFETY APPLIANCES COMPANY
2008 NON-EMPLOYEE DIRECTORS' EQUITY INCENTIVE PLAN

As amended through November 27, 2013

The purposes of the 2008 Non-Employee Directors' Equity Incentive Plan (the "Plan") are to promote the long-term success of Mine Safety Appliances Company (the "Company") by creating a long-term mutuality of interests between the non-employee Directors and shareholders of the Company, to provide an additional inducement for such Directors to remain with the Company and to provide a means through which the Company may attract able persons to serve as Directors of the Company.

SECTION 1

Administration

The Plan shall be administered by the Board of Directors of the Company (the "Board"), which may delegate some or all of its duties to a committee of the Board. The Board shall keep records of action taken at its meetings. A majority of the Board shall constitute a quorum at any meeting, and the acts of a majority of the members present at any meeting at which a quorum is present, or the unanimous consent in writing of the Board, shall be the acts of the Board.

The Board shall interpret the Plan and prescribe such rules, regulations and procedures in connection with the operations of the Plan as it shall deem to be necessary and advisable for the administration of the Plan consistent with the purposes of the Plan. All questions of interpretation and application of the Plan, or as to stock options or restricted stock awards granted under the Plan, shall be subject to the determination of the Board, which shall be final and binding.

Notwithstanding the above, the selection of the Directors to whom stock options and restricted stock awards are to be granted and the exercise price of any stock option shall be as hereinafter provided, and the Board shall have no discretion as to such matters.

In addition to the foregoing, the Board may grant awards to Directors who are first elected to the Board prior to the date of the annual meeting in recognition of their service prior to the day of the annual meeting.

SECTION 2

Shares Available under the Plan

The aggregate number of shares which may be issued and as to which grants of stock options and restricted stock awards may be made under the Plan is 400,000 shares of the Common Stock, without par value, of the Company (the "Common Stock"), subject to adjustment and substitution as set forth in Section 6. If any stock option granted under the Plan is cancelled by mutual consent or terminates or expires for any reason without having been exercised in full, the number of shares subject thereto shall again be available for purposes of the Plan. If shares of Common Stock are forfeited to the Corporation pursuant to the restrictions applicable to restricted stock, the shares so forfeited shall again be available for purposes of the Plan. The shares which may be issued under the Plan may be either authorized but unissued shares or treasury shares or partly each, as shall be determined from time to time by the Board.

SECTION 3

Grant of Stock Options and Restricted Stock

On the third business day following the day of each annual meeting of the shareholders of the Company (the "Grant Date"), each person who is then a member of the Board and who is not then an employee of the Company or any of its subsidiaries (a "non-employee Director") shall automatically and without further action by the Board be granted:

(1) a "nonstatutory stock option" (i.e., a stock option which does not qualify under Section 422 of the Internal Revenue Code of 1986 (the "Code")) to purchase a number of shares of Common Stock determined by dividing 75% of the amount of the annual Director's retainer then in effect by the Grant Date per share value of the option as determined by the Company under the Black-Scholes option pricing model; and

(2) a number of restricted shares of Common Stock ("restricted stock") determined by dividing 125% of the amount of the annual Director's retainer then in effect by the Fair Market Value of a share of Common Stock on the Grant Date.

The numbers of shares determined under the above formulas shall be rounded to the nearest whole share. If on any Grant Date the number of shares remaining available under the Plan is not sufficient for each non-employee Director to be granted the full number of options and shares of restricted stock provided in this Section, then the available shares shall be allocated among the options and shares of restricted stock to be granted to each non-employee Director in proportion to the amounts determined under the above formulas, disregarding any fractions of a share.

Notwithstanding the foregoing, the amounts and/or mix of awards set forth above may be adjusted by the Board in its discretion.

SECTION 4

Terms and Conditions of Stock Options

Stock options granted under the Plan shall be subject to the following terms and conditions:

(A) The purchase price at which each stock option may be exercised (the "option price") shall be one hundred percent (100%) of the Fair Market Value per share of the Common Stock covered by the stock option on the Grant Date.

(B) At the discretion of, and in accordance with rules established by the Board, the option price of each stock option may be paid (i) by one or any combination of the following: in cash or the tender of Common Stock already owned by the Participant for more than six months (or such other period of time as the Board deems appropriate) having a Fair Market Value on the date of exercise equal to the option price for the shares being purchased or (ii) by providing cash forwarded through a broker or other agent-sponsored exercise or financing program or (iii) through such other means as the Board determines are consistent with the Plan's purpose and applicable law. No fractional shares will be issued or accepted.

(C) Subject to the terms of Section 4(E) providing for earlier termination of a stock option, no stock option shall be exercisable after the expiration of ten years from the Grant Date. A stock option to the extent exercisable at any time may be exercised in whole or in part.

D) No stock option shall be transferable by the grantee otherwise than by Will, or if the grantee dies intestate, by the laws of descent and distribution of the state of domicile of the grantee at the time of death. All stock options shall be exercisable during the lifetime of the grantee only by the grantee or the grantee's guardian or legal representative.

(E) Subject to Section 4(C), unless the Board determines otherwise, if a grantee ceases to be a Director of the Company for any reason, any outstanding stock options held by the grantee shall be exercisable and shall terminate according to the following provisions:

(i) If a grantee ceases to be a Director of the Company for Retirement or for any reason other than resignation, removal for cause, death or Disability, any then outstanding stock option held by such grantee shall be exercisable by the grantee (whether or not exercisable by the grantee immediately prior to ceasing to be a Director) at any time prior to the expiration date of such stock option or within five years after the date the grantee ceases to be a Director, whichever is the shorter period;

(ii) If during his term of office as a Director a grantee resigns from the Board (other than by Retirement) or is removed from office for cause, any outstanding stock option held by the grantee which is not exercisable by the grantee immediately prior to resignation or removal shall terminate as of the date of resignation or removal, and any outstanding stock option held by the grantee which is exercisable by the grantee immediately prior to resignation or removal shall be exercisable by the grantee at any time prior to the expiration date of such stock option or within 90 days after the date of resignation or removal, whichever is the shorter period;

(iii) Following the death or Disability of a grantee during service as a Director of the Company, any outstanding stock option held by the grantee at the time of death or termination of service by reason of Disability (whether or not exercisable by the grantee immediately prior to death or termination of service) shall be exercisable by the grantee or person entitled to do so under the Will of the grantee, as the case may be, or, if the grantee shall fail to make testamentary disposition of the stock option or shall die intestate, by the legal representative of the grantee at any time prior to the expiration date of such stock option or within five years after the date of death or termination of service by reason of Disability, whichever is the shorter period;

(iv) Following the death of a grantee after ceasing to be a Director and during a period when a stock option is exercisable, any outstanding stock option held by the grantee at the time of death shall be exercisable by such person entitled to do so under the Will of the grantee or by such legal representative (but only to the extent the stock option was exercisable by the grantee immediately prior to the death of the grantee) within five years after the date of death or, if applicable, within the period provided in Section 4(E)(i), whichever is the longer period, but not later than the expiration date of such stock option.

A stock option held by a grantee who has ceased to be a Director of the Company shall terminate upon the expiration of the applicable exercise period, if any, specified in this Section 4(E).

(F) All stock options shall be confirmed by an agreement, or an amendment thereto, which shall be executed on behalf of the Company by the Chief Executive Officer (if other than the President), the President or any Vice President and by the grantee.

(G) The obligation of the Company to issue shares of the Common Stock under the Plan shall be subject to (i) the effectiveness of a registration statement under the Securities Act of 1933, as amended, with respect to such shares, if deemed necessary or appropriate by counsel for the Company, (ii) the condition that the shares shall have been listed (or authorized for listing upon official notice of issuance) upon each stock exchange, if any, on which the Common Stock shares may then be listed and (iii) all other applicable laws, regulations, rules and orders which may then be in effect.

Subject to the foregoing provisions of this Section 4 and the other provisions of the Plan, any stock option granted under the Plan may be subject to such restrictions and other terms and conditions, if any, as shall be determined, in its discretion, by the Board and set forth in the agreement referred to in Section 4(F), or an amendment thereto.

SECTION 5

Terms and Conditions of Restricted Stock

Unless the Board determines otherwise, restricted stock awards granted under the Plan shall be subject to the following terms and conditions:

(A) As of the Grant Date of the restricted stock award, certificates representing the shares of restricted stock shall be issued in the name of the Director and held by the Company in escrow until the earlier of the forfeiture of the shares of restricted stock to the Company or the lapse of the service restriction with respect to such shares. The Director shall execute and deliver to the Company a blank stock power in form acceptable to the Company with respect to each of the certificates representing the shares of restricted stock. Such stock power shall be returned to the Director if the service restriction lapses with respect to the shares to which the stock power relates.

(B) The Director shall not sell, exchange, assign, alienate, pledge, hypothecate, encumber, charge, give, transfer or otherwise dispose of, either voluntarily or by operation of law, any shares of restricted stock, or any rights or interests appertaining thereto, prior to the lapse of the service restriction imposed thereon and the issuance or transfer to the Director of certificates with respect to such shares.

(C) As of the Grant Date, the Director shall be a shareholder of the Company with respect to the restricted stock and shall have all the rights of a shareholder with respect to the restricted stock, including the right to vote the restricted stock and to receive all dividends and other distributions paid with respect to such restricted stock, subject to the restrictions of the Plan and the restricted stock agreement, including without limitation the restriction that, with the exception of dividends and distributions payable in cash, all dividends and distributions on the restricted stock, whether paid in Common Stock or other securities or property will be held in escrow subject to the same restrictions as the restricted stock.

(D) If the Director's service as a Director of the Company terminates for any reason, other than as a result of the Director's death, Disability or Retirement, prior to the date of the third Annual Meeting of Shareholders of the Company following the Grant Date, then 100% of the shares of restricted stock awarded on the Grant Date shall, upon such termination of service and without any further action, be forfeited to the Company by the Director and cease to be issued and outstanding shares of Common Stock.

(E) If the Director remains a Director of the Company until the date of the third Annual Meeting following the Grant Date and the shares of restricted stock have not been previously forfeited to the Company pursuant to Section 5(D), the service restriction on 100% of the shares of restricted stock originally awarded on that Grant Date shall lapse, and a certificate representing such shares shall be issued or transferred by the Company to the Director. If the Director's service with the Company or a Subsidiary terminates as a result of the Director's death, Disability or Retirement, the service restriction imposed on any shares of restricted stock set forth above which have not been previously forfeited to the Company pursuant to Section 5(D) and on which the service restriction has not previously lapsed shall lapse, and a certificate representing such shares shall be issued or transferred by the Company to the Director (or the Director's personal representative).

(F) Each certificate representing shares of restricted stock shall have noted on the face of such certificate the following legend:

“Notice is hereby given that the shares of stock represented by this certificate are held subject to, and may not be transferred except in accordance with, the Mine Safety Appliances Company 2008 Non-Employee Directors' Equity Incentive Plan and a restricted stock agreement executed thereunder, copies of which are on file at the office of Mine Safety Appliances Company.”

(G) All restricted stock awards shall be confirmed by an agreement, or an amendment thereto, which shall be executed on behalf of the Company by the Chief Executive Officer (if other than the President), the President or any Vice President and by the grantee.

Subject to the foregoing provisions of this Section 5 and the other provisions of the Plan, any restricted stock award granted under the Plan may be subject to such additional restrictions and other terms and conditions, if any, as shall be determined, in its discretion, by the Board and set forth in the agreement referred to in Section 5(G), or an amendment thereto.

SECTION 6

Adjustment and Substitution of Shares

If a dividend or other distribution shall be declared upon the Common Stock payable in shares of the Common Stock, the number of shares of the Common Stock set forth in Section 3, the number of shares of the Common Stock then subject to any outstanding stock options and the number of shares of the Common Stock which may be issued under the Plan but are not then subject to outstanding stock options or restricted stock awards shall be adjusted by adding thereto the number of shares of the Common Stock which would have been distributable thereon if such shares had been outstanding on the date fixed for determining the shareholders entitled to receive such stock dividend or distribution. Shares of Common Stock so distributed with respect to any restricted stock held in escrow shall also be held by the Company in escrow and shall be subject to the same restrictions as are applicable to the shares of restricted stock on which they were distributed.

If the outstanding shares of the Common Stock shall be changed into or exchangeable for a different number or kind of shares of stock or other securities of the Company or another corporation, or cash or other property, whether through reorganization, reclassification, recapitalization, stock split-up, combination of shares, merger or consolidation, then there shall be substituted for each share of the Common Stock set forth in Section 3, for each share of the Common Stock subject to any then outstanding stock option, and for each share of the Common Stock which may be issued under the Plan but which is not then subject to any outstanding stock option or restricted stock award, the number and kind of shares of stock or other securities (and in the case of outstanding options, the cash or other property) into which each outstanding share of the Common Stock shall be so changed or for which each such share shall be exchangeable. Unless otherwise determined by the Board in its discretion, any such stock or securities, as well as any cash or other property, into or for which any restricted stock held in escrow shall be changed or exchangeable in any such transaction shall also be held by the Company in escrow and shall be subject to the same restrictions as are applicable to the restricted stock in respect of which such stock, securities, cash or other property was issued or distributed.

Subject to any required action by the Company's shareholders, upon the occurrence of any other event which affects the outstanding shares of Common Stock in such a way that an adjustment of outstanding awards is appropriate in order to prevent the dilution or enlargement of rights under the awards (including, without limitation, any extraordinary dividend or other distribution, whether in cash or in kind), the Board shall make appropriate equitable adjustments, which may include, without limitation, adjustments to any or all of the number and kind of shares (or other securities) which may thereafter be issued in connection with such outstanding awards and adjustments to the exercise price of outstanding stock options and shall also make appropriate equitable adjustments to the number and kind of shares (or other securities) authorized by or to be granted under the Plan.

In case of any adjustment or substitution as provided for in this Section 6, the aggregate option price for all shares subject to each then outstanding stock option prior to such adjustment or substitution shall be the aggregate option price for all shares of stock or other securities (including any fraction) to which such shares shall have been adjusted or which shall have been substituted for such shares. Any new option price per share shall be carried to at least three decimal places with the last decimal place rounded upwards to the nearest whole number.

No adjustment or substitution provided for in this Section 6 shall require the Company to issue or sell a fraction of a share or other security. Accordingly, all fractional shares or other securities which result from any such adjustment or substitution shall be eliminated and not carried forward to any subsequent adjustment or substitution.

SECTION 7

Effect of the Plan on the Rights of Company and Shareholders

Nothing in the Plan, in any stock option or restricted stock award granted under the Plan, or in any stock option or restricted stock agreement shall confer any right to any person to continue as a Director of the Company or interfere in any way with the rights of the shareholders of the Company or the Board of Directors to elect and remove Directors.

SECTION 8

Amendment and Termination

The right to amend the Plan at any time and from time to time and the right to terminate the Plan at any time are hereby specifically reserved to the Board; provided always that no such termination shall terminate any outstanding stock options granted under the Plan; and provided further that no amendment of the Plan shall (a) be made without shareholder approval if shareholder approval of the amendment is at the time required for stock options under the Plan to qualify for the exemption from Section 16(b) of the Exchange Act provided by Rule 16b-3 or by the rules of any stock exchange on which the Common Stock may then be listed or (b) otherwise amend the Plan in any manner that would cause stock options or restricted stock awards under the Plan not to qualify for the exemption provided by Rule 16b-3. No amendment or termination of the Plan shall, without the written consent of the holder of a stock option or restricted stock award theretofore awarded under the Plan, adversely affect the rights of such holder with respect thereto.

Notwithstanding anything contained in the preceding paragraph or any other provision of the Plan or any stock option or restricted stock agreement, the Board shall have the power to amend the Plan in any manner deemed necessary or advisable for stock options and restricted stock awards granted under the Plan to qualify for the exemption provided by Rule 16b-3 (or any successor rule relating to exemption from Section 16(b) of the Exchange Act), and any such amendment shall, to the extent deemed necessary or advisable by the Board, be applicable to any outstanding stock options and restricted stock awards theretofore granted under the Plan notwithstanding any contrary provisions contained in any stock option or restricted stock agreement. In the event of any such amendment to the Plan, the holder of any stock option or restricted stock award outstanding under the Plan shall, upon request of the Board and as a condition to the exercisability of such option or the retention of such restricted stock award, execute a conforming amendment in the form prescribed by the Board to the stock option agreement or the restricted stock agreement, as the case may be, within such reasonable time as the Board shall specify in such request. Except as provided in Section 6 of the Plan, the purchase price of any outstanding stock option may not be reduced, whether through amendment, cancellation or replacement in exchange with another stock option, other award or cash payment, unless such action or reduction is approved by the shareholders of the Company.

SECTION 9

Effective Date and Duration of Plan

The Plan shall become effective upon the approval of a majority of the votes cast at a duly held meeting of shareholders at which a quorum representing a majority of the outstanding voting stock of the Company is, either in person or by proxy, present and voting, within twelve (12) months after the date the Plan is initially adopted by the Board, contingent upon shareholder approval thereof. Subject to obtaining such approval, the Board shall have authority to grant awards hereunder from the effective date until the tenth (10th) anniversary of the effective date, subject to the ability of the Board to terminate the Plan as provided in Section 4 hereof.

SECTION 10

Change in Control

Notwithstanding any other provision of the Plan to the contrary, immediately prior to any Change in Control of the Company (as defined in Section 11), all stock options which are then outstanding hereunder shall become fully vested and exercisable, and all restrictions with respect to shares of restricted stock awarded hereunder shall lapse, and such shares shall be fully vested and nonforfeitable. As used in the immediately preceding sentence, "immediately prior" to the Change in Control shall mean sufficiently in advance of the Change in Control to permit the grantee to take all steps reasonably necessary to exercise the option fully and to deal with the shares purchased under the option and the restricted stock released from restriction so that those shares may be treated in the same manner in connection with the Change in Control as the shares of Common Stock of other shareholders.

SECTION 11

Definitions

In addition to terms defined elsewhere herein, as used in the Plan:

Beneficial Owner shall have the meaning set forth in Rule 13d-3 under the Exchange Act.

A Change in Control shall be deemed to have occurred if the event set forth in any one of the following four paragraphs shall have occurred:

(I) any Person (as defined in this Section 11) is or becomes the Beneficial Owner (as defined in this Section 11), directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such Person any securities acquired directly from the Company or its Affiliates (which term shall have the meaning set forth in Rule 12b-2 promulgated under Section 12 of the Exchange Act, as defined in this Section 11)) representing thirty percent (30%) or more of the combined voting power of the Company's then outstanding securities, excluding any Person who becomes such a Beneficial Owner in connection with a transaction described in clause (I) of paragraph (III) below; or

(II) the following individuals cease for any reason to constitute a majority of the number of Directors then serving: individuals who, on February 28, 2008, constitute the Board and any new Director (other than a Director whose initial assumption of office is in connection with an actual or threatened election contest, including but not limited to a consent solicitation, relating to the election of Directors of the Company) whose appointment or election by the Board or nomination for election by the Company's shareholders was approved or recommended by a vote of at least two-thirds (2/3) of the Directors then still in office who either were Directors on February 28, 2008 or whose appointment, election or nomination for election was previously so approved or recommended; or

(III) there is consummated a merger or consolidation of the Company or any direct or indirect subsidiary of the Company with any other corporation, other than (i) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any subsidiary of the Company, at least fifty-one percent (51%) of the combined voting power of the securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (ii) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no Person is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing thirty percent (30%) or more of the combined voting power of the Company's then outstanding securities; or

(IV) the shareholders of the Company approve a plan of complete liquidation or dissolution of the Company or there is consummated an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets, other than a sale or disposition by the Company of all or substantially all of the Company's assets to an entity, at least fifty-one percent (51%) of the combined voting power of the voting securities of which are owned by shareholders of the Company in substantially the same proportions as their ownership of the Company immediately prior to such sale.

Notwithstanding the foregoing, a Change in Control shall not be deemed to have occurred by virtue of the consummation of any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions.

Disability shall mean that the Director is disabled within the meaning of Section 22(e)(3) of the Code. Whether a grantee is so disabled shall be determined, in its discretion, by the Board, and any such determination by the Board shall be final and binding.

Exchange Act shall mean the Securities and Exchange Act of 1934, as amended from time to time.

Fair Market Value of a share of Common Stock, unless otherwise provided in the applicable award agreement, means:

- (I) If the Common Stock is admitted to trading on one or more national securities exchanges, such as the New York Stock Exchange or the NASDAQ Stock Exchange,
 - (A) the closing price per share as reported on the reporting system selected by the Committee on the relevant date; or
 - (B) in the absence of reported sales on that date, the closing price per share on the next day for which there is a reported sale; or
- (II) If the Common Stock is not admitted to trading on any national securities exchange, but is admitted to quotation on NASDAQ as an "over the counter" traded security, the average of the highest bid and lowest asked prices per share on the relevant date; or

(III) If the preceding clauses (I) and (II) do not apply, the Fair Market Value determined by the Board, using such criteria as it shall determine, in good faith and in its sole discretion, to be appropriate for such valuation.

Person shall have the meaning given in Section 3(a)(9) of the Exchange Act, as modified and used in Sections 13(d) and 14(d) thereof, except that such term shall not include (I) the Company or any of its subsidiaries, (ii) a trustee or other fiduciary holding securities under an employee benefit plan of the Company or any of its Affiliates, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, or (iv) a corporation owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of stock of the Company, or (v) any individual or entity (including the trustees (in such capacity) of any such entity which is a trust) which is, directly or indirectly, the Beneficial Owner of securities of the Company representing five percent (5%) or more of the combined voting power of the Company's then outstanding securities immediately before the date hereof or any Affiliate of any such individual or entity, including, for purposes of this Plan, any of the following: (A) any trust (including the trustees thereof in such capacity) established by or for the benefit of any such individual; (B) any charitable foundation (whether a trust or a corporation, including the trustees or directors thereof in such capacity) established by any such individual; (C) any spouse of any such individual; (D) the ancestors (and spouses) and lineal descendants (and spouses) of such individual and such spouse; (E) the brothers and sisters (whether by the whole or half blood or by adoption) of either such individual or such spouse; or (F) the lineal descendants (and their spouses) of such brothers and sisters.

Retirement shall mean a termination of a Director's service on the Board on or after the date that (1) the Director has completed at least 5 years of service as a Director and (2) the Director's combined age and service as a Director satisfy the "Rule of 75." The "Rule of 75" shall be satisfied when the sum of the Director's age (measured in full and partial years, in increments of one-twelfth (1/12) year) and the Director's years of service as a Director (measured in full and partial years, in increments of one-twelfth (1/12) year) equals or exceeds 75.

MSA SUPPLEMENTAL SAVINGS PLAN

As Amended and Restated Effective January 1, 2003

MSA SUPPLEMENTAL SAVINGS PLAN

TABLE OF CONTENTS

Article		Page
ARTICLE I	Preamble	4
ARTICLE II	Definitions	11
ARTICLE III	Participation	11
ARTICLE IV	The Supplemental Account	15
ARTICLE V	Participant-Direction of Investment.	17
ARTICLE VI	Vesting	18
ARTICLE VII	Distribution of Benefits	20
APPENDIX A	General Provisions	
APPENDIX B		

MSA SUPPLEMENTAL SAVINGS PLAN

Mine Safety Appliances Company (the "Company") hereby amends and restates this MSA SUPPLEMENTAL SAVINGS PLAN (the "Plan") effective January 1, 2003 as provided below.

WHEREAS, the Company maintains the MSA Retirement Savings Plan (the "Retirement Savings Plan") for the benefit of the its employees; and

WHEREAS, the Retirement Savings Plan is a qualified plan under Section 401(a) of the Internal Revenue Code of 1986, as amended (the "Code") and provides for elective deferrals up to 25% of compensation as permitted under Code Section 401(k) and matching contributions of 50% of each dollar deferred up to a maximum of 8% of compensation as permitted under Code Section 401(m); and

WHEREAS, the Company first adopted the Plan effective January 1, 1987 to provide benefits to certain executive employees that could not be provided under the Retirement Savings Plan on account of Code Section 415; and

WHEREAS, the Plan was amended and restated effective January 1, 1997 to include additional benefits for participants on account of the application of other qualified plan limits under the Retirement Savings Plan; and

WHEREAS, the Plan was most recently amended and restated effective December 1, 1999, to make certain changes regarding the investment of funds allocated under the Plan and to provide protection to participants in the event of a change in control of the Company; and

WHEREAS, the Company desires to amend and restate the Plan to provide additional flexibility with regard to the elections to defer and receive benefits under the Plan and to make certain other changes.

NOW THEREFORE, the Plan is hereby amended and restated as follows:

ARTICLE I

DEFINITIONS

Unless otherwise specifically defined in this Article I or where a term first appears in this Plan, all capitalized terms used in this Plan shall have the same meanings as are ascribed to them under the Company's Retirement Savings Plan.

1.1 "**Administrator**" means the Retirement Savings Plan Committee, as appointed by the Board from time to time, unless the Board shall expressly appoint another Administrator. The Administrator may, by written notice of appointment delivered to any other person or persons (whether legal or natural), designate and allocate any fiduciary responsibility to such other person or persons, who may also serve in more than one fiduciary capacity with respect to the Plan.

1.2 "**Amendment Effective Date**" means January 1, 2003.

1.3 "**Beneficiary**" means the person or persons designated by a Participant (in accordance with procedures established by the Administrator) to receive the value of his Supplemental Account in the event of his death prior to receipt of all benefits due hereunder, or, if no such person is designated by a Participant, Beneficiary means the person or persons designated by the Participant under the provisions of the Retirement Savings Plan to receive the value of his account thereunder in the event of his death prior to receipt of all benefits due thereunder.

1.4 "**Board**" means the Board of Directors of Mine Safety Appliances Company, or any successor thereto.

1.5 "**Bonus**" means the annual Coordinating Committee Bonus, if any paid by the Company. The term Bonus shall not include any other bonuses paid by the Company.

1.6 **"Change in Control"** of the Company shall be deemed to have occurred if the event set forth in any one of the following paragraphs shall have occurred:

(I) any Person (as defined in this Section 1.5) is or becomes the Beneficial Owner (as defined in this Section 1.5), directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such Person any securities acquired directly from the Company or its Affiliates (which term shall have the meaning set forth in Rule 12b-2 promulgated under Section 12 of the Exchange Act, as defined in this Section 1.5)) representing thirty percent (30%) or more of the combined voting power of the Company's then outstanding securities, excluding any Person who becomes such a Beneficial Owner in connection with a transaction described in clause (i) of paragraph (III) below; or

(II) the following individuals cease for any reason to constitute a majority of the number of directors then serving: individuals who, on May 7, 2002, constitute the Board and any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including but not limited to a consent solicitation, relating to the election of directors of the Company) whose appointment or election by the Board or nomination for election by the Company's shareholders was approved or recommended by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors on May 7, 2002, or whose appointment, election or nomination for election was previously so approved or recommended; or

(III) there is consummated a merger or consolidation of the Company or any direct or indirect subsidiary of the Company with any other corporation, other than (i) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any subsidiary of the Company, at least fifty-one percent (51%) of the combined voting power of the securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (ii) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no Person is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing thirty percent (30%) or more of the combined voting power of the Company's then outstanding securities; or

(IV) the shareholders of the Company approve a plan of complete liquidation or dissolution of the Company or there is consummated an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets, other than a sale or disposition by the Company of all or substantially all of the Company's assets to an entity, at least fifty-one percent (51%) of the combined voting power of the voting securities of which are owned by shareholders of the Company in substantially the same proportions as their ownership of the Company immediately prior to such sale.

Notwithstanding the foregoing, a Change in Control shall not be deemed to have occurred by virtue of the consummation of any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions.

"Beneficial Owner" shall have the meaning set forth in Rule 13d-3 under the Exchange Act.

"Exchange Act" shall mean the Securities and Exchange Act of 1934, as amended from time to time.

"Person" shall have the meaning given in Section 3(a)(9) of the Exchange Act, as modified and used in Sections 13(d) and 14(d) thereof, except that such term shall not include (i) the Company or any of its subsidiaries, (ii) a trustee or other fiduciary holding securities under an employee benefit plan of the Company or any of its Affiliates, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, or (iv) a corporation owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of stock of the Company, or (v) any individual or entity [including the trustees (in such capacity) of any such entity which is a trust] which is, directly or indirectly, the Beneficial Owner of securities of the Company representing five percent (5%) or more of the combined voting power of the Company's then outstanding securities immediately before the Amendment Effective Date or any Affiliate of any such individual or entity, including, for purposes of this Plan, any of the following: (A) any trust (including the trustees thereof in such capacity) established by or for the benefit of any such individual; (B) any charitable foundation (whether a trust or a corporation, including the trustees or directors thereof in such capacity) established by any such individual; (C) any spouse of any such individual; (D) the ancestors (and spouses) and lineal descendants (and spouses) of such individual and such spouse; (E) the brothers and sisters (whether by the whole or half blood or by adoption) of either such individual or such spouse; or (F) the lineal descendants (and their spouses) of such brothers and sisters.

1.7 **"Claimant"** has the meaning given it in Section 7.2 hereof.

1.8 **"Code"** means the Internal Revenue Code of 1986, as amended from time to time.

1.9 **"Code Limitations"** means the limitation of Code Section 401(a)(17) restricting the contributions of a Participant or the Company under the provisions of the Retirement Savings Plan.

1.10 **"Company"** means Mine Safety Appliances Company, a Pennsylvania corporation, and, except in determining under Section 1.5 hereof whether or not any Change in Control of the Company has occurred, any successor thereto. For purposes of this Plan (except in determining under Section 1.5 hereof whether or not any Change in Control of the Company has occurred), any subsidiary or affiliate of Mine Safety Appliances Company whose employees participate in the Retirement Savings Plan shall be included within the definition of "Company."

1.11 "**Compensation**" means the compensation of a Participant as defined in the Retirement Savings Plan for purposes of calculating Employee Contributions, but without regard to the limit on such compensation otherwise required by Code Section 401(a) (17).

1.12 "**Deferral Election**" means a "salary reduction agreement" or "bonus deferral agreement" between an Eligible Employee and the Company, as described in Sections 3.1 and 3.2 hereof.

1.13 "**Distribution Election**" means the election to receive benefits under the Plan in an alternative form as provided in Section 6.2 of the Plan. The election must be in writing in the form provided in Appendix B to the Plan and delivered to the Administrator.

1.14 "**Eligible Employee**" means an Employee who participates in the Retirement Savings Plan and whose Employee Contributions, and/or any Company Matching Contributions with respect thereto, are restricted by the application of a Code Limitation, and also includes other Employees as designated by the Administrator as eligible to participate in the Plan and who are members of a select group of management or highly compensated employees.

1.15 "**Investment Funds**" means the separate investment vehicles designated by the Administrator in which the amounts in a Participant's Supplemental Account can be deemed invested, at the election of the Participant in accordance with Article IV hereof.

1.16 "**Participant**" means an individual who, as an Eligible Employee, participated in the Plan prior to the Amendment Effective Date and/or files a Deferral Election with respect to Compensation in accordance with Section 3.1 or 3.2 hereof. An individual who becomes a Participant continues to be a Participant until the entire amount of his benefit hereunder has been distributed.

1.17 "**Payment Date**" means the date selected by the Participant for the commencement of all or a portion of the Participant's benefits under the Plan. The Payment Date may be either the Participant's termination date or a specified date selected by the Participant. The specified date may be a date during which the Participant is still an Employee, or may be a date subsequent to the Employee's retirement. If the date is during the time the Participant is still an employee, the distributions shall be based on the value of the Employee's Supplemental Account as of the specified Payment Date and shall not affect the allocation of future amounts to the Participant's Supplemental Account. The election to receive benefits on a Payment Date shall be in writing and submitted to the Administrator in the form provided in Appendix A to the Plan.

1.18 "**Plan**" means this MSA Supplemental Savings Plan as in effect from time to time.

1.19 "**Retirement Savings Plan**" means the MSA Retirement Savings Plan as in effect from time to time.

1.20 "**Supplemental Account**" means the unfunded bookkeeping accounts established and maintained in accordance with Article III hereof to record the contributions deemed to be made by the Participant and the Company for each year, as well as the earnings, gains and losses thereon, expenses allocable thereto, distributions therefrom and other reductions in value thereof. The Supplemental Accounts for each year shall be comprised of two bookkeeping sub-accounts, the Supplemental Employee Contributions Account and the Supplemental Company Matching Contributions Account, as described in Article III hereof.

1.21 "**Unforeseeable Emergency**" means a severe financial hardship to the Participant resulting from a sudden and unexpected illness or accident of the Participant or of a dependent of the Participant, loss of the Participant's property due to casualty, or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant.

1.22 "**Valuation Date**" means every business day.

ARTICLE II

PARTICIPATION

2.1 An Eligible Employee who is a Participant in this Plan immediately prior to the Amendment Effective Date shall continue to be a Participant as of the Amendment Effective Date. Any other Eligible Employee who files a Deferral Election in accordance with Section 3.1 or 3.2 hereof shall become a Participant in this Plan as of the date provided in such Deferral Election (unless already a Participant herein).

THE SUPPLEMENTAL ACCOUNT

3.1 Deferral Election and Supplemental Employee Contributions.

(a) Excess Salary Reduction Agreement. An Eligible Employee may elect to execute salary reduction agreement with the Company (a "Deferral Election") to defer a portion of his Compensation in excess of the Code Limitation during a stated deferral period by a specified percentage not exceeding eight percent (8%) (hereafter in this Article III, the "Elected Percentage") and to credit such net reduction as Supplemental Employee Contributions to the Supplemental Employee Contributions Account portion of the Supplemental Account of the Eligible Employee.

(b) Salary Reduction Agreement. An Eligible Employee may also elect to execute a Deferral Election with the Company to defer an additional portion of his Compensation during a stated deferral period and to credit such net reduction as Supplemental Employee Contributions to the Supplemental Employee Contributions Account portion of the Supplemental Account of the Eligible Employee.

(c) Salary Deferral Elections. The Salary Deferral Elections set forth in paragraphs (a) and (b) above must be filed with the Administrator before the beginning of the relevant deferral period. The timely-filed Deferral Election shall become effective on the first day of the deferral period set forth in such Deferral Election, which deferral period (except as provided in Section 3.2 hereof) shall be a complete calendar year. Such Deferral Election shall be effective to defer Compensation relating to the Participant's services performed in such calendar year. A Deferral Election with respect to Compensation during a calendar year cannot be altered or revoked during that calendar year and must be made each calendar year. Amounts credited to the Participant's Supplemental Employee Contributions Account prior to the effective date of any new Deferral Election will not be affected.

(d) Bonus Deferrals. An Eligible Employee may elect to execute a Deferral Election with the Company under which the Employee agrees to reduce his Bonus from the Company by a stated percentage or dollar amount, and to credit such reduction as Supplemental Employee Contributions to the Supplemental Employee Contributions Account portion of the Supplemental Account of the Eligible Employee. This Deferral Election shall be irrevocable with respect to any and all Bonuses declared during a calendar year and must be filed with the Administrator before the earlier of December 31, of the year in which the Bonus is based, or the date the Bonus is both ascertainable and allocated to the credit of the Eligible Employee. The minimum amount of deferral for a calendar year shall be the lesser of \$5,000 or 5% of the annual Bonus award. The deferral of a Bonus under this paragraph (d) shall apply after the deferral on such amount, if any under paragraphs (a) and (b) above.

3.2 Some Mid-Year Elections Permitted. In the first calendar year in which an Employee becomes an Eligible Employee (or (i) in the calendar year in which a former Employee who has returned to the Company's employ becomes an Eligible Employee (whether or not he was an Eligible Employee during a previous period of employment) or (ii) in the calendar year in which a former Eligible Employee who continued as an Employee (but ceased to be an Eligible Employee and no longer has a Deferral Election in effect) again becomes an Eligible Employee), he may make and file a Deferral Election within thirty days after he becomes an Eligible Employee as to Compensation for services performed during such calendar year subsequent to filing the Deferral Election.

3.3 Supplemental Company Matching Contributions. The Employer shall credit as Supplemental Company Matching Contributions to the Supplemental Company Matching Contributions Account portion of the Supplemental Account of each Participant who has Supplemental Employee Contributions credited to his Supplemental Account pursuant to a salary reduction agreement for a calendar year Supplemental Company Matching Contributions with respect to such calendar year equal to fifty percent (50%) of the result of subtracting the aggregate amount of Company Matching Contributions credited to the Participant's account under the Retirement Savings Plan with respect to such calendar year from the lesser of the Elected Percentage of salary reduced pursuant to a salary reduction agreement or eight percent (8%) of Compensation. There shall be no Matching Contributions made with respect to a Bonus deferral election pursuant to Section 3.1(b) of this Plan.

3.4 Earnings and Expenses for a Supplemental Account. All Supplemental Employee Contributions and Supplemental Company Matching Contributions credited to a Participant's Supplemental Account shall be treated as though invested and reinvested only in Investment Funds selected (or deemed selected) by such Participant pursuant to Article IV hereof. A pro-rata portion of all dividends, interest gains and distributions of any nature earned in a given period in respect of an Investment Fund in which the Supplemental Account is treated as investing shall be credited to the Supplemental Account, such credit to be calculated by multiplying all such dividends, interest gains and distributions by a fraction, the numerator of which is equal to the portion of the Supplemental Account of each Participant that is deemed invested in the particular Investment Fund and the denominator of which is equal to the aggregate of all amounts invested in the same Investment Fund. All investment income deemed received from an Investment Fund shall be deemed reinvested in the same Investment Fund. Expenses attributable to the acquisition of investments shall be charged to the Supplemental Account (and respective sub-accounts thereof) of the Participant for which such investment is deemed made.

3.5 Recordkeeping. The dollar amounts of any such Employee Contributions and Company Matching Contributions for a Participant for each payroll period shall be credited promptly upon the completion of such payroll period to the appropriate sub-account of the Participant's Supplemental Account (an unfunded bookkeeping account). The sum of the balance of a Participant's Supplemental Employee Contributions Account and the vested balance of a Participant's Supplemental Company Matching Contribution Account, as such sum varies from time to time, shall be recorded on the financial books and records of the Company as a liability owed to the Participant. The Administrator or its delegate shall maintain such bookkeeping accounts as it deems necessary to administer this Plan and shall calculate, or direct the calculation of, amounts in the Participants' Supplemental Accounts. The Administrator's determination of the value of Participants' Supplemental Accounts shall be final and binding upon all Participants and on the Company. Participants will be furnished statements of their Supplemental Account values at least quarter-annually.

ARTICLE IV

PARTICIPANT-DIRECTION OF INVESTMENT

4.1 Participant-Directed Investment. Subject to Section 4.5 hereof, a Participant may make elections as to the deemed investment of his Supplemental Account in accordance with such procedures as are established and uniformly applied by the Administrator or its delegate. The Administrator or its delegate shall provide each Participant with a description of the Investment Funds available for selection from time to time and such other relevant information about the Investment Funds as it receives from time to time. The Participant's investment election shall remain in force until revised by means of a subsequent investment election becoming effective pursuant to Section 4.2 hereof. During any period in which the Participant does not have an investment election in force, the Participant shall be deemed to have elected an investment in the Retirement Government Money Market Portfolio (or any substantially similar approved Investment Fund which has been substituted therefor) until another investment election subsequently becomes effective pursuant to Section 4.2 hereof.

4.2 Changes in Investment Direction and Transfers. Subject to Section 4.5 hereof, on any business day a Participant may elect to change his deemed investment election as to subsequent contributions or to transfer amounts among one or more of the Investment Funds then available by following notice procedures established and uniformly applied by the Administrator or its delegate. The Participant's notice of change or transfer shall be effective as soon as reasonably practicable (as determined by the Administrator in its sole discretion) after the Administrator or its delegate has received such notice.

4.3 Responsibility for Investment Elections. The selection of investment choices among the Investment Funds available from time to time shall be the sole responsibility of each Participant. The deemed investment return (or loss) with respect to a Participant's Supplemental Account shall be determined solely by the Participant's investment elections made in accordance with this Supplemental Plan and the procedures established and uniformly applied by the Administrator or its delegate. The availability of an Investment Fund to a Participant shall not be construed as a recommendation for investment therein. Further, neither the Company, any Participating Affiliate, the Administrator or its delegate, any Employee nor the trustee of any trust which may be established by the Company in accordance with Section 7.3 hereof is authorized to make any recommendation to any Participant with respect to the selection of investments among the Investment Funds.

4.4 Participant's Risk. Each Participant assumes all risk connected with any decrease in the market value of any of his Supplemental Account's deemed investments. The value of the Participant's Supplemental Account and the payment of any amount which may be or become due therefrom are not guaranteed by any one or any entity.

4.5 Investment Restrictions. Temporary Suspensions of Plan Activities and Investment Fund Transfers by Administrator. The provisions of this Section 4.5 shall apply notwithstanding any other provision of any other Section of this Plan to the contrary. In accordance with its established and uniformly applied procedures, the Administrator or its delegate may place certain restrictions or limitations on the dollar amounts, percentages or types of investment elections, transfers and/or allocations which are deemed made under the Plan. If the Administrator changes the Plan's recordkeeper, the Administrator may temporarily suspend certain Plan activities (including without limitation, distributions, contribution percentage changes and investment allocations) in order to facilitate the recordkeeping change. If an Investment Fund is eliminated by the Administrator or its delegate, then the Administrator or its delegate may direct that amounts deemed invested in the Investment Fund which was eliminated shall be automatically transferred to another Investment Fund with similar investment goals. After any such transfer by the Administrator or its delegate, further investment changes may be made by the Participant in accordance with Section 4.2 hereof. Notwithstanding the foregoing provisions of this Section 4.5, no power given the Administrator or its delegate in this Section 4.5 can be used after a Change in Control to reduce or adversely affect in any way any benefit payable to, or accrued by, a Participant (or his Beneficiary) hereunder.

ARTICLE V

VESTING

5.1 Vesting in Supplemental Employee Contributions Account. A Participant's unfunded and unsecured interest in his Supplemental Employee Contributions Account shall be 100% vested at all times.

