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, 1996

Commission file number 0-2504

MINE SAFETY APPLIANCES COMPANY A Pennsylvania Corporation IRS Employer Identification No. 25-0668780 121 Gamma Drive RIDC Industrial Park O'Hara Township Pittsburgh, Pennsylvania 15238 Telephone 412/967-3000

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

Preferred Stock Purchase Rights

Common Stock, no par value

(COVER PAGE)

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, 1996	Commission File No. 0-2504		
MINE SAFETY APPLIANCES			
(Exact name of registrant as speci			
Pennsylvania	25-0668780		
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)		
121 Gamma Drive RIDC Industrial Park O'Hara Township Pittsburgh, Pennsylvania	15238		
(Address of principal executive offices)	(Zip Code)		
Registrant's telephone number, including area			
Securities registered pursuant to Section 12(b) of the Act: None			
Securities registered pursuant to Section 12(g) of the Act:		
Preferred Stock Purchase Rights			
(Title of Class)		
Common Stock, no par value			
(Title of Class			
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 X	No		
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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.			

As of February 21, 1997, there were outstanding 5,195,022 shares of common stock, no par value including 600,000 shares held by the Mine Safety Appliances Company Stock Compensation Trust. Total market value of outstanding voting stock as of February 21, 1997 was \$296,778,619. The aggregate market value of voting stock held by non-affiliates as of February 21,1997 was \$164,906,127.

(COVER PAGE)

DOCUMENTS INCORPORATED BY REFERENCE

The following documents have been incorporated by reference:

DOCUMENT	FORM 10-K PART NUMBER
(1) Annual Report to Shareholders for the year ended December 31, 1996	I, II, IV
(2) Proxy Statement filed pursuant to Regulation 14A in connection with the registrant's Annual Meeting of Shareholders to be held on April 23, 1997	III

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Item 1. Business

Products and Markets:

The primary business of the registrant and its affiliated companies is the manufacture and sale of products designed to protect the safety and health of workers throughout the world.

Principal products include respiratory protective equipment that is airpurifying, air-supplied and self-contained in design. The registrant also produces instruments that monitor and analyze workplace environments and control industrial processes. Personal protective products include head, eye and face, body and hearing protectors.

Many of these products are sold under the registered trademark "MSA", and have wide application for workers in industries that include manufacturing, fire service, power generation, telecommunications, mining, chemicals, petroleum, construction, pulp and paper processing, transportation, government, automotive, aerospace, asbestos abatement, and hazardous materials clean-up.

Other products manufactured and sold, which do not fall within the category of safety and health equipment, include boron-based and other specialty chemicals.

The registrant and its affiliated companies are in competition with many large and small enterprises. In the opinion of management, the registrant is a leader in the manufacture of safety and health equipment.

Orders, except under contracts with the U.S. government agencies and with international governments, are generally filled promptly after receipt and the production period for special items is usually less than one year. The backlog of orders under contracts with the U.S. government agencies and certain international governments is summarized as follows:

	December :	31
1996	1995	1994
(In thousa	nds)

U.S. Government Agencies
International Governments

\$14,400 \$30,400 \$36,200 900 7,900 8,800

Approximately \$900,000 under contracts with the U.S. government agencies and \$300,000 with international governments are expected to be shipped after December 31, 1997.

Sales of products to U.S. government agencies continued to decrease in 1996. Incoming orders were significantly less than shipments in 1996, and significantly lower than 1995 incoming orders. Further information with respect to the registrant's products, operations in different geographic areas, equity in earnings and assets of international affiliated companies, and significant customers is reported at Note 5 of Notes to Consolidated Financial Statements contained in the registrant's Annual Report to Shareholders for the year ended December 31, 1996, incorporated herein by reference.

Research:

The registrant and its affiliated companies engage in applied research with a view to developing new products and new applications for existing products. Most of its products are designed and manufactured to meet currently applicable performance and test standards published by groups such as ANSI (American National Standards Institute), MSHA (Mine Safety & Health Administration), NIOSH (National Institute for Occupational Safety and Health), UL (Underwriters' Laboratories), SEI (Safety Equipment Institute) and FM (Factory Mutual). The registrant also from time to time engages in research projects for others such as the Bureau of Mines and the Department of Defense or its prime contractors. Registrant-sponsored research and development costs were \$19,122,000 in 1996, \$20,366,000 in 1995, and \$20,575,000 in 1994.

In the aggregate, patents have represented an important element in building up the business of the registrant and its affiliates, but in the opinion of management no one patent or group of patents is of material significance to the business as presently conducted.

General:

The company was founded in 1914 and is headquartered in Pittsburgh, Pennsylvania. As of December 31, 1996, the registrant and its affiliated companies had approximately 4,200 employees, of which 1,900 were employed by international affiliates. None of the U.S. employees are subject to the provisions of a collective bargaining agreement.

In the United States and in those countries in which the registrant has affiliates, its products are sold by its own salespersons, independent distributors and/or manufacturers' representatives. In international countries where the registrant has no affiliate, products are sold primarily through independent distributors located in those countries.