5.2 Vesting in Supplemental Company Contributions Account. A Participant's unfunded and unsecured interest in his Supplemental Company Matching Contributions Account shall become 100% vested upon the earliest of the following to occur:

- (i) Participant's completion of five (5) years of Continuous Service;
- (ii) Death of the Participant while employed by the Company;

- (iii) Attainment of the Participant's 65th birthday while employed by the Company; or
- (iv) Occurrence of a Change in Control while the Participant is employed by the Company.

5.3 Forfeitures. If a Participant terminates his employment, any portion of his Supplemental Account (including any amounts credited after his termination of employment) which is not payable to him under Article VI hereof shall be forfeited by him upon such termination.

ARTICLE VI

DISTRIBUTION OF BENEFITS

6.1 Time of Distribution. The vested amount held in a Participant's Supplemental Account hereunder shall become payable to him commencing on the Participant's Payment Date. A Participant shall select a Payment Date at any time and may make a separate election with respect to each year of deferrals, however, such election shall not be valid until the one-year anniversary after it is made. Accordingly, if a Participant elects a Payment Date but then terminates employment prior to the one-year anniversary date, the election will be void and distributions will commence as of the Participant's termination date. Under no circumstance, however, may the commencement of benefits be delayed beyond the later of 90 days after the Participant's termination date or the first day of April of the year following the calendar year in which the Participant attains age 70 ½.

6.2 Form of Distribution. If the value of the Participant's vested Supplemental Account is less than \$25,000, cash payment shall be made in a single lump sum. If the value of the Participant's vested Supplemental Account is \$25,000 or more, cash payment will be made in five (5) approximately equal annual installments, each installment calculated by dividing the then-current value of the Participant's vested Supplemental Account by the number of remaining installment payments. Alternatively, a Participant may make an irrevocable Distribution Election to receive the entire vested balance of his Supplemental Account in either a single cash payment or any number of annual installments, each installment calculated by dividing then current value of the Participant's vested Supplemental Account by the number of remaining installment payments. A Participant may elect a Distribution Election at any time and may make a separate election with respect to each year of deferrals, however, such election shall not be valid until the one-year anniversary after it is made.

Accordingly, if a Participant makes a Distribution Election but then terminates employment prior to the one-year anniversary date, the election will be void and distributions will commence under either the previously made election, if any, or if there is no previously made election under the general five installment rule set forth above.

Notwithstanding the foregoing provisions of this Section 6.2, if the employment of a Participant shall be terminated within the three-year period immediately following a Change in Control (other than by the Participant's death), the entire balance of his Supplemental Account shall be paid to him in a single cash payment, not later than the fifth (5th) business day following such termination.

6.3 Hardship Distributions. A Participant may receive a distribution of all or a portion of his vested Supplemental Account in the event of an Unforeseeable Emergency in the discretion of the Administrator. The amount provided as a hardship distribution must be limited to the amount necessary to meet the need. Any such hardship distribution shall not have any effect on the allocation of future amounts to the Participant's Supplemental Account.

6.4 Distribution on Death. In the event of a Participant's death hereunder, the then current value of his Supplemental Account shall be paid to his Beneficiary in either a lump sum cash payment or annual installment payments for a period not to exceed 15 years as determined in the discretion of the Administrator.

6.5 Valuation of Supplemental Account. A Participant's Account shall be valued for distribution purposes as of the date of distribution.

ARTICLE VII

GENERAL PROVISIONS

7.1 Administration. The responsibility to administer this Plan and to interpret and carry out its provisions is hereby delegated to the Administrator. The Administrator is hereby authorized to delegate any part or all of its duties to such other administrators as it may appoint. The Administrator (or its delegate) shall have the same rights, powers, duties and fiduciary obligations, and operate with the same standard of care, with respect to this Plan and its Participants as the Retirement Savings Plan Committee has and does with respect to the Retirement Savings Plan and its participants.

7.2 Benefit Review Procedure. The Administrator shall initially make all determinations of eligibility for and the amount of benefits payable to a Participant or his Beneficiary (hereafter referred to as the "Claimant"). If the Administrator makes a decision which is adverse to the interests of any Claimant, the Administrator shall furnish notice of the adverse decision to the Claimant specifying the reason for the denial. The Claimant shall have the right to request a redetermination of such decision by the Administrator within sixty (60) days of receipt of the written notice of claim denial. The Employee Benefit Plan Committee appointed by the Board shall promptly review the request for redetermination, and within sixty (60) days submit its final decision to the Claimant in writing.

7.3 No Right to Assets. Any Participant (or Participant's beneficiary) who may have or claim any interest in or right to any compensation, payment or benefit payable hereunder shall rely solely upon the unsecured promise of the Company as set forth herein for the payment thereof and shall have the status of a general unsecured creditor of the Company. The Plan constitutes a mere promise by the Company to make certain benefit payments in the future. The right of any Participant or beneficiary to benefits hereunder is strictly contractual. Notwithstanding the foregoing provisions of this Article VII, Mine Safety Appliances Company may, in its discretion, establish a trust to pay amounts becoming payable by the Company pursuant to this Plan, which trust shall be subject to the claims of the general creditors of Mine Safety Appliances Company in the event of its bankruptcy or insolvency. Notwithstanding any establishment of such a trust, the Company shall remain responsible for the payment of any amounts so payable which are not so paid by such trust. If any such trust is established, the trustee will not be required to invest trust assets in accordance with the directions of Participants given in accordance with this Plan, although the trustee, in its discretion, may so invest the trust assets. Notwithstanding any provision of this Plan, all "investment powers" given to any Participant over his Supplemental Account are actually powers to direct a deemed investment of such Supplemental Account, thus determining the investment return on the contributions deemed made to such Supplemental Account and the amount of the benefit the Company must pay the Participant with respect to such Supplemental Account. It is intended that this Plan shall be unfunded for Federal income tax purposes and for purposes of Title I of ERISA. It is intended that any trust established in accordance with this Section 7.3 shall be treated as a grantor trust under the Code and that the establishment of such a trust shall not cause Participants to realize current income on amounts contributed thereto.

7.4 No Contract of Employment. This Plan shall not be construed to establish a guarantee of future or continued employment by the Company of any Participant.

7.5 Non-Alienation. Benefits payable under this Plan shall not be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment or garnishment, whether voluntary or involuntary, and any attempt to anticipate, alienate, sell, transfer, assign, pledge, encumber, attach or garnish the same shall be void; nor shall any such distribution or payment be in any way liable for or subject to the debts, contracts, liabilities, engagements or torts of any person entitled to such distribution or payment. If any Participant or Beneficiary is adjudicated bankrupt or purports to anticipate, alienate, sell, transfer, assign, pledge, encumber, attach or garnish any such distribution or payment voluntarily or involuntarily, the Administrator, in its discretion, may hold or cause to be held or applied such distribution or payment or any part thereof to or for the benefit of such Participant or Beneficiary in such manner as the Administrator shall direct.

7.6 Payments to Minors or Incompetents. If the Administrator determines that any person entitled to payments under the Plan is an infant or incompetent by reason of physical or mental disability, it may cause all payments thereafter becoming due to such person to be made to any other person for his benefit, without responsibility to follow the application of amounts so paid. Payments made pursuant to this provision shall completely discharge the Company, the Plan, and the Administrator.

7.7 Construction: Choice of Laws. The provisions of the Plan shall be construed, administered and governed under the laws of the Commonwealth of Pennsylvania to the extent such laws are not preempted by ERISA or any other federal laws which may from time to time be applicable. Whenever any words are used herein in the masculine gender, they shall be construed as though they were also used in the feminine gender in all cases where they would so apply, and whenever any words are used herein in the singular form, they shall be construed as though they were also used in the plural form in all cases where they would so apply. Titles of Articles and Sections hereof are for convenience of reference only and are not to be taken into account in construing the provisions of this Plan.

7.8 Invalidity of Provisions. If any provision of the Plan shall be held illegal or invalid for any reason, said illegality or invalidity shall not affect the remaining parts of the Plan, but the Plan shall be construed and enforced as if said illegal and invalid provision had never been inserted herein.

7.9 Amendment and Termination. The Company expects to continue the Plan indefinitely, but specifically reserves the right, in the sole and unfettered discretion of its Board, at any time, to amend, in whole or in part, any or all of the provisions of the Plan and to terminate the Plan in whole or in part, provided, however, that no such amendment or termination shall (i) reduce or adversely affect the benefits payable under the Plan to a Participant (or his Beneficiary) if the Participant's termination of employment with the Company has occurred prior to such termination or amendment of the Plan, or (ii) reduce or adversely affect the benefit to be paid with respect to the Participant on the date of such termination or amendment, as compared with the benefit that would have been payable with respect to the Participant if his employment had terminated on the day before the Plan was so terminated or amended. Upon a termination of the Plan, no further Supplemental Employee Contributions or Supplemental Company Matching Contributions shall be made under the Plan, but the Supplemental Accounts maintained under the Plan at the time of such Plan Termination shall continue to be governed by the terms of the Plan until paid out in accordance with such terms.

Doc. 127212

APPENDIX A

MSA SUPPLEMENTAL SAVINGS PLAN SPECIFIED PAYMENT DATE

I _____ hereby elect to have [] \$ [] ___% of my vested Supplemental Account paid upon the earlier of my termination of employment or the following date: __,

I understand that this election shall not be valid until the one-year anniversary date of this election. I also understand that this election shall be irrevocable and that by making this election,

I am also electing to receive the above benefits in the form of a single cash sum.

I have made this election on this __ day of __, 2__.

WITNESS: PARTICIPANT:

Approved by Administrator:

Date:

APPENDIX B
MSA SUPPLEMENTAL SAVINGS PLAN DISTRIBUTION ELECTION

I _____ hereby elect to have my benefits under the MSA Supplemental Savings Plan paid in the following form:

A single cash sum payment.

Approximately equal annual installments.

I understand that this election shall not be valid until the one-year anniversary date of this election. I also understand that this election shall be irrevocable.

I have made this election on this __ day of __, 2____.

WITNESS: PARTICIPANT:

Approved by Administrator:

Date:

**AMENDMENT NO. 1 TO
NOTE PURCHASE AND PRIVATE SHELF AGREEMENT**

AMENDMENT NO. 1 TO NOTE PURCHASE AND PRIVATE SHELF AGREEMENT, dated as of April 5, 2012 (this “**Agreement**”), is among **MINE SAFETY APPLIANCES COMPANY**, a Pennsylvania corporation (the “**Company**”), **PRUDENTIAL INVESTMENT MANAGEMENT, INC.** (“**Prudential**”) and each of the holders of Notes (as defined below) (collectively, the “**Noteholders**”).

RECITALS:

A. The Company, Prudential and each Noteholder are parties to a certain Note Purchase and Private Shelf Agreement, dated as of October 13, 2010 (as amended, restated or otherwise modified from time to time, the “**Shelf Agreement**”), pursuant to which the Company authorized the issuance and sale from time to time (within limits prescribed by Prudential under the Shelf Agreement) of (i) \$100,000,000 aggregate principal amount of its 4.00% Series A Senior Notes due October 13, 2021 (as the same may be amended, restated or otherwise modified from time to time, collectively, the “**Series A Notes**”), and (ii) up to \$50,000,000 aggregate principal amount of its additional senior promissory notes (as the same may be amended, restated or modified from time to time, collectively, the “**Shelf Notes**”, and together with the Series A Notes, collectively, the “**Notes**”).

B. The Company has requested certain amendments to the Shelf Agreement and, subject to the terms and conditions of this Agreement, the Required Holders have agreed to such amendments.

AGREEMENT:

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. DEFINITIONS.

Except as otherwise defined in this Agreement, capitalized terms used herein and not defined herein shall have the meanings ascribed to them in the Shelf Agreement.

2. AMENDMENTS.

Subject to the satisfaction of the conditions set forth in Section 4 hereof, the Shelf Agreement is hereby amended, as of the Effective Date, as follows (the “**Amendments**”):

2.1. Amendment of Clause (e) of Section 10.1.

Clause (e) of Section 10.1 of the Shelf Agreement is hereby amended by deleting the reference to “Twenty-Five Million and 00/100 Dollars (\$25,000,000.00)” and inserting “Fifty Million Dollars (\$50,000,000.00)” in lieu thereof.

2.2. Amendment of Clause (i) of Section 10.1.

Clause (i) of Section 10.1 of the Shelf Agreement is hereby amended by deleting the reference to “Thirty Five Million and 00/100 Dollars (\$35,000,000.00)” and inserting “Fifty Million Dollars (\$50,000,000.00)” in lieu thereof.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

To induce the Required Holders to enter into this Agreement, and to consent to the Amendments, the Company represents and warrants that:

3.1. Organization; Power and Authority.

Each Obligor is a corporation, partnership or limited liability company duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, and is duly qualified as a foreign corporation, partnership or limited liability company and is in good standing in each jurisdiction in which such qualification is required by law, except where the failure to be licensed or qualified would not reasonably be expected to have a Material Adverse Effect. Each Obligor has the necessary corporate power and authority to execute and deliver this Agreement and to perform the provisions hereof.

3.2. Authorization, etc.

This Agreement has been duly authorized by all necessary corporate action on the part of the Obligors, and, assuming due authorization, execution and delivery by the other parties hereto, this Agreement constitutes a legal, valid and binding obligation of the Obligors, enforceable in accordance with its terms, except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors’ rights generally and (b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

3.3. No Defaults.

No Default or Event of Default has occurred and is continuing, either before or after giving effect to the Amendments.

3.4. Governmental Authorizations, Etc.

No consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required to be obtained by the Company in connection with the execution, delivery or performance by the Company of this Agreement.

3.5. Effect of Amendments.

The Shelf Agreement as hereby amended shall continue in full force and effect.

4. CONDITIONS PRECEDENT.

The Amendments shall become effective as of the first date written above (the “**Effective Date**”) upon the satisfaction of the following conditions precedent:

4.1. Execution and Delivery of this Agreement.

All parties hereto shall have executed and delivered a counterpart of this Agreement.

4.2. New Subsidiary Note Guarantee.

Prudential and the Noteholders shall have received a fully executed Note Guarantee from MSA International, Inc., a Delaware corporation (the “**New Subsidiary Guarantor**”), dated the date hereof, in form and substance reasonably satisfactory to the Required Holders (the “**New Subsidiary Note Guarantee**”).

4.3. Joinder to Intercompany Subordination Agreement.

Prudential and the Noteholders shall have received a fully executed joinder to the Intercompany Subordination Agreement from the New Subsidiary Guarantor, dated the date hereof, in form and substance satisfactory to the Required Holders.

4.4. Compliance Certificates from New Subsidiary Guarantor.

(a) Officer’s Certificate. Prudential and the Noteholders shall have received an Officer’s Certificate, from the New Subsidiary Guarantor, dated the date hereof and in form and substance satisfactory to the Required Holders, confirming that (i) its representations and warranties contained in the New Subsidiary Note Guarantee are true and correct, and (ii) the guarantee provided under the New Subsidiary Note Guarantee would not cause any borrowing, guaranteeing or similar limit binding on the New Subsidiary Guarantor to be exceeded.

(b) Secretary’s Certificate. Prudential and the Noteholders shall have received a certificate of the Secretary or an Assistant Secretary of the New Subsidiary Guarantor, dated the date hereof and in form and substance satisfactory to the Required Holders, (i) certifying as to the resolutions of the board of directors attached thereto authorizing the New Subsidiary Guarantor’s execution and delivery of the New Subsidiary Note Guarantee and the transactions contemplated thereby, (ii) attaching and certifying as correct and complete copies of the articles or certificate of incorporation and all other constitutive documents of the New Subsidiary Guarantor, and (iii) certifying as to specimen signatures of the authorized officers of the New Subsidiary Guarantor.

4.5. Legal Opinion.

Prudential and the Noteholders shall have received a legal opinion of independent legal counsel, dated the date hereof, in form and substance satisfactory to the Required Holders.

4.6. Confirmation and Reaffirmation Documents.

Prudential and the Noteholders shall have received the following documents, each duly executed and delivered by the party or parties thereto and in form and substance satisfactory to the Required Holders:

(a) Confirmation and Reaffirmation of Note Guarantees, dated as of the date hereof, executed by each of the Guarantors; and

(b) Confirmation and Reaffirmation of the Intercompany Subordination Agreement, dated as of the date hereof, executed by each of the Obligors.

4.7. Costs and Expenses.

The Company shall have paid all costs and reasonable expenses of the Noteholders relating to this Agreement due on the execution date hereof in accordance with Section 6.6 hereof (including, without limitation, any reasonable attorney's fees and disbursements).

4.8. Representations and Warranties.

The representations and warranties set forth in Section 3 hereof shall be true and correct.

4.9. Proceedings Satisfactory.

Prudential, the Noteholders and their special counsel shall have received copies of such documents and papers (whether or not specifically referred to above in this Section 4) as they may have reasonably requested prior to such date and such documents shall be in form and substance satisfactory to them.

5. RELEASE.

In consideration of the agreements of the Noteholders contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company, on behalf of itself and its successors, assigns, and other legal representatives, hereby absolutely, unconditionally and irrevocably releases, remises and forever discharges Prudential and each Noteholder and their respective successors and assigns, and their respective present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Prudential, the Noteholders and all such other Persons being hereinafter referred to collectively as the "**Releasees**" and individually as a "**Releasee**"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set off, demands and liabilities whatsoever (individually, a "**Claim**" and collectively, "**Claims**") of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which the Company or any of its successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Agreement for or on account of, or in relation to, or in any way in connection with the Shelf Agreement or any of the other Financing Documents or transactions thereunder or related thereto.

The Company understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release.

The Company agrees that no fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the release set forth above. The Company acknowledges and agrees that the Releasees have fully performed all obligations and undertakings owed to the Company under or in any way in connection with the Shelf Agreement or any of the other Financing Documents or transactions thereunder or related thereto as of the date hereof.

6. MISCELLANEOUS.

6.1. Effect of Amendments.

Except as expressly provided herein, (a) no terms or provisions of any agreement are modified or changed by this Agreement, (b) the terms of this Agreement shall not operate as a waiver by Prudential of, or otherwise prejudice Prudential's rights, remedies or powers under, the Shelf Agreement or any other Financing Document, or under any applicable law and (c) the terms and provisions of the Shelf Agreement and the other Financing Documents shall continue in full force and effect.

6.2. Successors and Assigns.

This Agreement shall inure to the benefit of and be binding upon the successors and assigns of each of the parties hereto.

6.3. Section Headings, etc.

The titles of the Sections appear as a matter of convenience only, do not constitute a part hereof and shall not affect the construction hereof. The words "herein," "hereof," "hereunder," and "hereto" refer to this Agreement as a whole and not to any particular Section or other subdivision.

6.4. Governing Law.

THIS AGREEMENT SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, AND THE RIGHTS OF THE PARTIES SHALL BE GOVERNED BY, THE LAW OF THE STATE OF NEW YORK EXCLUDING CHOICE-OF-LAW PRINCIPLES OF THE LAW OF SUCH STATE THAT WOULD PERMIT THE APPLICATION OF THE LAWS OF A JURISDICTION OTHER THAN SUCH STATE.

6.5. Waivers and Amendments.

Neither this Agreement nor any term hereof may be changed, waived, discharged or terminated orally, or by any action or inaction, but only by an instrument in writing signed by each of the parties signatory hereto.

6.6. Costs and Expenses.

Whether or not the Amendments become effective, the Company confirms its obligations under Section 15 of the Shelf Agreement and agrees that, on the execution date hereof (or if an invoice is delivered subsequent to such date or if the Amendments do not become effective, promptly, and in any event within 10 days of receiving any statement or invoice therefor), the Company will pay all out-of-pocket fees, costs and expenses reasonably incurred by the Noteholders relating to this Agreement, including, but not limited to, the statement for reasonable fees and disbursements of Bingham McCutchen LLP, special counsel to the Noteholders, presented to the Company on or before the execution date hereof. The Company will also promptly pay (in any event within 10 days), upon receipt of any statement thereof, each additional statement for reasonable fees and disbursements of special counsel to the Noteholders rendered after the execution date hereof in connection with this Agreement.

6.7. Execution in Counterpart.

This Agreement may be executed in any number of counterparts (including those transmitted by electronic transmission (including, without limitation, facsimile and e-mail)), all of which taken together shall constitute one and the same agreement. Delivery of an executed signature page by facsimile or electronic transmission shall be as effective as delivery of a manually signed counterpart hereof.

6.8. Entire Agreement.

This Agreement constitutes the final written expression of all of the terms hereof and is a complete and exclusive statement of those terms.

6.9. Company Ratification.

The Company hereby confirms, ratifies and agrees that the Financing Documents executed by it continue to be valid and enforceable against it in accordance with their respective terms as of the date hereof.

[Remainder of page intentionally left blank. Next page is signature page.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on their behalf by a duly authorized officer or agent thereof, as the case may be, as of the date first above written.

MINE SAFETY APPLIANCES COMPANY

By: /s/
Name:
Title:

The foregoing is hereby agreed to as of the date first above written.

PRUDENTIAL INVESTMENT MANAGEMENT, INC.

By: /s/
Name:
Title:

[Signature Page to Amendment No. 1 to Note Purchase and Private Shelf Agreement]

**THE PRUDENTIAL INSURANCE COMPANY
OF AMERICA**

By: /s/ _____

Name:

Title:

ZURICH AMERICAN INSURANCE COMPANY

By: Prudential Private Placement Investors,
L.P. (as Investment Advisor)

By: Prudential Private Placement Investors, Inc.
(as its General Partner)

By: /s/ _____

Name:

Title:

FORETHOUGHT LIFE INSURANCE COMPANY

By: Prudential Private Placement Investors,
L.P. (as Investment Advisor)

By: Prudential Private Placement Investors, Inc.
(as its General Partner)

By: /s/ _____

Name:

Title:

[Signature Page to Amendment No. 1 to Note Purchase and Private Shelf Agreement]

GUARANTEE AGREEMENT

Dated as of April 5, 2012 of

MSA INTERNATIONAL, INC.

GUARANTEE AGREEMENT

THIS GUARANTEE AGREEMENT, dated as of April 5, 2012 (this "Guarantee Agreement"), is made by MSA INTERNATIONAL, INC., a Delaware corporation (the "Guarantor"), in favor of the Purchasers (as defined below) and the other holders from time to time of the Notes (as defined below) . The Purchasers and such other holders are herein collectively called the "holders" and individually a "holder."

PRELIMINARY STATEMENTS:

I. Mine Safety Appliances Company, a Pennsylvania corporation (the "Company"), has entered into a Note Purchase and Private Shelf Agreement, dated as of October 13, 2010 (as amended, modified, supplemented or restated from time to time, the "Note Purchase Agreement"), with Prudential Investment Management , Inc., the Series A Purchasers listed on the signature pages thereto and each Prudential Affiliate which becomes a party thereto from time to time (such Series A Purchasers and Prudential Affiliates, collectively, the "Purchasers"). Capitalized terms used herein have the meanings specified in the Note Purchase Agreement unless otherwise defined herein.

II. The Company has authorized the issuance, pursuant to the Note Purchase Agreement, of (i) \$100,000,000 aggregate principal amount of its 4.00% Series A Senior Notes due October 13, 2021 (the "Series A Notes") and (ii) its additional senior promissory notes in the aggregate principal amount of \$50,000,000 (the "Shelf Notes"). The foregoing Series A Notes and the Shelf Notes that may from time to time be issued pursuant to the Note Purchase Agreement (including any notes issued in substitution therefor), as the same may be amended, modified, supplemented or restated from time to time, are herein collectively called the "Notes" and individually a "Note".

III. The Company has requested, and the Purchasers have agreed to, certain amendments to the Note Purchase Agreement.

IV. It is a condition to the agreement of the Purchasers to enter into the amendments that this Guarantee Agreement shall have been executed and delivered by the Guarantor and shall be in full force and effect.

V. The Guarantor has received and will receive direct and indirect benefits from the financing arrangements contemplated by the Note Purchase Agreement, as amended. The Board of Directors of the Guarantor has determined that the incurrence of such obligations is in the best interests of the Guarantor.

Now THEREFORE, in compliance with the Note Purchase Agreement, and in consideration of, the execution and delivery of the amendment to the Note Purchase Agreement, the Guarantor hereby covenants and agrees with, and represents and warrants to, each of the holders as follows:

1. GUARANTEE; INDEMNITY.

1.1 GUARANTEE. The Guarantor hereby irrevocably and unconditionally guarantees to each holder, the due and punctual payment in full of (a) the principal of, Make-Whole Amount , if any, and interest on (including, without limitation , interest accruing after the filing of any petition in bankruptcy, or the commencement of any insolvency , reorganization or like proceeding, whether or not a claim for post-filing or post-petition interest is allowed in such proceeding), and any other amounts due under, the Notes when and as the same shall become due and payable (whether at stated maturity or by required or optional prepayment or by acceleration or otherwise) and (b) any other sums which may become due under the terms and provisions of the Notes, the Note Purchase Agreement or any other instrument referred to therein (all such obligations described in clauses (a) and (b) above are herein called the "**Guaranteed Obligations**"). The guarantee in the preceding sentence is an absolute, present and continuing guarantee of payment and not of collectability and is in no way conditional or contingent upon any attempt to collect from the Company or any other guarantor of the Notes or upon any other action , occurrence or circumstance whatsoever . In the event that the Company shall fail so to pay any of such Guaranteed Obligations, the Guarantor agrees to pay the same when due to the holders entitled thereto, without demand, presentment, protest or notice of any kind, in lawful money of the United States of America, pursuant to the requirements for payment specified in the Notes and the Note Purchase Agreement. Each default in payment of any of the Guaranteed Obligations shall give rise to a separate cause of action hereunder and separate suits may be brought hereunder as each cause of action arises. The Guarantor agrees that the Notes issued in connection with the Note Purchase Agreement may (but need not) make reference to this Guarantee Agreement.

The Guarantor agrees to pay and to indemnify and save each holder harmless from and against any damage, loss, cost or expense (including attorneys' fees) which such holder may incur or be subject to as a consequence, direct or indirect, of (x) any breach by the Guarantor or by the Company of any warranty, covenant, term or condition in, or the occurrence of any default under, this Guarantee Agreement, the Notes , the Note Purchase Agreement or any other instrument referred to therein , together with all expenses resulting from the compromise or defense of any claims or liabilities arising as a result of any such breach or default, (y) any legal action commenced to challenge the validity or enforceability of this Guarantee Agreement, the Notes, the Note Purchase Agreement or any other instrument referred to therein and (z) enforcing or defending (or determining whether or how to enforce or defend) the provisions of this Guarantee Agreement.

The Guarantor hereby acknowledges and agrees that the Guarantor's liability hereunder is joint and several with any other Person(s) who may guarantee the obligations and Indebtedness under and in respect of the Notes and the Note Purchase Agreement.

Notwithstanding the foregoing provisions or any other provision of this Guarantee Agreement, the holders (by their acceptance of any Note) and the Guarantor hereby agree that if at any time the Guaranteed Obligations exceed the Maximum Guaranteed Amount determined as of such time with regard to the Guarantor, then this Guarantee Agreement shall be automatically amended to reduce the Guaranteed Obligations to the Maximum Guaranteed Amount. Such amendment shall not require the written consent of the Guarantor or any holder and shall be deemed to have been automatically consented to by the Guarantor and each holder.

The Guarantor agrees that the Guaranteed Obligations may at any time exceed the Maximum Guaranteed Amount without affecting or impairing the obligation of the Guarantor. "**Maximum Guaranteed Amount**" means as of the date of determination with respect to the Guarantor, the lesser of (a) the amount of the Guaranteed Obligations outstanding on such date and (b) the maximum amount that would not render the Guarantor's liability under this Guarantee Agreement subject to avoidance under Section 548 of the United States Bankruptcy Code (or any successor provision) or any comparable provision of applicable state law.

1.2 INDEMNITY. The Guarantor hereby further agrees that if, for any reason, any amount claimed by a holder of the Notes under this Guarantee Agreement is not recoverable on the basis of a guarantee, it will be liable as a principal debtor and primary obligor to indemnify that holder of the Notes against any cost, loss or liability it incurs as a result of the Company not paying any amount expressed to be payable by it under the Notes, the Note Purchase Agreement or otherwise on the date when it is expressed to be due. The amount payable by the Guarantor under this Section 1.2 will not exceed the amount it would have had to pay under Section 1.1 if the amount claimed had been recoverable on the basis of a guarantee.

2. OBLIGATIONS ABSOLUTE.

The obligations of the Guarantor hereunder shall be primary, absolute, irrevocable and unconditional, irrespective of the validity or enforceability of the Notes, the Note Purchase Agreement or any other instrument referred to therein, shall not be subject to any counterclaim, setoff, deduction or defense based upon any claim the Guarantor may have against the Company or any holder or otherwise, and shall remain in full force and effect without regard to, and shall not be released, discharged or in any way affected by, any circumstance or condition whatsoever (whether or not the Guarantor shall have any knowledge or notice thereof), including, without limitation: (a) any amendment to, modification of, supplement to or restatement of the Notes, the Note Purchase Agreement or any other instrument referred to therein (it being agreed that the obligations of the Guarantor hereunder shall apply to the Notes, the Note Purchase Agreement or any such other instrument as so amended, modified, supplemented or restated) or any assignment or transfer of any thereof or of any interest therein, or any furnishing, acceptance or release of any security for the Notes; (b) any waiver, consent, extension, indulgence or other action or inaction under or in respect of the Notes, the Note Purchase Agreement or any other instrument referred to therein; (c) any bankruptcy, insolvency, arrangement, reorganization, readjustment, composition, liquidation or similar proceeding with respect to the Company or its property; (d) any merger, amalgamation or consolidation of the Guarantor or of the Company into or with any other Person or any sale, lease or transfer of any or all of the assets of the Guarantor or of the Company to any Person; (e) any failure on the part of the Company for any reason to comply with or perform any of the terms of any other agreement with the Guarantor; (f) any failure on the part of any holder to obtain, maintain, register or otherwise perfect any security; or (g) any other event or circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor (whether or not similar to the foregoing), and in any event however material or prejudicial it may be to the Guarantor or to any subrogation, contribution or reimbursement rights the Guarantor may otherwise have. The Guarantor covenants that its obligations hereunder will not be discharged except by indefeasible payment in full in cash of all of the Guaranteed Obligations and all other obligations hereunder.

3. WAIVER.

The Guarantor unconditionally waives to the fullest extent permitted by law, (a) notice of acceptance hereof, of any action taken or omitted in reliance hereon and of any default by the Company in the payment of any amounts due under the Notes, the Note Purchase Agreement or any other instrument referred to therein, and of any of the matters referred to in Section 2 hereof, (b) all notices which may be required by statute, rule of law or otherwise to preserve any of the rights of any holder against the Guarantor, including, without limitation, presentment to or demand for payment from the Company or the Guarantor with respect to any Note, notice to the Company or to the Guarantor of default or protest for nonpayment or dishonor and the filing of claims with a court in the event of the bankruptcy of the Company, (c) any right to require any holder to enforce, assert or exercise any right, power or remedy including, without limitation, any right, power or remedy conferred in the Note Purchase Agreement or the Notes, (d) any requirement for diligence on the part of any holder and (e) any other act or omission or thing or delay in doing any other act or thing which might in any manner or to any extent vary the risk of the Guarantor or otherwise operate as a discharge of the Guarantor or in any manner lessen the obligations of the Guarantor hereunder.

4. OBLIGATIONS UNIMPAIRED.

The Guarantor authorizes the holders, without notice or demand to the Guarantor and without affecting its obligations hereunder, from time to time: (a) to renew, compromise, extend, accelerate or otherwise change the time for payment of, all or any part of the Notes, the Note Purchase Agreement or any other instrument referred to therein; (b) to change any of the representations, covenants, events of default or any other terms or conditions of or pertaining to the Notes, the Note Purchase Agreement or any other instrument referred to therein, including, without limitation, decreases or increases in amounts of principal, rates of interest, the Make-Whole Amount or any other obligation; (c) to take and hold security for the payment of the Notes, the Note Purchase Agreement or any other instrument referred to therein, for the performance of this Guarantee Agreement or otherwise for the Indebtedness guaranteed hereby and to exchange, enforce, waive, subordinate and release any such security; (d) to apply any such security and to direct the order or manner of sale thereof as the holders in their sole discretion may determine; (e) to obtain additional or substitute endorsers or guarantors; (f) to exercise or refrain from exercising any rights against the Company and others; and (g) to apply any sums, by whomsoever paid or however realized, to the payment of the Guaranteed Obligations and all other obligations owed hereunder. The holders shall have no obligation to proceed against any additional or substitute endorsers or guarantors or to pursue or exhaust any security provided by the Company, the Guarantor or any other Person or to pursue any other remedy available to the holders.

If an event permitting the acceleration of the maturity of the principal amount of any Notes shall exist and such acceleration shall at such time be prevented or the right of any holder to receive any payment on account of the Guaranteed Obligations shall at such time be delayed or otherwise affected by reason of the pendency against the Company, the Guarantor or any other guarantors of a case or proceeding under a bankruptcy or insolvency law, the Guarantor agrees that, for purposes of this Guarantee Agreement and its obligations hereunder, the maturity of such principal amount shall be deemed to have been accelerated with the same effect as if the holder thereof had accelerated the same in accordance with the terms of the Note Purchase Agreement, and the Guarantor shall forthwith pay such accelerated Guaranteed Obligations.

5. SUBROGATION AND SUBORDINATION.

(a) The Guarantor will not exercise any rights which it may have acquired by way of subrogation under this Guarantee Agreement, by any payment made hereunder or otherwise, or accept any payment on account of such subrogation rights, or any rights of reimbursement, contribution or indemnity or any rights or recourse to any security for the Notes or this Guarantee Agreement unless and until all of the Guaranteed Obligations shall have been indefeasibly paid in full in cash and the Issuance Period under the Note Purchase Agreement shall have expired or otherwise terminated.

(b) The Guarantor hereby subordinates the payment of all Indebtedness and other obligations of the Company or any other guarantor of the Guaranteed Obligations owing to the Guarantor, whether now existing or hereafter arising, including, without limitation, all rights and claims described in clause (a) of this Section 5, to the indefeasible payment in full in cash of all of the Guaranteed Obligations. If the Required Holders so request, any such Indebtedness or other obligations shall be enforced and performance received by the Guarantor as trustee for the holders and the proceeds thereof shall be paid over to the holders promptly, in the form received (together with any necessary endorsements) to be applied to the Guaranteed Obligations, whether matured or unmatured, as may be directed by the Required Holders, but without reducing or affecting in any manner the liability of the Guarantor under this Guarantee Agreement.

(c) If any amount or other payment is made to or accepted by the Guarantor in violation of any of the preceding clauses (a) and (b) of this Section 5, such amount shall be deemed to have been paid to the Guarantor for the benefit of, and held in trust for the benefit of, the holders and shall be paid over to the holders promptly, in the form received (together with any necessary endorsements) to be applied to the Guaranteed Obligations, whether matured or unmatured, as may be directed by the Required Holders, but without reducing or affecting in any manner the liability of the Guarantor under this Guarantee Agreement.

(d) The Guarantor acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by the Note Purchase Agreement and that its agreements set forth in this Guarantee Agreement (including this Section 5) are knowingly made in contemplation of such benefits.

6. REINSTATEMENT OF GUARANTEE.

This Guarantee Agreement shall continue to be effective, or be reinstated, as the case may be, if and to the extent at any time payment, in whole or in part, of any of the sums due to any holder on account of the Guaranteed Obligations is rescinded or must otherwise be restored or returned by a holder upon the insolvency, bankruptcy, dissolution, liquidation or reorganization of the Company or any other guarantors, or upon or as a result of the appointment of a custodian, receiver, trustee or other officer with similar powers with respect to the Company or any other guarantors or any part of its or their property, or otherwise, all as though such payments had not been made.

7. RANK OF GUARANTEE.

The Guarantor will ensure that its payment obligations under this Guarantee Agreement will at all times rank at least *pari passu*, without preference or priority, with all other unsecured and unsubordinated Indebtedness of the Guarantor now or hereafter existing.

8. REPRESENTATIONS AND WARRANTIES OF THE GUARANTOR.

The Guarantor represents and warrants to each holder as follows:

8.1 ORGANIZATION; POWER AND AUTHORITY. The Guarantor is a Delaware corporation, duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, and is duly qualified as a foreign corporation and is in good standing in each jurisdiction in which such qualification is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Guarantor has the corporate power and authority to own or hold under lease the properties it purports to own or hold under lease, to transact the business it transacts and proposes to transact, to execute and deliver this Guarantee Agreement and to perform the provisions hereof.

8.2 AUTHORIZATION, ETC. This Guarantee Agreement has been duly authorized by all necessary corporate action on the part of the Guarantor, and this Guarantee Agreement constitutes a legal, valid and binding obligation of the Guarantor enforceable against the Guarantor in accordance with its terms, except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

8.3 COMPLIANCE WITH LAWS, OTHER INSTRUMENTS, ETC. The execution, delivery and performance by the Guarantor of this Guarantee Agreement will not (a) contravene, result in any breach of, or constitute a default under, or result in the creation of any Lien in respect of any property of the Guarantor or any of its Subsidiaries under, any indenture, mortgage, deed of trust, loan, purchase or credit agreement, lease, organizational documents, or any other agreement or instrument to which the Guarantor or any of its Subsidiaries is bound or by which the Guarantor or any of its Subsidiaries or any of their respective properties may be bound or affected, (b) conflict with or result in a breach of any of the terms, conditions or provisions of any order, judgment, decree, or ruling of any court, arbitrator or Governmental Authority applicable to the Guarantor or any of its Subsidiaries or (c) violate any provision of any statute or other rule or regulation of any Governmental Authority applicable to the Guarantor or any of its Subsidiaries. "Governmental Authority" means (x) the government of (i) the United States of America or any State or other political subdivision thereof, or (ii) any other jurisdiction in which the Guarantor or any of its Subsidiaries conducts all or any part of its business, or which asserts jurisdiction over any properties of the Guarantor or any of its Subsidiaries, or (y) any entity exercising executive, legislative, judicial, regulatory or administrative functions of, or pertaining to, any such government.

8.4 GOVERNMENTAL AUTHORIZATIONS, ETC. No consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required in connection with the execution, delivery or performance by the Guarantor of this Guarantee Agreement.

8.5 INFORMATION REGARDING THE COMPANY. The Guarantor now has and will continue to have independent means of obtaining information concerning the affairs, financial condition and business of the Company. No holder shall have any duty or responsibility to provide the Guarantor with any credit or other information concerning the affairs, financial condition or business of the Company which may come into possession of the holders. The Guarantor has executed and delivered this Guarantee Agreement without reliance upon any representation by the holders including, without limitation, with respect to (a) the due execution, validity, effectiveness or enforceability of any instrument, document or agreement evidencing or relating to any of the Guaranteed Obligations or any loan or other financial accommodation made or granted to the Company, (b) the validity, genuineness, enforceability, existence, value or sufficiency of any property securing any of the Guaranteed Obligations or the creation, perfection or priority of any lien or security interest in such property or (c) the existence, number, financial condition or creditworthiness of other guarantors or sureties, if any, with respect to any of the Guaranteed Obligations.

8.6 SOLVENCY. Upon the execution and delivery hereof, the Guarantor will be solvent, will be able to pay its debts as they mature, and will have capital sufficient to carry on its business.

9. TERM OF GUARANTEE AGREEMENT.

This Guarantee Agreement and all guarantees, covenants and agreements of the Guarantor contained herein shall continue in full force and effect and shall not be discharged until such time as all of the Guaranteed Obligations and all other obligations hereunder shall be indefeasibly paid in full in cash and the Issuance Period under the Note Purchase Agreement shall have expired or otherwise terminated and shall be subject to reinstatement pursuant to Section 6.

10. SURVIVAL OF REPRESENTATIONS AND WARRANTIES; ENTIRE AGREEMENT.

All representations and warranties contained herein shall survive the execution and delivery of this Guarantee Agreement and may be relied upon by any subsequent holder, regardless of any investigation made at any time by or on behalf of any Purchaser or any other holder. All statements contained in any certificate or other instrument delivered by or on behalf of the Guarantor pursuant to this Guarantee Agreement shall be deemed representations and warranties of the Guarantor under this Guarantee Agreement. Subject to the preceding sentence, this Guarantee Agreement embodies the entire agreement and understanding between each holder and the Guarantor and supersedes all prior agreements and understandings relating to the subject matter hereof.

11. AMENDMENT AND WAIVER.

11.1 REQUIREMENTS. Except as otherwise provided in the fourth paragraph of Section 1.1 of this Guarantee Agreement, this Guarantee Agreement may be amended, and the observance of any term hereof may be waived (either retroactively or prospectively), with (and only with) the written consent of the Guarantor and the Required Holders, except that no amendment or waiver (a) of any of the first three paragraphs of Section 1.1 or any of Section 1.2 or any of the provisions of Section 2, 3, 4, 5, 6, 7, 9 or 11 hereof, or any defined term (as it is used therein), or (b) which results in the limitation of the liability of the Guarantor hereunder (except to the extent provided in the fourth paragraph of Section 1 of this Guarantee Agreement) will be effective as to any holder unless consented to by such holder in writing.

11.2 SOLICITATION OF HOLDERS OF NOTES.

(a) *Solicitation.* The Guarantor will provide each holder of the Notes (irrespective of the amount of Notes then owned by it) with sufficient information, sufficiently far in advance of the date a decision is required, to enable such holder to make an informed and considered decision with respect to any proposed amendment, waiver or consent in respect of any of the provisions hereof. The Guarantor will deliver executed or true and correct copies of each amendment, waiver or consent effected pursuant to the provisions of this Section 11.2 to each holder promptly following the date on which it is executed and delivered by, or receives the consent or approval of, the requisite holders of Notes.

(b) *Payment.* The Guarantor will not directly or indirectly pay or cause to be paid any remuneration, whether by way of supplemental or additional interest, fee or otherwise, or grant any security or provide other credit support, to any holder as consideration for or as an inducement to the entering into by any holder of any waiver or amendment of any of the terms and provisions hereof unless such remuneration is concurrently paid, or security is concurrently granted or other credit support concurrently provided, on the same terms, ratably to each holder even if such holder did not consent to such waiver or amendment.

11.3 BINDING EFFECT. Any amendment or waiver consented to as provided in this Section 11 applies equally to all holders and is binding upon them and upon each future holder and upon the Guarantor without regard to whether any Note has been marked to indicate such an amendment or waiver. No such amendment or waiver will extend to or affect any obligation, covenant or agreement not expressly amended or waived or impaired any right consequent thereon. No course of dealing between the Guarantor and the holder nor any delay in exercising any rights hereunder or under any Note shall operate as a waiver of any rights of any holder. As used herein, the term "this Guarantee Agreement" and references thereto shall mean this Guarantee Agreement as it may be amended, modified, supplemented or restated from time to time.

11.4 NOTES HELD BY COMPANY, ETC. Solely for the purpose of determining whether the holders of the requisite percentage of the aggregate principal amount of Notes then outstanding approved or consented to any amendment, waiver or consent to be given under this Guarantee Agreement, or have directed the taking of any action provided herein to be taken upon the direction of the holders of a specified percentage of the aggregate principal amount of Notes then outstanding, Notes directly or indirectly owned by the Guarantor, the Company or any of their respective Affiliates shall be deemed not to be outstanding.

12. NOTICES.

All notices and communications provided for hereunder shall be in writing and sent (a) by telecopy if the sender on the same day sends a confirming copy of such notice by a recognized overnight delivery service (charges prepaid), or (b) by registered or certified mail with return receipt requested (postage prepaid), or (c) by a recognized overnight delivery service (with charges prepaid). Any such notice must be sent:

- (a) If to the Guarantor, to c/o MSA International, Inc., 901 North Market Street, Suite 701, Wilmington, Delaware 19801, Attention: George W. Steggle, President, or such other address as the Guarantor shall have specified to the holders in writing, or
- (b) if to any holder, to such holder at the addresses specified for such communications set forth in Schedule A to the Note Purchase Agreement (or, if such holder's address is not set forth therein, in such holder's Confirmation of Acceptance), or such other address as such holder shall have specified to the Guarantor in writing.

13. MISCELLANEOUS.

13.1 SUCCESSORS AND ASSIGNS. All covenants and other agreements contained in this Guarantee Agreement by or on behalf of any of the parties hereto bind and inure to the benefit of their respective successors and assigns whether so expressed or not.

13.2 SEVERABILITY. Any provision of this Guarantee Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall (to the full extent permitted by law), not invalidate or render unenforceable such provision in any other jurisdiction.

13.3 CONSTRUCTION. Each covenant contained herein shall be construed (absent express provision to the contrary) as being independent of each other covenant contained herein, so that compliance with any one covenant shall not (absent such express contrary provision) be deemed to excuse compliance with any other covenant. Whether any provision herein refers to action to be taken by any Person, or which such Person is prohibited from taking, such provision shall be applicable whether such action is taken directly or indirectly by such Person.

The section and subsection headings in this Guarantee Agreement are for convenience of reference only and shall neither be deemed to be a part of this Guarantee Agreement nor modify, define, expand or limit any of the terms or provisions hereof. All references herein to numbered sections, unless otherwise indicated, are to sections of this Guarantee Agreement. Words and definitions in the singular shall be read and construed as though in the plural and *vice versa*, and words in the masculine, neuter or feminine gender shall be read and construed as though in either of the other genders where the context so requires.

13.4 FURTHER ASSURANCES. The Guarantor agrees to execute and deliver all such instruments and take all such action as the Required Holders may from time to time reasonably request in order to effectuate fully the purposes of this Guarantee Agreement.

13.5 GOVERNING LAW. This Guarantee Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the law of the State of New York, excluding choice-of-law principles of the law of such State that would permit the application of the laws of a jurisdiction other than such State.

13.6 JURISDICTION AND PROCESS; WAIVER OF JURY TRIAL.

(a) The Guarantor irrevocably submits to the non-exclusive jurisdiction of any New York State or federal court sitting in the Borough of Manhattan, The City of New York, over any suit, action or proceeding arising out of or relating to this Guarantee Agreement. To the fullest extent permitted by applicable law, the Guarantor irrevocably waives and agrees not to assert, by way of motion, as a defense or otherwise, any claim that it is not subject to the jurisdiction of any such court, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding brought in any such court and any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

(b) The Guarantor consents to process being served by or on behalf of any holder in any suit, action or proceeding of the nature referred to in Section 13.6(a) by mailing a copy thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, return receipt requested, to it at its address specified in Section 12 or at such other address of which such holder shall then have been notified pursuant to Section 12. The Guarantor agrees that such service upon receipt (i) shall be deemed in every respect effective service of process upon it in any such suit, action or proceeding and (ii) shall, to the fullest extent permitted by applicable law, be taken and held to be valid personal service upon and personal delivery to it. Notices hereunder shall be conclusively presumed received as evidenced by a delivery receipt furnished by the United States Postal Service or any reputable commercial delivery service.

(c) Nothing in this Section 13.6 shall affect the right of any holder to serve process in any manner permitted by law, or limit any right that the holders may have to bring proceedings against the Guarantor in the courts of any appropriate jurisdiction or to enforce in any lawful manner a judgment obtained in one jurisdiction in any other jurisdiction.

(d) **THE GUARANTOR AND THE HOLDERS HEREBY WAIVE TRIAL BY JURY IN ANY ACTION BROUGHT ON OR WITH RESPECT TO THIS GUARANTEE AGREEMENT OR OTHER DOCUMENT EXECUTED IN CONNECTION HEREWITH.**

13.7 REPRODUCTION OF DOCUMENTS; EXECUTION. This Guarantee Agreement may be reproduced by any holder by any photographic, photostatic, electronic, digital, or other similar process and such holder may destroy any original document so reproduced. The Guarantor agrees and stipulates that, to the extent permitted by applicable law, any such reproduction shall be admissible in evidence as the original itself in any judicial or administrative proceeding (whether or not the original is in existence and whether or not such reproduction was made by such holder in the regular course of business) and any enlargement, facsimile or further reproduction of such reproduction shall likewise be admissible in evidence. This Section 13.7 shall not prohibit the Guarantor or any other holder of Notes from contesting any such reproduction to the same extent that it could contest the original, or from introducing evidence to demonstrate the inaccuracy of any such reproduction. A facsimile or electronic transmission of the signature page of the Guarantor shall be as effective as delivery of a manually executed counterpart hereof and shall be admissible into evidence for all purposes.

IN WITNESS WHEREOF, the Guarantor has caused this Guarantee Agreement to be duly executed and delivered as of the date and year first above written.

Signed /s/ _____

AMENDMENT NO. 3 AND WAIVER TO NOTE PURCHASE AGREEMENT

AMENDMENT NO. 3 AND WAIVER TO NOTE PURCHASE AGREEMENT (this “**Waiver**”), dated as of February 12, 2014, by and among **MINE SAFETY APPLIANCES COMPANY**, a Pennsylvania corporation (the “**Company**”), each of the Guarantors signatory hereto, **PRUDENTIAL INVESTMENT MANAGEMENT, INC.** (“**Prudential**”) and each of the holders of Notes (as defined below) (collectively, the “**Noteholders**”).

WITNESSETH:

WHEREAS, the Company, Prudential and the Noteholders are parties to a certain Note Purchase and Private Shelf Agreement, dated as of October 13, 2010, as amended by that certain Amendment No. 1 to Note Purchase and Private Shelf Agreement dated as of April 5, 2012 and that certain Amendment No. 2 to Note Purchase and Private Shelf Agreement dated as of April 4, 2013 (as so amended and as may be further amended, restated, supplemented or otherwise modified from time to time, the “**2010 Note Purchase Agreement**”), pursuant to which the Company authorized the issuance and sale from time to time (within limits prescribed by Prudential under the 2010 Note Purchase Agreement) of (i) \$100,000,000 in aggregate principal amount of its 4.00% Series A Senior Notes due October 13, 2021 (as the same may be amended, restated or otherwise modified from time to time, collectively, the “**Series A Notes**”), and (ii) up to \$50,000,000 in aggregate principal amount of its additional senior promissory notes (as the same may be amended, restated or modified from time to time, collectively, the “**Shelf Notes**”, and together with the Series A Notes, collectively, the “**Notes**”). No Shelf Notes have been issued under the 2010 Note Purchase Agreement and the Facility has terminated in accordance with its terms.

WHEREAS, the Company has informed the Noteholders that events of default have occurred under Section 11(c) of the 2006 Note Purchase Agreement as a result of (a) the Company's failure to comply with Section 10.3 of the 2006 Note Purchase Agreement as a result of the execution of certain Guaranties by certain Restricted Subsidiaries (as defined thereunder) of the Indebtedness of the Company under, and in respect of, the 2010 Note Purchase Agreement and the Bank Credit Agreement (the “**Priority Indebtedness Default**”), and (b) the Company's failure to provide notice to the Noteholders of the occurrence of the Priority Indebtedness Default in accordance with Section 7.1(d) of the 2006 Note Purchase Agreement (the “**2006 Notice Default**”), which Priority Indebtedness Default and 2006 Notice Default are detailed and waived pursuant to that certain Amendment No. 1 and Waiver to Note Purchase Agreement, dated as of the date hereof, by and among the Company and each of the Purchasers (as defined in the 2006 Note Purchase Agreement) party thereto (the “**2006 Noteholders**”), a copy of which is attached hereto as Exhibit A hereto (the “**2006 Amendment/Waiver**”).

WHEREAS, (a) as a result of the Priority Indebtedness Default, the 2006 Notice Default and the 2010 NPA Cross Defaults (as defined below), events of default have occurred under Section 8.1.6 of the Bank Credit Agreement (collectively, the “**Credit Agreement Cross Defaults**”), and (b) an event of default has occurred under Section 8.1.4 of the Bank Credit Agreement as a result of the Company's failure to provide a certificate signed by an officer of the Company setting forth the details of the Credit Agreement Cross Defaults to the Bank Lenders and PNC Bank, National Association, as Administrative Agent, in accordance with Section 7.3.4.1 of the Bank Credit Agreement (the “**Credit Agreement Notice Default**”), which Credit Agreement Cross Defaults and Credit Agreement Notice Default are detailed and waived pursuant to that certain letter agreement, by and among the Company, the Bank Lenders party thereto and PNC Bank, National Association, as Administrative Agent, a copy of which is attached hereto as Exhibit B (the “**Credit Agreement Waiver**”).

WHEREAS, (a) as a result of the Priority Indebtedness Default, the 2006 Notice Default and Credit Agreement Defaults, cross-defaults have occurred under Section 11(e) of the 2010 Note Purchase Agreement (collectively, the “**2010 NPA Cross Defaults**”), and (b) an Event of Default has occurred under Section 11(b) of the 2010 Note Purchase Agreement as a result of the Company's failure to provide notice to the Noteholders of the occurrence of the 2010 NPA Cross Defaults in accordance with Section 7.1(d) of the 2010 Note Purchase Agreement (the “**2010 Notice Default**”).

WHEREAS, the waiver of the Priority Indebtedness Default and the 2006 Notice Default pursuant to the 2006 Amendment/Waiver is conditioned, among other things, upon the execution and delivery by each Guarantor of a Guaranty of the Indebtedness under the 2006 Note Purchase Agreement in substantially the form of Exhibit C hereto (together with each other Guaranty executed by any future Guarantor in accordance with Section 9.9 of the 2006 Note Purchase Agreement (as in effect on the date hereof immediately after giving effect to the 2006 Amendment/Waiver), collectively, the “**2006 NPA Guarantees**”).

WHEREAS, the 2006 NPA Guarantees are not permitted under Section 10.1 of the 2010 Note Purchase Agreement and the 2006 Note Purchase Agreement may not be amended without the written consent of the Required Holders pursuant to Section 10.18 of the 2010 Note Purchase Agreement.

WHEREAS, the Company has requested that the Noteholders waive the 2010 NPA Cross Defaults and the 2010 Notice Default and consent to the execution of the 2006 Amendment/Waiver and the 2006 NPA Guarantees, and the Required Holders are willing to grant such waivers and consents upon the terms, and subject to the conditions, set forth herein.

NOW, THEREFORE, in consideration of the mutual conditions and agreements and covenants set forth herein, and for other good and valuable consideration, the adequacy and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

Section 1. Definitions. For purposes of this Waiver, all terms used herein shall have the respective meanings assigned thereto in the 2010 Note Purchase Agreement, unless otherwise defined herein.

Section 2. Waiver and Consent. Subject to satisfaction of the conditions precedent set forth in Section 5 hereof, the Noteholders hereby (a) waive the 2010 NPA Cross Defaults and the 2010 Notice Default effective as of the date and time on which such 2010 NPA Cross Defaults and the 2010 Notice Default first occurred, respectively, (b) consent to the execution and delivery by each Guarantor (whether presently existing or hereafter arising) of the 2006 NPA Guarantee to which it is a party, each in substantially the form as attached hereto as Exhibit C, and agree that the 2006 NPA Guarantees shall be permitted Indebtedness under Section 10.1(c) of the 2010 Note Purchase Agreement, and (c) consent to the execution and delivery by the Company of the 2006 Amendment/Waiver.

Section 3. Amendment to 2010 Note Purchase Agreement. Subject to the satisfaction of the conditions set forth in Section 5 hereof, the following definitions set forth in Schedule B to the 2010 Note Purchase Agreement are hereby amended and restated in their entirety, as of the Effective Date (as defined below), to read respectively as follows:

“**Additional Subsidiary Guarantor**” means, at any time, each Subsidiary of the Company which (a) guarantees all or any part of the obligations of the Company or any Subsidiary under, or in respect of, the Bank Credit Agreement or the 2006 Note Purchase Agreement, or (b) is a borrower, issuer or other obligor under, or in respect of, the Bank Credit Agreement or the 2006 Note Purchase Agreement.

“**Guarantor**” means separately, and “**Guarantors**” shall mean collectively, (a) GMT, (b) General Monitors, Inc., a Nevada corporation, (c) MSA International, Inc., a Delaware corporation, and (d) each other Person which executes and delivers a Note Guarantee pursuant to Section 4.16, Section 9.10 or otherwise on or after the Series A Closing Day.

Section 4. Representations, Warranties and Covenants. The Company represents, warrants and covenants with and to the Noteholders as follows (which representations, warranties and covenants are continuing and shall survive the execution and delivery hereof):

4.1 Corporate Power and Authority. Each Obligor is a corporation, partnership or limited liability company duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, and is duly qualified as a foreign corporation, partnership or limited liability company and is in good standing in each jurisdiction in which such qualification is required by law, except where the failure to be licensed or qualified would not reasonably be expected to have a Material Adverse Effect. Each Obligor has the necessary corporate power and authority to execute and deliver this Waiver and to perform the provisions hereof.

4.2 Consents; Approvals. This Waiver has been duly authorized by all necessary corporate or other similar action on the part of the Obligors, and, assuming due authorization, execution and delivery by the other parties hereto, this Waiver constitutes a legal, valid and binding obligation of the Obligors, enforceable in accordance with its terms, except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

4.3 No Event of Default. As of the date hereof, and after giving effect to the provisions of this Waiver, no Default or Event of Default exists or has occurred and is continuing.

4.4 Governmental Authorizations, Etc. [Other than the filing of a Form 8-K with the SEC in connection with the transactions contemplated by this Agreement and the 2006 NPA Guarantees,] no consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required to be obtained by the Company or the Guarantors in connection with the execution, delivery or performance by the Company or the Guarantors of this Waiver.

4.5 No Amendment Fees. No remuneration, whether by way of supplemental or additional interest, fees or other consideration, has been paid, is payable or will be paid directly or indirectly by the Company to any Person, in its capacity as a lender, holder, purchaser and/or guarantor (or agent for any of the foregoing), as an inducement to the Company's or such Person's execution and delivery of this Waiver or any related amendment, consent or waiver to the 2006 Note Purchase Agreement, the Bank Credit Agreement or any other loan agreement, note purchase agreement, indenture or other agreement evidencing any other Indebtedness of the Company with respect to any default or event of default (including any cross-default) arising thereunder as a result of, or in connection with, the Priority Indebtedness Default, the 2006 Notice Default, the Credit Agreement Cross Defaults, the Credit Agreement Notice Default, the 2010 NPA Cross Defaults or the 2010 Notice Default.

4.6 Effect of Amendments. The 2010 Note Purchase Agreement as hereby amended shall continue in full force and effect.

Section 5. Conditions Precedent. The amendments and consents set forth herein shall become effective as of the date first written above (the "**Effective Date**") and the waivers shall become effective as of the date set forth in Section 2 above, in each case upon the satisfaction of each of the following conditions precedent in a manner reasonably satisfactory to the Required Holders:

5.1 Executed Waiver. Each Noteholder shall have received a copy of this Waiver executed and delivered by the Company, the Guarantors and the Required Holders.

5.2 Waivers for 2006 Note Purchase Agreement and Bank Credit Agreement. Each Noteholder shall have received fully executed copies of (a) the Credit Agreement Waiver in substantially the form attached as Exhibit B hereto and otherwise in form and substance satisfactory to the Required Holders, and (b) the 2006 Amendment/Waiver in substantially the form attached as Exhibit A hereto and otherwise in form and substance satisfactory to the Required Holders, and the Credit Agreement Waiver and the 2006 Amendment/Waiver shall each be in full force and effect.

5.3 2006 Guarantee Documents. Each Noteholder shall have received fully executed copies of each of the 2006 Note Guarantees, in form and substance satisfactory to the Required Holders.

5.4 Representations and Warranties. The representations and warranties set forth in Section 4 hereof shall be true and correct on the Effective Date.

Section 6. Provisions of General Application

6.1 Effect of this Waiver. Except as expressly provided herein, (a) no terms or provisions of any agreement are modified, waived or changed by this Waiver, (b) the terms of this Waiver shall not operate as a waiver by Prudential or any holder of Notes of, or otherwise prejudice any of their respective rights, remedies or powers under, the 2010 Note Purchase Agreement or any other Financing Document, or under any applicable law and (c) the terms and provisions of the 2010 Note Purchase Agreement and the other Financing Documents shall continue in full force and effect.

6.2 Further Assurances. The parties hereto shall execute and deliver such additional documents and take such additional action as may be reasonably necessary or desirable to effectuate the provisions and purposes of this Waiver.

6.3 Costs and Expenses. Whether or not the amendments, waivers and consents contemplated hereby become effective, the Company confirms its obligations under Section 15 of the 2010 Note Purchase Agreement and agrees that, on the execution date hereof (or if an invoice is delivered subsequent to such date or if the amendments, waivers and consents set forth herein do not become effective, promptly, and in any event within 10 days of receiving any statement or invoice therefor), the Company will pay all out-of-pocket fees, costs and expenses reasonably incurred by the Noteholders relating to this Waiver, including, but not limited to, the statement for reasonable fees and disbursements of Bingham McCutchen LLP, special counsel to the Noteholders, presented to the Company on or before the execution date hereof. The Company will also promptly pay (in any event within 10 days), upon receipt of any statement thereof, each additional statement for reasonable fees and disbursements of special counsel to the Noteholders rendered after the execution date hereof in connection with this Waiver.

6.4 Governing Law. THIS WAIVER SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, AND THE RIGHTS OF THE PARTIES SHALL BE GOVERNED BY, THE LAW OF THE STATE OF NEW YORK EXCLUDING CHOICE-OF-LAW PRINCIPLES OF THE LAW OF SUCH STATE THAT WOULD PERMIT THE APPLICATION OF THE LAWS OF A JURISDICTION OTHER THAN SUCH STATE.

6.5 Binding Effect. This Waiver shall be binding upon and inure to the benefit of each of the parties hereto and their respective successors and assigns.

6.6 Counterparts. This Waiver may be executed in any number of counterparts (including those transmitted by electronic transmission (including, without limitation, facsimile and e-mail)), all of which taken together shall constitute one and the same agreement. Delivery of an executed signature page by facsimile or electronic transmission shall be as effective as delivery of a manually signed counterpart hereof.

6.7 Reaffirmation of Note Guarantees. Each of the Guarantors hereby (a) consents to this Waiver and the transactions contemplated hereby, (b) confirms its obligations under the terms of the Note Guarantee to which it is a party and the Intercompany Subordination Agreement, (c) acknowledges that such Note Guarantee continues in full force and effect in respect of, and to secure, the obligations under the 2010 Note Purchase Agreement, the Notes and the other Financing Documents, (d) its obligations and liabilities under the Intercompany Subordination Agreement continue to be in full force and effect, and (e) it has no defense, offset, counterclaim, right of recoupment or independent claim against the Noteholders with respect to such Note Guarantee, the Intercompany Subordination Agreement, the 2010 Note Purchase Agreement, the Notes or otherwise.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Waiver to be executed on their behalf by a duly authorized officer or agent thereof, as the case may be, as of the date first above written.

COMPANY:

MINE SAFETY APPLIANCES COMPANY

By: /s/

Name:

Title:

GUARANTORS:

GENERAL MONITORS, INC.

By: /s/ _____
Name:
Title:

GENERAL MONITORS TRANSNATIONAL, LLC

By: /s/ _____
Name:
Title:

MSA INTERNATIONAL, INC.

By: /s/ _____
Name:
Title:

NOTEHOLDERS:
PRUDENTIAL INVESTMENT MANAGEMENT, INC.

By: /s/ _____
Name:
Title:

**THE PRUDENTIAL INSURANCE COMPANY
OF AMERICA**

By: /s/ _____
Name:
Title:

ZURICH AMERICAN INSURANCE COMPANY

By: Prudential Private Placement Investors,
L.P. (as Investment Advisor)

By: Prudential Private Placement Investors, Inc.
(as its General Partner)

By: /s/ _____
Name:
Title:

FORETHOUGHT LIFE INSURANCE COMPANY

By: Prudential Private Placement Investors,
L.P. (as Investment Advisor)

By: Prudential Private Placement Investors, Inc.
(as its General Partner)

By: /s/ _____
Name:
Title:

MINE SAFETY APPLIANCES COMPANY

NOTE PURCHASE AGREEMENT

DATED As OF DECEMBER 20, 2006

\$60,000,000 5.41% SENIOR NOTES DUE DECEMBER 20, 2021

TABLE OF CONTENTS

1. AUTHORIZATION OF NOTES		2
1.1 Notes		2
1.2 Certain Defined Terms		2
2. SALE AND PURCHASE OF NOTES		2
3. CLOSING		3
4. CONDITIONS TO CLOSING		3
4.1 Representations and Warranties		3
4.2 Performance; No Default		3
4.3 Compliance Certificates		3
4.4 Opinions of Counsel		4
4.5 Purchase Permitted By Applicable Law, Etc		4
4.6 Sale of Other Notes		4
4.7 Payment of Special Counsel Fees		4
4.8 Private Placement Number		4
4.9 Changes in Corporate Structure		4
4.10 Funding Instructions		5
4.11 Proceedings and Documents		5
5. REPRESENTATIONS AND WARRANTIES OF THE COMPANY		5
5.1 Organization; Power and Authority		5
5.2 Authorization, Etc		5
5.3 Disclosure		5
5.4 Organization and Ownership of Shares of Subsidiaries		6
5.5 Financial Statements; Material Liabilities		6
5.6 Compliance with Laws, Other Instruments, Etc		7
5.7 Governmental Authorizations, Etc		7
5.8 Litigation; Observance of Statutes and Orders		7
5.9 Taxes		7
5.10 Title to Property; Leases		8
5.11 Licenses, Permits, Etc		8
5.12 Compliance with ERISA		8
5.13 Private Offering by the Company		9
5.14 Use of Proceeds; Margin Regulations		10
5.15 Existing Indebtedness		10
5.16 Foreign Assets Control Regulations, Etc		10
5.17 Status under Certain Statutes		11
6. REPRESENTATIONS OF THE PURCHASER		11
6.1 Purchase for Investment		11
6.2 Source of Funds		11
7. INFORMATION AS TO COMPANY		13
7.1 Financial and Business Information		13
7.2 Officer's Certificate		15
7.3 Visitation		16

8. REPAYMENT AND PREPAYMENT OF THE NOTES		16
8.1	Required Payments	16
8.2	Optional Prepayments	17
8.3	Change in Control	18
8.4	Allocation of Partial Prepayments	19
8.5	Maturity; Surrender, Etc	20
8.6	No Other Optional Prepayments or Purchase of Notes	20
8.7	Make-Whole Amount	20
9. AFFIRMATIVE COVENANTS		22
9.1	Compliance with Law	22
9.2	Insurance	22
9.3	Maintenance of Properties	22
9.4	Payment of Taxes	22
9.5	Corporate Existence, Etc	23
9.6	Pari Passu Ranking	23
9.7	Designation of Subsidiaries	23
9.8	Designation of Subsidiaries	24
10. NEGATIVE COVENANTS		24
10.1	Fixed Charges Coverage Ratio	24
10.2	Limitation of Consolidated Indebtedness	25
10.3	Priority Indebtedness	25
10.4	Liens	25
10.5	Transactions with Affiliates	27
10.6	Merger, Consolidation, Etc	27
10.7	Sale of Assets	28
10.8	Line of Business	28
10.9	Terrorism Sanctions Regulations	29
11. EVENTS OF DEFAULT		29
12. REMEDIES ON DEFAULT, ETC		31
12.1	Acceleration	31
12.2	Other Remedies	32
12.3	Rescission	32
12.4	No Waivers or Election of Remedies, Expenses, Etc	32
13. REGISTRATION; EXCHANGE; SUBSTITUTION OF NOTES		32
13.1	Registration of Notes	32
13.2	Transfer and Exchange of Notes	33
13.3	Replacement of Notes	33
14. PAYMENTS ON NOTES		34
14.1	Place of Payment	34
14.2	Home Office Payment	
15. EXPENSES, ETC		34
15.1	Home Office Payment	34
15.2	Survival	35

16. SURVIVAL OF REPRESENTATIONS AND WARRANTIES; ENTIRE AGREEMENT		35
17. AMENDMENT AND WAIVER		
	17.1 Requirements	35
	17.2 Solicitation of Holders of Notes	36
	17.3 Binding Effect, Etc	36
	17.4 Notes Held by Company, Etc	36
18. NOTICES		37
19. REPRODUCTION OF DOCUMENTS		37
20. CONFIDENTIAL INFORMATION		37
21. SUBSTITUTION OF PURCHASER		39
22. MISCELLANEOUS		39
	22.1 Successors and Assigns	39
	Payments Due on Non-Business Days; When Payments	
	22.2 Deemed Received	39
	22.3 Accounting Terms	40
	22.4 Severability	40
	22.5 Construction, Etc	40
	22.6 Counterparts	40
	22.7 Governing Law	41
	22.8 Jurisdiction and Process; Waiver of Jury Trial.	41

SCHEDULES & EXHIBITS

SCHEDULE A	Information Relating to Purchasers
SCHEDULE B	Defined Terms
SCHEDULE 3-	Payment Instructions
SCHEDULE 4.9	Changes in Corporate Structure
SCHEDULE 5.3	Disclosure Materials
SCHEDULE 5.4	Subsidiaries of the Company and Ownership of Subsidiary Stock
SCHEDULE 5.5	Financial Statements
SCHEDULE 5.8	Certain Litigation
SCHEDULE 5.11	Licenses, Permits, etc.
SCHEDULE 5.12	ERISA Affiliates
SCHEDULE 5.14	Use of Proceeds
SCHEDULE 5.15	Existing Indebtedness
EXHIBIT 1.1	Form of 5.41% Senior Note due December 20, 2021
EXHIBIT 4.4(a)	Form of Opinion of Counsel for the Company
EXHIBIT 4.4(b)	Form of Opinion of Special Counsel for the Purchasers

MINE SAFETY APPLIANCES COMPANY 121 GAMMA DRIVE
RIDC Industrial Park O'Hara Township
Pittsburgh, Pennsylvania 15238

\$60,000,000 5.41% SENIOR NOTES DUE DECEMBER 20, 2021

Dated as of December 20, 2006 To Each of the Purchasers Listed in the Attached Schedule A

Ladies and Gentlemen:

MINE SAFETY APPLIANCES COMPANY, a Pennsylvania corporation (together with its successors and assigns, the "*Company*"), agrees with each of the purchasers whose names appear at the end hereof (each a "*Purchaser*" and, collectively, the "*Purchasers*") as follows:

1. AUTHORIZATION OF NOTES.

1.1. Notes.

The Company will authorize the issue and sale of \$60,000,000 aggregate principal amount of its 5.41% Senior Notes due December 20, 2021 (the "*Notes*", such term to include any such notes issued in substitution therefor pursuant to Section 13 of this Agreement). The Notes shall be substantially in the form set out in Exhibit 1.1, with such changes therefrom, if any, as may be approved by the Purchasers and the Company.

1.2. Certain Defined Terms.

Certain capitalized and other terms used in this Agreement are defined in Schedule B; and references to a "Schedule" or an "Exhibit" are, unless otherwise specified, to a Schedule or an Exhibit attached to this Agreement.

2. SALE AND PURCHASE OF NOTES.

Subject to the terms and conditions of this Agreement, the Company will issue and sell to each Purchaser and each Purchaser will purchase from the Company, at the Closing provided for in Section 3, Notes in the principal amount specified opposite such Purchaser's name in Schedule A at the purchase price of 100% of the principal amount thereof. The Purchasers' obligations hereunder are several and not joint obligations and no Purchaser shall have any liability to any Person for the performance or non-performance of any obligation by any other Purchaser hereunder.

3. CLOSING.

The sale and purchase of the Notes to be purchased by each Purchaser shall occur at the offices of Bingham McCutchen LLP, 399 Park Avenue, New York, New York at 10:00 a.m., local time, at a closing (the "*Closing*") on December 20, 2006 or on such other Business Day thereafter on or prior to December 31, 2006 as may be agreed upon by the Company and the Purchasers. At the Closing the Company will deliver to each Purchaser the Notes to be purchased by such Purchaser in the form of a single Note (or such greater number of Notes in denominations of at least \$100,000 as such Purchaser may request), dated the date of the Closing and registered in such Purchaser's name (or in the name of its nominee), as indicated in Schedule A, against payment by federal funds wire transfer in immediately available funds of the amount of the purchase price therefor as directed by the Company in Schedule 3. If at the Closing the Company shall fail to tender such Notes to any Purchaser as provided above in this Section 3, or any of the conditions specified in Section 4 shall not have been fulfilled to such Purchaser's satisfaction, such Purchaser shall, at its election, be relieved of all further obligations under this Agreement, without thereby waiving any rights such Purchaser may have by reason of such failure or such nonfulfillment.

4. CONDITIONS TO CLOSING.

Each Purchaser's obligation to purchase and pay for the Notes to be sold to such Purchaser at the Closing is subject to the fulfillment to such Purchaser's satisfaction, prior to or at the Closing, of the following conditions:

4.1. Representations and Warranties.

The representations and warranties of the Company in this Agreement shall be correct when made and at the time of the Closing.

4.2. Performance; No Default.

The Company shall have performed and complied with all agreements and conditions contained in this Agreement required to be performed or complied with by it prior to or at the Closing and after giving effect to the issue and sale of the Notes (and the application of the proceeds thereof as contemplated by Section 5.14) no Default or Event of Default shall have occurred and be continuing.

4.3. Compliance Certificates.

(a) *Officer's Certificate.* The Company shall have delivered to such Purchaser an Officer's Certificate, dated the date of the Closing, certifying that the conditions specified in Sections 4.1, 4.2 and 4.9 have been fulfilled.

(b) *Secretary's Certificate.* The Company shall have delivered to such Purchaser a certificate of its Secretary or one of its Assistant Secretaries, dated the date of the Closing, certifying as to the resolutions attached thereto and other corporate proceedings relating to the authorization, execution and delivery of the Notes and this Agreement.

4.4. Opinions of Counsel.

Such Purchaser shall have received opinions in form and substance satisfactory to such Purchaser, dated the date of the Closing, from

(a) Douglas K. McClaine, General Counsel of the Company, covering the matters set forth in Exhibit 4.4(a) and covering such other matters incident to the transactions contemplated hereby as such Purchaser or its special counsel may reasonably request (and the Company hereby instructs such counsel to deliver such opinion to the Purchasers), and

(b) Bingham Mccutchen LLP, such Purchaser's special counsel in connection with such transactions, substantially in the form set out in Exhibit 4.4(b) and covering such other matters incident to such transactions as such Purchaser may reasonably request.

4.5. Purchase Permitted By Applicable Law, Etc.

On the date of the Closing such Purchaser's purchase of Notes shall (a) be permitted by the laws and regulations of each jurisdiction to which such Purchaser is subject, without recourse to provisions (such as section 1405(a)(8) of the New York Insurance Law) permitting limited investments by insurance companies without restriction as to the character of the particular investment, (b) not violate any applicable law or regulation (including, without limitation, Regulation T, U or X of the Board of Governors of the Federal Reserve System) and (c) not subject such Purchaser to any tax, penalty or liability under or pursuant to any applicable law or regulation, which law or regulation was not in effect on the date hereof. If requested by such Purchaser, such Purchaser shall have received an Officer's Certificate certifying as to such matters of fact as such Purchaser may reasonably specify to enable such Purchaser to determine whether such purchase is so permitted.

4.6. Sale of Other Notes.

Contemporaneously with the Closing, the Company shall sell to each other Purchaser and each other Purchaser shall purchase the Notes to be purchased by it at the Closing as specified in Schedule A.

4.7. Payment of Special Counsel Fees.

Without limiting the provisions of Section 15.1, the Company shall have paid on or before the Closing the reasonable fees, charges and disbursements of the Purchasers' special counsel referred to in Section 4.4 to the extent reflected in a statement of such counsel rendered to the Company at least one Business Day prior to the Closing.

4.8. Private Placement Number.

A Private Placement Number issued by Standard & Poor's CUSIP Service Bureau (in cooperation with the SVO) shall have been obtained for the Notes.

4.9. Changes in Corporate Structure.

Except as specified in Schedule 4.9, the Company shall not have changed its jurisdiction of incorporation or organization, as applicable, or been a party to any merger or consolidation, or succeeded to all or any substantial part of the liabilities of any other entity, at any time following the date of the most recent financial statements referred to in Schedule 5.5.

4.10. Funding Instructions.

At least three Business Days prior to the date of the Closing, each Purchaser shall have received written instructions signed by a Responsible Officer on letterhead of the Company confirming the information specified in Section 3 including (a) the name and address of the transferee bank, (b) such transferee bank's ABA number and (c) the account name and number into which the purchase price for the Notes is to be deposited.

4.11. Proceedings and Documents.

All corporate and other proceedings in connection with the transactions contemplated by this Agreement and all documents and instruments incident to such transactions shall be satisfactory to such Purchaser and its special counsel, and such Purchaser and its special counsel shall have received all such counterpart originals or certified or other copies of such documents as such Purchaser or such special counsel may reasonably request.

5. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants to each Purchaser that:

5.1. Organization; Power and Authority.

The Company is a corporation duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation, and is duly qualified as a foreign corporation and is in good standing in each jurisdiction in which such qualification is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Company has the corporate power and authority to own or hold under lease the properties it purports to own or hold under lease, to transact the business it transacts and proposes to transact, to execute and deliver this Agreement and the Notes and to perform the provisions hereof and thereof.

5.2. Authorization, Etc.

This Agreement and the Notes have been duly authorized by all necessary corporate action on the part of the Company, and this Agreement constitutes, and upon execution and delivery thereof each Note will constitute, a legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

5.3. Disclosure.

The Company, through its agent, PNC Capital Markets LLC, has delivered to each Purchaser a copy of a Private Placement Memorandum, dated November, 2006 (the "*Memorandum*"), relating to the transactions contemplated hereby. Except as disclosed in Schedule 5.3, this Agreement, the Memorandum and the documents, certificates or other writings delivered to the Purchasers by or on behalf of the Company in connection with the transactions contemplated hereby and identified on Schedule 5.3 and the financial statements listed on Schedule 5.5 (this Agreement, the Memorandum and such documents, certificates or other writings and such financial statements delivered to each Purchaser prior to December 5, 2006 being referred to, collectively, as the "*Disclosure Documents*"), taken as a whole, do not contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein not misleading in light of the circumstances under which they were made. Except as disclosed in the Disclosure Documents, since December 31, 2005, there has been no change in the financial condition, operations, business or properties of the Company or any of its Subsidiaries except changes that individually or in the aggregate would not reasonably be expected to have a Material Adverse Effect.

5.4. Organization and Ownership of Shares of Subsidiaries.

(a) Schedule 5.4 is (except as noted therein) a complete and correct list of the Company's Subsidiaries, showing, as to each Subsidiary, the correct name thereof, the jurisdiction of its organization, and the percentage of shares of each class of its Capital Stock or similar equity interests outstanding owned by the Company and each other Subsidiary and whether it is a Restricted Subsidiary or an Unrestricted Subsidiary.

(b) All of the outstanding shares of Capital Stock or similar equity interests of each Subsidiary shown in Schedule 5.4 as being owned by the Company and its Subsidiaries have been validly issued, are fully paid and nonassessable and are owned by the Company or another Subsidiary free and clear of any Lien (except as otherwise disclosed in Schedule 5.4).

(c) Each Subsidiary identified in Schedule 5.4 is a corporation or other legal entity duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, and is duly qualified as a foreign corporation or other legal entity and is in good standing in each jurisdiction in which such qualification is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Each such Subsidiary has the corporate or other power and authority to own or hold under lease the properties it purports to own or hold under lease and to transact the business it transacts and proposes to transact.

5.5. Financial Statements; Material Liabilities.

The Company has delivered to each Purchaser copies of the financial statements of the Company and its Subsidiaries listed on Schedule 5.5. All of said financial statements (including in each case the related schedules and notes) fairly present in all material respects the consolidated financial position of the Company and its Subsidiaries as of the respective dates specified in such Schedule and the consolidated results of their operations and cash flows for the respective periods so specified and have been prepared in accordance with GAAP consistently applied throughout the periods involved except as set forth in the notes thereto (subject, in the case of any interim financial statements, to normal year-end adjustments). The Company and its Subsidiaries do not have any Material liabilities that are not disclosed on such financial statements or otherwise disclosed in the Disclosure Documents.

5.6. Compliance with Laws, Other Instruments, Etc.

The execution, delivery and performance by the Company of this Agreement and the Notes will not

(a) contravene, result in any breach of, or constitute a default under, or result in the creation of any Lien in respect of any property of the Company or any Subsidiary under, any indenture, mortgage, deed of trust, loan, purchase or credit agreement, lease, corporate charter or by-laws, or any other Material agreement or instrument to which the Company or any Subsidiary is bound or by which the Company or any Subsidiary or any of their respective properties may be bound or affected,

(b) conflict with or result in a breach of any of the terms, conditions or provisions of any order, judgment, decree, or ruling of any court, arbitrator or Governmental Authority applicable to the Company or any Subsidiary, or

(c) violate any provision of any statute or other rule or regulation of any Governmental Authority applicable to the Company or any Subsidiary.

5.7. Governmental Authorizations, Etc.

No consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required in connection with the execution, delivery or performance by the Company of this Agreement or the Notes.

5.8. Litigation; Observance of Statutes and Orders.

(a) Except as disclosed in Schedule 5.8, there are no actions, suits, investigations -or proceedings pending or, to the knowledge of the Company, threatened against or affecting the Company or any Subsidiary or any property of the Company or any Subsidiary in any court or before any arbitrator of any kind or before or by any Governmental Authority that, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect.

(b) Neither the Company nor any Subsidiary is in default under any order, judgment, decree or ruling of any court, arbitrator or Governmental Authority or is in violation of any applicable law, ordinance, rule or regulation (including, without limitation, Environmental Laws or the USA Patriot Act) of any Governmental Authority, which default or violation, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect.

5.9. Taxes.

The Company and its Subsidiaries have filed all income tax returns that are required to have been filed in any jurisdiction, and have paid all taxes shown to be due and payable on such returns and all other taxes and assessments payable by them, to the extent such taxes and assessments have become due and payable and before they have become delinquent, except for any taxes and assessments (a) the amount of which is not individually or in the aggregate Material or (b) the amount, applicability or validity of which is currently being contested in good faith by appropriate proceedings and with respect to which the Company or a Subsidiary, as the case may be, has established adequate reserves in accordance with GAAP. The Federal income tax liabilities of the Company and its Subsidiaries have been finally determined (whether by reason of completed audits or the statute of limitations having run) for all fiscal years up to and including the fiscal year ended December 31, 2002.

5.10. Title to Property; Leases.

The Company and its Subsidiaries have good and sufficient title to their respective Material properties, including all such properties reflected in the most recent audited balance sheet referred to in Section 5.5 or purported to have been acquired by the Company or any Subsidiary after said date (except as sold or otherwise disposed of in the ordinary course of business), in each case free and clear of Liens prohibited by this Agreement, except for those defects in title and Liens that, individually or in the aggregate, would not have a Material Adverse Effect. All Material leases are valid and subsisting and are in full force and effect in all material respects.

5.11. Licenses, Permits, Etc.

Except as disclosed in Schedule 5.11, the Company and its Subsidiaries own or possess all licenses, permits, franchises, authorizations, patents, copyrights, proprietary software, service marks, trademarks and trade names, or rights thereto, that are Material, without known conflict with the rights of others, except for those conflicts that, individually or in the aggregate, would not have a Material Adverse Effect.

5.12. Compliance with ERISA.

(a) The Company and each ERISA Affiliate have operated and administered each Plan in compliance with all applicable laws except for such instances of noncompliance as have not resulted in and could not reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any ERISA Affiliate has incurred any liability pursuant to Title I or IV of ERISA or the penalty or excise tax provisions of the Code relating to employee benefit plans (as defined in section 3 of ERISA), and no event, transaction or condition has occurred or exists that would reasonably be expected to result in the incurrence of any such liability by the Company or any ERISA Affiliate, or in the imposition of any Lien on any of the rights, properties or assets of the Company or any ERISA Affiliate, in either case pursuant to Title I or IV of ERISA or to such penalty or excise tax provisions or to section 401(a)(29) or 412 of the Code or section 4068 of ERISA, other than such liabilities or Liens as would not be individually or in the aggregate Material.

(b) The present value of the aggregate benefit liabilities under each of the Plans (other than Multiemployer Plans), determined as of the end of such Plan's most recently ended plan year on the basis of the actuarial assumptions specified for funding purposes in such Plan's most recent actuarial valuation report, did not exceed the aggregate current value of the assets of such Plan allocable to such benefit liabilities. The term "*benefit liabilities*" has the meaning specified in section 4001 of ERISA and the terms "*current value*" and "*present value*" have the meaning specified in section 3 of ERISA.

(c) The Company and its ERISA Affiliates have not incurred withdrawal liabilities (and are not subject to contingent withdrawal liabilities) under section 4201 or 4204 of ERISA in respect of Multiemployer Plans that individually or in the aggregate are Material.

(d) The expected postretirement benefit obligation (determined as of the last day of the Company's most recently ended fiscal year in accordance with Financial Accounting Standards Board Statement No. 106, without regard to liabilities attributable to continuation coverage mandated by section 4980B of the Code) of the Company and its Subsidiaries is \$17,600,000.

(e) The execution and delivery of this Agreement and the issuance and sale of the Notes hereunder will not involve any transaction that is subject to the prohibitions of section 406 of ERISA or in connection with which a tax could be imposed pursuant to section 4975(c)(1)(A)-(D) of the Code. The representation by the Company to each Purchaser in the first sentence of this Section 5.12(e) is made in reliance upon and subject to the accuracy of such Purchaser's representation in Section 6.2 as to the sources of the funds used to pay the purchase price of the Notes to be purchased by such Purchaser.

(f) Schedule 5.12 sets forth all ERISA Affiliates and all "*employee benefit plans*" maintained by the Company (or any "affiliate" thereof) or in respect of which the Notes could constitute an "employer security" ("*employee benefit plan*" has the meaning specified in section 3 of ERISA, "*affiliate*" has the meaning specified in section 407(d) of ERISA and section V of the Department of Labor Prohibited Transaction Exemption 95-60 (60 FR 35925, July 12, 1995) and "*employer security*" has the meaning specified in section 407(d) of ERISA).

(g) The accumulated benefit obligation under each Foreign Pension Plan that is not subject to ERISA, determined as of the most recent valuation date in respect thereof using current exchange rates, does not exceed the value of the assets of such Foreign Pension Plan by more than \$1,500,000. All required payments in respect of the funding of each such Foreign Pension Plan have been made.

5.13. Private Offering by the Company.

Neither the Company nor anyone acting on its behalf has offered the Notes or any similar securities for sale to, or solicited any offer to buy any of the same from, or otherwise approached or negotiated in respect thereof with, any person other than the Purchasers and not more than twenty (20) other Institutional Investors (as defined in clause (c) to the definition of such term), each of which has been offered the Notes at a private sale for investment. Neither the Company nor anyone acting on its behalf has taken, or will take, any action that would subject the issuance or sale of the Notes to the registration requirements of Section 5 of the Securities Act or to the registration requirements of any securities or blue sky laws of any applicable jurisdiction.

5.14. Use of Proceeds; Margin Regulations.

The Company will apply the proceeds of the sale of the Notes as set forth in Schedule

5.14. No part of the proceeds from the sale of the Notes hereunder will be used, directly or indirectly, for the purpose of buying or carrying any margin stock within the meaning of Regulation U of the Board of Governors of the Federal Reserve System (12 CFR 221), or for the purpose of buying or carrying or trading in any securities under such circumstances as to involve the Company in a violation of Regulation X of said Board (12 CFR 224) or to involve any broker or dealer in a violation of Regulation T of said Board (12 CFR 220). Margin stock does not constitute more than 1% of the value of the consolidated assets of the Company and its Subsidiaries and the Company does not have any present intention that margin stock will constitute more than 1% of the value of such assets. As used in this Section, the terms "*margin stock*" and "*purpose of buying or carrying*" shall have the meanings assigned to them in said Regulation U.

5.15. Existing Indebtedness.

(a) Except as described therein, Schedule 5.15 sets forth a complete and correct list of all outstanding Indebtedness of the Company and its Subsidiaries as of September 30, 2006 (including a description of the obligors and obligees, principal amount outstanding and collateral therefor, if any, and Guaranty thereof, if any) since which date there has been no Material change in the amounts, interest rates, sinking funds, installment payments or maturities of the Indebtedness of the Company or its Subsidiaries. Neither the Company nor any Subsidiary is in default and no waiver of default is currently in effect, in the payment of any principal or interest on any Indebtedness of the Company or such Subsidiary and no event or condition exists with respect to any Indebtedness of the Company or any Subsidiary the outstanding principal amount of which exceeds \$5,000,000 that would permit (or that with notice or the lapse of time, or both, would permit) one or more Persons to cause such Indebtedness to become due and payable before its stated maturity or before its regularly scheduled dates of payment.

(b) Neither the Company nor any Subsidiary is a party to, or otherwise subject to any provision contained in, any instrument evidencing Indebtedness of the Company or such Subsidiary, any agreement relating thereto or any other agreement (including, but not limited to, its charter or other organizational document) which limits the amount of, or otherwise imposes restrictions on the incurring of, Indebtedness of the Company, except as specifically indicated in Schedule 5.15.

5.16. Foreign Assets Control Regulations, Etc.

(a) Neither the sale of the Notes by the Company hereunder nor its use of the proceeds thereof will violate the Trading with the Enemy Act, as amended, or any of the foreign assets control regulations of the United States Treasury Department (31 CFR, Subtitle B, Chapter V, as amended) or any enabling legislation or executive order relating thereto.

(b) Neither the Company nor any Subsidiary (a) is a Person described or designated in the Specially Designated Nationals and Blocked Persons List of the Office of Foreign Assets Control or in Section 1 of the Anti-Terrorism Order or (b) engages in any dealings or transactions with any such Person. The Company and its Subsidiaries are in compliance, in all material respects, with the USA Patriot Act.

(c) No part of the proceeds from the sale of the Notes hereunder will be used, directly or indirectly, for any payments to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended, assuming in all cases that such Act applies to the Company.

5.17. Status under Certain Statutes.

Neither the Company nor any Subsidiary is subject to regulation under the Investment Company Act of 1940, as amended, the Public Utility Holding Company Act of 2005, as amended, the ICC Termination Act of 1995, as amended, or the Federal Power Act, as amended.

6. REPRESENTATIONS OF THE PURCHASERS.

6.1. Purchase for Investment.

Each Purchaser severally represents that it is purchasing the Notes for its own account or for one or more separate accounts maintained by such Purchaser or for the account of one or more pension or trust funds and not with a view to the distribution thereof, *provided* that the disposition of such Purchaser's or their property shall at all times be within such Purchaser's or their control. Each Purchaser understands that the Notes have not been registered under the Securities Act and may be resold only if registered pursuant to the provisions of the Securities Act or if an exemption from registration is available, except under circumstances where neither such registration nor such an exemption is required by law, and that the Company is not required to register the Notes.

6.2. Source of Funds.

Each Purchaser severally represents that at least one of the following statements is an accurate representation as to each source of funds (a "*Source*") to be used by such Purchaser to pay the purchase price of the Notes to be purchased by such Purchaser hereunder:

(a) the Source is an "*insurance company general account*" (as the term is defined in the United States Department of Labor's Prohibited Transaction Exemption ("*PTE*") 95-60) in respect of which the reserves and liabilities (as defined by the annual statement for life insurance companies approved by the National Association of Insurance Commissioners (the "*NAIC Annual Statement*")) for the general account contract(s) held by or on behalf of any employee benefit plan together with the amount of the reserves and liabilities for the general account contract(s) held by or on behalf of any other employee benefit plans maintained by the same employer (or affiliate thereof as defined in PTE 95-60) or by the same employee organization in the general account do not exceed 10% of the total reserves and liabilities of the general account (exclusive of separate account liabilities) *plus* surplus as set forth in the NAIC Annual Statement filed with such Purchaser's state of domicile; or

(b) the Source is a separate account that is maintained solely in connection with such Purchaser's fixed contractual obligations under which the amounts payable, or credited, to any employee benefit plan (or its related trust) that has any interest in such separate account (or to any participant or beneficiary of such plan (including any annuitant)) are not affected in any manner by the investment performance of the separate account; or

(c) the Source is either (i) an insurance company pooled separate account, within the meaning of PTE 90-1 or (ii) a bank collective investment fund, within the meaning of the PTE 91-38 and, except as disclosed by such Purchaser to the Company in writing pursuant to this clause (c), no employee benefit plan or group of plans maintained by the same employer or employee organization beneficially owns more than 10% of all assets allocated to such pooled separate account or collective investment fund; or

(d) the Source constitutes assets of an "investment fund" (within the meaning of Part V of PTE 84-14 (the "QPAM Exemption ")) managed by a "qualified professional asset manager" or "QPAM" (within the meaning of Part V of the QPAM Exemption), no employee benefit plan's assets that are included in such investment fund, when combined with the assets of all other employee benefit plans established or maintained by the same employer or by an affiliate (within the meaning of Section V(c)(1) of the QPAM Exemption) of such employer or by the same employee organization and managed by such QPAM, exceed 20% of the total client assets managed by such QPAM, the conditions of Part I(c) and (g) of the QPAM Exemption are satisfied, neither the QPAM nor a person controlling or controlled by the QPAM (applying the definition of "control" in Section V(e) of the QPAM Exemption) owns a 5% or more interest in the Company and (i) the identity of such QPAM and (ii) the names of all employee benefit plans whose assets are included in such investment fund have been disclosed to the Company in writing pursuant to this clause (d); or

(e) the Source constitutes assets of a "plan(s)" (within the meaning of Section IV of PTE 96-23 (the "INHAM Exemption ")) managed by an "in-house asset manager" or "INHAM" (within the meaning of Part IV of the INHAM Exemption), the conditions of Part I(a), (g) and (h) of the INHAM Exemption are satisfied, neither the INHAM nor a person controlling or controlled by the INHAM (applying the definition of "control" in Section IV(d) of the INHAM Exemption) owns a 5% or more interest in the Company and (i) the identity of such INHAM and (ii) the name(s) of the employee benefit plan(s) whose assets constitute the Source have been disclosed to the Company in writing pursuant to this clause (e); or

(f) the Source is a governmental plan; or

(g) the Source is one or more employee benefit plans, or a separate account or trust fund comprised of one or more employee benefit plans, each of which has been identified to the Company in writing pursuant to this clause (g); or

(h) the Source does not include assets of any employee benefit plan, other than a plan exempt from the coverage of ERISA.

As used in this Section 6.2, the terms "*employee benefit plan*," "*governmental plan*," and "*separate account*" shall have the respective meanings assigned to such terms in section 3 of ERISA.

7. INFORMATION AS TO COMPANY.

7.1. Financial and Business Information.

The Company shall deliver to each holder of Notes that is an Institutional Investor:

(a) *Quarterly Statements* -- within 60 days after the end of each quarterly fiscal period in each fiscal year of the Company (other than the last quarterly fiscal period of each such fiscal year), duplicate copies of,

(i) an unaudited consolidated condensed balance sheet of the Company and its Restricted Subsidiaries as at the end of such quarter, and

(ii) unaudited consolidated condensed statements of income, changes in shareholders' equity and cash flows of the Company and its Restricted Subsidiaries, for such quarter and (in the case of the second and third quarters) for the portion of the fiscal year ending with such quarter,

setting forth in each case in comparative form the figures for the corresponding periods in the previous fiscal year, all in reasonable detail, prepared in accordance with GAAP applicable to quarterly financial statements generally, and certified by a Senior Financial Officer as fairly presenting, in all material respects, the consolidated financial position of the companies being reported on and their consolidated results of operations and cash flows, subject to changes resulting from year-end adjustments,

(b) *Annual Statements* -- within 105 days (or such shorter period as is 15 days greater than the period applicable to the filing of the Company's Annual Report on Form 10-K (the "*Form 10-K*") with the SEC regardless of whether the Company is subject to the filing requirements thereof) after the end of each fiscal year of the Company, duplicate copies of,

(i) a consolidated balance sheet of the Company and its Restricted Subsidiaries, as at the end of such year,

(ii) a consolidated balance sheet of the Company and its Subsidiaries, as at the end of such year,

(iii) consolidated statements of income, cash flows and changes in retained earnings of the Company and its Restricted Subsidiaries, for such year, and

(iv) consolidated statements of income, changes in shareholders' equity and cash flows of the Company and its Subsidiaries, for such year, setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail, prepared in accordance with GAAP, and accompanied by an opinion thereon of independent public accountants of recognized national standing, which opinion shall state that such financial statements present fairly, in all material respects, the financial position of the companies being reported upon and their results of operations and cash flows and have been prepared in conformity with GAAP, and that the examination of such accountants in connection with such financial statements has been made in accordance with generally accepted auditing standards, and that such audit provides a reasonable basis for such opinion in the circumstances, *provided* that the delivery within the time period specified above of the Form 10-K for such fiscal year (together with the Company's annual report to shareholders, if any, prepared pursuant to Rule 14a-3 under the Exchange Act) prepared in accordance with the requirements therefor and filed with the SEC shall be deemed to satisfy the requirements of this Section 7.1(b), and *provided, further* that delivery within the time period specified above of copies of the Company's Form 10-K prepared in compliance with the requirements therefor and filed with the SEC shall be deemed to satisfy the requirements of this clauses (ii) and (iv) of this Section 7. 1 (b) (but not clauses (i) and (ii) except to the extent all Subsidiaries are Restricted Subsidiaries), and *provided, further*, that the Company shall be deemed to have made such delivery of such Form 10-K if it shall have timely made such Form 10-K available on "EDGAR" and on its home page on the worldwide web (at the date of this Agreement located at: <http://www.msanet.com>) and shall have given such holder prior notice of such availability on EDGAR and on its home page in connection with each delivery (such availability and notice thereof being referred to as "*Electronic Delivery*");

(c) *SEC and Other Reports* -- promptly upon their becoming available, one copy of (i) each financial statement, report, notice or proxy statement sent by the Company or any Subsidiary to its principal lending banks as a whole (excluding information sent to such banks in the ordinary course of administration of a bank facility, such as information relating to pricing and borrowing availability) or to its public securities holders generally, and (ii) each regular or periodic report, each registration statement that shall have become effective (without exhibits except as expressly requested by such holder), and each final prospectus and all amendments thereto filed by the Company or any Subsidiary with the SEC;

(d) *Notice of Default or Event of Default* -- promptly, and in any event within five days after a Responsible Officer becoming aware of the existence of any Default or Event of Default, a written notice specifying the nature and period of existence thereof and what action the Company is taking or proposes to take with respect thereto;

(e) *ERISA Matters* -- promptly, and in any event within five days after a Responsible Officer becoming aware of any of the following, a written notice setting forth the nature thereof and the action, if any, that the Company or an ERISA Affiliate proposes to take with respect thereto:

(i) with respect to any Plan, any reportable event, as defined in section 4043(c) of ERISA and the regulations thereunder, for which notice thereof has not been waived pursuant to such regulations as in effect on the date hereof; or

(ii) the taking by the PBGC of steps to institute, or the threatening by the PBGC of the institution of, proceedings under section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Plan, or the receipt by the Company or any ERISA Affiliate of a notice from a Multi employer Plan that such action has been taken by the PBGC with respect to such Multi-employer Plan; or

(iii) any event, transaction or condition that could result in the incurrence of any liability by the Company or any ERISA Affiliate pursuant to Title I or IV of ERISA or the penalty or excise tax provisions of the Code relating to employee benefit plans, or in the imposition of any Lien on any of the rights, properties or assets of the Company or any ERISA Affiliate pursuant to Title I or IV of ERISA or such penalty or excise tax provisions, if such liability or Lien, taken together with any other such liabilities or Liens then existing, would reasonably be expected to have a Material Adverse Effect;

(f) *Notices from Governmental Authorities* -- promptly, and in any event within 30 days of receipt thereof, copies of any notice to the Company or any Subsidiary from any Federal or state Governmental Authority relating to any order, ruling, statute or other law or regulation that could reasonably be expected to have a Material Adverse Effect; and

(g) *Requested Information* -- with reasonable promptness, such other data and information relating to the business, operations, affairs, financial condition, assets or properties of the Company or any of its Subsidiaries (including, but without limitation, actual copies of the Company's Form 10-K) or relating to the ability of the Company to perform its obligations under this Agreement and under the Notes as from time to time may be reasonably requested by such holder of Notes.

7.2. Officer's Certificate.

Each set of financial statements delivered to a holder of Notes pursuant to Section 7.1(a) or Section 7.1(b) shall be accompanied by a certificate of a Senior Financial Officer setting forth (which, in the case of Electronic Delivery of any such financial statements, shall be by separate concurrent delivery of such certificate to each such holder of Notes):

(a) *Covenant Compliance* -- the information (including detailed calculations) required in order to establish whether the Company was in compliance with the requirements of Section 10 during the quarterly or annual period covered by the statements then being furnished (including with respect to each such Section, where applicable, the calculations of the maximum or minimum amount, ratio or percentage, as the case may be, permissible under the terms of such Section, and the calculation of the amount, ratio or percentage then in existence), and, with respect to each Asset Disposition, if any, of property having a Fair Market Value of not less than

\$1,000,000 made during such period *without* a determination by the board of directors of the Company pursuant to Section 10.7(a) that such Asset Disposition was, in such board's good faith opinion, made in exchange for cash consideration having a Fair Market Value at least equal to that of the property exchanged and was in the best interests of the Company, a statement to the effect that each such Asset Disposition was, in such Senior Financial Officer's good faith opinion, made in exchange for cash consideration having a Fair Market Value at least equal to that of the property exchanged and was in the best interests of the Company; and

(b) *Event of Default* -- a statement that such Senior Financial Officer has reviewed the relevant terms hereof and has made, or caused to be made, under his or her supervision, a review of the transactions and conditions of the Company and its Subsidiaries from the beginning of the quarterly or annual period covered by the statements then being furnished to the date of the certificate and that such review shall not have disclosed the existence during such period of any condition or event that constitutes a Default or an Event of Default or, if any such condition or event existed or exists, specifying the nature and period of existence thereof and what action the Company shall have taken or proposes to take with respect thereto.

7.3. Visitation.

The Company shall permit the representatives of each holder of Notes that is an Institutional Investor:

(a) *No Default* -- if no Default or Event of Default then exists, at the expense of such holder and upon reasonable prior notice to the Company, to visit the principal executive office of the Company, to discuss the affairs, finances and accounts of the Company and its Subsidiaries with the Company's officers, and with the consent of the Company, (which consent will not be unreasonably withheld) to visit the other offices and properties of the Company and each Subsidiary, all at such reasonable times and as often as may be reasonably requested in writing; and

(b) *Default* -- if a Default or Event of Default then exists, at the expense of the Company, to visit and inspect any of the offices or properties of the Company or any Subsidiary, to examine all their respective books of account, records, reports and other papers, to make copies and extracts therefrom, and to discuss their respective affairs, finances and accounts with their respective officers and independent public accountants (and by this provision the Company authorizes said accountants to discuss the affairs, finances and accounts of the Company and its Subsidiaries), all at such times and as often as may be requested.

8. PAYMENT AND PREPAYMENT OF THE NOTES.

8.1. Required Payments.

On December 20, 2013 and on each December 20 thereafter to and including December 20, 2021, the Company will prepay \$6,666,666.67 principal amount (or such lesser principal amount as shall then be outstanding) of the Notes at par and without payment of the Make Whole Amount or any premium, *provided* that upon any partial prepayment of the Notes pursuant to Section 8.2 or 8.3 or partial purchase of the Notes permitted by Section 8.6, the principal amount of each required prepayment of the Notes becoming due under this Section 8.1 on and after the date of such prepayment or purchase shall be reduced in the same proportion as the aggregate unpaid principal amount of the Notes is reduced as a result of such prepayment or purchase.

8.2. Optional Prepayments.

(a) *Optional Prepayments with Make-Whole Amount.* The Company may, at its option, upon notice as provided below, prepay at any time all, or from time to time any part of, the Notes, in an amount not less than 5% of the aggregate principal amount of the Notes then outstanding in the case of a partial prepayment, at 100% of the principal amount so prepaid, *plus* the Make-Whole Amount determined for the prepayment date with respect to such principal amount. The Company will give each holder of Notes written notice of each optional prepayment under this Section 8.2 not less than 30 days and not more than 60 days prior to the date fixed for such prepayment. Each such notice shall specify such date (which shall be a Business Day), the aggregate principal amount of the Notes to be prepaid on such date, the principal amount of each Note held by such holder to be prepaid (determined in accordance with Section 8.4(b)), and the interest to be paid on the prepayment date with respect to such principal amount being prepaid, and shall be accompanied by a certificate of a Senior Financial Officer as to the estimated Make- Whole Amount due in connection with such prepayment (calculated as if the date of such notice were the date of the prepayment), setting forth the details of such computation. Two Business Days prior to such prepayment, the Company shall deliver to each holder of Notes a certificate of a Senior Financial Officer specifying the calculation of such Make-Whole Amount as of the specified prepayment date.

(b) *Prepayment of Notes Pursuant to Indebtedness Prepayment Application.* In the event that the Company shall be obligated to apply any Net Proceeds Amount in respect of any Transfer to an Indebtedness Prepayment Application, the Company will give written notice (a "*Transfer Application Notice*") of such election to each holder of Notes, which notice shall

(i) describe the facts, circumstances and the Net Proceeds Amount in respect of such Transfer in reasonable detail,

(ii) hereunder, refer to this Section 8.2(b) and the rights of the holders of the Notes

(iii) set forth the aggregate principal amount of Indebtedness which the Company intends to prepay with such Net Proceeds Amount,

(iv) contain an offer to prepay the Notes held by such holder in a principal amount which equals the "*Ratable Portion*" (as such term is defined in the definition of "Indebtedness Prepayment Application" contained in Schedule B) for such Notes, *plus* accrued and unpaid interest thereon to the Transfer Application Prepayment Date (as defined below) with respect to each Note (showing in such offer the principal amount of such Notes to be prepaid on such prepayment date), which prepayment shall be on a Business Day specified in such notice that is not prior to the stated date in clause (v) below and is not more than 90 days after the date of such Transfer Application Notice (the "*TransferApplication Prepayment Date*"), and

(v) request each holder to notify the Company in writing by a stated date, which date is not less than 30 days after such notice has been dispatched by the Company in accordance with Section 18, if such holder wishes its Notes to be so prepaid (it being understood that the failure by any holder to send any such notice to the Company shall be deemed to be a *rejection* of such offer of prepayment pursuant to this Section 8.2(b)).

8.3. Change in Control.

(a) *Notice of Change in Control or Control Event* -- The Company will, within five Business Days after any Responsible Officer has knowledge of the occurrence of any Change in Control or Control Event, give written notice of such Change in Control or Control Event to each holder of Notes unless notice in respect of such Change in Control (or the Change in Control contemplated by such Control Event) shall have been given pursuant to Section 8.3(b). If a Change in Control has occurred, such notice shall contain and constitute an offer to prepay Notes as described in Section 8.3(c) and shall be accompanied by the certificate described in Section 8.3(g).

(b) *Condition to Company Action* -- The Company will not take any action that consummates or finalizes a Change in Control unless

(i) at least 30 days prior to such action it shall have given to each holder of Notes written notice containing and constituting an offer to prepay Notes as described in Section 8.3(c), accompanied by the certificate described in Section 8.3(g), and

(ii) contemporaneously with such action, it prepays all Notes required to be prepaid in accordance with this Section 8.3.

(c) *Offer to Prepay Notes* -- The offer to prepay Notes contemplated by Section 8.3(a) and Section 8.3(b) shall be an offer to prepay, in accordance with and subject to this Section 8.3, all, but not less than all, the Notes held by each holder (in this case only, "*holder*" in respect of any Note registered in the name of a nominee for a disclosed beneficial owner shall mean such beneficial owner) on a date specified in such offer (the "*Proposed Prepayment Date* "). If such Proposed Prepayment Date is in connection with an offer contemplated by Section 8.3(a), such date shall be not less than 45 days and not more than 60 days after the date of such offer. If the Proposed Prepayment Date shall not be specified in such offer, the Proposed Prepayment Date shall be the 60th day after the date of such offer.

(d) *Acceptance and Rejection* -- A holder of Notes may accept the offer to prepay made pursuant to this Section 8.3 by causing a notice of such acceptance to be delivered to the Company at least fifteen days prior to the Proposed Prepayment Date. A failure by a holder of Notes to respond to an offer to prepay made pursuant to this Section 8.3 shall be deemed to constitute a *rejection* of such offer by such holder.

(e) *Prepayment* -- Prepayment of the Notes to be prepaid pursuant to this Section 8.3 shall be at 100% of the principal amount of such Notes, together with interest on such Notes accrued to the date of prepayment. The prepayment shall be made on the Proposed Prepayment Date except as provided in Section 8.3(f).

(f) *Deferral of Obligation to Purchase* -- The obligation of the Company to prepay Notes pursuant to the offers accepted in accordance with Section 8.3(d) is subject to the occurrence of the Change in Control in respect of which such offers and acceptances shall have been made. In the event that such Change in Control does not occur on the Proposed Prepayment Date in respect thereof, the prepayment shall be deferred until and shall be made on the date on which such Change in Control occurs. The Company shall keep each holder of Notes reasonably and timely informed of

(i) any such deferral of the date of prepayment,

(ii) the date on which such Change in Control and the prepayment are expected to occur, and

(iii) any determination by the Company that the efforts to effect such Change in Control have ceased or been abandoned (in which case the offers and acceptances made pursuant to this Section 8.3 in respect of such Change in Control shall be deemed rescinded).

(g) *Officer's Certificate* -- Each offer to prepay the Notes pursuant to this Section 8.3 shall be accompanied by a certificate, executed by a Senior Financial Officer and dated the date of such offer, specifying:

(i) the Proposed Prepayment Date;

(ii) that such offer is made pursuant to this Section 8.3;

(iii) the principal amount of each Note offered to be prepaid;

(iv) the interest that would be due on each Note offered to be prepaid, accrued to the Proposed Prepayment Date;

(v) the last date upon which the offer can be accepted or rejected, and setting forth the consequences of failing to provide an acceptance or rejection, as provided in Section 8.3(d);

(vi) that the conditions of this Section 8.3 have been fulfilled; and

(vii) in reasonable detail, the nature and date or proposed date of the Change in Control.

8.4. Allocation of Partial Prepayments.

(a) *Required Payments*. In the case of each required payment of the Notes pursuant to Section 8.1 hereof, the principal amount of the Notes to be paid shall be allocated among all of the Notes at the time outstanding in proportion, as nearly as practicable, to the respective unpaid principal amounts thereof not theretofore called for payment.

(b) *Optional Prepayments*. In the case of each partial prepayment of the Notes pursuant to Section 8.2(a), the principal amount of the Notes to be prepaid shall be allocated among all of the Notes at the time outstanding in proportion, as nearly as practicable, to the respective unpaid principal amounts thereof not theretofore called for prepayment.

8.5. Maturity; Surrender, Etc.

In the case of each prepayment of Notes pursuant to this Section 8, the principal amount of each Note to be prepaid shall mature and become due and payable on the date fixed for such prepayment (which shall be a Business Day), together with interest on such principal amount accrued to such date and (in respect of any prepayment pursuant to Section 8.2(a) only) the applicable Make-Whole Amount, if any. From and after such date, unless the Company shall fail to pay such principal amount when so due and payable, together with the interest and Make Whole Amount, if any, as aforesaid, interest on such principal amount shall cease to accrue. Any Note paid or prepaid in full shall be surrendered to the Company and cancelled and shall not be reissued, and no Note shall be issued in lieu of any prepaid principal amount of any Note.

8.6. No Other Optional Prepayments or Purchase of Notes.

The Company will not and will not permit any Affiliate to purchase, redeem, prepay or otherwise acquire, directly or indirectly, any of the outstanding Notes except (a) upon the payment or prepayment of the Notes in accordance with the terms of this Agreement and the Notes or (b) pursuant to an offer to purchase made by the Company or an Affiliate pro rata to the holders of all Notes at the time outstanding upon the same terms and conditions. Any such offer shall provide each holder with sufficient information to enable it to make an informed decision with respect to such offer, and shall remain open for at least 20 Business Days. If the holders of more than 25% of the principal amount of the Notes then outstanding accept such offer, the Company shall promptly notify the remaining holders of such fact and the expiration date for the acceptance by holders of Notes of such offer shall be extended by the number of days necessary to give each such remaining holder at least 20 Business Days from its receipt of such notice to accept such offer. The Company will promptly cancel all Notes acquired by it or any Affiliate pursuant to any payment, prepayment or purchase of Notes pursuant to any provision of this Agreement and no Notes may be issued in substitution or exchange for any such Notes.

8.7. Make-Whole Amount.

"*Make-Whole Amount*" means, with respect to any Note, an amount equal to the excess, if any, of the Discounted Value of the Remaining Scheduled Payments with respect to the Called Principal of such Note over the amount of such Called Principal, *provided* that the Make-Whole Amount may in no event be less than zero. For the purposes of determining the Make-Whole Amount, the following terms have the following meanings:

"*Called Principal*" means, with respect to any Note, the principal of such Note that is to be prepaid pursuant to Section 8.2(a) or has become or is declared to be immediately due and payable pursuant to Section 12.1, as the context requires.

"*Discounted Value*" means, with respect to the Called Principal of any Note, the amount obtained by discounting all Remaining Scheduled Payments with respect to such Called Principal from their respective scheduled due dates to the Settlement Date with respect to such Called Principal, in accordance with accepted financial practice and at a discount factor (applied on the same periodic basis as that on which interest on the Notes is payable) equal to the Reinvestment Yield with respect to such Called Principal.

"Reinvestment Yield" means, with respect to the Called Principal of any Note, 0.50% over the yield to maturity implied by (a) the yields reported as of 10:00 a.m. (New York City time) on the second Business Day preceding the Settlement Date with respect to such Called Principal, on the display designated as "Page PX 1" (or such other display as may replace Page PX 1) on Bloomberg Financial Markets for the most recently issued actively traded on the run U.S. Treasury securities having a maturity equal to the Remaining Average Life of such Called Principal as of such Settlement Date, or (b) if such yields are not reported as of such time or the yields reported as of such time are not ascertainable (including by way of interpolation), the Treasury Constant Maturity Series Yields reported, for the latest day for which such yields have been so reported as of the second Business Day preceding the Settlement Date with respect to such Called Principal, in Federal Reserve Statistical Release H.15 (or any comparable successor publication) for U.S. Treasury securities having a constant maturity equal to the Remaining Average Life of such Called Principal as of such Settlement Date.

In the case of each determination under clause (a) or clause (b), as the case may be, of the preceding paragraph, such implied yield will be determined, if necessary, by

(i) converting U.S. Treasury bill quotations to bond equivalent yields in accordance with accepted financial practice and (ii) interpolating linearly between (1) the applicable U.S. Treasury security with the maturity closest to and greater than such Remaining Average Life and (2) the applicable U.S. Treasury security with the maturity closest to and less than such Remaining Average Life. The Reinvestment Yield shall be rounded to the number of decimal places as appears in the interest rate of the applicable Note.

"Remaining Average Life" means, with respect to any Called Principal of any Notes, the number of years (calculated to the nearest one-twelfth year) obtained by dividing (a) such Called Principal into (b) the sum of the products obtained by multiplying (i) the principal component of each Remaining Scheduled Payment with respect to such Called Principal by (ii) the number of years (calculated to the nearest one twelfth year) that will elapse between the Settlement Date with respect to such Called Principal and the scheduled due date of such Remaining Scheduled Payment.

"Remaining Scheduled Payments" means, with respect to the Called Principal of any Note, all payments of such Called Principal and interest thereon that would be due after the Settlement Date with respect to such Called Principal if no payment of such Called Principal were made prior to its scheduled due date, *provided* that if such Settlement Date is not a date on which interest payments are due to be made under the terms of the Notes, then the amount of the next succeeding scheduled interest payment will be reduced by the amount of interest accrued to such Settlement Date and required to be paid on such Settlement Date pursuant to Section 8.2(a) or Section 12.1.

"Settlement Date " means, with respect to the Called Principal of any Note, the date on which such Called Principal is to be prepaid pursuant to Section 8.2(a) or has become or is declared to be immediately due and payable pursuant to Section 12.1, as the context requires.

9. AFFIRMATIVE COVENANTS.

The Company covenants that so long as any of the Notes are outstanding:

The Company covenants that so long as any of the Notes are outstanding:

9.1. Compliance with Law.

Without limiting Section 10.9, the Company will and will cause each of its Subsidiaries to comply with all laws, ordinances or governmental rules or regulations to which each of them is subject, including, without limitation, ERISA, the USA Patriot Act and Environmental Laws, and will obtain and maintain in effect all licenses, certificates, permits, franchises and other governmental authorizations necessary to the ownership of their respective properties or to the conduct of their respective businesses, in each case to the extent necessary to ensure that non compliance with such laws, ordinances or governmental rules or regulations or failures to obtain or maintain in effect such licenses, certificates, permits, franchises and other governmental authorizations would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.

9.2. Insurance.

The Company will and will cause each of its Subsidiaries to maintain, with financially sound and reputable insurers, insurance with respect to their respective properties and businesses against such casualties and contingencies, of such types, on such terms and in such amounts (including deductibles, co-insurance and self-insurance, if adequate reserves are maintained with respect thereto) as is customary in the case of entities of established reputations engaged in the same or a similar business and similarly situated.

9.3. Maintenance of Properties.

The Company will and will cause each of its Subsidiaries to maintain and keep, or cause to be maintained and kept, their respective properties in good repair, working order and condition (other than ordinary wear and tear), so that the business carried on in connection therewith may be properly conducted at all times, *provided* that this Section shall not prevent the Company or any Subsidiary from discontinuing the operation and the maintenance of any of its properties if such discontinuance is desirable in the conduct of its business and the Company has concluded that such discontinuance would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

9.4. Payment of Taxes.

The Company will and will cause each of its Subsidiaries to file all income tax or similar tax returns required to be filed in any jurisdiction and to pay and discharge all taxes shown to be due and payable on such returns and all other taxes, assessments, governmental charges, or levies payable by any of them, to the extent the same have become due and payable and before they have become delinquent, *provided* that neither the Company nor any Subsidiary need pay any such tax, assessment, charge or levy if (a) the amount, applicability or validity thereof is contested by the Company or such Subsidiary on a timely basis in good faith and in appropriate proceedings, and the Company or a Subsidiary has established adequate reserves therefor in accordance with GAAP on the books of the Company or such Subsidiary or (b) the nonpayment of all such taxes, assessments, charges and levies in the aggregate would not reasonably be expected to have a Material Adverse Effect.

9.5. Corporate Existence, Etc.

The Company will at all times preserve and keep in full force and effect its corporate existence. Subject to Sections 10.6 and 10.7, the Company will at all times preserve and keep in **full** force and effect the corporate existence of each of its Subsidiaries (unless merged into the Company or a Wholly-Owned Restricted Subsidiary) and all rights and franchises of the Company and its Subsidiaries unless, in the good faith judgment of the Company, the termination of or failure to preserve and keep in full force and effect such corporate existence, right or franchise would not, individually or in the aggregate, have a Material Adverse Effect.

9.6. *Pari Passu Ranking.*

The Notes shall at all times rank *pari passu*, without preference or priority, with all other outstanding, unsecured, unsubordinated obligations of the Company, present and future, that have not been accorded preferential rights.

9.7. *Designation of Subsidiaries.*

(a) *Right of Designation.* Subject to the satisfaction of the requirements of Section 9.7(c) hereof, the Company shall have the right to designate each of its Subsidiaries as an Unrestricted Subsidiary or a Restricted Subsidiary by delivering to each holder of Notes a writing, signed by a Responsible Officer, certifying that the board of directors of the Company shall have so designated such Subsidiary prior to or upon the acquisition or formation by the Company of such Subsidiary. Any such Subsidiary not so designated shall be deemed, on and after the date of acquisition or formation thereof and without any further action by the Company or any holder of Notes, to have been designated by the Company as a Restricted Subsidiary. Each Subsidiary designated as a Restricted Subsidiary in Schedule 5.4 shall be a Restricted Subsidiary on and after the date of Closing and all other Subsidiaries, if any, listed in such Schedule 5.4 shall, subject to Section 9.7(b) hereof, be Unrestricted Subsidiaries on and after the date of Closing.

(b) *Right of Redesignation.* Subject to the satisfaction of the requirements of Section 9.7(c) hereof, the Company may at any time designate any of its Subsidiaries that is a Restricted Subsidiary as an Unrestricted Subsidiary by delivering to each holder of Notes a written notice, signed by a Responsible Officer, certifying that the board of directors of the Company shall have so designated such Subsidiary.

(c) *Designation Criteria.* No Subsidiary shall at any time after the date of Closing be designated as an Unrestricted Subsidiary unless:

(i) immediately before and after, and after giving effect to such designation, and assuming that all obligations, liabilities and investments of, and all Liens on the property of, such Subsidiary being so designated were incurred or made contemporaneously with such designation, no Default or Event of Default exists or would exist;

(ii) such Subsidiary had not, prior to such time, previously been designated as an Unrestricted Subsidiary pursuant to Section 9.7(b) hereof; and

(iii) such Subsidiary does not own, directly or indirectly, any Indebtedness, Voting Stock or other Capital Stock of the Company or any Restricted Subsidiary.

No Subsidiary shall at any time after the date of Closing be designated as a Restricted Subsidiary unless:

(A) immediately before and after, and after giving effect to such designation, and assuming that all obligations, liabilities and investments of, and all Liens on the property of, such Subsidiary being so designated were incurred or made contemporaneously with such designation, no Default or Event of Default exists or would exist; *provided, however*, that the Company's compliance with Section 10.2 should be determined on the basis that such transaction had been consummated immediately prior to the end of the Company's then most recently ended fiscal quarter; and

(B) more than 50% of the shares of such Subsidiary's Voting Stock and other Capital Stock is owned, directly or indirectly, by one or more of the Company and the Restricted Subsidiaries.

(d) *Effectiveness.* Other than as set forth in the last two sentences of Section 9.7(a) hereof, any designation under this Section 9.7 that satisfies all of the conditions set forth in this Section 9.7 shall become effective, for purposes of this Agreement, on the day that notice thereof shall have been delivered by the Company to each holder of Notes in accordance with the provisions of Section 18.

9.8. *Books and Records.*

The Company will, and will cause each of its Subsidiaries to, maintain proper books of record and account in conformity with GAAP and all applicable requirements of any Governmental Authority having legal or regulatory jurisdiction over the Company or such Subsidiary, as the case may be.

10. NEGATIVE COVENANTS.

The Company covenants that so long as any of the Notes are outstanding:

10.1. Fixed Charges Coverage Ratio.

The Company will not, at any time, permit the Fixed Charges Coverage Ratio to be less than 150%.

10.2. Limitation of Consolidated Indebtedness.

The Company will not as at the end of each fiscal quarter of the Company, permit Consolidated Indebtedness to exceed 60% of Consolidated Capitalization at such time.

10.3. Priority Indebtedness.

The Company will not, at any time, permit Priority Indebtedness to exceed the greater of

(i) \$60,000,000 and (ii) 20% of Consolidated Net Worth, determined at such time.

10.4. Liens.

The Company will not, and will not permit any of its Restricted Subsidiaries to, directly or indirectly create, incur, assume or permit to exist (upon the happening of a contingency or otherwise) any Lien on or with respect to any property or asset (including, without limitation, any document or instrument in respect of goods or accounts receivable) of the Company or any such Restricted Subsidiary, whether now owned or held or hereafter acquired, or any income or profits therefrom or assign or otherwise convey any right to receive income or profits (unless it makes, or causes to be made, effective provision whereby the Notes will be equally and ratably secured with any and all other obligations thereby secured, such security to be pursuant to an agreement reasonably satisfactory to the Required Holders, and in any case, the Notes shall have the benefit, to the fullest extent that, and with such priority as, the holders of the Notes may be entitled under applicable law, of an equitable Lien on such property), except:

(a) Liens existing on the date of this Agreement and securing Indebtedness of the Company and its Restricted Subsidiaries referred to in Schedule 5.15;

(b) Liens (other than any Lien imposed by ERISA) incurred or deposits made in the ordinary course of business

(i) in connection with workers' compensation, unemployment insurance and other types of social security or retirement benefits,

(ii) to secure (or to obtain letters of credit that secure) the performance of tenders, statutory obligations, surety bonds, appeal bonds, bids, leases (other than Capital Leases), performance bonds, purchase, construction or sales contracts and other similar obligations, or

(iii) consisting of bankers' Liens encumbering deposit accounts (including, without limitation, rights of setoff), in each case, not incurred or made in connection with the borrowing of money, the obtaining of advances or credit or the payment of the deferred purchase price of property; *provided* that the aggregate amount secured by appeal bonds and the Liens referred to in Section 10.4(d) shall not at any time exceed 5% of Consolidated Total Assets;

(c) any Lien created to secure all or any part of the purchase price (including Capital Leases), or to secure Indebtedness incurred or assumed to pay all or any part of the purchase price or cost of construction, of tangible property (or any improvement thereon) acquired or constructed by the Company or a Restricted Subsidiary after the date of Closing, *provided* that

(i) any such Lien shall extend solely to the item or items of such property (or improvement thereon) which is an improvement to or is acquired for specific use in connection with such acquired or constructed property (or improvement thereon) or which is real property being improved by such acquired or constructed property (or improvement thereon),

(ii) the principal amount of the Indebtedness secured by such Lien shall at no time exceed an amount equal to the lesser of (A) the cost to the Company or such Restricted Subsidiary of the property (or improvement thereon) so acquired or constructed and (B) the Fair Market Value (as determined in good faith by the board of directors of the Company) of such property (or improvement thereon) at the time of such acquisition or construction, and

(iii) any such Lien shall be created contemporaneously with, or within 180 days after, the acquisition or construction of such property;

(d) any attachment or judgment Lien, unless the judgment it secures shall not, within 30 days after entry thereof, have been discharged or execution thereof stayed pending appeal, or shall not have been discharged within 30 days after the expiration of any such stay; *provided* that the aggregate amount secured by all such Liens and all Liens securing appeal bonds referred to in Section 10.4(b)(ii) shall not at any time exceed 5% of Consolidated Total Assets;

(e) any Lien existing on property of a Person immediately prior to its being consolidated with or merged into the Company or a Restricted Subsidiary or its becoming a Restricted Subsidiary, or any Lien existing on any property acquired by the Company or any Restricted Subsidiary at the time such property is so acquired (whether or not the Indebtedness secured thereby shall have been assumed), *provided* that

(i) no such Lien shall have been created or assumed in contemplation of such consolidation or merger or such Person's becoming a Restricted Subsidiary or such acquisition of property, and

(ii) each such Lien shall extend solely to the item or items of property so acquired and, if required by the terms of the instrument originally creating such Lien, other property which is an improvement to or is acquired for specific use in connection with such acquired property;

(f) Liens on property or assets of the Company or any of its Restricted Subsidiaries securing Indebtedness owing to the Company or to another Restricted Subsidiary;

(g) any Lien renewing, extending or refunding any Lien permitted by paragraph (a) of this Section 10.4, *provided* that

(i) the principal amount of Indebtedness secured by such Lien immediately prior to such extension, renewal or refunding is not increased or the maturity thereof reduced,

(ii) such Lien is not extended to any other property, and

(iii) immediately after such extension, renewal or refunding, no Default or Event of Default would exist; and

(h) other Liens not otherwise permitted by paragraphs (a) through (g) of this Section 10.4, so long as the Indebtedness secured thereby does not, in the aggregate, exceed 15% of Consolidated Net Worth.

10.5. Transactions with Affiliates.

The Company will not, and will not permit any Subsidiary to, enter into directly or indirectly any Material transaction or Material group of related transactions (including, without limitation, the purchase, lease, sale or exchange of properties of any kind or the rendering of any service) with any Affiliate (other than the Company or another Subsidiary), except pursuant to the reasonable requirements of the Company's or such Subsidiary's business and upon fair and reasonable terms no less favorable to the Company or such Subsidiary than would be obtainable in a comparable arm's-length transaction with a Person not an Affiliate.

10.6. Merger, Consolidation, Etc.

The Company will not, and will not permit any Restricted Subsidiary to, merge with or consolidate or amalgamate with any other Person, or convey, transfer or lease substantially all of its assets in a single transaction or series of transactions to any Person (except that a Restricted Subsidiary may (x) merge, consolidate or amalgamate with, or convey, transfer or lease substantially all of its assets in a single transaction or series of transactions to, the Company or a Wholly-Owned Restricted Subsidiary so long as in any such transaction involving the Company, the Company is the surviving or resulting Person and the conditions specified in clause (c) below were satisfied in connection therewith, and (y) convey, transfer or lease all of its assets in compliance with the provisions of Section 10.7), *provided* that the foregoing restriction does not apply to the consolidation, amalgamation or merger of the Company with, or the conveyance, transfer or lease of substantially all of the assets of the Company in a single transaction or series of transactions to, any Person so long as:

(a) the successor formed by such consolidation or the survivor of such merger or the Person that acquires by conveyance, transfer or lease substantially all of the assets of the Company as an entirety, as the case may be (the "*Successor Corporation*"), shall be a solvent corporation organized and existing under the laws of the United States of America, any State thereof or the District of Columbia;

(b) if the Company is not the Successor Corporation, such corporation shall have executed and delivered to each holder of Notes its assumption of the due and punctual performance and observance of each covenant and condition of this Agreement and the Notes (pursuant to such agreements and instruments as shall be reasonably satisfactory to the Required Holders), and

(c) immediately after giving effect to such transaction, no Default or Event of Default would exist; *provided, however*, that the Company's compliance with Section 10.2 should be determined on the basis that such transaction had been consummated immediately prior to the end of the Company's then most recently ended fiscal quarter.

No such conveyance, transfer or lease of substantially all of the assets of the Company shall have the effect of releasing the Company or any Successor Corporation from its liability under this Agreement or the Notes.

10.7. Sale of Assets.

The Company will not, and will not permit any Restricted Subsidiary to, make any Asset Disposition (other than a Joint Venture Transfer) *unless*:

(a) in the good faith opinion of the board of directors of the Company, such Asset Disposition is in exchange for cash consideration having a Fair Market Value at least equal to that of the property exchanged and is in the best interest of the Company (*provided, however*, that such determination by the board of directors of the Company shall not be required for Asset Dispositions of property with a Fair Market Value of less than \$5,000,000 *so long as* the certificate to be delivered pursuant to Section 7.2(a) with respect to the fiscal period during which such Asset Disposition was made contains a statement to the effect that any such Asset Disposition of property having a Fair Market Value of not less than \$1,000,000 was, in the good faith opinion of the Senior Financial Officer signing such certificate, made in exchange for cash consideration having a Fair Market Value at least equal to that of the property exchanged and was in the best interests of the Company);

(b) immediately after giving effect to such Asset Disposition, no Default or Event of Default would exist; and

(c) the Disposition Value of the property subject to such Asset Disposition, together with the aggregate Disposition Value of all property of the Company and its Restricted Subsidiaries that was the subject of an Asset Disposition during the then current fiscal year of the Company, would not exceed 10% of Consolidated Total Assets determined as of the end of the then most recently ended fiscal year of the Company.

If, prior to consummation of any Asset Disposition, the Company gives written notice to all holders of the Notes that the Net Proceeds Amount arising from any Asset Disposition will be applied to an Indebtedness Prepayment Application or a Property Reinvestment Application within a period of 365 days after such Transfer, then any such Transfer, only for the purpose of determining compliance with subsection (c) of this Section 10.7 as of any date, shall be deemed not to be an Asset Disposition. If the Company shall fail to apply the Net Proceeds Amount in accordance with such written notice, such failure shall constitute an Event of Default as of the end of such period.

10.8. Line of Business.

The Company will not, and will not permit any of its Restricted Subsidiaries to, engage to any substantial extent in any business if, as a result, the general nature of the business in which the Company and its Restricted Subsidiaries, taken as a whole, would then be engaged would be substantially changed from the general nature of the business in which the Company and its Restricted Subsidiaries, taken as a whole, are engaged on the date of this Agreement as described in the Memorandum.

10.9. Terrorism Sanctions Regulations.

The Company will not and will not permit any Subsidiary to (a) become a Person described or designated in the Specially Designated Nationals and Blocked Persons List of the Office of Foreign Assets Control or in Section 1 of the Anti-Terrorism Order or (b) engage in any dealings or transactions with any such Person.

11. EVENTS OF DEFAULT.

An "*Event of Default*" shall exist if any of the following conditions or events shall occur and be continuing:

(a) the Company defaults in the payment of any principal or Make-Whole Amount, if any, on any Note when the same becomes due and payable, whether at maturity or at a date fixed for prepayment or by declaration or otherwise; or

(b) the Company defaults in the payment of any interest on any Note for more than five Business Days after the same becomes due and payable; or

(c) the Company defaults in the performance of or compliance with any term contained in any of Sections 10.1 through 10.4, inclusive, Sections 10.6 or 10.7 or Section 7.1 (d); or

(d) the Company defaults in the performance of or compliance with any term contained in Section 10 (other than those referred to in paragraph (c) of this Section 11), and such default continues for more than five Business Days; or

(e) the Company defaults in the performance of or compliance with any term contained herein (other than those referred to in Sections 11 (a), (b), (c) and (d) of this Section 11) and such default is not remedied within 30 days after the earlier of (i) a Responsible Officer obtaining actual knowledge of such default and (ii) the Company receiving written notice of such default from any holder of a Note (any such written notice to be identified as "notice of default" and to refer specifically to this Section 11 (e)); or

(f) any representation or warranty made in writing by or on behalf of the Company or by any officer of the Company in this Agreement or in any writing furnished in connection with the transactions contemplated hereby proves to have been false or incorrect in any material respect on the date as of which made; or

(g) the Company or any Subsidiary is in default (whether as primary obligor or as guarantor or other surety) in the payment of any principal, premium or make-whole amount or interest on, any Indebtedness (other than Indebtedness under this Agreement and the Notes) that is outstanding in an aggregate principal amount of at least \$10,000,000 beyond any period of grace provided with respect thereto (after giving effect to any consents or waivers in respect thereof), or (ii) the Company or any Subsidiary is in default (whether as primary obligor or as guarantor or other surety) in the performance of or compliance with any term of any evidence of any Indebtedness in an aggregate outstanding principal amount of at least \$10,000,000 or of any mortgage, indenture or other agreement relating thereto or any other condition exists, and as a consequence of such default or condition such Indebtedness has become, or has been declared due and payable before its stated maturity or before its regularly scheduled dates of payment; or

(h) the Company or any Significant Subsidiary (i) is generally not paying, or admits in writing its inability to pay, its debts as they become due, (ii) files, or consents by answer or otherwise to the filing against it of, a petition for relief or reorganization or arrangement or any other petition in bankruptcy, for liquidation or to take advantage of any bankruptcy, insolvency, reorganization, moratorium or other similar law of any jurisdiction, (iii) makes an assignment for the benefit of its creditors, (iv) consents to the appointment of a custodian, receiver, trustee or other officer with similar powers with respect to it or with respect to any substantial part of its property, (v) is adjudicated as insolvent or to be liquidated, or (vi) takes corporate action for the purpose of any of the foregoing; or

(i) a court or Governmental Authority of competent jurisdiction enters an order appointing, without consent by the Company or any of its Subsidiaries, a custodian, receiver, trustee or other officer with similar powers with respect to it or with respect to any substantial part of its property, or constituting an order for relief or approving a petition for relief or reorganization or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy or insolvency law of any jurisdiction, or ordering the dissolution, winding-up or liquidation of the Company or any of its Subsidiaries, or any such petition shall be filed against the Company or any of its Subsidiaries and such petition shall not be dismissed within 60 days; or

(j) a final judgment or judgments for the payment of money aggregating in excess of 5% of Consolidated Total Assets are rendered against any one or more of the Company and its Significant Subsidiaries and which judgments are not, within 60 days after entry thereof, bonded, discharged or stayed pending appeal, or are not discharged within 60 days after the expiration of such stay; or

(k) if

(i) any Plan shall fail to satisfy the minimum funding standards of ERISA or the Code for any plan year or part thereof or a waiver of such standards or extension of any amortization period is sought or granted under section 412 of the Code,

(ii) a notice of intent to terminate any Plan shall have been or is reasonably expected to be filed with the PBGC or the PBGC shall have instituted proceedings under ERISA section 4042 to terminate or appoint a trustee to administer any Plan or the PBGC shall have notified the Company or any ERISA Affiliate that a Plan may become a subject of any such proceedings,

(iii) the aggregate "*amount of unfunded benefit liabilities*" (within the meaning of section 4001(a)(18) of ERISA) under all Plans, determined in accordance with Title IV of ERISA, shall exceed 5% of Consolidated Net Worth,

(iv) the Company or any ERISA Affiliate shall have incurred or is reasonably expected to incur any liability pursuant to Title I or IV of ERISA or the penalty or excise tax provisions of the Code relating to employee benefit plans,

(v) the Company or any ERISA Affiliate withdraws from any Multiemployer Plan, or

(vi) the Company or any Subsidiary establishes or amends any employee welfare benefit plan that provides post-employment welfare benefits in a manner that would increase the liability of the Company or any Subsidiary thereunder;

and any such event or events described in clauses (i) through (vi) above, either individually or together with any other such event or events, would reasonably be expected to have a Material Adverse Effect.

As used in Section 11(k), the terms "*employee benefit plan*" and "*employee welfare benefit plan*" shall have the respective meanings assigned to such terms in section 3 of ERISA.

(vi) the Company or any Subsidiary establishes or amends any employee welfare benefit plan that provides post-employment welfare benefits in a manner that would increase the liability of the Company or any Subsidiary thereunder; and any such event or events described in clauses (i) through (vi) above, either individually or together with any other such event or events, would reasonably be expected to have a Material Adverse Effect.

As used in Section 11(k), the terms "*employee benefit plan*" and "*employee welfare benefit plan*" shall have the respective meanings assigned to such terms in section 3 of ERISA.

12. REMEDIES ON DEFAULT, ETC.

12.1. Acceleration.

(a) If an Event of Default with respect to the Company described in Section 11(h) or 11(i) (other than an Event of Default described in clause (i) of Section 11(h) or described in clause (vi) of Section 11 (h) by virtue of the fact that such clause encompasses clause (i) of Section 11 (h)) has occurred, all the Notes then outstanding shall automatically become immediately due and payable.

(b) If any other Event of Default has occurred and is continuing, the Required Holders may at any time at its or their option, by notice or notices to the Company, declare all the Notes then outstanding to be immediately due and payable.

(c) If any Event of Default described in Section 11(a) or (b) has occurred and is continuing, any holder or holders of Notes at the time outstanding affected by such Event of Default may at any time, at its or their option, by notice or notices to the Company, declare all the Notes held by it or them to be immediately due and payable.

Upon any Notes becoming due and payable under this Section 12.1, whether automatically or by declaration, such Notes will forthwith mature and the entire unpaid principal amount of such Notes, *plus* (x) all accrued and unpaid interest thereon (including, but not limited to, interest accrued thereon at the Default Rate) and (y) the Make-Whole Amount determined in respect of such principal amount (to the full extent permitted by applicable law), shall all be immediately due and payable, in each and every case without presentment, demand, protest or further notice, all of which are hereby waived. The Company acknowledges, and the parties hereto agree, that each holder of a Note has the right to maintain its investment in the Notes free from repayment by the Company (except as herein specifically provided for) and that the provision for payment of a Make-Whole Amount by the Company in the event that the Notes are prepaid or are accelerated as a result of an Event of Default, is intended to provide compensation for the deprivation of such right under such circumstances.

12.2. Other Remedies.

If any Default or Event of Default has occurred and is continuing, and irrespective of whether any Notes have become or have been declared immediately due and payable under Section 12.1, the holder of any Note at the time outstanding may proceed to protect and enforce the rights of such holder by an action at law, suit in equity or other appropriate proceeding, whether for the specific performance of any agreement contained herein or in any Note, or for an injunction against a violation of any of the terms hereof or thereof, or in aid of the exercise of any power granted hereby or thereby or by law or otherwise.

12.3. Rescission.

At any time after any Notes have been declared due and payable pursuant to Section 12.1(b) or (c), the Required Holders, by written notice to the Company, may rescind and annul any such declaration and its consequences if (a) the Company has paid all overdue interest on the Notes, all principal of and Make-Whole Amount, if any, on any Notes that are due and payable and are unpaid other than by reason of such declaration, and all interest on such overdue principal and Make-Whole Amount, if any, and (to the extent permitted by applicable law) any overdue interest in respect of the Notes, at the Default Rate, (b) neither the Company nor any other Person shall have paid any amounts which have become due solely by reason of such declaration, (c) all Events of Default and Defaults, other than non-payment of amounts that have become due solely by reason of such declaration, have been cured or have been waived pursuant to Section 17, and (d) no judgment or decree has been entered for the payment of any monies due pursuant hereto or to the Notes. No rescission and annulment under this Section 12.3 will extend to or affect any subsequent Event of Default or Default or impair any right consequent thereon.

12.4. No Waivers or Election of Remedies, Expenses, Etc.

No course of dealing and no delay on the part of any holder of any Note in exercising any right, power or remedy shall operate as a waiver thereof or otherwise prejudice such holder's rights, powers or remedies. No right, power or remedy conferred by this Agreement or by any Note upon any holder thereof shall be exclusive of any other right, power or remedy referred to herein or therein or now or hereafter available at law, in equity, by statute or otherwise. Without limiting the obligations of the Company under Section 15, the Company will pay to the holder of each Note on demand such further amount as shall be sufficient to cover all costs and expenses of such holder incurred in any enforcement or collection under this Section 12, including, without limitation, reasonable attorneys' fees, expenses and disbursements.

13. REGISTRATION; EXCHANGE; SUBSTITUTION OF NOTES.

13.1. Registration of Notes.

The Company shall keep at its principal executive office a register for the registration and registration of transfers of Notes. The name and address of each holder of one or more Notes, each transfer thereof and the name and address of each transferee of one or more Notes shall be registered in such register. Prior to due presentment for registration of transfer, the Person in whose name any Note shall be registered shall be deemed and treated as the owner and holder thereof for all purposes hereof, and the Company shall not be affected by any notice or knowledge to the contrary. The Company shall give to any holder of a Note that is an Institutional Investor promptly upon request therefor, a complete and correct copy of the names and addresses of all registered holders of Notes.

13.2. Transfer and Exchange of Notes.

Upon surrender of any Note to the Company at the address and to the attention of the designated officer (all as specified in Section 18(iii)), for registration of transfer or exchange (and in the case of a surrender for registration of transfer accompanied by a written instrument of transfer duly executed by the registered holder of such Note or such holder's attorney duly authorized in writing and accompanied by the relevant name, address and other information for notices of each transferee of such Note or part thereof), within ten Business Days thereafter, the Company shall execute and deliver, at the Company's expense (except as provided below), one or more new Notes (as requested by the holder thereof) in exchange therefor, in an aggregate principal amount equal to the unpaid principal amount of the surrendered Note. Each such new Note shall be payable to such Person as such holder may request and shall be substantially in the form of Exhibit 1. Each such new Note shall be dated and bear interest from the date to which interest shall have been paid on the surrendered Note or dated the date of the surrendered Note if no interest shall have been paid thereon. The Company may require payment of a sum sufficient to cover any stamp tax or governmental charge imposed in respect of any such transfer of Notes. Notes shall not be transferred in denominations of less than \$100,000, *provided* that if necessary to enable the registration of transfer by a holder of its entire holding of Notes, one Note may be in a denomination of less than \$100,000. Any transferee, by its acceptance of a Note registered in its name (or the name of its nominee), shall be deemed to have made the representation set forth in Section 6.2.

13.3. Replacement of Notes.

Upon receipt by the Company at the address and to the attention of the designated officer (all as specified in Section 18(iii)) of evidence reasonably satisfactory to it of the ownership of and the loss, theft, destruction or mutilation of any Note (which evidence shall be, in the case of an Institutional Investor, notice from such Institutional Investor of such ownership and such loss, theft, destruction or mutilation), and

(a) in the case of loss, theft or destruction, of indemnity reasonably satisfactory to it (*provided* that if the holder of such Note is, or is a nominee for, an original Purchaser or a Qualified Institutional Buyer, such Person's own unsecured agreement of indemnity shall be deemed to be satisfactory), or

(b) in the case of mutilation, upon surrender and cancellation thereof,

within ten Business Days thereafter, the Company at its own expense shall execute and deliver, in lieu thereof, a new Note, dated and bearing interest from the date to which interest shall have been paid on such lost, stolen, destroyed or mutilated Note or dated the date of such lost, stolen, destroyed or mutilated Note if no interest shall have been paid thereon.

14. PAYMENTS ON NOTES.

14.1. Place of Payment.

Subject to Section 14.2, payments of principal, Make-Whole Amount, if any, and interest becoming due and payable on the Notes shall be made in Pittsburgh, Pennsylvania at the principal office of the Company in such jurisdiction. The Company may at any time, by notice to each holder of a Note, change the place of payment of the Notes so long as such place of payment shall be either the principal office of the Company in such jurisdiction or the principal office of a bank or trust company in such jurisdiction.

14.2. Home Office Payment.

So long as any Purchaser or its nominee shall be the holder of any Note, and notwithstanding anything contained in Section 14.1 or in such Note to the contrary, the Company will pay all sums becoming due on such Note for principal, Make-Whole Amount, if any, and interest by the method and at the address specified for such purpose below such Purchaser's name in Schedule A, or by such other method or at such other address as such Purchaser shall have from time to time specified to the Company in writing for such purpose, without the presentation or surrender of such Note or the making of any notation thereon, except that upon written request of the Company made concurrently with or reasonably promptly after payment or prepayment in full of any Note, such Purchaser shall surrender such Note for cancellation, reasonably promptly after any such request, to the Company at its principal executive office or at the place of payment most recently designated by the Company pursuant to Section 14.1. Prior to any sale or other disposition of any Note held by a Purchaser or its nominee, such Purchaser will, at its election, either endorse thereon the amount of principal paid thereon and the last date to which interest has been paid thereon or surrender such Note to the Company in exchange for a new Note or Notes pursuant to Section 13.2. The Company will afford the benefits of this Section 14.2 to any Institutional Investor that is the direct or indirect transferee of any Note purchased by a Purchaser under this Agreement and that has made the same agreement relating to such Note as the Purchasers have made in this Section 14.2.

15. EXPENSES, ETC.

15.1. Transaction Expenses.

Whether or not the transactions contemplated hereby are consummated, the Company will pay all costs and expenses (including reasonable attorneys' fees of a special counsel and, if reasonably required by the Required Holders, local or other counsel) incurred by the Purchasers and each other holder of a Note in connection with such transactions and in connection with any amendments, waivers or consents under or in respect of this Agreement or the Notes (whether or not such amendment, waiver or consent becomes effective), including, without limitation: (a) the costs and expenses incurred in enforcing or defending (or determining whether or how to enforce or defend) any rights under this Agreement or the Notes or in responding to any subpoena or other legal process or informal investigative demand issued in connection with this Agreement or the Notes, or by reason of being a holder of any Note, (b) the costs and expenses, including financial advisors' fees, incurred in connection with the insolvency or bankruptcy of the Company or any Subsidiary or in connection with any work-out or restructuring of the transactions contemplated hereby and by the Notes and (c) the costs and expenses incurred in connection with the initial filing of this Agreement and all related documents and financial information with the SVO. The Company will pay, and will save each Purchaser and each other holder of a Note harmless from, all claims in respect of any fees, costs or expenses if any, of brokers and finders (other than those, if any, retained by a Purchaser or other holder in connection with its purchase of the Notes).

15.2. Survival.

The obligations of the Company under this Section 15 will survive the payment or transfer of any Note, the enforcement, amendment or waiver of any provision of this Agreement or the Notes, and the termination of this Agreement.

16. SURVIVAL OF REPRESENTATIONS AND WARRANTIES; ENTIRE AGREEMENT.

All representations and warranties contained herein shall survive the execution and delivery of this Agreement and the Notes, the purchase or transfer by any Purchaser of any Note or portion thereof or interest therein and the payment of any Note, and may be relied upon by any subsequent holder of a Note, regardless of any investigation made at any time by or on behalf of such Purchaser or any other holder of a Note. All statements contained in any certificate or other instrument delivered by or on behalf of the Company pursuant to this Agreement shall be deemed representations and warranties of the Company under this Agreement. Subject to the preceding sentence, this Agreement and the Notes embody the entire agreement and understanding between each Purchaser and the Company and supersede all prior agreements and understandings relating to the subject matter hereof.

16. AMENDMENT AND WAIVER.

17.1. Requirements.

This Agreement and the Notes may be amended, and the observance of any term hereof or of the Notes may be waived (either retroactively or prospectively), with (and only with) the written consent of the Company and the Required Holders, except that (a) no amendment or waiver of any of the provisions of Sections 1, 2, 3, 4, 5, 6 or 21 hereof, or any defined term (as it is used therein), will be effective as to any Purchaser unless consented to by such Purchaser in writing, and (b) no such amendment or waiver may, without the written consent of the holder of each Note at the time outstanding affected thereby, (i) subject to the provisions of Section 12 relating to acceleration or rescission, change the amount or time of any prepayment or payment of principal of, or reduce the rate or change the time of payment or method of computation of interest or of the Make-Whole Amount on, the Notes, (ii) change the percentage of the principal amount of the Notes the holders of which are required to consent to any such amendment or waiver, or (iii) amend any of Sections 8, 11 (a), 11 (b), 12, 17 or 20.

17.2. Solicitation of Holders of Notes.

(a) *Solicitation.* The Company will provide each holder of the Notes (irrespective of the amount of Notes then owned by it) with sufficient information, sufficiently far in advance of the date a decision is required, to enable such holder to make an informed and considered decision with respect to any proposed amendment, waiver or consent in respect of any of the provisions hereof or of the Notes. The Company will deliver executed or true and correct copies of each amendment, waiver or consent effected pursuant to the provisions of this Section 17 to each holder of outstanding Notes promptly following the date on which it is executed and delivered by, or receives the consent or approval of, the requisite holders of Notes.

(b) *Payment.* The Company will not directly or indirectly pay or cause to be paid any remuneration, whether by way of supplemental or additional interest, fee or otherwise, or grant any security or provide other credit support, to any holder of Notes as consideration for or as an inducement to the entering into by any holder of Notes or any waiver or amendment of any of the terms and provisions hereof unless such remuneration is concurrently paid, or security is concurrently granted or other credit support concurrently provided, on the same terms, ratably to each holder of Notes then outstanding even if such holder did not consent to such waiver or amendment.

(c) *Consent in Contemplation of Transfer.* Any consent made pursuant to this Section 17.2 by the holder of any Note that has transferred or has agreed to transfer such Note to the Company, any Subsidiary or any Affiliate of the Company and has provided or has agreed to provide such written consent as a condition to such transfer shall be void and of no force or effect except solely as to such holder, and any amendments effected or waivers granted or to be effected or granted that would not have been or would not be so effected or granted but for such consent (and the consents of all other holders of Notes that were acquired under the same or similar conditions) shall be void and of no force or effect except solely as to such transferring holder.

17.3. Binding Effect, Etc.

Any amendment or waiver consented to as provided in this Section 17 applies equally to all holders of Notes and is binding upon them and upon each future holder of any Note and upon the Company without regard to whether such Note has been marked to indicate such amendment or waiver. No such amendment or waiver will extend to or affect any obligation, covenant, agreement, Default or Event of Default not expressly amended or waived or impair any right consequent thereon. No course of dealing between the Company and the holder of any Note nor any delay in exercising any rights hereunder or under any Note shall operate as a waiver of any rights of any holder of such Note. As used herein, the term "*this Agreement*" and references thereto shall mean this Agreement as it may from time to time be amended or supplemented.

17.4. Notes Held by Company, Etc.

Solely for the purpose of determining whether the holders of the requisite percentage of the aggregate principal amount of Notes then outstanding approved or consented to any amendment, waiver or consent to be given under this Agreement or the Notes, or have directed the taking of any action provided herein or in the Notes to be taken upon the direction of the holders of a specified percentage of the aggregate principal amount of Notes then outstanding, Notes directly or indirectly owned by the Company or any of its Affiliates shall be deemed not to be outstanding.

18. NOTICES.

All notices and communications provided for hereunder shall be in writing and sent (a) by telecopy if the sender on the same day sends a confirming copy of such notice by a recognized overnight delivery service (charges prepaid), or (b) by registered or certified mail with return receipt requested (postage prepaid), or (c) by a recognized overnight delivery service (with charges prepaid). Any such notice must be sent:

- (i) if to any Purchaser or its nominee, to such Purchaser or nominee at the address specified for such communications in Schedule A, or at such other address as such Purchaser or nominee or it shall have specified to the Company in writing,
- (ii) if to any other holder of any Note, to such holder at such address as such other holder shall have specified to the Company in writing, or
- (iii) if to the Company, to the Company at its address set forth at the beginning hereof to the attention of Senior Financial Officer, or at such other address as the Company shall have specified to the holder of each Note in writing.

Notices under this Section 18 will be deemed given only when actually received.

19. REPRODUCTION OF DOCUMENTS.

This Agreement and all documents relating hereto, including, without limitation, (a) consents, waivers and modifications that may hereafter be executed, (b) documents received by any Purchaser at the Closing (except the Notes themselves), and (c) financial statements, certificates and other information previously or hereafter furnished to any Purchaser, may be reproduced by such Purchaser by any photographic, photostatic, electronic, digital or other similar process and such Purchaser may destroy any original document so reproduced. The Company agrees and stipulates that, to the extent permitted by applicable law, any such reproduction shall be admissible in evidence as the original itself in any judicial or administrative proceeding (whether or not the original is in existence and whether or not such reproduction was made by such Purchaser in the regular course of business) and any enlargement, facsimile or further reproduction of such reproduction shall likewise be admissible in evidence. This Section 19 shall not prohibit the Company or any other holder of Notes from contesting any such reproduction to the same extent that it could contest the original, or from introducing evidence to demonstrate the inaccuracy of any such reproduction.

20. CONFIDENTIAL INFORMATION.

For the purposes of this Section 20, "*Confidential Information*" means information delivered to any Purchaser by or on behalf of the Company or any Subsidiary in connection with the transactions contemplated by or otherwise pursuant to this Agreement that is proprietary in nature and that was clearly marked or labeled or otherwise adequately identified when received by such Purchaser as being confidential information of the Company or such Subsidiary, *provided* that such term does not include information that

- (a) was publicly known or otherwise known to such Purchaser prior to the time of such disclosure,
- (b) subsequently becomes publicly known through no act or omission by such Purchaser or any person acting on such Purchaser's behalf,
- (c) otherwise becomes known to such Purchaser other than through disclosure by the Company or any Subsidiary, or
- (d) constitutes financial statements delivered to such Purchaser under Section 7.1 that are otherwise publicly available.

Each Purchaser will maintain the confidentiality of such Confidential Information in accordance with procedures adopted by such Purchaser in good faith to protect confidential information of third parties delivered to such Purchaser, *provided* that such Purchaser may deliver or disclose Confidential Information to:

- (i) its directors, trustees, officers, employees, agents, attorneys and affiliates (to the extent such disclosure reasonably relates to the administration of the investment represented by its Notes);
- (ii) its financial advisors and other professional advisors who agree to hold confidential the Confidential Information substantially in accordance with the terms of this Section 20;
- (iii) any other holder of any Note;

(iv) any Institutional Investor to which it sells or offers to sell such Note or any part thereof or any participation therein (if such Person has agreed in writing prior to its receipt of such Confidential Information to be bound by the provisions of this Section 20);

(v) any Person from which it offers to purchase any security of the Company (if such Person has agreed in writing prior to its receipt of such Confidential Information to be bound by the provisions of this Section 20);

(vi) Purchaser; any federal or state regulatory authority having jurisdiction over such

(vii) the NAIC or the SVO or, in each case, any similar organization, or any nationally recognized rating agency that requires access to information about such Purchaser's investment portfolio; or

(viii) any other Person to which such delivery or disclosure may be necessary or appropriate

(A) to effect compliance with any law, rule, regulation or order applicable to such Purchaser,

(B) in response to any subpoena or other legal process,

(C) in connection with any litigation to which such Purchaser is a party, or

(D) if an Event of Default has occurred and is continuing, to the extent such Purchaser may reasonably determine such delivery and disclosure to be necessary or appropriate in the enforcement or for the protection of the rights and remedies under such Purchaser's Notes and this Agreement.

Each holder of a Note, by its acceptance of a Note, will be deemed to have agreed to be bound by and to be entitled to the benefits of this Section 20 as though it were a party to this Agreement. On reasonable request by the Company in connection with the delivery to any holder of a Note of information required to be delivered to such holder under this Agreement or requested by such holder (other than a holder that is a party to this Agreement or its nominee), such holder will enter into an agreement with the Company embodying the provisions of this Section 20.

21. SUBSTITUTION OF PURCHASER.

Each Purchaser shall have the right to substitute any one of its Affiliates as the purchaser of the Notes that it has agreed to purchase hereunder, by written notice to the Company, which notice shall be signed by both such Purchaser and such Affiliate, shall contain such Affiliate's agreement to be bound by this Agreement and shall contain a confirmation by such Affiliate of the accuracy with respect to it of the representations set forth in Section 6. Upon receipt of such notice, any reference to such Purchaser in this Agreement (other than in this Section 21), shall be deemed to refer to such Affiliate in lieu of such original Purchaser. In the event that such Affiliate is so substituted as a Purchaser hereunder and such Affiliate thereafter transfers to such original Purchaser all of the Notes then held by such Affiliate, upon receipt by the Company of notice of such transfer, any reference to such Affiliate as a "Purchaser" in this Agreement (other than in this Section 21), shall no longer be deemed to refer to such Affiliate, but shall refer to such original Purchaser, and such original Purchaser shall again have all the rights of an original holder of the Notes under this Agreement.

22. MISCELLANEOUS.

22.1. Successors and Assigns.

All covenants and other agreements contained in this Agreement by or on behalf of any of the parties hereto bind and inure to the benefit of their respective successors and assigns (including, without limitation, any subsequent holder of a Note) whether so expressed or not.

22.2. Payments Due on Non-Business Days; When Payments Deemed Received.

(a) *Payments Due on Non-Business Days.* Anything in this Agreement or the Notes to the contrary notwithstanding (but without limiting the requirement in Section 8.5 that the notice of any optional prepayment specify a Business Day as the date fixed for such prepayment), any payment of principal of or Make-Whole Amount or interest on any Note that is due on a date other than a Business Day shall be made on the next succeeding Business Day without including the additional days elapsed in the computation of the interest payable on such next succeeding Business Day; provided that if the maturity date of any Note is a date other than a Business Day, the payment otherwise due on such maturity date shall be made on the next succeeding Business Day and shall include the additional days elapsed in the computation of interest payable on such next succeeding Business Day.

(b) *Payments, When Received.* Any payment to be made to the holders of Notes hereunder or under the Notes shall be deemed to have been made on the Business Day such payment actually becomes available to such holder at such holder's bank prior to 12:00 noon (local time of such bank).

22.3. Accounting Terms.

All accounting terms used herein which are not expressly defined in this Agreement have the meanings respectively given to them in accordance with GAAP. Except as otherwise specifically provided herein, (a) all computations made pursuant to this Agreement shall be made in accordance with GAAP, and (b) all financial statements shall be prepared in accordance with GAAP.

22.4. Severability.

Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall (to the full extent permitted by law) not invalidate or

render unenforceable such provision in any other jurisdiction.

22.5. Construction, Etc.

Each covenant contained herein shall be construed (absent express provision to the contrary) as being independent of each other covenant contained herein, so that compliance with any one covenant shall not (absent such an express contrary provision) be deemed to excuse compliance with any other covenant. Where any provision herein refers to action to be taken by any Person, or which such Person is prohibited from taking, such provision shall be applicable whether such action is taken directly or indirectly by such Person.

For the avoidance of doubt, all Schedules and Exhibits attached to this Agreement shall be deemed to be a part hereof.

22.6. Counterparts.

This Agreement may be executed in any number of counterparts, each of which shall be an original but all of which together shall constitute one instrument. Each counterpart may consist of a number of copies hereof, each signed by less than all, but together signed by all, of the parties hereto. Delivery of a facsimile or electronic transmission of an executed counterpart of a signature page to this Agreement shall be as effective as delivery of a manually executed counterpart to this Agreement.

22.7. Governing Law.

This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the law of the State of New York excluding choice-of-law principles of the law of such State that would permit the application of the laws of a jurisdiction other than such State.

22.8. Jurisdiction and Process; Waiver of Jury Trial.

(a) The Company irrevocably submits to the non-exclusive jurisdiction of any New York State or federal court sitting in the Borough of Manhattan, The City of New York, over any suit, action or proceeding arising out of or relating to this Agreement or the Notes. To the fullest extent permitted by applicable law, the Company irrevocably waives and agrees not to assert, by way of motion, as a defense or otherwise, any claim that it is not subject to the jurisdiction of any such court, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding brought in any such court and any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

(b) The Company consents to process being served by or on behalf of any holder of Notes in any suit, action or proceeding of the nature referred to in Section 22.8(a) by mailing a copy thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, return receipt requested, to it at its address specified in Section 18 or at such other address of which such holder shall then have been notified pursuant to said Section. The Company agrees that such service upon receipt (i) shall be deemed in every respect effective service of process upon it in any such suit, action or proceeding and (ii) shall, to the fullest extent permitted by applicable law, be taken and held to be valid personal service upon and personal delivery to it. Notices hereunder shall be conclusively presumed received as evidenced by a delivery receipt furnished by the United States Postal Service or any reputable commercial delivery service.

(c) Nothing in this Section 22.8 shall affect the right of any holder of a Note to serve process in any manner permitted by law, or limit any right that the holders of any of the Notes may have to bring proceedings against the Company in the courts of any appropriate jurisdiction or to enforce in any lawful manner a judgment obtained in one jurisdiction in any other jurisdiction.

(d) The parties hereto hereby waive trial by jury in any action brought on or with respect to this Agreement, the Notes or any other document executed in connection herewith or therewith.

[Remainder of page left intentionally blank. Next page is signature page.]

If you are in agreement with the foregoing, please sign the form of agreement on a counterpart of this Agreement and return it to the Company, whereupon this Agreement shall become a binding agreement between you and the Company.

Very truly yours,

MINE SAFETY APPLIANCES COMPANY

By /s/_____

Name: Dennis L. Zeitler

Title: Vice President , CFO and Treasurer

The Agreement is hereby accepted and agreed to as of the date thereof.

HARTFORD LIFE INSURANCE COMPANY

By: Hartford Investment Management Company Its Agent and Attorney-in-Fact

By: /s/_____

Name: Eva Konopka

Title: Senior Vice President

PHYSICIANS LIFE INSURANCE COMPANY

By: Hartford Investment Management Company Its Investment Manager

By: /s/_____

Name: Eva Konopka

Title: Senior Vice President

ALLSTATE LIFE INSURANCE COMPANY

By: /s/_____

Name:

MODERN WOODMEN OF AMERICA

By: /s/_____

Name:

Title:

STATE FARM LIFE INSURANCE COMPANY

By: /s/_____

Name: Julie Pierce

Title: Senior Investment Officer

By: /s/_____

Name: Jeff Attwood

Title: Investment Officer

UNION CENTRAL LIFE INSURANCE COMPANY

By: /s/

Name: Andrew S. White

Title: Agent

AMERITAS LIFE INSURANCE CORP..

By: Ameritas Investment Advisors Inc., as Agent

By: /s/

Name: Andrew S. White

Title: Vice President - Fixed Income Securities

ACACIA LIFE INSURANCE COMPANY

By: Ameritas Investment Advisors Inc., as Agent

By: /s/

Name: Andrew S. White

Title: Vice President - Fixed Income Securities

[Signature Page to Mine Safety Appliances Company Note Purchase Agreement]

SCHEDULE B DEFINED TERMS

As used herein, the following terms have the respective meanings set forth below or set forth in the Section hereof following such term:

"Affiliate" means, at any time, and with respect to any Person,

(a) any other Person that at such time directly or indirectly through one or more intermediaries Controls, or is Controlled by, or is under common Control with, such first Person, and

(b) any Person beneficially owning or holding, directly or indirectly, 10% or more of any class of voting or equity interests of the Company or any Subsidiary or any corporation of which the Company and its Subsidiaries beneficially own or hold, in the aggregate, directly or indirectly, 10% or more of any class of voting or equity interests.

As used in this definition, *"Control"* means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise. Unless the context otherwise clearly requires, any reference to an *"Affiliate"* is a reference to an Affiliate of the Company.

"Agreement, this" is defined in Section 17.3.

"Anti-Terrorism Order" means Executive Order No. 13,224 of September 23, 2001, Blocking property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit or Support Terrorism, 66 U.S. Fed. Reg. 49079 (2001), as amended.

"Asset Disposition " means any Transfer except:

(a) any Transfer from a Restricted Subsidiary to the Company or from the Company to a Restricted Subsidiary, so long as immediately before and immediately after the consummation of any such Transfer and after giving effect thereto, no Default or Event of Default exists; and

(b) any Transfer made in the ordinary course of business and involving only property that is either (i) inventory held for sale or (ii) equipment, fixtures, supplies or materials no longer required in the operation of the business of the Company or any of its Subsidiaries or that are obsolete.

"Business Day" means (a) for the purposes of Section 8.7 only, any day other than a Saturday, a Sunday or a day on which commercial banks in New York City are required or authorized to be closed, and (b) for the purposes of any other provision of this Agreement, any day other than a Saturday, a Sunday or a day on which commercial banks in Pittsburgh, Pennsylvania or New York, New York are required or authorized to be closed.

"Capital Lease" means, at any time, a lease with respect to which the lessee is required concurrently to recognize the acquisition of an asset and the incurrence of a liability in accordance with GAAP.

"*Capital Lease Obligation*" means, with respect to any Person and a Capital Lease, the amount of the obligation of such Person as the lessee under such Capital Lease which would, in accordance with GAAP, appear as a liability on a balance sheet of such Person.

"*Capital Stock*" means any class of capital stock, share capital or similar equity interest of a Person.

"*Change in Control*" shall have occurred if any person (as such term is used in section 13(d) and section 14(d)(2) of the Exchange Act as in effect on the date of the Closing) or related persons constituting a group (as such term is used in Rule 13d-5 under the Exchange Act as in effect on the date of the Closing), shall in the aggregate, directly or indirectly, control or own (beneficially or otherwise) more than 50% of the issued and outstanding common stock of the Company.

"*Closing*" is defined in Section 3.

"*Code*" means the Internal Revenue Code of 1986, as amended from time to time, and the rules and regulations promulgated thereunder from time to time.

"*Company*" is defined in the introductory sentence of this Agreement.

"*Confidential Information*" is defined in Section 20.

"*Consolidated Capitalization*" means, at any time, the sum of (a) Consolidated Indebtedness plus (b) Consolidated Net Worth, in each case determined at such time.

"*Consolidated Income Available for Fixed Charges*" means, with respect to any period, Consolidated Net Income for such period plus all amounts deducted in the computation thereof on account of (a) Fixed Charges and (b) taxes imposed on or measured by income or excess profits.

"*Consolidated Indebtedness*" means, at any time, the Indebtedness of the Company and its Restricted Subsidiaries that would be shown on a consolidated balance sheet of the Company and its Restricted Subsidiaries, prepared at such time in accordance with GAAP.

"*Consolidated Net Income*" means, with reference to any period, the net income (or loss) of the Company and its Restricted Subsidiaries for such period (taken as a cumulative whole), as determined in accordance with GAAP, after eliminating all offsetting debits and credits between the Company and its Restricted Subsidiaries and all other items required to be eliminated in the course of the preparation of consolidated financial statements of the Company and its Restricted Subsidiaries in accordance with GAAP.

"*Consolidated Net Worth*" means, at any time,

the sum of (i) the par value (or value stated on the books of the corporation) of the capital stock (but excluding treasury stock and Capital Stock subscribed and unissued) of the Company and its Restricted Subsidiaries plus (ii) the amount of the paid-in capital and retained earnings of the Company and its Restricted Subsidiaries, in each case as such amounts would be shown on a consolidated balance sheet of the Company and its Restricted Subsidiaries as of such time prepared in accordance with GAAP, minus

(b) to the extent included in clause (a) above, all amounts properly attributable to minority interests, if any, in the stock and surplus of Restricted Subsidiaries.

"*Consolidated Total Assets*" means, at any time, the total amount of assets (less properly deductible reserves), which under GAAP appear on a consolidated balance sheet of the Company and the Restricted Subsidiaries prepared in accordance with GAAP at such time.

"*Control Event*" means:

(a) the execution by the Company or any of its Subsidiaries or Affiliates of any agreement or letter of intent with respect to any proposed transaction or event or series of transactions or events which, individually or in the aggregate, may reasonably be expected to result in a Change in Control.

(b) the execution of any written agreement which, when fully performed by the parties thereto, would result in a Change in Control, or

(c) the making of any written offer by any person (as such term is used in section 13(d) and section 14(d)(2) of the Exchange Act as in effect on the date of the Closing) or related persons constituting a group (as such term is used in Rule 13d-5 under the Exchange Act as in effect on the date of the Closing) to the holders of the Voting Stock of the Company, which offer, if accepted by the requisite number of holders, would result in a Change in Control.

"*Default*" means an event or condition the occurrence or existence of which would, with the lapse of time or the giving of notice or both, become an Event of Default.

"*Default Rate*" means, with respect to any Note, that rate of interest that is the greater of

(i) 2% *per annum* above the rate of interest stated in clause (a) of the first paragraph of such Note or (ii) 2.0% *per annum* over the rate of interest publicly announced from time to time by PNC Bank, National Association (or its successor) in Pittsburgh, Pennsylvania as its "base" or "prime" rate.

"*Disclosure Documents*" is defined in Section 5.3.

"*Disposition Value*" means, at any time, with respect to any property

(a) in the case of property that does not constitute Restricted Subsidiary Stock, the book value thereof, and

(b) in the case of property that constitutes Restricted Subsidiary Stock, an amount equal to that percentage of the book value of the assets of the Restricted Subsidiary that issued such stock as is equal to the percentage that the book value of such Restricted Subsidiary Stock represents of the book value of all of the outstanding Capital Stock of such Restricted Subsidiary (assuming, in making such calculations, that all Securities convertible into such Capital Stock are so converted and giving full effect to all transactions that would occur or be required in connection with such conversion) determined at the time of the disposition thereof, in good faith by the Company.

"*Dollar*" or "\$" shall each mean the lawful currency of the United States of America.

"*Electronic Delivery*" is defined in Section 7.1(b).

"*Environmental Laws*" means any and all Federal, state, local, and foreign statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, permits, concessions, grants, franchises, licenses, agreements or governmental restrictions relating to pollution and the protection of the environment or the release of any materials into the environment, including but not limited to those related to Hazardous Materials.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

"ERISA Affiliate" means any trade or business (whether or not incorporated) that is treated as a single employer together with the Company under section 414 of the Code.

"Event of Default" is defined in Section 11.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Fair Market Value" means, at any time and with respect to any property, the sale value of such property that would be realized in an arm's length sale at such time between an informed and willing buyer and an informed and willing seller (neither being under a compulsion to buy or sell).

"Fixed Charges" means, with respect to any period, the sum of (a) Interest Charges for such period *plus* (b) Lease Rentals for such period.

"Fixed Charges Coverage Ratio" means, at any time, the ratio of (a) Consolidated Income Available for Fixed Charges for any four of the then most recent five fiscal quarters of the Company ending on, or most recently ended prior to, such time to (b) Fixed Charges for such fiscal quarters. The four fiscal quarters to which the preceding sentence applies shall be the fiscal quarters that result in the highest Fixed Charges Coverage Ratio.

"Form 10-K" is defined in Section 7.1 (b).

"Foreign Pension Plan" means any plan, fund or other similar program that is (a) established or maintained outside of the United States of America by any one or more of the Company or its Subsidiaries primarily for the benefit of the employees (substantially all of whom are aliens not residing in the United States of America) of the Company or such Subsidiaries which plan, fund or other similar program provides for retirement income for such employees or results in the deferral of income for such employees in contemplation of retirement, and (b) not otherwise subject to ERISA.

"GAAP" means generally accepted accounting principles as in effect from time to time in the United States of America.

"Governmental Authority" means

- (a) the government of
 - (i) the United States of America or any State or other political subdivision thereof, or
 - (ii) any other jurisdiction in which the Company or any Subsidiary conducts all or any part of its business, or which asserts jurisdiction over any properties of the Company or any Subsidiary, or
 - (iii) any entity exercising executive, legislative, judicial, regulatory or administrative functions of, or pertaining to, any such government.

"Guaranty" means, with respect to any Person, any obligation (except the endorsement in the ordinary course of business of negotiable instruments for deposit or collection) of such Person guaranteeing or in effect guaranteeing any indebtedness, dividend or other obligation of any other Person in any manner, whether directly or indirectly, including (without limitation) obligations incurred through an agreement, contingent or otherwise, by such Person:

- (a) to purchase such indebtedness or obligation or any property constituting security therefor;
- (b) to advance or supply funds (i) for the purchase or payment of such indebtedness or obligation, or (ii) to maintain any working capital or other balance sheet condition or any income statement condition of any other Person or otherwise to advance or make available funds for the purchase or payment of such indebtedness or obligation;
- (c) to lease properties or to purchase properties or services primarily for the purpose of assuring the owner of such indebtedness or obligation of the ability of any other Person to make payment of the indebtedness or obligation; or
- (d) otherwise to assure the owner of such indebtedness or obligation against loss in respect thereof.

In any computation of the indebtedness or other liabilities of the obligor under any Guaranty, the indebtedness or other obligations that are the subject of such Guaranty shall be assumed to be direct obligations of such obligor.

"Hazardous Material" means any and all pollutants, toxic or hazardous wastes or any other substances that might pose a hazard to health and safety, the removal of which may be required or the generation, manufacture, refining, production, processing, treatment, storage, handling, transportation, transfer, use, disposal, release, discharge, spillage, seepage, or filtration of which is or shall be restricted, prohibited or penalized by any applicable law, including, but not limited to, asbestos, urea formaldehyde foam insulation, polychlorinated biphenyls, petroleum, petroleum products, lead based paint, radon gas or similar restricted, prohibited or penalized substances.

"Holder" means, with respect to any Note, the Person in whose name such Note is registered in the register maintained by the Company pursuant to Section 13.1.

"Indebtedness" means, with respect to any Person, without duplication:

- (a) its liabilities for borrowed money and its redemption obligations in respect of mandatorily redeemable Preferred Stock;
- (b) its liabilities for the deferred purchase price of property acquired by such Person (excluding accounts payable arising in the ordinary course of business but including all liabilities created or arising under any conditional sale or other title retention agreement with respect to any such property);
- (c) its liabilities in respect of Capital Leases;
- (d) all liabilities for borrowed money secured by any Lien with respect to any property owned by such Person (whether or not it has assumed or otherwise become liable for such liabilities);
- (e) its reimbursement obligations in respect of letters of credit or instruments serving a similar function;
- (f) Swaps of such Person; and

(g) any Guaranty of such Person with respect to liabilities of a type described in any of clauses (a) through (f) above.

Without limitation of the foregoing, Indebtedness of any Person shall include all obligations of such Person of the character described in clauses (a) through (g) to the extent such Person remains legally liable in respect thereof notwithstanding that any such obligation is deemed to be extinguished under GAAP.

"Indebtedness Prepayment Application" means, with respect to any Transfer of property, the application by the Company or its Restricted Subsidiaries of cash in an amount equal to the Net Proceeds Amount with respect to such Transfer to pay Indebtedness of the Company (other than Indebtedness owing to the Company or any of its Subsidiaries, and Indebtedness in respect of any revolving credit or similar credit facility providing the Company or any of its Restricted Subsidiaries with the right to obtain loans or other extensions of credit from time to time, except to the extent that in connection with such payment of Indebtedness the availability of credit under such credit facility is permanently reduced by an amount not less than the amount of such proceeds applied to the payment of such Indebtedness), *provided* that in the course of making such application, the Company shall offer to prepay each outstanding Note in accordance with Section 8.2(b) in a principal amount which equals the Ratable Portion for such Note. If any holder of a Note fails to accept such offer of prepayment, then, for purposes of the preceding sentence only, the Company nevertheless will be deemed to have paid Indebtedness in an amount equal to the Ratable Portion for such Note. *"Ratable Portion "* for any Note means an amount equal to the product of (x) the Net Proceeds Amount being so applied to the payment of Indebtedness *multiplied by* (y) a fraction the numerator of which is the outstanding principal amount of such Note and the denominator of which is the aggregate principal amount of Indebtedness of the Company and the Restricted Subsidiaries that is *pari passu* with the Indebtedness evidenced by the Notes.

"Institutional Investor" means (a) any Purchaser of a Note, (b) any holder of a Note holding (together with one or more of its Affiliates) more than 5% of the aggregate principal amount of the Notes then outstanding, (c) any bank, trust company, savings and loan association or other financial institution, any pension plan, any investment company, any insurance company, any broker or dealer, or any other similar financial institution or entity, regardless of legal form, and (d) any Related Fund of any holder of any Note.

"Interest Charges" means, with respect to any period, the sum (without duplication) of the following (in each case, eliminating all offsetting debits and credits between the Company and its Restricted Subsidiaries and all other items required to be eliminated in the course of the preparation of consolidated financial statements of the Company and its Restricted Subsidiaries in accordance with GAAP): (a) all interest in respect of Indebtedness of the Company and its Restricted Subsidiaries (including imputed interest on Capital Lease Obligations) deducted in determining Consolidated Net Income for such period, together with all interest capitalized or deferred during such period and not deducted in determining Consolidated Net Income for such period, and (b) all debt discount and expense amortized or required to be amortized in the determination of Consolidated Net Income for such period.

"*Joint Venture Transfer*" means a Transfer by the Company or any Restricted Subsidiary to a corporate or similar business entity so long as (i) the Company or such Restricted Subsidiary receives in exchange for such transfer, at least 50% of the Voting Stock and other equity interests in such entity, (ii) the Fair Market Value of the Voting Stock and other equity interests received by the Company or such Restricted Subsidiary is at least equal to the Fair Market Value of the property transferred to such entity by the Company or such Restricted Subsidiary; (iii) such entity is engaged, or will be engaged, in the same general line of business as the Company or such Restricted Subsidiary; (iv) the book value of the assets which are the subject of such transfer, together with the book value of all Joint Venture Transfers since the date of Closing does not exceed 10% of Consolidated Total Assets at the end of the most recently ended fiscal year of the Company and (v) before and after giving effect to such Transfer no Default or Event of Default exists.

"*Lease Rentals*" means, with respect to any period, the sum of the minimum amount of rental and other obligations required to be paid during such period by the Company or any Restricted Subsidiary as lessee under all leases of real or personal property (other than Capital Leases), *excluding* any amounts required to be paid by the lessee (whether or not therein designated as rental or additional rental) (a) which are on account of maintenance and repairs, insurance, taxes, assessments, water rates and similar charges, or (b) which are based on profits, revenues or sales realized by the lessee from the leased property or otherwise based on the performance of the lessee.

"*Lien*" means, with respect to any Person, any mortgage, lien, pledge, charge, security interest or other encumbrance, or any interest or title of any vendor, lessor, lender or other secured party to or of such Person under any conditional sale or other title retention agreement or Capital Lease, upon or with respect to any property or asset of such Person (including in the case of stock, stockholder agreements, voting trust agreements and all similar arrangements).

"*Make-Whole Amount*" is defined in Section 8.7.

"*Material*" means material in relation to the business, operations, affairs, financial condition, assets, properties, or prospects of the Company and its Subsidiaries taken as a whole.

"*Material Adverse Effect*" means a material adverse effect on (a) the business, operations, affairs, financial condition, assets or properties of the Company and its Subsidiaries taken as a whole, (b) the ability of the Company to perform its obligations under this Agreement and the Notes or (c) the validity or enforceability of this Agreement or the Notes.

"*Memorandum*" is defined in Section 5.3.

"*Multiemployer Plan*" means any Plan that is a "multiemployer plan" (as such term is defined in section 4001(a)(3) of ERISA).

"*NAIC*" means the National Association of Insurance Commissioners or any successor

"*NAIC Annual Statement*" is defined in Section 6.2(a).

"*Net Proceeds Amount*" means, with respect to any Transfer of any property by any Person, an amount equal to the *difference* of

(a) the aggregate amount of the consideration (valued at the Fair Market Value of such consideration at the time of the consummation of such Transfer) received by such Person in respect of such Transfer, *minus*

(b) all ordinary and reasonable out-of-pocket costs and expenses actually incurred by such Person in connection with such Transfer.

"*NHAM Exemption*" is defined in Section 6.2(e).

"*Notes*" is defined in Section 1.1.

"*Officer's Certificate*" means a certificate of a Senior Financial Officer or of any other officer of the Company whose responsibilities extend to the subject matter of such certificate.

"*PBGC*" means the Pension Benefit Guaranty Corporation referred to and defined in ERISA or any successor thereto.

"*Person*" means an individual, partnership, corporation (including the Company), limited liability company, association, joint venture, trust, unincorporated organization, or a government agency or political subdivision thereof.

"*Plan*" means an "employee benefit plan" (as defined in section 3(3) of ERISA) subject to Title I of ERISA that is or, within the preceding five years, has been established or maintained, or to which contributions are or, within the preceding five years, have been made or required to be made, by the Company or any ERISA Affiliate or with respect to which the Company or any ERISA Affiliate may have any liability.

"*Preferred Stock*" means any class of Capital Stock of a Person that is preferred over any other class of Capital Stock (or similar equity interest) of such Person as to the payment of dividends or other equity distributions or the payment of any amount upon liquidation or dissolution of such Person.

"*Priority Indebtedness*" means, without duplication, the sum of, (a) all Indebtedness of Restricted Subsidiaries (excluding Indebtedness owing to the Company or another Restricted Subsidiary) and (b) all Indebtedness secured by Liens permitted by Section 10.4(h), and (b) the greater of the mandatory redemption amount or the liquidation preference of the Preferred Stock, if any, of all Restricted Subsidiaries.

"*Property Reinvestment Application*" means, with respect to any Transfer of property, the application of an amount equal to the Net Proceeds Amount with respect to such Transfer to the acquisition by the Company or any Restricted Subsidiary of operating assets of the Company or any Restricted Subsidiary to be used in the ordinary course of business of such Person.

"*Proposed Prepayment Date*" is defined in Section 8.3(c).

"*PTE*" is defined in Section 6.2(a).

"*QPAM Exemption*" is defined in Section 6.2(d).

"*Qualified Institutional Buyer*" means any Person who is a "qualified institutional buyer" within the meaning of such term as set forth in Rule 144A(a)(1) under the Securities Act.

"*Required Holders*" means, at any time, the holder or holders of at least a majority in principal amount of the Notes at the time outstanding (exclusive of Notes then owned by the Company or any of its Affiliates).

"*Responsible Officer*" means any Senior Financial Officer and any other officer of the Company with responsibility for the administration of the relevant portion of this Agreement.

"*Restricted Subsidiary*" means, at any time, a Subsidiary that

- (a) as of the date of Closing has been designated as a Restricted Subsidiary on Schedule 5.4 attached hereto; or
- (b) after the date of Closing, and in accordance with Section 9.7, has been designated a Restricted Subsidiary.

"*Restricted Subsidiary Stock*" means the Capital Stock (or any options or warrants to purchase stock or other Securities exchangeable or convertible into any Capital Stock) of any Restricted Subsidiary.

"*SEC*" means the Securities and Exchange Commission.

"*Securities Act*" means the Securities Act of 1933, as amended from time to time.

"*Senior Financial Officer*" means the chief financial officer, principal accounting officer, treasurer or controller of the Company.

"*Significant Subsidiary*" means at any time any Subsidiary that would at such time constitute a "significant subsidiary" (as such term is defined in Regulation S-X of the SEC as in effect on the date of the Closing) of the Company.

"*Source*" is defined in Section 6.2.

"*Subsidiary*" means, as to any Person, any corporation, association or other business entity (a) in which such Person or one or more of its Subsidiaries or such Person and one or more of its Subsidiaries owns sufficient equity or voting interests to enable it or them (as a group) ordinarily, in the absence of contingencies, to elect a majority of the directors (or Persons performing similar functions) of such entity, or (b) that is consolidated with the Company in the Company's consolidated financial statements. Unless the context otherwise clearly requires, any reference to a "Subsidiary" is a reference to a Subsidiary of the Company.

"*Successor Corporation*" is defined in Section 10.6.

"*SVO*" means the Securities Valuation Office of the NAIC or any successor to such office.

"*Swaps*" means (a) any and all interest rate swap transactions, basis swap transactions, basis swaps, credit derivative transactions, forward rate transactions, commodity swaps, commodity options, forward commodity contracts, equity or equity index swaps or options, bond or bond price or bond index swaps or options or forward foreign exchange transactions, cap transactions, floor transactions, currency options, spot contracts or any other similar transactions or any of the foregoing (including, but without limitation, any options to enter into any of the foregoing), and (b) any and all transactions of any kind, and the related confirmations, which are subject to the terms and conditions of, or governed by, any form of master agreement published by the International Swaps and Derivatives Association, Inc. or any International Foreign Exchange Master Agreement.

"*Transfer*" means, with respect to the Company or any Restricted Subsidiary, any transaction in which such Person sells, conveys, transfers or leases (as lessor) any of its property, including, without limitation, Restricted Subsidiary Stock. For purposes of determining the application of the Net Proceeds Amount in respect of any Transfer, the Company may designate any Transfer as one or more separate Transfers each yielding a separate Net Proceeds Amount. In any such case, (a) the Disposition Value of any property subject to each such separate Transfer and (b) the amount of Consolidated Total Assets attributable to any property subject to each such separate Transfer shall be determined by ratably allocating the aggregate Disposition Value of, and the aggregate Consolidated Total Assets attributable to, all property subject to all such separate Transfers to each such separate Transfer on a proportionate basis.

"*Transfer Application Notice*" is defined in Section 8.2(b).

"*Transfer Application Prepayment Date*" is defined in Section 8.2(b)(iv).

"*Unrestricted Subsidiary*" means any Subsidiary that is not at the time designated a Restricted Subsidiary.

"*USA Patriot Act*" means United States Public Law 107-56, Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

"*Voting Stock*" means Capital Stock of any class or classes of a Person the holders of which are ordinarily, in the absence of contingencies, entitled to elect corporate directors (or Persons performing similar functions).

"*Wholly-Owned Restricted Subsidiary*" means, at any time, any Restricted Subsidiary 100% of

- (a) all of the Voting Stock and other equity interests (except directors' qualifying shares) and
- (b) all of the Indebtedness of which are owned by any one or more of the Company and the Company's other Wholly-Owned Restricted Subsidiaries at such time.

AMENDMENT NO. 1 AND WAIVER TO
NOTE PURCHASE AGREEMENT

AMENDMENT NO. 1 AND WAIVER TO NOTE PURCHASE AGREEMENT, dated as of February 12, 2014 (this “**Agreement**”), is by and among **MINE SAFETY APPLIANCES COMPANY**, a Pennsylvania corporation (the “**Company**”), and each of the holders of Notes (as defined below) (collectively, the “**Noteholders**”).

RECITALS:

A. The Company and each of the Noteholders are parties to a certain Note Purchase Agreement, dated as of December 20, 2006 (as amended, restated or otherwise modified from time to time, the “**2006 Note Purchase Agreement**”), pursuant to which the Company issued and sold to the Noteholders \$60,000,000 in aggregate principal amount of its 5.41% Senior Notes due December 20, 2021 (as the same may be amended, restated or otherwise modified from time to time, collectively, the “**Notes**”).

B. The Company previously entered into (i) that certain Note Purchase and Private Shelf Agreement, dated as of October 13, 2010, by and among the Company, Prudential Investment Management, Inc. and each of the purchasers party thereto, as amended by Amendment No. 1 to Note Purchase and Private Shelf Agreement dated as of April 5, 2012, that certain Amendment No. 2 to Note Purchase and Private Shelf Agreement dated as of April 4, 2013 and that certain Amendment No. 3 and Waiver to Note Purchase and Private Shelf Agreement dated as of February 12, 2014 (as so amended and as may be further amended, restated, supplemented or otherwise modified from time to time, the “**2010 Note Purchase Agreement**”), and (ii) that certain Credit Agreement, dated as of October 13, 2010, by and among the Company, each of the guarantors from time to time party thereto, each of the Lenders from time to time party thereto (collectively, the “**Bank Lenders**”) and PNC Bank, National Association, as Administrative Agent, as amended by that certain First Amendment to Credit Agreement, effective November 16, 2011, by and among the Company, each of the guarantors from time to time party thereto, the Bank Lenders party thereto and PNC Bank, National Association, as Administrative Agent (as so amended and as the same may be further amended, restated, supplemented or otherwise modified from time, the “**Bank Credit Agreement**”).

C. The Company has informed the Noteholders that Events of Default have occurred under Section 11(c) of the 2006 Note Purchase Agreement as a result of (i) the Company's failure to comply with Section 10.3 of the 2006 Note Purchase Agreement as a result of the execution of certain Guaranties by certain Restricted Subsidiaries of the Indebtedness of the Company under, and in respect of, the 2010 Note Purchase Agreement and the Bank Credit Agreement (the “**Priority Indebtedness Default**”), and (ii) the Company's failure to provide notice to the Noteholders of the occurrence of the Priority Indebtedness Default in accordance with Section 7.1(d) of the 2006 Note Purchase Agreement (the “**2006 Notice Default**” and together with the Priority Indebtedness Default, collectively, the “**Existing Defaults**”).

D. The Company has requested that the Noteholders waive the Existing Defaults and amend certain terms and provisions of the 2006 Note Purchase Agreement, and the Required Holders are willing to grant such waivers and amend the 2006 Note Purchase Agreement upon the terms, and subject to the conditions, set forth herein.

AGREEMENT:

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. DEFINITIONS.

Except as otherwise defined in this Agreement, capitalized terms used herein and not defined herein shall have the meanings ascribed to them in the 2006 Note Purchase Agreement.

2. AMENDMENTS.

Subject to the satisfaction of the conditions set forth in Section 5 hereof, the 2006 Note Purchase Agreement is hereby amended, as of the Effective Date (as defined below), as follows (the "**Amendments**"):

2.1. Amendment to Section 9.

Section 9 of the 2006 Note Purchase Agreement is hereby amended by inserting the following new Section 9.9 at the end thereof to read in its entirety as follows:

"9.9. Subsidiary Guarantors."

(a) The Company shall promptly cause each Additional Subsidiary Guarantor to execute and deliver a Note Guarantee substantially in the form of Exhibit 9.9 hereto (with such modifications as may be required to reflect the legal requirements of the jurisdiction of incorporation of the relevant Subsidiary, including any modifications necessary to make the obligations of such guarantee agreement *pari passu* with the other unsecured and unsubordinated Indebtedness of such Subsidiary) or otherwise in form and substance reasonably satisfactory to the Required Holders.

(b) The Company may, from time to time at its discretion and upon written notice from the Company to the holders of Notes, cause any of its Subsidiaries which are not otherwise Guarantors pursuant to Section 9.9(a) to enter into a Note Guarantee substantially in the form of Exhibit 9.9 hereto (with such modifications as may be required to reflect the legal requirements of the jurisdiction of incorporation of the relevant Subsidiary, including any modifications necessary to make the obligations of such guarantee agreement *pari passu* with the other unsecured and unsubordinated Indebtedness of such Subsidiary) or otherwise in form and substance reasonably satisfactory to the Required Holders.

(c) The delivery of a Note Guarantee by any Guarantor shall be accompanied by the following:

(i) an Officer's Certificate from such Guarantor confirming that (A) the representations and warranties of such Guarantor contained in such Note Guarantee are true and correct, and (B) the guarantee provided under the Note Guarantee would not cause any borrowing, guaranteeing or similar limit binding on the Guarantor to be exceeded;

(ii) copies of the articles of association or certificate or articles of incorporation, bylaws, limited liability company operating agreement, partnership agreement and all other constitutive documents, of such Guarantor (as applicable), resolutions of the board of directors or other similar governing body (and, where applicable, the shareholders) of such Guarantor authorizing its execution and delivery of the Note Guarantee and the transactions contemplated thereby, and specimen signatures of authorized officers of such Guarantor (in each case, certified as correct and complete copies by the secretary or an assistant secretary (or an equivalent officer) of such Guarantor);

(iii) a legal opinion, satisfactory in form, scope and substance to the Required Holders, of independent legal counsel to the effect that, subject to customary qualifications and assumptions, (A) such Guarantor is duly and validly organized and existing under the laws of its jurisdiction of organization and (if applicable in such jurisdiction) is in good standing, (B) such Note Guarantee has been duly authorized, executed and delivered by such Guarantor, (C) such Note Guarantee is enforceable in accordance with its terms, and (D) in the case of a Guarantor organized under the laws of a jurisdiction other than the United States, any State thereof or the District of Columbia, the obligations of such Guarantor under such Note Guarantee rank at least *pari passu* with all of such Guarantor's other unsecured and unsubordinated Indebtedness in an insolvency proceeding of such Guarantor and are not subject to any legal or contractual limitations or restrictions that are not equally applicable to all other indebtedness for borrowed money of such Guarantor; and

(iv) in the case of a Guarantor organized under the laws of a jurisdiction other than the United States, any State thereof or the District of Columbia, evidence of the appointment of the Company as such Guarantor's agent to receive, for it and on its behalf, service of process in the United States of America.

An original executed counterpart of each such Note Guarantee shall be delivered to each holder of Notes promptly after the execution thereof."

2.2. Amendment to Section 11.

Section 11 of the 2006 Note Purchase Agreement is hereby amended by deleting the period at the end of clause (k) thereof, inserting "; or" in lieu thereof and inserting the following new clause (l) to read in its entirety as follows:

"(i) any representation or warranty made in writing by or on behalf of any Guarantor or by any officer of any Guarantor in connection with any Note Guarantee proves to have been false or incorrect in any material respect on the date as of which made, (ii) any default shall occur and be continuing (subject to any applicable cure period) under any Note Guarantee or any Note Guarantee shall cease to be in full force and effect for any reason whatsoever (except as otherwise permitted hereunder and under such Note Guarantee), including, without limitation, a determination by any Governmental Authority that such Note Guarantee is invalid, void or unenforceable or (iii) the Company or any Guarantor shall contest or deny in writing the validity or enforceability of any Guarantor's obligations under its Note Guarantee."

2.3. Amendments to Definitions.

The following definitions are hereby either amended and restated in their entireties, or are added to Schedule B in their appropriate alphabetical order, as the case may be, as follows:

“2010 Note Purchase Agreement” means that certain Note Purchase and Private Shelf Agreement, dated as of October 13, 2010, by and among the Company, Prudential Investment Management, Inc. and each of the purchasers party thereto, as amended by that certain Amendment No. 1 to Note Purchase and Private Shelf Agreement dated as of April 5, 2012, that certain Amendment No. 2 to Note Purchase and Private Shelf Agreement dated as of April 4, 2013 and that certain Amendment No. 3 and Waiver to Note Purchase and Private Shelf Agreement dated as of February ___, 2014, as so amended and as may be further amended, restated, supplemented or otherwise modified from time to time.

“Additional Subsidiary Guarantor” means, at any time, each Subsidiary of the Company which (a) guarantees all or any part of the obligations of the Company or any Subsidiary under, or in respect of, the Bank Credit Agreement or the 2010 Note Purchase Agreement, or (b) is a borrower, issuer or other obligor under, or in respect of, the Bank Credit Agreement or the 2010 Note Purchase Agreement.

“Bank Credit Agreement” means that certain Credit Agreement, dated as of October 13, 2010, by and among the Company, each of the guarantors from time to time party thereto, each of the Bank Lenders from time to time party thereto and PNC Bank, National Association, as Administrative Agent, as amended by that certain First Amendment to Credit Agreement, effective November 16, 2011, by and among the Company, each of the guarantors from time to time party thereto, the Bank Lenders party thereto and PNC Bank, National Association, as Administrative Agent and as the same may be further amended, restated, supplemented, modified, renewed, extended, replaced or refinanced from time to time to the extent permitted by the terms hereof.

“Bank Lenders” means each financial institution that is a “Lender” under, and as defined in, the Bank Credit Agreement from time to time.

“Guarantor” means, collectively, (a) General Monitors, Inc., a Nevada corporation, (b) General Monitors Transnational, LLC, a Nevada limited liability company, (c) MSA International, Inc., a Delaware corporation, and (d) each other Person which executes and delivers a Note Guarantee pursuant to Section 9.9 or otherwise on or after the date hereof.

“Note Guarantee” means a guarantee agreement substantially in the form attached hereto as Exhibit 9.9, as the same may be amended, restated, supplemented or otherwise modified from time to time.

“Priority Indebtedness” means, without duplication, the sum of (a) all Indebtedness of Restricted Subsidiaries (excluding (x) Indebtedness owing to the Company or another Restricted Subsidiary, and (y) Indebtedness of any Restricted Subsidiary that is a Guarantor); (b) all Indebtedness secured by Liens permitted by Section 10.4(h); and (c) the greater of the mandatory redemption amount or the liquidation preference of the Preferred Stock, if any, of all Restricted Subsidiaries.

2.4. New Exhibit 9.9.

The 2006 Note Purchase Agreement is hereby amended by inserting a new Exhibit 9.9 in its correct numerical order to read as set forth on Exhibit A hereto.

3. **WAIVER.**

Subject to satisfaction of the conditions precedent set forth in Section 5 hereof, the Noteholders hereby waive the Existing Defaults effective as of the date and time on which such Existing Defaults first occurred, respectively.

4. **REPRESENTATIONS AND WARRANTIES OF THE COMPANY.**

To induce the Required Holders to enter into this Agreement, and to consent to the Amendments, the Company represents and warrants that:

4.1. Organization; Power and Authority.

The Company and each Initial Subsidiary Guarantor (as defined below) (collectively, the “**Obligors**”) is a corporation, partnership or limited liability company duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, and is duly qualified as a foreign corporation, partnership or limited liability company and is in good standing in each jurisdiction in which such qualification is required by law, except where the failure to be licensed or qualified would not reasonably be expected to have a Material Adverse Effect. The Company has the necessary corporate power and authority to execute and deliver this Agreement and each Initial Subsidiary Guarantor has the necessary organizational power and authority to execute and deliver the 2006 NPA Guarantee (as defined below) to which it is a party and to perform the provisions hereof.

4.2. Authorization, etc.

Each of this Agreement and the 2006 NPA Guarantees, as applicable, have been duly authorized by all necessary corporate or other similar action on the part of the Obligors party hereto and thereto, and, assuming due authorization, execution and delivery by the other parties hereto and thereto, each of this Agreement and the 2006 NPA Guarantees, as applicable, constitutes a legal, valid and binding obligation of the Obligors party thereto, enforceable in accordance with their respective terms, except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors’ rights generally and (b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

4.3. No Defaults.

After giving effect to the Amendments and the waivers contemplated hereby, no Default or Event of Default has occurred and is continuing.

4.4. Governmental Authorizations, Etc.

Other than the filing of a Form 8-K with the SEC in connection with the transactions contemplated by this Agreement and the 2006 NPA Guarantees, no consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required to be obtained by (a) the Company in connection with the execution, delivery or performance by the Company of this Agreement, or (b) any Initial Subsidiary Guarantor in connection with the execution, delivery or performance by such Initial Subsidiary Guarantor of the 2006 NPA Guarantee to which it is a party.

3.5. No Amendment Fees. No remuneration, whether by way of supplemental or additional interest, fees or other consideration, has been paid, is payable or will be paid directly or indirectly by the Company to any Person, in its capacity as a lender, holder, purchaser and/or guarantor (or agent for any of the foregoing), as an inducement to the Company's or such Person's execution and delivery of this Waiver or any related amendment, consent or waiver to the 2010 Note Purchase Agreement, the Bank Credit Agreement or any other loan agreement, note purchase agreement, indenture or other agreement evidencing any other Indebtedness of the Company with respect to any default or event of default (including any cross default) arising thereunder as a result of, or in connection with, the Existing Defaults.

4.5. Effect of Amendments.

The 2006 Note Purchase Agreement as hereby amended shall continue in full force and effect.

5. CONDITIONS PRECEDENT.

The Amendments set forth herein shall become effective as of the date first written above (the "**Effective Date**") and the waivers shall become effective as of the date set forth in Section 3 above, in each case upon the satisfaction of each of the following conditions precedent in a manner reasonably satisfactory to the Required Holders:

5.1. Execution and Delivery of this Agreement.

Each Noteholder shall have received a copy of this Waiver executed and delivered by the Company and the Required Holders.

5.2. 2006 Guarantee Documents.

Each Noteholder shall have received the following:

(a) a fully executed copy of a Guaranty of the Indebtedness under the 2006 Note Purchase Agreement from each of General Monitors, Inc., a Nevada corporation, General Monitors Transnational, LLC, a Nevada limited liability company, and MSA International, Inc., a Delaware corporation (collectively, the "**Initial Subsidiary Guarantors**"), each in substantially the form of Exhibit A hereto and otherwise in form and substance satisfactory to the Required Holders (collectively, the "**2006 NPA Guarantees**");

(b) a certificate from each Initial Subsidiary Guarantor executed by the Secretary and one other officer of such Initial Subsidiary Guarantor (i) attaching certified copies of the certificate of formation, articles of incorporation, operating agreement, by-laws or other similar organizational documents of such Initial Subsidiary Guarantor; (ii) attaching resolutions of the board of directors or other similar governing body of such Initial Subsidiary Guarantor (A) evidencing approval of the transactions contemplated by the 2006 NPA Guarantee to which it is a party and the execution, delivery and performance thereof on behalf of such Initial Subsidiary Guarantor, (B) authorizing certain officers to execute and deliver the same on behalf of such Initial Subsidiary Guarantor, and (C) certifying that such resolutions were duly and validly adopted and have not since been amended, revoked or rescinded; (iii) attaching a certificate of good standing for such Initial Subsidiary Guarantor issued by the Secretary of State of the state of formation of such Initial Subsidiary Guarantor, dated as of a recent date; and (iv) certifying as to the names, titles and true signatures of the officers authorized to sign the 2006 NPA Guarantee on behalf of such Initial Subsidiary Guarantor; and

(c) the holders of the Notes shall have received a legal opinion from Reed Smith LLP, as special counsel to the Initial Subsidiary Guarantors, dated as of the Effective Date and in form and substance reasonably satisfactory to the Required Holders.

5.3. Waivers for 2010 Note Purchase Agreement and the Bank Credit Agreement.

Each Noteholder shall have received fully executed copies of (a) that certain letter Agreement, dated as of the date hereof, by and among the Company, the Bank Lenders party thereto and PNC Bank, National Association, as Administrative Agent (the “**Administrative Agent**”), in substantially the form attached as Exhibit B hereto and otherwise in form and substance satisfactory to the Required Holders (the “**Credit Agreement Waiver**”), pursuant to which the Administrative Agent and the Required Lenders (as defined in the Bank Credit Agreement) shall have agreed to waive any defaults arising under the Credit Agreement as a result of the Existing Defaults and consented to the execution and delivery of this Agreement and the 2006 NPA Guarantees, and (b) that certain Amendment No. 3 and Waiver to Note Purchase Agreement, dated as of the date hereof, by and among the Company, Prudential Investment Management, Inc. and each of the holders of the notes issued pursuant to the 2010 Note Purchase Agreement, in substantially the form attached as Exhibit C hereto and otherwise in form and substance satisfactory to the Required Holders (the “**2010 NPA Waiver**”), pursuant to which such holders shall have, among other things, agreed to waive any defaults arising under the 2010 Note Purchase Agreement as a result of the Existing Defaults and consented to the execution and delivery of this Agreement and the 2006 NPA Guarantees, and each of the Credit Agreement Waiver and the 2010 NPA Waiver shall be in full force and effect.

5.4. Representations and Warranties.

The representations and warranties set forth in Section 4 hereof shall be true and correct on the Effective Date.

5.5. Proceedings Satisfactory.

The Noteholders and their special counsel shall have received copies of such documents and papers (whether or not specifically referred to above in this Section 5) as they may have reasonably requested prior to such date and such documents shall be in form and substance satisfactory to them.

6. MISCELLANEOUS.

6.1. Effect of Amendments and Waiver.

Except as expressly provided herein, (a) no terms or provisions of any agreement are modified, waived or changed by this Agreement, (b) the terms of this Agreement shall not operate as a waiver by any holder of Notes of, or otherwise prejudice any of their respective rights, remedies or powers under, the 2006 Note Purchase Agreement or the Notes, or under any applicable law and (c) the terms and provisions of the 2006 Note Purchase Agreement and the Notes shall continue in full force and effect. Any and all notices, requests, certificates and other instruments executed and delivered after the execution and delivery of this Agreement may refer to the 2006 Note Purchase Agreement without making specific reference to this Agreement, but nevertheless all such references shall include this Agreement, unless the context otherwise requires.

6.2. Successors and Assigns.

This Agreement shall inure to the benefit of and be binding upon the successors and assigns of each of the parties hereto.

6.3. Section Headings, etc.

The titles of the Sections appear as a matter of convenience only, do not constitute a part hereof and shall not affect the construction hereof. The words “herein,” “hereof,” “hereunder,” and “hereto” refer to this Agreement as a whole and not to any particular Section or other subdivision.

6.4. Governing Law.

THIS AGREEMENT SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, AND THE RIGHTS OF THE PARTIES SHALL BE GOVERNED BY, THE LAW OF THE STATE OF NEW YORK EXCLUDING CHOICE-OF-LAW PRINCIPLES OF THE LAW OF SUCH STATE THAT WOULD PERMIT THE APPLICATION OF THE LAWS OF A JURISDICTION OTHER THAN SUCH STATE.

6.5. Waivers and Amendments.

Neither this Agreement nor any term hereof may be changed, waived, discharged or terminated orally, or by any action or inaction, but only by an instrument in writing signed by each of the parties signatory hereto.

6.6. Costs and Expenses.

Whether or not the Amendments become effective, the Company confirms its obligations under Section 15 of the 2006 Note Purchase Agreement and agrees that, on the execution date hereof (or if an invoice is delivered subsequent to such date or if the Amendments do not become effective, promptly, and in any event within 10 days of receiving any statement or invoice therefor), the Company will pay all out-of-pocket fees, costs and expenses reasonably incurred by the Noteholders relating to this Agreement, including, but not limited to, the statement for reasonable fees and disbursements of Bingham McCutchen LLP, special counsel to the Noteholders, presented to the Company on or before the execution date hereof. The Company will also promptly pay (in any event within 10 days), upon receipt of any statement thereof, each additional statement for reasonable fees and disbursements of special counsel to the Noteholders rendered after the execution date hereof in connection with this Agreement.

6.7. Execution in Counterpart.

This Agreement may be executed in any number of counterparts (including those transmitted by electronic transmission (including, without limitation, facsimile and e-mail)), all of which taken together shall constitute one and the same agreement. Delivery of an executed signature page by facsimile or electronic transmission shall be as effective as delivery of a manually signed counterpart hereof.

6.8. Entire Agreement.

This Agreement constitutes the final written expression of all of the terms hereof and is a complete and exclusive statement of those terms.

[Remainder of page intentionally left blank. Next page is signature page.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on their behalf by a duly authorized officer or agent thereof, as the case may be, as of the date first above written.

MINE SAFETY APPLIANCES COMPANY

By: /s/ _____

Name:

Title:

[Signature Page to Amendment No. 1 and Waiver to Note Purchase Agreement]

The foregoing is hereby agreed to as of the date first above written.

[NAME OF EACH PURCHASER]

By: /s/

Name:

Title:

[Signature Page to Amendment No. 1 and Waiver to Note Purchase Agreement]

Exhibit A

Form of 2006 NPA Guarantee

A/75905413.4

Exhibit B

Form of Credit Agreement Waiver

A/75905413.4

Exhibit C

Form of 2010 NPA Waiver

A/75905413.4

GUARANTEE AGREEMENT

Dated as of February 12, 2014

of

GENERAL MONITORS TRANSNATIONAL, LLC

GUARANTEE AGREEMENT

THIS GUARANTEE AGREEMENT, dated as of February 12, 2014 (this “**Guarantee Agreement**”), is made by GENERAL MONITORS TRANSNATIONAL, LLC, a Nevada limited liability company (the “**Guarantor**”), in favor of the Purchasers (as defined below) and the other holders from time to time of the Notes (as defined below). The Purchasers and such other holders are herein collectively called the “**holders**” and individually a “**holder**.”

PRELIMINARY STATEMENTS:

I. Mine Safety Appliances Company, a Pennsylvania corporation (the “**Company**”), previously entered into a Note Purchase Agreement, dated as of December 20, 2006 (as amended, modified, supplemented or restated from time to time, the “**Note Purchase Agreement**”), with each of the Purchasers listed on the signature pages thereto (collectively, the “**Purchasers**”), pursuant to which the Company issued and sold to the Purchasers \$60,000,000 in aggregate principal amount of its 5.41% Senior Notes due December 20, 2021 (as the same may be amended, restated or otherwise modified from time to time, collectively, the “**Notes**”). Capitalized terms used herein have the meanings specified in the Note Purchase Agreement unless otherwise defined herein.

II. The Company has informed the holders of the Notes that certain Events of Default have occurred under Section 11(c) of the Note Purchase Agreement as a result of (a) the Company's failure to comply with Section 10.3 of the Note Purchase Agreement (the “**Priority Indebtedness Default**”) as a result of the execution of certain Guaranties of the Indebtedness of the Company under, and in respect of, the 2010 Note Purchase Agreement and the Bank Credit Agreement (as each such term is defined in the 2006 Amendment and Waiver referred to below), and (b) the Company's failure to provide notice to the holders of the Notes of the occurrence of the Priority Indebtedness Default in accordance with Section 7.1(d) of the Note Purchase Agreement (the “**2006 Notice Default**” and together with the Priority Indebtedness Default, collectively, the “**Existing Defaults**”).

III. The Purchasers have agreed to waive the Existing Defaults and amend certain terms and provisions of the Note Purchase Agreement, upon the terms, and subject to the conditions, set forth in that certain Amendment No. 1 and Waiver to Note Purchase Agreement, dated as of the date hereof, by and between the Company and the holders of the Notes (the “**2006 Amendment and Waiver**”).

IV. It is a condition to the agreement of the holders of the Notes to enter into the 2006 Amendment and Waiver that the Guarantor execute and deliver this Guarantee Agreement to the holders of the Notes and that this Guarantee Agreement be in full force and effect.

V. The Guarantor has received and will receive direct and indirect benefits from the transactions contemplated by the 2006 Amendment and Waiver and the agreement of the holders of the Notes to continue to extend credit to the Company pursuant to the terms of the Note Purchase Agreement and the Notes. The Board of Managers of the Guarantor has determined that the incurrence of such obligations is in the best interests of the Guarantor.

NOW THEREFORE, in compliance with the Note Purchase Agreement, and in consideration of, the execution and delivery of the Note Purchase Agreement and the purchase of the Notes by each of the Purchasers, the Guarantor hereby covenants and agrees with, and represents and warrants to, each of the holders as follows:

1. GUARANTEE; INDEMNITY.

1.1 GUARANTEE. The Guarantor hereby irrevocably and unconditionally guarantees to each holder, the due and punctual payment in full of (a) the principal of, Make-Whole Amount, if any, and interest on (including, without limitation, interest accruing after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding, whether or not a claim for post-filing or post-petition interest is allowed in such proceeding), and any other amounts due under, the Notes when and as the same shall become due and payable (whether at stated maturity or by required or optional prepayment or by acceleration or otherwise) and (b) any other sums which may become due under the terms and provisions of the Notes, the Note Purchase Agreement or any other instrument referred to therein (all such obligations described in clauses (a) and (b) above are herein called the **“Guaranteed Obligations”**). The guarantee in the preceding sentence is an absolute, present and continuing guarantee of payment and not of collectability and is in no way conditional or contingent upon any attempt to collect from the Company or any other guarantor of the Notes or upon any other action, occurrence or circumstance whatsoever. In the event that the Company shall fail so to pay any of such Guaranteed Obligations, the Guarantor agrees to pay the same when due to the holders entitled thereto, without demand, presentment, protest or notice of any kind, in lawful money of the United States of America, pursuant to the requirements for payment specified in the Notes and the Note Purchase Agreement. Each default in payment of any of the Guaranteed Obligations shall give rise to a separate cause of action hereunder and separate suits may be brought hereunder as each cause of action arises. The Guarantor agrees that the Notes issued in connection with the Note Purchase Agreement may (but need not) make reference to this Guarantee Agreement.

The Guarantor agrees to pay and to indemnify and save each holder harmless from and against any damage, loss, cost or expense (including attorneys’ fees) which such holder may incur or be subject to as a consequence, direct or indirect, of (x) any breach by the Guarantor or by the Company of any warranty, covenant, term or condition in, or the occurrence of any default under, this Guarantee Agreement, the Notes, the Note Purchase Agreement or any other instrument referred to therein, together with all expenses resulting from the compromise or defense of any claims or liabilities arising as a result of any such breach or default, (y) any legal action commenced to challenge the validity or enforceability of this Guarantee Agreement, the Notes, the Note Purchase Agreement or any other instrument referred to therein and (z) enforcing or defending (or determining whether or how to enforce or defend) the provisions of this Guarantee Agreement.

The Guarantor hereby acknowledges and agrees that the Guarantor’s liability hereunder is joint and several with any other Person(s) who may guarantee the obligations and Indebtedness under and in respect of the Notes and the Note Purchase Agreement.

Notwithstanding the foregoing provisions or any other provision of this Guarantee Agreement, the holders (by their acceptance of any Note) and the Guarantor hereby agree that if at any time the Guaranteed Obligations exceed the Maximum Guaranteed Amount determined as of such time with regard to the Guarantor, then this Guarantee Agreement shall be automatically amended to reduce the Guaranteed Obligations to the Maximum Guaranteed Amount. Such amendment shall not require the written consent of the Guarantor or any holder and shall be deemed to have been automatically consented to by the Guarantor and each holder. The Guarantor agrees that the Guaranteed Obligations may at any time exceed the Maximum Guaranteed Amount without affecting or impairing the obligation of the Guarantor. **“Maximum Guaranteed Amount”** means as of the date of determination with respect to the Guarantor, the lesser of (a) the amount of the Guaranteed Obligations outstanding on such date and (b) the maximum amount that would not render the Guarantor’s liability under this Guarantee Agreement subject to avoidance under Section 548 of the United States Bankruptcy Code (or any successor provision) or any comparable provision of applicable state law.

1.2 INDEMNITY. The Guarantor hereby further agrees that if, for any reason, any amount claimed by a holder of the Notes under this Guarantee Agreement is not recoverable on the basis of a guarantee, it will be liable as a principal debtor and primary obligor to indemnify that holder of the Notes against any cost, loss or liability it incurs as a result of the Company not paying any amount expressed to be payable by it under the Notes, the Note Purchase Agreement or otherwise on the date when it is expressed to be due. The amount payable by the Guarantor under this Section 1.2 will not exceed the amount it would have had to pay under Section 1.1 if the amount claimed had been recoverable on the basis of a guarantee.

2. OBLIGATIONS ABSOLUTE.

The obligations of the Guarantor hereunder shall be primary, absolute, irrevocable and unconditional, irrespective of the validity or enforceability of the Notes, the Note Purchase Agreement or any other instrument referred to therein, shall not be subject to any counterclaim, setoff, deduction or defense based upon any claim the Guarantor may have against the Company or any holder or otherwise, and shall remain in full force and effect without regard to, and shall not be released, discharged or in any way affected by, any circumstance or condition whatsoever (whether or not the Guarantor shall have any knowledge or notice thereof), including, without limitation: (a) any amendment to, modification of, supplement to or restatement of the Notes, the Note Purchase Agreement or any other instrument referred to therein (it being agreed that the obligations of the Guarantor hereunder shall apply to the Notes, the Note Purchase Agreement or any such other instrument as so amended, modified, supplemented or restated) or any assignment or transfer of any thereof or of any interest therein, or any furnishing, acceptance or release of any security for the Notes; (b) any waiver, consent, extension, indulgence or other action or inaction under or in respect of the Notes, the Note Purchase Agreement or any other instrument referred to therein; (c) any bankruptcy, insolvency, arrangement, reorganization, readjustment, composition, liquidation or similar proceeding with respect to the Company or its property; (d) any merger, amalgamation or consolidation of the Guarantor or of the Company into or with any other Person or any sale, lease or transfer of any or all of the assets of the Guarantor or of the Company to any Person; (e) any failure on the part of the Company for any reason to comply with or perform any of the terms of any other agreement with the Guarantor; (f) any failure on the part of any holder to obtain, maintain, register or otherwise perfect any security; or (g) any other event or circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor (whether or not similar to the foregoing), and in any event however material or prejudicial it may be to the Guarantor or to any subrogation, contribution or reimbursement rights the Guarantor may otherwise have. The Guarantor covenants that its obligations hereunder will not be discharged except by indefeasible payment in full in cash of all of the Guaranteed Obligations and all other obligations hereunder.

3. WAIVER.

The Guarantor unconditionally waives to the fullest extent permitted by law, (a) notice of acceptance hereof, of any action taken or omitted in reliance hereon and of any default by the Company in the payment of any amounts due under the Notes, the Note Purchase Agreement or any other instrument referred to therein, and of any of the matters referred to in Section 2 hereof, (b) all notices which may be required by statute, rule of law or otherwise to preserve any of the rights of any holder against the Guarantor, including, without limitation, presentment to or demand for payment from the Company or the Guarantor with respect to any Note, notice to the Company or to the Guarantor of default or protest for nonpayment or dishonor and the filing of claims with a court in the event of the bankruptcy of the Company, (c) any right to require any holder to enforce, assert or exercise any right, power or remedy including, without limitation, any right, power or remedy conferred in the Note Purchase Agreement or the Notes, (d) any requirement for diligence on the part of any holder and (e) any other act or omission or thing or delay in doing any other act or thing which might in any manner or to any extent vary the risk of the Guarantor or otherwise operate as a discharge of the Guarantor or in any manner lessen the obligations of the Guarantor hereunder.

4. OBLIGATIONS UNIMPAIRED.

The Guarantor authorizes the holders, without notice or demand to the Guarantor and without affecting its obligations hereunder, from time to time: (a) to renew, compromise, extend, accelerate or otherwise change the time for payment of, all or any part of the Notes, the Note Purchase Agreement or any other instrument referred to therein; (b) to change any of the representations, covenants, events of default or any other terms or conditions of or pertaining to the Notes, the Note Purchase Agreement or any other instrument referred to therein, including, without limitation, decreases or increases in amounts of principal, rates of interest, the Make-Whole Amount or any other obligation; (c) to take and hold security for the payment of the Notes, the Note Purchase Agreement or any other instrument referred to therein, for the performance of this Guarantee Agreement or otherwise for the Indebtedness guaranteed hereby and to exchange, enforce, waive, subordinate and release any such security; (d) to apply any such security and to direct the order or manner of sale thereof as the holders in their sole discretion may determine; (e) to obtain additional or substitute endorsers or guarantors; (f) to exercise or refrain from exercising any rights against the Company and others; and (g) to apply any sums, by whomsoever paid or however realized, to the payment of the Guaranteed Obligations and all other obligations owed hereunder. The holders shall have no obligation to proceed against any additional or substitute endorsers or guarantors or to pursue or exhaust any security provided by the Company, the Guarantor or any other Person or to pursue any other remedy available to the holders.

If an event permitting the acceleration of the maturity of the principal amount of any Notes shall exist and such acceleration shall at such time be prevented or the right of any holder to receive any payment on account of the Guaranteed Obligations shall at such time be delayed or otherwise affected by reason of the pendency against the Company, the Guarantor or any other guarantors of a case or proceeding under a bankruptcy or insolvency law, the Guarantor agrees that, for purposes of this Guarantee Agreement and its obligations hereunder, the maturity of such principal amount shall be deemed to have been accelerated with the same effect as if the holder thereof had accelerated the same in accordance with the terms of the Note Purchase Agreement, and the Guarantor shall forthwith pay such accelerated Guaranteed Obligations.

5. SUBROGATION AND SUBORDINATION.

(a) The Guarantor will not exercise any rights which it may have acquired by way of subrogation under this Guarantee Agreement, by any payment made hereunder or otherwise, or accept any payment on account of such subrogation rights, or any rights of reimbursement, contribution or indemnity or any rights or recourse to any security for the Notes or this Guarantee Agreement unless and until all of the Guaranteed Obligations shall have been indefeasibly paid in full in cash.

(b) The Guarantor hereby subordinates the payment of all Indebtedness and other obligations of the Company or any other guarantor of the Guaranteed Obligations owing to the Guarantor, whether now existing or hereafter arising, including, without limitation, all rights and claims described in clause (a) of this Section 5, to the indefeasible payment in full in cash of all of the Guaranteed Obligations. If the Required Holders so request, any such Indebtedness or other obligations shall be enforced and performance received by the Guarantor as trustee for the holders and the proceeds thereof shall be paid over to the holders promptly, in the form received (together with any necessary endorsements) to be applied to the Guaranteed Obligations, whether matured or unmatured, as may be directed by the Required Holders, but without reducing or affecting in any manner the liability of the Guarantor under this Guarantee Agreement.

(c) If any amount or other payment is made to or accepted by the Guarantor in violation of any of the preceding clauses (a) and (b) of this Section 5, such amount shall be deemed to have been paid to the Guarantor for the benefit of, and held in trust for the benefit of, the holders and shall be paid over to the holders promptly, in the form received (together with any necessary endorsements) to be applied to the Guaranteed Obligations, whether matured or unmatured, as may be directed by the Required Holders, but without reducing or affecting in any manner the liability of the Guarantor under this Guarantee Agreement.

(d) The Guarantor acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by the Note Purchase Agreement and that its agreements set forth in this Guarantee Agreement (including this Section 5) are knowingly made in contemplation of such benefits.

6. REINSTATEMENT OF GUARANTEE.

This Guarantee Agreement shall continue to be effective, or be reinstated, as the case may be, if and to the extent at any time payment, in whole or in part, of any of the sums due to any holder on account of the Guaranteed Obligations is rescinded or must otherwise be restored or returned by a holder upon the insolvency, bankruptcy, dissolution, liquidation or reorganization of the Company or any other guarantors, or upon or as a result of the appointment of a custodian, receiver, trustee or other officer with similar powers with respect to the Company or any other guarantors or any part of its or their property, or otherwise, all as though such payments had not been made.

7. RANK OF GUARANTEE.

The Guarantor will ensure that its payment obligations under this Guarantee Agreement will at all times rank at least *pari passu*, without preference or priority, with all other unsecured and unsubordinated Indebtedness of the Guarantor now or hereafter existing.

8. REPRESENTATIONS AND WARRANTIES OF THE GUARANTOR.

The Guarantor represents and warrants to each holder as follows:

8.1 ORGANIZATION; POWER AND AUTHORITY. The Guarantor is a Nevada limited liability company, duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, and is duly qualified as a foreign limited liability company and is in good standing in each jurisdiction in which such qualification is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Guarantor has the limited liability company power and authority to own or hold under lease the properties it purports to own or hold under lease, to transact the business it transacts and proposes to transact, to execute and deliver this Guarantee Agreement and to perform the provisions hereof.

8.2 AUTHORIZATION, ETC. This Guarantee Agreement has been duly authorized by all necessary limited liability company action on the part of the Guarantor, and this Guarantee Agreement constitutes a legal, valid and binding obligation of the Guarantor enforceable against the Guarantor in accordance with its terms, except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

8.3 COMPLIANCE WITH LAWS, OTHER INSTRUMENTS, ETC. The execution, delivery and performance by the Guarantor of this Guarantee Agreement will not (a) contravene, result in any breach of, or constitute a default under, or result in the creation of any Lien in respect of any property of the Guarantor or any of its Subsidiaries under, any indenture, mortgage, deed of trust, loan, purchase or credit agreement, lease, organizational documents, or any other agreement or instrument to which the Guarantor or any of its Subsidiaries is bound or by which the Guarantor or any of its Subsidiaries or any of their respective properties may be bound or affected, (b) conflict with or result in a breach of any of the terms, conditions or provisions of any order, judgment, decree, or ruling of any court, arbitrator or Governmental Authority applicable to the Guarantor or any of its Subsidiaries or (c) violate any provision of any statute or other rule or regulation of any Governmental Authority applicable to the Guarantor or any of its Subsidiaries. **“Governmental Authority”** means (x) the government of (i) the United States of America or any State or other political subdivision thereof, or (ii) any other jurisdiction in which the Guarantor or any of its Subsidiaries conducts all or any part of its business, or which asserts jurisdiction over any properties of the Guarantor or any of its Subsidiaries, or (y) any entity exercising executive, legislative, judicial, regulatory or administrative functions of, or pertaining to, any such government.

8.4 GOVERNMENTAL AUTHORIZATIONS, ETC. No consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required in connection with the execution, delivery or performance by the Guarantor of this Guarantee Agreement.

8.5 INFORMATION REGARDING THE COMPANY. The Guarantor now has and will continue to have independent means of obtaining information concerning the affairs, financial condition and business of the Company. No holder shall have any duty or responsibility to provide the Guarantor with any credit or other information concerning the affairs, financial condition or business of the Company which may come into possession of the holders. The Guarantor has executed and delivered this Guarantee Agreement without reliance upon any representation by the holders including, without limitation, with respect to (a) the due execution, validity, effectiveness or enforceability of any instrument, document or agreement evidencing or relating to any of the Guaranteed Obligations or any loan or other financial accommodation made or granted to the Company, (b) the validity, genuineness, enforceability, existence, value or sufficiency of any property securing any of the Guaranteed Obligations or the creation, perfection or priority of any lien or security interest in such property or (c) the existence, number, financial condition or creditworthiness of other guarantors or sureties, if any, with respect to any of the Guaranteed Obligations.

8.6 SOLVENCY. Upon the execution and delivery hereof, the Guarantor will be solvent, will be able to pay its debts as they mature, and will have capital sufficient to carry on its business.

9. TERM OF GUARANTEE AGREEMENT.

This Guarantee Agreement and all guarantees, covenants and agreements of the Guarantor contained herein shall continue in full force and effect and shall not be discharged until such time as all of the Guaranteed Obligations and all other obligations hereunder shall be indefeasibly paid in full in cash and shall be subject to reinstatement pursuant to Section 6.

10. SURVIVAL OF REPRESENTATIONS AND WARRANTIES; ENTIRE AGREEMENT.

All representations and warranties contained herein shall survive the execution and delivery of this Guarantee Agreement and may be relied upon by any subsequent holder, regardless of any investigation made at any time by or on behalf of any Purchaser or any other holder. All statements contained in any certificate or other instrument delivered by or on behalf of the Guarantor pursuant to this Guarantee Agreement shall be deemed representations and warranties of the Guarantor under this Guarantee Agreement. Subject to the preceding sentence, this Guarantee Agreement embodies the entire agreement and understanding between each holder and the Guarantor and supersedes all prior agreements and understandings relating to the subject matter hereof.

11. AMENDMENT AND WAIVER.

11.1 REQUIREMENTS. Except as otherwise provided in the fourth paragraph of Section 1.1 of this Guarantee Agreement, this Guarantee Agreement may be amended, and the observance of any term hereof may be waived (either retroactively or prospectively), with (and only with) the written consent of the Guarantor and the Required Holders, except that no amendment or waiver (a) of any of the first three paragraphs of Section 1.1 or any of Section 1.2 or any of the provisions of Section 2, 3, 4, 5, 6, 7, 9 or 11 hereof, or any defined term (as it is used therein), or (b) which results in the limitation of the liability of the Guarantor hereunder (except to the extent provided in the fourth paragraph of Section 1 of this Guarantee Agreement) will be effective as to any holder unless consented to by such holder in writing.

11.2 SOLICITATION OF HOLDERS OF NOTES.

(a) *Solicitation.* The Guarantor will provide each holder of the Notes (irrespective of the amount of Notes then owned by it) with sufficient information, sufficiently far in advance of the date a decision is required, to enable such holder to make an informed and considered decision with respect to any proposed amendment, waiver or consent in respect of any of the provisions hereof. The Guarantor will deliver executed or true and correct copies of each amendment, waiver or consent effected pursuant to the provisions of this Section 11.2 to each holder promptly following the date on which it is executed and delivered by, or receives the consent or approval of, the requisite holders of Notes.

(b) *Payment.* The Guarantor will not directly or indirectly pay or cause to be paid any remuneration, whether by way of supplemental or additional interest, fee or otherwise, or grant any security or provide other credit support, to any holder as consideration for or as an inducement to the entering into by any holder of any waiver or amendment of any of the terms and provisions hereof unless such remuneration is concurrently paid, or security is concurrently granted or other credit support concurrently provided, on the same terms, ratably to each holder even if such holder did not consent to such waiver or amendment.

11.3 BINDING EFFECT. Any amendment or waiver consented to as provided in this Section 11 applies equally to all holders and is binding upon them and upon each future holder and upon the Guarantor without regard to whether any Note has been marked to indicate such amendment or waiver. No such amendment or waiver will extend to or affect any obligation, covenant or agreement not expressly amended or waived or impair any right consequent thereon. No course of dealing between the Guarantor and the holder nor any delay in exercising any rights hereunder or under any Note shall operate as a waiver of any rights of any holder. As used herein, the term **“this Guarantee Agreement”** and references thereto shall mean this Guarantee Agreement as it may be amended, modified, supplemented or restated from time to time.

11.4 NOTES HELD BY COMPANY, ETC. Solely for the purpose of determining whether the holders of the requisite percentage of the aggregate principal amount of Notes then outstanding approved or consented to any amendment, waiver or consent to be given under this Guarantee Agreement, or have directed the taking of any action provided herein to be taken upon the direction of the holders of a specified percentage of the aggregate principal amount of Notes then outstanding, Notes directly or indirectly owned by the Guarantor, the Company or any of their respective Affiliates shall be deemed not to be outstanding.

12. NOTICES.

All notices and communications provided for hereunder shall be in writing and sent (a) by telecopy if the sender on the same day sends a confirming copy of such notice by a recognized overnight delivery service (charges prepaid), or (b) by registered or certified mail with return receipt requested (postage prepaid), or (c) by a recognized overnight delivery service (with charges prepaid). Any such notice must be sent:

(a) if to the Guarantor, to c/o Mine Safety Appliances Company, 121 Gamma Drive, Pittsburgh, Pennsylvania 153238, Attention: Dennis L. Zeitler, Senior Vice President and Chief Financial Officer, or such other address as the Guarantor shall have specified to the holders in writing, or

(b) if to any holder, to such holder at the addresses specified for such communications set forth in Schedule A to the Note Purchase Agreement (or, if such holder’s address is not set forth therein, in such holder’s Confirmation of Acceptance), or such other address as such holder shall have specified to the Guarantor in writing.

13. MISCELLANEOUS.

13.1 SUCCESSORS AND ASSIGNS. All covenants and other agreements contained in this Guarantee Agreement by or on behalf of any of the parties hereto bind and inure to the benefit of their respective successors and assigns whether so expressed or not.

13.2 SEVERABILITY. Any provision of this Guarantee Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall (to the full extent permitted by law), not invalidate or render unenforceable such provision in any other jurisdiction.

13.3 CONSTRUCTION. Each covenant contained herein shall be construed (absent express provision to the contrary) as being independent of each other covenant contained herein, so that compliance with any one covenant shall not (absent such express contrary provision) be deemed to excuse compliance with any other covenant. Whether any provision herein refers to action to be taken by any Person, or which such Person is prohibited from taking, such provision shall be applicable whether such action is taken directly or indirectly by such Person.

The section and subsection headings in this Guarantee Agreement are for convenience of reference only and shall neither be deemed to be a part of this Guarantee Agreement nor modify, define, expand or limit any of the terms or provisions hereof. All references herein to numbered sections, unless otherwise indicated, are to sections of this Guarantee Agreement. Words and definitions in the singular shall be read and construed as though in the plural and *vice versa*, and words in the masculine, neuter or feminine gender shall be read and construed as though in either of the other genders where the context so requires.

13.4 FURTHER ASSURANCES. The Guarantor agrees to execute and deliver all such instruments and take all such action as the Required Holders may from time to time reasonably request in order to effectuate fully the purposes of this Guarantee Agreement.

13.5 GOVERNING LAW. This Guarantee Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the law of the State of New York, excluding choice-of-law principles of the law of such State that would permit the application of the laws of a jurisdiction other than such State.

13.6 JURISDICTION AND PROCESS; WAIVER OF JURY TRIAL.

(a) The Guarantor irrevocably submits to the non-exclusive jurisdiction of any New York State or federal court sitting in the Borough of Manhattan, The City of New York, over any suit, action or proceeding arising out of or relating to this Guarantee Agreement. To the fullest extent permitted by applicable law, the Guarantor irrevocably waives and agrees not to assert, by way of motion, as a defense or otherwise, any claim that it is not subject to the jurisdiction of any such court, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding brought in any such court and any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

(b) The Guarantor consents to process being served by or on behalf of any holder in any suit, action or proceeding of the nature referred to in Section 13.6(a) by mailing a copy thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, return receipt requested, to it at its address specified in Section 12 or at such other address of which such holder shall then have been notified pursuant to Section 12. The Guarantor agrees that such service upon receipt (i) shall be deemed in every respect effective service of process upon it in any such suit, action or proceeding and (ii) shall, to the fullest extent permitted by applicable law, be taken and held to be valid personal service upon and personal delivery to it. Notices hereunder shall be conclusively presumed received as evidenced by a delivery receipt furnished by the United States Postal Service or any reputable commercial delivery service.

(c) Nothing in this Section 13.6 shall affect the right of any holder to serve process in any manner permitted by law, or limit any right that the holders may have to bring proceedings against the Guarantor in the courts of any appropriate jurisdiction or to enforce in any lawful manner a judgment obtained in one jurisdiction in any other jurisdiction.

(d) THE GUARANTOR AND THE HOLDERS HEREBY WAIVE TRIAL BY JURY IN ANY ACTION BROUGHT ON OR WITH RESPECT TO THIS GUARANTEE AGREEMENT OR OTHER DOCUMENT EXECUTED IN CONNECTION HEREWITH.

13.7 REPRODUCTION OF DOCUMENTS; EXECUTION. This Guarantee Agreement may be reproduced by any holder by any photographic, photostatic, electronic, digital, or other similar process and such holder may destroy any original document so reproduced. The Guarantor agrees and stipulates that, to the extent permitted by applicable law, any such reproduction shall be admissible in evidence as the original itself in any judicial or administrative proceeding (whether or not the original is in existence and whether or not such reproduction was made by such holder in the regular course of business) and any enlargement, facsimile or further reproduction of such reproduction shall likewise be admissible in evidence. This Section 13.7 shall not prohibit the Guarantor or any other holder of Notes from contesting any such reproduction to the same extent that it could contest the original, or from introducing evidence to demonstrate the inaccuracy of any such reproduction. A facsimile or electronic transmission of the signature page of the Guarantor shall be as effective as delivery of a manually executed counterpart hereof and shall be admissible into evidence for all purposes.

IN WITNESS WHEREOF, the Guarantor has caused this Guarantee Agreement to be duly executed and delivered as of the date and year first above written.

GENERAL MONITORS TRANSNATIONAL, LLC

By: /s/

Name:

Title:

GUARANTEE AGREEMENT

Dated as of February 12, 2014

of

GENERAL MONITORS, INC.

GUARANTEE AGREEMENT

THIS GUARANTEE AGREEMENT, dated as of February 12, 2014 (this “**Guarantee Agreement**”), is made by GENERAL MONITORS, INC., a Nevada corporation (the “**Guarantor**”), in favor of the Purchasers (as defined below) and the other holders from time to time of the Notes (as defined below). The Purchasers and such other holders are herein collectively called the “**holders**” and individually a “**holder**.”

PRELIMINARY STATEMENTS:

I. Mine Safety Appliances Company, a Pennsylvania corporation (the “**Company**”), previously entered into a Note Purchase Agreement, dated as of December 20, 2006 (as amended, modified, supplemented or restated from time to time, the “**Note Purchase Agreement**”), with each of the Purchasers listed on the signature pages thereto (collectively, the “**Purchasers**”), pursuant to which the Company issued and sold to the Purchasers \$60,000,000 in aggregate principal amount of its 5.41% Senior Notes due December 20, 2021 (as the same may be amended, restated or otherwise modified from time to time, collectively, the “**Notes**”). Capitalized terms used herein have the meanings specified in the Note Purchase Agreement unless otherwise defined herein.

II. The Company has informed the holders of the Notes that certain Events of Default have occurred under Section 11(c) of the Note Purchase Agreement as a result of (a) the Company's failure to comply with Section 10.3 of the Note Purchase Agreement (the “**Priority Indebtedness Default**”) as a result of the execution of certain Guaranties of the Indebtedness of the Company under, and in respect of, the 2010 Note Purchase Agreement and the Bank Credit Agreement (as each such term is defined in the 2006 Amendment and Waiver referred to below), and (b) the Company's failure to provide notice to the holders of the Notes of the occurrence of the Priority Indebtedness Default in accordance with Section 7.1(d) of the Note Purchase Agreement (the “**2006 Notice Default**” and together with the Priority Indebtedness Default, collectively, the “**Existing Defaults**”).

III. The Purchasers have agreed to waive the Existing Defaults and amend certain terms and provisions of the Note Purchase Agreement, upon the terms, and subject to the conditions, set forth in that certain Amendment No. 1 and Waiver to Note Purchase Agreement, dated as of the date hereof, by and between the Company and the holders of the Notes (the “**2006 Amendment and Waiver**”).

IV. It is a condition to the agreement of the holders of the Notes to enter into the 2006 Amendment and Waiver that the Guarantor execute and deliver this Guarantee Agreement to the holders of the Notes and that this Guarantee Agreement be in full force and effect.

V. The Guarantor has received and will receive direct and indirect benefits from the transactions contemplated by the 2006 Amendment and Waiver and the agreement of the holders of the Notes to continue to extend credit to the Company pursuant to the terms of the Note Purchase Agreement and the Notes. The Board of Directors of the Guarantor has determined that the incurrence of such obligations is in the best interests of the Guarantor.

NOW THEREFORE, in compliance with the Note Purchase Agreement, and in consideration of, the execution and delivery of the Note Purchase Agreement and the purchase of the Notes by each of the Purchasers, the Guarantor hereby covenants and agrees with, and represents and warrants to, each of the holders as follows:

1. GUARANTEE; INDEMNITY.

1.1 GUARANTEE. The Guarantor hereby irrevocably and unconditionally guarantees to each holder, the due and punctual payment in full of (a) the principal of, Make-Whole Amount, if any, and interest on (including, without limitation, interest accruing after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding, whether or not a claim for post-filing or post-petition interest is allowed in such proceeding), and any other amounts due under, the Notes when and as the same shall become due and payable (whether at stated maturity or by required or optional prepayment or by acceleration or otherwise) and (b) any other sums which may become due under the terms and provisions of the Notes, the Note Purchase Agreement or any other instrument referred to therein (all such obligations described in clauses (a) and (b) above are herein called the **“Guaranteed Obligations”**). The guarantee in the preceding sentence is an absolute, present and continuing guarantee of payment and not of collectability and is in no way conditional or contingent upon any attempt to collect from the Company or any other guarantor of the Notes or upon any other action, occurrence or circumstance whatsoever. In the event that the Company shall fail so to pay any of such Guaranteed Obligations, the Guarantor agrees to pay the same when due to the holders entitled thereto, without demand, presentment, protest or notice of any kind, in lawful money of the United States of America, pursuant to the requirements for payment specified in the Notes and the Note Purchase Agreement. Each default in payment of any of the Guaranteed Obligations shall give rise to a separate cause of action hereunder and separate suits may be brought hereunder as each cause of action arises. The Guarantor agrees that the Notes issued in connection with the Note Purchase Agreement may (but need not) make reference to this Guarantee Agreement.

The Guarantor agrees to pay and to indemnify and save each holder harmless from and against any damage, loss, cost or expense (including attorneys’ fees) which such holder may incur or be subject to as a consequence, direct or indirect, of (x) any breach by the Guarantor or by the Company of any warranty, covenant, term or condition in, or the occurrence of any default under, this Guarantee Agreement, the Notes, the Note Purchase Agreement or any other instrument referred to therein, together with all expenses resulting from the compromise or defense of any claims or liabilities arising as a result of any such breach or default, (y) any legal action commenced to challenge the validity or enforceability of this Guarantee Agreement, the Notes, the Note Purchase Agreement or any other instrument referred to therein and (z) enforcing or defending (or determining whether or how to enforce or defend) the provisions of this Guarantee Agreement.

The Guarantor hereby acknowledges and agrees that the Guarantor’s liability hereunder is joint and several with any other Person(s) who may guarantee the obligations and Indebtedness under and in respect of the Notes and the Note Purchase Agreement.

Notwithstanding the foregoing provisions or any other provision of this Guarantee Agreement, the holders (by their acceptance of any Note) and the Guarantor hereby agree that if at any time the Guaranteed Obligations exceed the Maximum Guaranteed Amount determined as of such time with regard to the Guarantor, then this Guarantee Agreement shall be automatically amended to reduce the Guaranteed Obligations to the Maximum Guaranteed Amount. Such amendment shall not require the written consent of the Guarantor or any holder and shall be deemed to have been automatically consented to by the Guarantor and each holder. The Guarantor agrees that the Guaranteed Obligations may at any time exceed the Maximum Guaranteed Amount without affecting or impairing the obligation of the Guarantor. **“Maximum Guaranteed Amount”** means as of the date of determination with respect to the Guarantor, the lesser of (a) the amount of the Guaranteed Obligations outstanding on such date and (b) the maximum amount that would not render the Guarantor’s liability under this Guarantee Agreement subject to avoidance under Section 548 of the United States Bankruptcy Code (or any successor provision) or any comparable provision of applicable state law.

1.2 INDEMNITY. The Guarantor hereby further agrees that if, for any reason, any amount claimed by a holder of the Notes under this Guarantee Agreement is not recoverable on the basis of a guarantee, it will be liable as a principal debtor and primary obligor to indemnify that holder of the Notes against any cost, loss or liability it incurs as a result of the Company not paying any amount expressed to be payable by it under the Notes, the Note Purchase Agreement or otherwise on the date when it is expressed to be due. The amount payable by the Guarantor under this Section 1.2 will not exceed the amount it would have had to pay under Section 1.1 if the amount claimed had been recoverable on the basis of a guarantee.

2. OBLIGATIONS ABSOLUTE.

The obligations of the Guarantor hereunder shall be primary, absolute, irrevocable and unconditional, irrespective of the validity or enforceability of the Notes, the Note Purchase Agreement or any other instrument referred to therein, shall not be subject to any counterclaim, setoff, deduction or defense based upon any claim the Guarantor may have against the Company or any holder or otherwise, and shall remain in full force and effect without regard to, and shall not be released, discharged or in any way affected by, any circumstance or condition whatsoever (whether or not the Guarantor shall have any knowledge or notice thereof), including, without limitation: (a) any amendment to, modification of, supplement to or restatement of the Notes, the Note Purchase Agreement or any other instrument referred to therein (it being agreed that the obligations of the Guarantor hereunder shall apply to the Notes, the Note Purchase Agreement or any such other instrument as so amended, modified, supplemented or restated) or any assignment or transfer of any thereof or of any interest therein, or any furnishing, acceptance or release of any security for the Notes; (b) any waiver, consent, extension, indulgence or other action or inaction under or in respect of the Notes, the Note Purchase Agreement or any other instrument referred to therein; (c) any bankruptcy, insolvency, arrangement, reorganization, readjustment, composition, liquidation or similar proceeding with respect to the Company or its property; (d) any merger, amalgamation or consolidation of the Guarantor or of the Company into or with any other Person or any sale, lease or transfer of any or all of the assets of the Guarantor or of the Company to any Person; (e) any failure on the part of the Company for any reason to comply with or perform any of the terms of any other agreement with the Guarantor; (f) any failure on the part of any holder to obtain, maintain, register or otherwise perfect any security; or (g) any other event or circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor (whether or not similar to the foregoing), and in any event however material or prejudicial it may be to the Guarantor or to any subrogation, contribution or reimbursement rights the Guarantor may otherwise have. The Guarantor covenants that its obligations hereunder will not be discharged except by indefeasible payment in full in cash of all of the Guaranteed Obligations and all other obligations hereunder.

3. WAIVER.

The Guarantor unconditionally waives to the fullest extent permitted by law, (a) notice of acceptance hereof, of any action taken or omitted in reliance hereon and of any default by the Company in the payment of any amounts due under the Notes, the Note Purchase Agreement or any other instrument referred to therein, and of any of the matters referred to in Section 2 hereof, (b) all notices which may be required by statute, rule of law or otherwise to preserve any of the rights of any holder against the Guarantor, including, without limitation, presentment to or demand for payment from the Company or the Guarantor with respect to any Note, notice to the Company or to the Guarantor of default or protest for nonpayment or dishonor and the filing of claims with a court in the event of the bankruptcy of the Company, (c) any right to require any holder to enforce, assert or exercise any right, power or remedy including, without limitation, any right, power or remedy conferred in the Note Purchase Agreement or the Notes, (d) any requirement for diligence on the part of any holder and (e) any other act or omission or thing or delay in doing any other act or thing which might in any manner or to any extent vary the risk of the Guarantor or otherwise operate as a discharge of the Guarantor or in any manner lessen the obligations of the Guarantor hereunder.

4. OBLIGATIONS UNIMPAIRED.

The Guarantor authorizes the holders, without notice or demand to the Guarantor and without affecting its obligations hereunder, from time to time: (a) to renew, compromise, extend, accelerate or otherwise change the time for payment of, all or any part of the Notes, the Note Purchase Agreement or any other instrument referred to therein; (b) to change any of the representations, covenants, events of default or any other terms or conditions of or pertaining to the Notes, the Note Purchase Agreement or any other instrument referred to therein, including, without limitation, decreases or increases in amounts of principal, rates of interest, the Make-Whole Amount or any other obligation; (c) to take and hold security for the payment of the Notes, the Note Purchase Agreement or any other instrument referred to therein, for the performance of this Guarantee Agreement or otherwise for the Indebtedness guaranteed hereby and to exchange, enforce, waive, subordinate and release any such security; (d) to apply any such security and to direct the order or manner of sale thereof as the holders in their sole discretion may determine; (e) to obtain additional or substitute endorsers or guarantors; (f) to exercise or refrain from exercising any rights against the Company and others; and (g) to apply any sums, by whomsoever paid or however realized, to the payment of the Guaranteed Obligations and all other obligations owed hereunder. The holders shall have no obligation to proceed against any additional or substitute endorsers or guarantors or to pursue or exhaust any security provided by the Company, the Guarantor or any other Person or to pursue any other remedy available to the holders.

If an event permitting the acceleration of the maturity of the principal amount of any Notes shall exist and such acceleration shall at such time be prevented or the right of any holder to receive any payment on account of the Guaranteed Obligations shall at such time be delayed or otherwise affected by reason of the pendency against the Company, the Guarantor or any other guarantors of a case or proceeding under a bankruptcy or insolvency law, the Guarantor agrees that, for purposes of this Guarantee Agreement and its obligations hereunder, the maturity of such principal amount shall be deemed to have been accelerated with the same effect as if the holder thereof had accelerated the same in accordance with the terms of the Note Purchase Agreement, and the Guarantor shall forthwith pay such accelerated Guaranteed Obligations.

5. SUBROGATION AND SUBORDINATION.

(a) The Guarantor will not exercise any rights which it may have acquired by way of subrogation under this Guarantee Agreement, by any payment made hereunder or otherwise, or accept any payment on account of such subrogation rights, or any rights of reimbursement, contribution or indemnity or any rights or recourse to any security for the Notes or this Guarantee Agreement unless and until all of the Guaranteed Obligations shall have been indefeasibly paid in full in cash.

(b) The Guarantor hereby subordinates the payment of all Indebtedness and other obligations of the Company or any other guarantor of the Guaranteed Obligations owing to the Guarantor, whether now existing or hereafter arising, including, without limitation, all rights and claims described in clause (a) of this Section 5, to the indefeasible payment in full in cash of all of the Guaranteed Obligations. If the Required Holders so request, any such Indebtedness or other obligations shall be enforced and performance received by the Guarantor as trustee for the holders and the proceeds thereof shall be paid over to the holders promptly, in the form received (together with any necessary endorsements) to be applied to the Guaranteed Obligations, whether matured or unmatured, as may be directed by the Required Holders, but without reducing or affecting in any manner the liability of the Guarantor under this Guarantee Agreement.

(c) If any amount or other payment is made to or accepted by the Guarantor in violation of any of the preceding clauses (a) and (b) of this Section 5, such amount shall be deemed to have been paid to the Guarantor for the benefit of, and held in trust for the benefit of, the holders and shall be paid over to the holders promptly, in the form received (together with any necessary endorsements) to be applied to the Guaranteed Obligations, whether matured or unmatured, as may be directed by the Required Holders, but without reducing or affecting in any manner the liability of the Guarantor under this Guarantee Agreement.

(d) The Guarantor acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by the Note Purchase Agreement and that its agreements set forth in this Guarantee Agreement (including this Section 5) are knowingly made in contemplation of such benefits.

6. REINSTATEMENT OF GUARANTEE.

This Guarantee Agreement shall continue to be effective, or be reinstated, as the case may be, if and to the extent at any time payment, in whole or in part, of any of the sums due to any holder on account of the Guaranteed Obligations is rescinded or must otherwise be restored or returned by a holder upon the insolvency, bankruptcy, dissolution, liquidation or reorganization of the Company or any other guarantors, or upon or as a result of the appointment of a custodian, receiver, trustee or other officer with similar powers with respect to the Company or any other guarantors or any part of its or their property, or otherwise, all as though such payments had not been made.

7. RANK OF GUARANTEE.

The Guarantor will ensure that its payment obligations under this Guarantee Agreement will at all times rank at least *pari passu*, without preference or priority, with all other unsecured and unsubordinated Indebtedness of the Guarantor now or hereafter existing.

8. REPRESENTATIONS AND WARRANTIES OF THE GUARANTOR.

The Guarantor represents and warrants to each holder as follows:

8.1 ORGANIZATION; POWER AND AUTHORITY. The Guarantor is a Nevada corporation, duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation, and is duly qualified as a foreign corporation and is in good standing in each jurisdiction in which such qualification is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Guarantor has the corporate power and authority to own or hold under lease the properties it purports to own or hold under lease, to transact the business it transacts and proposes to transact, to execute and deliver this Guarantee Agreement and to perform the provisions hereof.

8.2 AUTHORIZATION, ETC. This Guarantee Agreement has been duly authorized by all necessary corporate action on the part of the Guarantor, and this Guarantee Agreement constitutes a legal, valid and binding obligation of the Guarantor enforceable against the Guarantor in accordance with its terms, except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

8.3 COMPLIANCE WITH LAWS, OTHER INSTRUMENTS, ETC. The execution, delivery and performance by the Guarantor of this Guarantee Agreement will not (a) contravene, result in any breach of, or constitute a default under, or result in the creation of any Lien in respect of any property of the Guarantor or any of its Subsidiaries under, any indenture, mortgage, deed of trust, loan, purchase or credit agreement, lease, organizational documents, or any other agreement or instrument to which the Guarantor or any of its Subsidiaries is bound or by which the Guarantor or any of its Subsidiaries or any of their respective properties may be bound or affected, (b) conflict with or result in a breach of any of the terms, conditions or provisions of any order, judgment, decree, or ruling of any court, arbitrator or Governmental Authority applicable to the Guarantor or any of its Subsidiaries or (c) violate any provision of any statute or other rule or regulation of any Governmental Authority applicable to the Guarantor or any of its Subsidiaries. **“Governmental Authority”** means (x) the government of (i) the United States of America or any State or other political subdivision thereof, or (ii) any other jurisdiction in which the Guarantor or any of its Subsidiaries conducts all or any part of its business, or which asserts jurisdiction over any properties of the Guarantor or any of its Subsidiaries, or (y) any entity exercising executive, legislative, judicial, regulatory or administrative functions of, or pertaining to, any such government.

8.4 GOVERNMENTAL AUTHORIZATIONS, ETC. No consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required in connection with the execution, delivery or performance by the Guarantor of this Guarantee Agreement.

8.5 INFORMATION REGARDING THE COMPANY. The Guarantor now has and will continue to have independent means of obtaining information concerning the affairs, financial condition and business of the Company. No holder shall have any duty or responsibility to provide the Guarantor with any credit or other information concerning the affairs, financial condition or business of the Company which may come into possession of the holders. The Guarantor has executed and delivered this Guarantee Agreement without reliance upon any representation by the holders including, without limitation, with respect to (a) the due execution, validity, effectiveness or enforceability of any instrument, document or agreement evidencing or relating to any of the Guaranteed Obligations or any loan or other financial accommodation made or granted to the Company, (b) the validity, genuineness, enforceability, existence, value or sufficiency of any property securing any of the Guaranteed Obligations or the creation, perfection or priority of any lien or security interest in such property or (c) the existence, number, financial condition or creditworthiness of other guarantors or sureties, if any, with respect to any of the Guaranteed Obligations.

8.6 SOLVENCY. Upon the execution and delivery hereof, the Guarantor will be solvent, will be able to pay its debts as they mature, and will have capital sufficient to carry on its business.

9. TERM OF GUARANTEE AGREEMENT.

This Guarantee Agreement and all guarantees, covenants and agreements of the Guarantor contained herein shall continue in full force and effect and shall not be discharged until such time as all of the Guaranteed Obligations and all other obligations hereunder shall be indefeasibly paid in full in cash and shall be subject to reinstatement pursuant to Section 6.

10. SURVIVAL OF REPRESENTATIONS AND WARRANTIES; ENTIRE AGREEMENT.

All representations and warranties contained herein shall survive the execution and delivery of this Guarantee Agreement and may be relied upon by any subsequent holder, regardless of any investigation made at any time by or on behalf of any Purchaser or any other holder. All statements contained in any certificate or other instrument delivered by or on behalf of the Guarantor pursuant to this Guarantee Agreement shall be deemed representations and warranties of the Guarantor under this Guarantee Agreement. Subject to the preceding sentence, this Guarantee Agreement embodies the entire agreement and understanding between each holder and the Guarantor and supersedes all prior agreements and understandings relating to the subject matter hereof.

11. AMENDMENT AND WAIVER.

11.1 REQUIREMENTS. Except as otherwise provided in the fourth paragraph of Section 1.1 of this Guarantee Agreement, this Guarantee Agreement may be amended, and the observance of any term hereof may be waived (either retroactively or prospectively), with (and only with) the written consent of the Guarantor and the Required Holders, except that no amendment or waiver (a) of any of the first three paragraphs of Section 1.1 or any of Section 1.2 or any of the provisions of Section 2, 3, 4, 5, 6, 7, 9 or 11 hereof, or any defined term (as it is used therein), or (b) which results in the limitation of the liability of the Guarantor hereunder (except to the extent provided in the fourth paragraph of Section 1 of this Guarantee Agreement) will be effective as to any holder unless consented to by such holder in writing.

11.2 SOLICITATION OF HOLDERS OF NOTES.

(a) *Solicitation.* The Guarantor will provide each holder of the Notes (irrespective of the amount of Notes then owned by it) with sufficient information, sufficiently far in advance of the date a decision is required, to enable such holder to make an informed and considered decision with respect to any proposed amendment, waiver or consent in respect of any of the provisions hereof. The Guarantor will deliver executed or true and correct copies of each amendment, waiver or consent effected pursuant to the provisions of this Section 11.2 to each holder promptly following the date on which it is executed and delivered by, or receives the consent or approval of, the requisite holders of Notes.

(b) *Payment.* The Guarantor will not directly or indirectly pay or cause to be paid any remuneration, whether by way of supplemental or additional interest, fee or otherwise, or grant any security or provide other credit support, to any holder as consideration for or as an inducement to the entering into by any holder of any waiver or amendment of any of the terms and provisions hereof unless such remuneration is concurrently paid, or security is concurrently granted or other credit support concurrently provided, on the same terms, ratably to each holder even if such holder did not consent to such waiver or amendment.

11.3 BINDING EFFECT. Any amendment or waiver consented to as provided in this Section 11 applies equally to all holders and is binding upon them and upon each future holder and upon the Guarantor without regard to whether any Note has been marked to indicate such amendment or waiver. No such amendment or waiver will extend to or affect any obligation, covenant or agreement not expressly amended or waived or impair any right consequent thereon. No course of dealing between the Guarantor and the holder nor any delay in exercising any rights hereunder or under any Note shall operate as a waiver of any rights of any holder. As used herein, the term “**this Guarantee Agreement**” and references thereto shall mean this Guarantee Agreement as it may be amended, modified, supplemented or restated from time to time.

11.4 NOTES HELD BY COMPANY, ETC. Solely for the purpose of determining whether the holders of the requisite percentage of the aggregate principal amount of Notes then outstanding approved or consented to any amendment, waiver or consent to be given under this Guarantee Agreement, or have directed the taking of any action provided herein to be taken upon the direction of the holders of a specified percentage of the aggregate principal amount of Notes then outstanding, Notes directly or indirectly owned by the Guarantor, the Company or any of their respective Affiliates shall be deemed not to be outstanding.

12. NOTICES.

All notices and communications provided for hereunder shall be in writing and sent (a) by telecopy if the sender on the same day sends a confirming copy of such notice by a recognized overnight delivery service (charges prepaid), or (b) by registered or certified mail with return receipt requested (postage prepaid), or (c) by a recognized overnight delivery service (with charges prepaid). Any such notice must be sent:

(a) if to the Guarantor, to c/o Mine Safety Appliances Company, 121 Gamma Drive, Pittsburgh, Pennsylvania 153238, Attention: Dennis L. Zeitler, Senior Vice President and Chief Financial Officer, or such other address as the Guarantor shall have specified to the holders in writing, or

(b) if to any holder, to such holder at the addresses specified for such communications set forth in Schedule A to the Note Purchase Agreement (or, if such holder’s address is not set forth therein, in such holder’s Confirmation of Acceptance), or such other address as such holder shall have specified to the Guarantor in writing.

13. MISCELLANEOUS.

13.1 SUCCESSORS AND ASSIGNS. All covenants and other agreements contained in this Guarantee Agreement by or on behalf of any of the parties hereto bind and inure to the benefit of their respective successors and assigns whether so expressed or not.

13.2 SEVERABILITY. Any provision of this Guarantee Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall (to the full extent permitted by law), not invalidate or render unenforceable such provision in any other jurisdiction.

13.3 CONSTRUCTION. Each covenant contained herein shall be construed (absent express provision to the contrary) as being independent of each other covenant contained herein, so that compliance with any one covenant shall not (absent such express contrary provision) be deemed to excuse compliance with any other covenant. Whether any provision herein refers to action to be taken by any Person, or which such Person is prohibited from taking, such provision shall be applicable whether such action is taken directly or indirectly by such Person.

The section and subsection headings in this Guarantee Agreement are for convenience of reference only and shall neither be deemed to be a part of this Guarantee Agreement nor modify, define, expand or limit any of the terms or provisions hereof. All references herein to numbered sections, unless otherwise indicated, are to sections of this Guarantee Agreement. Words and definitions in the singular shall be read and construed as though in the plural and *vice versa*, and words in the masculine, neuter or feminine gender shall be read and construed as though in either of the other genders where the context so requires.

13.4 FURTHER ASSURANCES. The Guarantor agrees to execute and deliver all such instruments and take all such action as the Required Holders may from time to time reasonably request in order to effectuate fully the purposes of this Guarantee Agreement.

13.5 GOVERNING LAW. This Guarantee Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the law of the State of New York, excluding choice-of-law principles of the law of such State that would permit the application of the laws of a jurisdiction other than such State.

13.6 JURISDICTION AND PROCESS; WAIVER OF JURY TRIAL.

(a) The Guarantor irrevocably submits to the non-exclusive jurisdiction of any New York State or federal court sitting in the Borough of Manhattan, The City of New York, over any suit, action or proceeding arising out of or relating to this Guarantee Agreement. To the fullest extent permitted by applicable law, the Guarantor irrevocably waives and agrees not to assert, by way of motion, as a defense or otherwise, any claim that it is not subject to the jurisdiction of any such court, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding brought in any such court and any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

(b) The Guarantor consents to process being served by or on behalf of any holder in any suit, action or proceeding of the nature referred to in Section 13.6(a) by mailing a copy thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, return receipt requested, to it at its address specified in Section 12 or at such other address of which such holder shall then have been notified pursuant to Section 12. The Guarantor agrees that such service upon receipt (i) shall be deemed in every respect effective service of process upon it in any such suit, action or proceeding and (ii) shall, to the fullest extent permitted by applicable law, be taken and held to be valid personal service upon and personal delivery to it. Notices hereunder shall be conclusively presumed received as evidenced by a delivery receipt furnished by the United States Postal Service or any reputable commercial delivery service.

(c) Nothing in this Section 13.6 shall affect the right of any holder to serve process in any manner permitted by law, or limit any right that the holders may have to bring proceedings against the Guarantor in the courts of any appropriate jurisdiction or to enforce in any lawful manner a judgment obtained in one jurisdiction in any other jurisdiction.

(d) **THE GUARANTOR AND THE HOLDERS HEREBY WAIVE TRIAL BY JURY IN ANY ACTION BROUGHT ON OR WITH RESPECT TO THIS GUARANTEE AGREEMENT OR OTHER DOCUMENT EXECUTED IN CONNECTION HEREWITH.**

13.7 REPRODUCTION OF DOCUMENTS; EXECUTION. This Guarantee Agreement may be reproduced by any holder by any photographic, photostatic, electronic, digital, or other similar process and such holder may destroy any original document so reproduced. The Guarantor agrees and stipulates that, to the extent permitted by applicable law, any such reproduction shall be admissible in evidence as the original itself in any judicial or administrative proceeding (whether or not the original is in existence and whether or not such reproduction was made by such holder in the regular course of business) and any enlargement, facsimile or further reproduction of such reproduction shall likewise be admissible in evidence. This Section 13.7 shall not prohibit the Guarantor or any other holder of Notes from contesting any such reproduction to the same extent that it could contest the original, or from introducing evidence to demonstrate the inaccuracy of any such reproduction. A facsimile or electronic transmission of the signature page of the Guarantor shall be as effective as delivery of a manually executed counterpart hereof and shall be admissible into evidence for all purposes.

IN WITNESS WHEREOF, the Guarantor has caused this Guarantee Agreement to be duly executed and delivered as of the date and year first above written.

GENERAL MONITORS, INC.

By: /s/

Name:

Title:

GUARANTEE AGREEMENT

Dated as of February 12, 2014

of

MSA INTERNATIONAL, INC.

GUARANTEE AGREEMENT

THIS GUARANTEE AGREEMENT, dated as of February 12, 2014 (this “**Guarantee Agreement**”), is made by MSA INTERNATIONAL, INC., a Delaware corporation (the “**Guarantor**”), in favor of the Purchasers (as defined below) and the other holders from time to time of the Notes (as defined below). The Purchasers and such other holders are herein collectively called the “**holders**” and individually a “**holder**.”

PRELIMINARY STATEMENTS:

I. Mine Safety Appliances Company, a Pennsylvania corporation (the “**Company**”), previously entered into a Note Purchase Agreement, dated as of December 20, 2006 (as amended, modified, supplemented or restated from time to time, the “**Note Purchase Agreement**”), with each of the Purchasers listed on the signature pages thereto (collectively, the “**Purchasers**”), pursuant to which the Company issued and sold to the Purchasers \$60,000,000 in aggregate principal amount of its 5.41% Senior Notes due December 20, 2021 (as the same may be amended, restated or otherwise modified from time to time, collectively, the “**Notes**”). Capitalized terms used herein have the meanings specified in the Note Purchase Agreement unless otherwise defined herein.

II. The Company has informed the holders of the Notes that certain Events of Default have occurred under Section 11(c) of the Note Purchase Agreement as a result of (a) the Company's failure to comply with Section 10.3 of the Note Purchase Agreement (the “**Priority Indebtedness Default**”) as a result of the execution of certain Guaranties of the Indebtedness of the Company under, and in respect of, the 2010 Note Purchase Agreement and the Bank Credit Agreement (as each such term is defined in the 2006 Amendment and Waiver referred to below), and (b) the Company's failure to provide notice to the holders of the Notes of the occurrence of the Priority Indebtedness Default in accordance with Section 7.1(d) of the Note Purchase Agreement (the “**2006 Notice Default**” and together with the Priority Indebtedness Default, collectively, the “**Existing Defaults**”).

III. The Purchasers have agreed to waive the Existing Defaults and amend certain terms and provisions of the Note Purchase Agreement, upon the terms, and subject to the conditions, set forth in that certain Amendment No. 1 and Waiver to Note Purchase Agreement, dated as of the date hereof, by and between the Company and the holders of the Notes (the “**2006 Amendment and Waiver**”).

IV. It is a condition to the agreement of the holders of the Notes to enter into the 2006 Amendment and Waiver that the Guarantor execute and deliver this Guarantee Agreement to the holders of the Notes and that this Guarantee Agreement be in full force and effect.

V. The Guarantor has received and will receive direct and indirect benefits from the transactions contemplated by the 2006 Amendment and Waiver and the agreement of the holders of the Notes to continue to extend credit to the Company pursuant to the terms of the Note Purchase Agreement and the Notes. The Board of Directors of the Guarantor has determined that the incurrence of such obligations is in the best interests of the Guarantor.

NOW THEREFORE, in compliance with the Note Purchase Agreement, and in consideration of, the execution and delivery of the Note Purchase Agreement and the purchase of the Notes by each of the Purchasers, the Guarantor hereby covenants and agrees with, and represents and warrants to, each of the holders as follows:

1. GUARANTEE; INDEMNITY.

1.1 GUARANTEE. The Guarantor hereby irrevocably and unconditionally guarantees to each holder, the due and punctual payment in full of (a) the principal of, Make-Whole Amount, if any, and interest on (including, without limitation, interest accruing after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding, whether or not a claim for post-filing or post-petition interest is allowed in such proceeding), and any other amounts due under, the Notes when and as the same shall become due and payable (whether at stated maturity or by required or optional prepayment or by acceleration or otherwise) and (b) any other sums which may become due under the terms and provisions of the Notes, the Note Purchase Agreement or any other instrument referred to therein (all such obligations described in clauses (a) and (b) above are herein called the **“Guaranteed Obligations”**). The guarantee in the preceding sentence is an absolute, present and continuing guarantee of payment and not of collectability and is in no way conditional or contingent upon any attempt to collect from the Company or any other guarantor of the Notes or upon any other action, occurrence or circumstance whatsoever. In the event that the Company shall fail so to pay any of such Guaranteed Obligations, the Guarantor agrees to pay the same when due to the holders entitled thereto, without demand, presentment, protest or notice of any kind, in lawful money of the United States of America, pursuant to the requirements for payment specified in the Notes and the Note Purchase Agreement. Each default in payment of any of the Guaranteed Obligations shall give rise to a separate cause of action hereunder and separate suits may be brought hereunder as each cause of action arises. The Guarantor agrees that the Notes issued in connection with the Note Purchase Agreement may (but need not) make reference to this Guarantee Agreement.

The Guarantor agrees to pay and to indemnify and save each holder harmless from and against any damage, loss, cost or expense (including attorneys’ fees) which such holder may incur or be subject to as a consequence, direct or indirect, of (x) any breach by the Guarantor or by the Company of any warranty, covenant, term or condition in, or the occurrence of any default under, this Guarantee Agreement, the Notes, the Note Purchase Agreement or any other instrument referred to therein, together with all expenses resulting from the compromise or defense of any claims or liabilities arising as a result of any such breach or default, (y) any legal action commenced to challenge the validity or enforceability of this Guarantee Agreement, the Notes, the Note Purchase Agreement or any other instrument referred to therein and (z) enforcing or defending (or determining whether or how to enforce or defend) the provisions of this Guarantee Agreement.

The Guarantor hereby acknowledges and agrees that the Guarantor’s liability hereunder is joint and several with any other Person(s) who may guarantee the obligations and Indebtedness under and in respect of the Notes and the Note Purchase Agreement.

Notwithstanding the foregoing provisions or any other provision of this Guarantee Agreement, the holders (by their acceptance of any Note) and the Guarantor hereby agree that if at any time the Guaranteed Obligations exceed the Maximum Guaranteed Amount determined as of such time with regard to the Guarantor, then this Guarantee Agreement shall be automatically amended to reduce the Guaranteed Obligations to the Maximum Guaranteed Amount. Such amendment shall not require the written consent of the Guarantor or any holder and shall be deemed to have been automatically consented to by the Guarantor and each holder. The Guarantor agrees that the Guaranteed Obligations may at any time exceed the Maximum Guaranteed Amount without affecting or impairing the obligation of the Guarantor. **“Maximum Guaranteed Amount”** means as of the date of determination with respect to the Guarantor, the lesser of (a) the amount of the Guaranteed Obligations outstanding on such date and (b) the maximum amount that would not render the Guarantor’s liability under this Guarantee Agreement subject to avoidance under Section 548 of the United States Bankruptcy Code (or any successor provision) or any comparable provision of applicable state law.

1.2 INDEMNITY. The Guarantor hereby further agrees that if, for any reason, any amount claimed by a holder of the Notes under this Guarantee Agreement is not recoverable on the basis of a guarantee, it will be liable as a principal debtor and primary obligor to indemnify that holder of the Notes against any cost, loss or liability it incurs as a result of the Company not paying any amount expressed to be payable by it under the Notes, the Note Purchase Agreement or otherwise on the date when it is expressed to be due. The amount payable by the Guarantor under this Section 1.2 will not exceed the amount it would have had to pay under Section 1.1 if the amount claimed had been recoverable on the basis of a guarantee.

2. OBLIGATIONS ABSOLUTE.

The obligations of the Guarantor hereunder shall be primary, absolute, irrevocable and unconditional, irrespective of the validity or enforceability of the Notes, the Note Purchase Agreement or any other instrument referred to therein, shall not be subject to any counterclaim, setoff, deduction or defense based upon any claim the Guarantor may have against the Company or any holder or otherwise, and shall remain in full force and effect without regard to, and shall not be released, discharged or in any way affected by, any circumstance or condition whatsoever (whether or not the Guarantor shall have any knowledge or notice thereof), including, without limitation: (a) any amendment to, modification of, supplement to or restatement of the Notes, the Note Purchase Agreement or any other instrument referred to therein (it being agreed that the obligations of the Guarantor hereunder shall apply to the Notes, the Note Purchase Agreement or any such other instrument as so amended, modified, supplemented or restated) or any assignment or transfer of any thereof or of any interest therein, or any furnishing, acceptance or release of any security for the Notes; (b) any waiver, consent, extension, indulgence or other action or inaction under or in respect of the Notes, the Note Purchase Agreement or any other instrument referred to therein; (c) any bankruptcy, insolvency, arrangement, reorganization, readjustment, composition, liquidation or similar proceeding with respect to the Company or its property; (d) any merger, amalgamation or consolidation of the Guarantor or of the Company into or with any other Person or any sale, lease or transfer of any or all of the assets of the Guarantor or of the Company to any Person; (e) any failure on the part of the Company for any reason to comply with or perform any of the terms of any other agreement with the Guarantor; (f) any failure on the part of any holder to obtain, maintain, register or otherwise perfect any security; or (g) any other event or circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor (whether or not similar to the foregoing), and in any event however material or prejudicial it may be to the Guarantor or to any subrogation, contribution or reimbursement rights the Guarantor may otherwise have. The Guarantor covenants that its obligations hereunder will not be discharged except by indefeasible payment in full in cash of all of the Guaranteed Obligations and all other obligations hereunder.

3. WAIVER.

The Guarantor unconditionally waives to the fullest extent permitted by law, (a) notice of acceptance hereof, of any action taken or omitted in reliance hereon and of any default by the Company in the payment of any amounts due under the Notes, the Note Purchase Agreement or any other instrument referred to therein, and of any of the matters referred to in Section 2 hereof, (b) all notices which may be required by statute, rule of law or otherwise to preserve any of the rights of any holder against the Guarantor, including, without limitation, presentment to or demand for payment from the Company or the Guarantor with respect to any Note, notice to the Company or to the Guarantor of default or protest for nonpayment or dishonor and the filing of claims with a court in the event of the bankruptcy of the Company, (c) any right to require any holder to enforce, assert or exercise any right, power or remedy including, without limitation, any right, power or remedy conferred in the Note Purchase Agreement or the Notes, (d) any requirement for diligence on the part of any holder and (e) any other act or omission or thing or delay in doing any other act or thing which might in any manner or to any extent vary the risk of the Guarantor or otherwise operate as a discharge of the Guarantor or in any manner lessen the obligations of the Guarantor hereunder.

4. OBLIGATIONS UNIMPAIRED.

The Guarantor authorizes the holders, without notice or demand to the Guarantor and without affecting its obligations hereunder, from time to time: (a) to renew, compromise, extend, accelerate or otherwise change the time for payment of, all or any part of the Notes, the Note Purchase Agreement or any other instrument referred to therein; (b) to change any of the representations, covenants, events of default or any other terms or conditions of or pertaining to the Notes, the Note Purchase Agreement or any other instrument referred to therein, including, without limitation, decreases or increases in amounts of principal, rates of interest, the Make-Whole Amount or any other obligation; (c) to take and hold security for the payment of the Notes, the Note Purchase Agreement or any other instrument referred to therein, for the performance of this Guarantee Agreement or otherwise for the Indebtedness guaranteed hereby and to exchange, enforce, waive, subordinate and release any such security; (d) to apply any such security and to direct the order or manner of sale thereof as the holders in their sole discretion may determine; (e) to obtain additional or substitute endorsers or guarantors; (f) to exercise or refrain from exercising any rights against the Company and others; and (g) to apply any sums, by whomsoever paid or however realized, to the payment of the Guaranteed Obligations and all other obligations owed hereunder. The holders shall have no obligation to proceed against any additional or substitute endorsers or guarantors or to pursue or exhaust any security provided by the Company, the Guarantor or any other Person or to pursue any other remedy available to the holders.

If an event permitting the acceleration of the maturity of the principal amount of any Notes shall exist and such acceleration shall at such time be prevented or the right of any holder to receive any payment on account of the Guaranteed Obligations shall at such time be delayed or otherwise affected by reason of the pendency against the Company, the Guarantor or any other guarantors of a case or proceeding under a bankruptcy or insolvency law, the Guarantor agrees that, for purposes of this Guarantee Agreement and its obligations hereunder, the maturity of such principal amount shall be deemed to have been accelerated with the same effect as if the holder thereof had accelerated the same in accordance with the terms of the Note Purchase Agreement, and the Guarantor shall forthwith pay such accelerated Guaranteed Obligations.

5. SUBROGATION AND SUBORDINATION.

(a) The Guarantor will not exercise any rights which it may have acquired by way of subrogation under this Guarantee Agreement, by any payment made hereunder or otherwise, or accept any payment on account of such subrogation rights, or any rights of reimbursement, contribution or indemnity or any rights or recourse to any security for the Notes or this Guarantee Agreement unless and until all of the Guaranteed Obligations shall have been indefeasibly paid in full in cash.

(b) The Guarantor hereby subordinates the payment of all Indebtedness and other obligations of the Company or any other guarantor of the Guaranteed Obligations owing to the Guarantor, whether now existing or hereafter arising, including, without limitation, all rights and claims described in clause (a) of this Section 5, to the indefeasible payment in full in cash of all of the Guaranteed Obligations. If the Required Holders so request, any such Indebtedness or other obligations shall be enforced and performance received by the Guarantor as trustee for the holders and the proceeds thereof shall be paid over to the holders promptly, in the form received (together with any necessary endorsements) to be applied to the Guaranteed Obligations, whether matured or unmatured, as may be directed by the Required Holders, but without reducing or affecting in any manner the liability of the Guarantor under this Guarantee Agreement.

(c) If any amount or other payment is made to or accepted by the Guarantor in violation of any of the preceding clauses (a) and (b) of this Section 5, such amount shall be deemed to have been paid to the Guarantor for the benefit of, and held in trust for the benefit of, the holders and shall be paid over to the holders promptly, in the form received (together with any necessary endorsements) to be applied to the Guaranteed Obligations, whether matured or unmatured, as may be directed by the Required Holders, but without reducing or affecting in any manner the liability of the Guarantor under this Guarantee Agreement.

(d) The Guarantor acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by the Note Purchase Agreement and that its agreements set forth in this Guarantee Agreement (including this Section 5) are knowingly made in contemplation of such benefits.

6. REINSTATEMENT OF GUARANTEE.

This Guarantee Agreement shall continue to be effective, or be reinstated, as the case may be, if and to the extent at any time payment, in whole or in part, of any of the sums due to any holder on account of the Guaranteed Obligations is rescinded or must otherwise be restored or returned by a holder upon the insolvency, bankruptcy, dissolution, liquidation or reorganization of the Company or any other guarantors, or upon or as a result of the appointment of a custodian, receiver, trustee or other officer with similar powers with respect to the Company or any other guarantors or any part of its or their property, or otherwise, all as though such payments had not been made.

7. RANK OF GUARANTEE.

The Guarantor will ensure that its payment obligations under this Guarantee Agreement will at all times rank at least *pari passu*, without preference or priority, with all other unsecured and unsubordinated Indebtedness of the Guarantor now or hereafter existing.

8. REPRESENTATIONS AND WARRANTIES OF THE GUARANTOR.

The Guarantor represents and warrants to each holder as follows:

8.1 ORGANIZATION; POWER AND AUTHORITY. The Guarantor is a Delaware corporation, duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation, and is duly qualified as a foreign corporation and is in good standing in each jurisdiction in which such qualification is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Guarantor has the corporate power and authority to own or hold under lease the properties it purports to own or hold under lease, to transact the business it transacts and proposes to transact, to execute and deliver this Guarantee Agreement and to perform the provisions hereof.

8.2 AUTHORIZATION, ETC. This Guarantee Agreement has been duly authorized by all necessary corporate action on the part of the Guarantor, and this Guarantee Agreement constitutes a legal, valid and binding obligation of the Guarantor enforceable against the Guarantor in accordance with its terms, except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

8.3 COMPLIANCE WITH LAWS, OTHER INSTRUMENTS, ETC. The execution, delivery and performance by the Guarantor of this Guarantee Agreement will not (a) contravene, result in any breach of, or constitute a default under, or result in the creation of any Lien in respect of any property of the Guarantor or any of its Subsidiaries under, any indenture, mortgage, deed of trust, loan, purchase or credit agreement, lease, organizational documents, or any other agreement or instrument to which the Guarantor or any of its Subsidiaries is bound or by which the Guarantor or any of its Subsidiaries or any of their respective properties may be bound or affected, (b) conflict with or result in a breach of any of the terms, conditions or provisions of any order, judgment, decree, or ruling of any court, arbitrator or Governmental Authority applicable to the Guarantor or any of its Subsidiaries or (c) violate any provision of any statute or other rule or regulation of any Governmental Authority applicable to the Guarantor or any of its Subsidiaries. **“Governmental Authority”** means (x) the government of (i) the United States of America or any State or other political subdivision thereof, or (ii) any other jurisdiction in which the Guarantor or any of its Subsidiaries conducts all or any part of its business, or which asserts jurisdiction over any properties of the Guarantor or any of its Subsidiaries, or (y) any entity exercising executive, legislative, judicial, regulatory or administrative functions of, or pertaining to, any such government.

8.4 GOVERNMENTAL AUTHORIZATIONS, ETC. No consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required in connection with the execution, delivery or performance by the Guarantor of this Guarantee Agreement.

8.5 INFORMATION REGARDING THE COMPANY. The Guarantor now has and will continue to have independent means of obtaining information concerning the affairs, financial condition and business of the Company. No holder shall have any duty or responsibility to provide the Guarantor with any credit or other information concerning the affairs, financial condition or business of the Company which may come into possession of the holders. The Guarantor has executed and delivered this Guarantee Agreement without reliance upon any representation by the holders including, without limitation, with respect to (a) the due execution, validity, effectiveness or enforceability of any instrument, document or agreement evidencing or relating to any of the Guaranteed Obligations or any loan or other financial accommodation made or granted to the Company, (b) the validity, genuineness, enforceability, existence, value or sufficiency of any property securing any of the Guaranteed Obligations or the creation, perfection or priority of any lien or security interest in such property or (c) the existence, number, financial condition or creditworthiness of other guarantors or sureties, if any, with respect to any of the Guaranteed Obligations.

8.6 SOLVENCY. Upon the execution and delivery hereof, the Guarantor will be solvent, will be able to pay its debts as they mature, and will have capital sufficient to carry on its business.

9. TERM OF GUARANTEE AGREEMENT.

This Guarantee Agreement and all guarantees, covenants and agreements of the Guarantor contained herein shall continue in full force and effect and shall not be discharged until such time as all of the Guaranteed Obligations and all other obligations hereunder shall be indefeasibly paid in full in cash and shall be subject to reinstatement pursuant to Section 6.

10. SURVIVAL OF REPRESENTATIONS AND WARRANTIES; ENTIRE AGREEMENT.

All representations and warranties contained herein shall survive the execution and delivery of this Guarantee Agreement and may be relied upon by any subsequent holder, regardless of any investigation made at any time by or on behalf of any Purchaser or any other holder. All statements contained in any certificate or other instrument delivered by or on behalf of the Guarantor pursuant to this Guarantee Agreement shall be deemed representations and warranties of the Guarantor under this Guarantee Agreement. Subject to the preceding sentence, this Guarantee Agreement embodies the entire agreement and understanding between each holder and the Guarantor and supersedes all prior agreements and understandings relating to the subject matter hereof.

11. AMENDMENT AND WAIVER.

11.1 REQUIREMENTS. Except as otherwise provided in the fourth paragraph of Section 1.1 of this Guarantee Agreement, this Guarantee Agreement may be amended, and the observance of any term hereof may be waived (either retroactively or prospectively), with (and only with) the written consent of the Guarantor and the Required Holders, except that no amendment or waiver (a) of any of the first three paragraphs of Section 1.1 or any of Section 1.2 or any of the provisions of Section 2, 3, 4, 5, 6, 7, 9 or 11 hereof, or any defined term (as it is used therein), or (b) which results in the limitation of the liability of the Guarantor hereunder (except to the extent provided in the fourth paragraph of Section 1 of this Guarantee Agreement) will be effective as to any holder unless consented to by such holder in writing.

11.2 SOLICITATION OF HOLDERS OF NOTES.

(a) *Solicitation.* The Guarantor will provide each holder of the Notes (irrespective of the amount of Notes then owned by it) with sufficient information, sufficiently far in advance of the date a decision is required, to enable such holder to make an informed and considered decision with respect to any proposed amendment, waiver or consent in respect of any of the provisions hereof. The Guarantor will deliver executed or true and correct copies of each amendment, waiver or consent effected pursuant to the provisions of this Section 11.2 to each holder promptly following the date on which it is executed and delivered by, or receives the consent or approval of, the requisite holders of Notes.

(b) *Payment.* The Guarantor will not directly or indirectly pay or cause to be paid any remuneration, whether by way of supplemental or additional interest, fee or otherwise, or grant any security or provide other credit support, to any holder as consideration for or as an inducement to the entering into by any holder of any waiver or amendment of any of the terms and provisions hereof unless such remuneration is concurrently paid, or security is concurrently granted or other credit support concurrently provided, on the same terms, ratably to each holder even if such holder did not consent to such waiver or amendment.

11.3 BINDING EFFECT. Any amendment or waiver consented to as provided in this Section 11 applies equally to all holders and is binding upon them and upon each future holder and upon the Guarantor without regard to whether any Note has been marked to indicate such amendment or waiver. No such amendment or waiver will extend to or affect any obligation, covenant or agreement not expressly amended or waived or impair any right consequent thereon. No course of dealing between the Guarantor and the holder nor any delay in exercising any rights hereunder or under any Note shall operate as a waiver of any rights of any holder. As used herein, the term **“this Guarantee Agreement”** and references thereto shall mean this Guarantee Agreement as it may be amended, modified, supplemented or restated from time to time.

11.4 NOTES HELD BY COMPANY, ETC. Solely for the purpose of determining whether the holders of the requisite percentage of the aggregate principal amount of Notes then outstanding approved or consented to any amendment, waiver or consent to be given under this Guarantee Agreement, or have directed the taking of any action provided herein to be taken upon the direction of the holders of a specified percentage of the aggregate principal amount of Notes then outstanding, Notes directly or indirectly owned by the Guarantor, the Company or any of their respective Affiliates shall be deemed not to be outstanding.

12. NOTICES.

All notices and communications provided for hereunder shall be in writing and sent (a) by telecopy if the sender on the same day sends a confirming copy of such notice by a recognized overnight delivery service (charges prepaid), or (b) by registered or certified mail with return receipt requested (postage prepaid), or (c) by a recognized overnight delivery service (with charges prepaid). Any such notice must be sent:

(a) if to the Guarantor, to c/o Mine Safety Appliances Company, 121 Gamma Drive, Pittsburgh, Pennsylvania 153238, Attention: Dennis L. Zeitler, Senior Vice President and Chief Financial Officer, or such other address as the Guarantor shall have specified to the holders in writing, or

(b) if to any holder, to such holder at the addresses specified for such communications set forth in Schedule A to the Note Purchase Agreement (or, if such holder’s address is not set forth therein, in such holder’s Confirmation of Acceptance), or such other address as such holder shall have specified to the Guarantor in writing.

13. MISCELLANEOUS.

13.1 SUCCESSORS AND ASSIGNS. All covenants and other agreements contained in this Guarantee Agreement by or on behalf of any of the parties hereto bind and inure to the benefit of their respective successors and assigns whether so expressed or not.

13.2 SEVERABILITY. Any provision of this Guarantee Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall (to the full extent permitted by law), not invalidate or render unenforceable such provision in any other jurisdiction.

13.3 CONSTRUCTION. Each covenant contained herein shall be construed (absent express provision to the contrary) as being independent of each other covenant contained herein, so that compliance with any one covenant shall not (absent such express contrary provision) be deemed to excuse compliance with any other covenant. Whether any provision herein refers to action to be taken by any Person, or which such Person is prohibited from taking, such provision shall be applicable whether such action is taken directly or indirectly by such Person.

The section and subsection headings in this Guarantee Agreement are for convenience of reference only and shall neither be deemed to be a part of this Guarantee Agreement nor modify, define, expand or limit any of the terms or provisions hereof. All references herein to numbered sections, unless otherwise indicated, are to sections of this Guarantee Agreement. Words and definitions in the singular shall be read and construed as though in the plural and *vice versa*, and words in the masculine, neuter or feminine gender shall be read and construed as though in either of the other genders where the context so requires.

13.4 FURTHER ASSURANCES. The Guarantor agrees to execute and deliver all such instruments and take all such action as the Required Holders may from time to time reasonably request in order to effectuate fully the purposes of this Guarantee Agreement.

13.5 GOVERNING LAW. This Guarantee Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the law of the State of New York, excluding choice-of-law principles of the law of such State that would permit the application of the laws of a jurisdiction other than such State.

13.6 JURISDICTION AND PROCESS; WAIVER OF JURY TRIAL.

(a) The Guarantor irrevocably submits to the non-exclusive jurisdiction of any New York State or federal court sitting in the Borough of Manhattan, The City of New York, over any suit, action or proceeding arising out of or relating to this Guarantee Agreement. To the fullest extent permitted by applicable law, the Guarantor irrevocably waives and agrees not to assert, by way of motion, as a defense or otherwise, any claim that it is not subject to the jurisdiction of any such court, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding brought in any such court and any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

(b) The Guarantor consents to process being served by or on behalf of any holder in any suit, action or proceeding of the nature referred to in Section 13.6(a) by mailing a copy thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, return receipt requested, to it at its address specified in Section 12 or at such other address of which such holder shall then have been notified pursuant to Section 12. The Guarantor agrees that such service upon receipt (i) shall be deemed in every respect effective service of process upon it in any such suit, action or proceeding and (ii) shall, to the fullest extent permitted by applicable law, be taken and held to be valid personal service upon and personal delivery to it. Notices hereunder shall be conclusively presumed received as evidenced by a delivery receipt furnished by the United States Postal Service or any reputable commercial delivery service.

(c) Nothing in this Section 13.6 shall affect the right of any holder to serve process in any manner permitted by law, or limit any right that the holders may have to bring proceedings against the Guarantor in the courts of any appropriate jurisdiction or to enforce in any lawful manner a judgment obtained in one jurisdiction in any other jurisdiction.

(d) THE GUARANTOR AND THE HOLDERS HEREBY WAIVE TRIAL BY JURY IN ANY ACTION BROUGHT ON OR WITH RESPECT TO THIS GUARANTEE AGREEMENT OR OTHER DOCUMENT EXECUTED IN CONNECTION HEREWITH.

13.7 REPRODUCTION OF DOCUMENTS; EXECUTION. This Guarantee Agreement may be reproduced by any holder by any photographic, photostatic, electronic, digital, or other similar process and such holder may destroy any original document so reproduced. The Guarantor agrees and stipulates that, to the extent permitted by applicable law, any such reproduction shall be admissible in evidence as the original itself in any judicial or administrative proceeding (whether or not the original is in existence and whether or not such reproduction was made by such holder in the regular course of business) and any enlargement, facsimile or further reproduction of such reproduction shall likewise be admissible in evidence. This Section 13.7 shall not prohibit the Guarantor or any other holder of Notes from contesting any such reproduction to the same extent that it could contest the original, or from introducing evidence to demonstrate the inaccuracy of any such reproduction. A facsimile or electronic transmission of the signature page of the Guarantor shall be as effective as delivery of a manually executed counterpart hereof and shall be admissible into evidence for all purposes.

IN WITNESS WHEREOF, the Guarantor has caused this Guarantee Agreement to be duly executed and delivered as of the date and year first above written.

MSA INTERNATIONAL, INC.

By: /s/
Name:
Title:

MINE SAFETY APPLIANCES COMPANY

SUBSIDIARIES OF THE REGISTRANT

DECEMBER 31, 2013

Name	State or Other Jurisdiction of Incorporation
General Monitors, Inc.	California
General Monitors Transnational, LLC.	Nevada
Compañía MSA de Argentina S.A.	Argentina
MSA (Aust.) Pty. Limited	Australia
MSA-Auer Sicherheitstechnik Vertriebs GmbH	Austria
MSA Belgium NV	Belgium
MSA do Brasil Ltda.	Brazil
MSA Canada	Canada
MSA de Chile Ltda.	Chile
MSA (China) Safety Equipment Co., Ltd.	China
MSA (Suzhou) Safety Equipment Research and Development Co., Ltd.	China
MSA International, Inc.	Delaware
MSA Gallet	France
MSA Auer	Germany
MSA Europe	Germany
MSA-Auer Hungaria Safety Technology	Hungary
General Monitors Ireland Limited	Ireland
MSA Italiana S.p.A.	Italy
MSA Japan Ltd.	Japan
MSA Safety Malaysia Snd Bhd	Malaysia
MSA de Mexico, S.A. de C.V.	Mexico
MSA Nederland, B.V.	Netherlands
MSA del Peru S.A.C.	Peru
MSA-Auer Polska Sp. z o.o.	Poland
MSA (Britain) Limited	Scotland
MSA S.E. Asia Pte. Ltd.	Singapore
Samsac Holding (Pty.) Limited	South Africa
MSA Española S.A.	Spain
MSA Nordic	Sweden
Sordin AB	Sweden

The above-mentioned subsidiary companies are included in the consolidated financial statements of the registrant filed as part of this annual report. The names of certain other subsidiaries, which considered in the aggregate as a single affiliate would not constitute a significant subsidiary, have been omitted.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (Nos. 33-43696, 333-51983, 333-121196, 333-157681, 333-157682, 333-157683 and 333-174601) of Mine Safety Appliances Company of our report dated February 24, 2014 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania

February 24, 2014

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO RULE 13a-14(a)

I, William M. Lambert, certify that:

1. I have reviewed this annual report on Form 10-K of Mine Safety Appliances Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 24, 2014

/s/ WILLIAM M. LAMBERT
William M. Lambert
Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO RULE 13a-14(a)

I, Stacy P. McMahan, certify that:

1. I have reviewed this annual report on Form 10-K of Mine Safety Appliances Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 24, 2014

/s/ Stacy P. McMahan
Stacy P. McMahan
Chief Financial Officer

CERTIFICATION

Pursuant to 18 U.S.C. (S) 1350, the undersigned officers of Mine Safety Appliances Company (the “Company”), hereby certify, to the best of their knowledge, that the Company’s Annual Report on Form 10-K for the year ended December 31, 2013 (the “Report”) fully complies with the requirements of Section 13 (a) or 15 (d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 24, 2014

/s/ WILLIAM M. LAMBERT

William M. Lambert
Chief Executive Officer

/s/ STACY P. McMAHAN

Stacy P. McMahan
Chief Financial Officer