The registrant is cognizant of environmental responsibilities and has taken affirmative action regarding this responsibility. There are no current or expected legal proceedings or expenditures with respect to environmental matters which would materially affect the operations of the registrant and its affiliates.

Generally speaking, the operations of the registrant and its affiliates are such that it is possible to maintain sufficient inventories of raw materials and component parts on the manufacturing premises.

Equipment and machinery for processing chemicals and rubber, plastic injection molding equipment, molds, metal cutting, stamping and working equipment, assembly fixtures and similar items are regularly acquired, repaired or replaced in the ordinary course of business at prevailing market prices as necessary.

In the third quarter of 1996, the company acquired Rose Manufacturing Company, a leading manufacturer in the growing fall protection portion of the safety products business, and Better Breathing, Inc., a leading innovator of disposable respiratory protection products. In 1992 the company decided to discontinue the operations of Transfer-Metallisierte Produkte GmbH (TMP), a joint venture in Germany to produce metallized paper. Operating activities ceased during 1993. During 1996 the company completed the assets valuation process and the settlement of its liabilities, the effects of which were not significant to the consolidated financial position and results of operations. Further information about the registrant's business is included in Management's Discussion and Analysis at pages 10 to 12 of the Annual Report to Shareholders, incorporated herein by reference.

Executive Officers:

Name 	Age	All Positions and Offices Presently Held
J. T. Ryan III	53	Chairman and Chief Executive Officer
T. B. Hotopp	55	President
J. E. Herald	55	Vice President - Finance (Chief Financial Officer)
W. E. Christen	52	Vice President
G. W. Steggles	62	Vice President
G. R. McGee	56	Vice President
D. H. Cuozzo	63	Vice President and Secretary
D. L. Zeitler	48	Treasurer

All the executive officers have been employed by the registrant since prior to January 1, 1992 and have held their present positions since prior to that date except as follows:

- (a) Mr. Hotopp was elected President on December 18, 1996. Prior to that time, he was Senior Vice President and General Manager, Safety Products.
- (b) Mr. Steggles was employed by the registrant on May 4, 1992 and elected Vice President. From prior to January 1, 1992 until he joined the registrant, Mr. Steggles was Vice President of International Marketing and Sales with the BMY Division of Harsco Corp., a manufacturer of tracked and wheeled vehicles.
- (c) Mr. McGee was employed by the registrant on January 2, 1997 and was elected Vice President and General Manager, Instrument Division. From prior to January 1, 1992 until July, 1996, Mr. McGee was President and Chief Executive Officer of Balzer High Vacuum Products. From July, 1996 until he joined the registrant, he was President and Chief Executive Officer of Pfeiffer Vacuum Technology, Inc., which is a spinoff of Balzer High Vacuum Products.
- (d) Mr. Cuozzo was elected Vice President on April 27, 1995. Prior to that time, he was Secretary.

The executive officers of the registrant serve at the pleasure of the Board of Directors and are not elected to any specified term of office.

The primary responsibilities of these officers follow:

Individual Responsibilities

Mr. Hotopp U.S. operations

Mr. Christen European operations

Europe

Mr. McGee Research, product development, manufacturing and

marketing of instrument and battery products in

the U.S.

Mr. Cuozzo General Counsel and corporate taxes

Mr. Zeitler Cash and risk insurance management

Item 2. Properties

World Headquarters:

The registrant's executive offices are located at 121 Gamma Drive, RIDC Industrial Park, O'Hara Township, Pittsburgh, Pennsylvania 15238. This facility contains approximately 138,000 sq. ft.

Production and Research Facilities:

The registrant's principal U.S. manufacturing and research facilities are located in the Greater Pittsburgh area in buildings containing approximately 1,049,000 square feet. Other U.S. manufacturing and research facilities of the registrant are located in Esmond, Rhode Island (184,000 sq. ft.), Jacksonville, North Carolina (107,000 sq. ft.), Lyons, Colorado (10,000 sq. ft.), Sparks, Maryland (37,000 sq. ft.), Dayton, Ohio (23,000 sq. ft.), Lawrence, Massachusetts (42,000 sq. ft.), and Englewood, Colorado (41,000 sq. ft.).

Manufacturing facilities of international affiliates of the registrant are located in Australia, Brazil, Canada, France, Germany, Italy, Japan, Mexico, Peru, Scotland, Spain, and Sweden. The most significant are located in Germany (approximately 431,000 sq. ft., excluding 127,000 sq. ft. leased to others), and in Glasgow, Scotland (approximately 96,000 sq. ft., excluding 44,000 sq. ft. leased to others); research activities are also conducted at these facilities.

Virtually all of these buildings are owned by the registrant and its affiliates and are constructed of granite, brick, concrete block, steel or other fire-resistant materials. The German facility is owned subject to encumbrances securing indebtedness in the aggregate amount of \$3,348,000 as of December 31, 1996.

Sales Offices and Warehouses:

The registrant and its U.S. affiliates own two warehouses and lease 13 other distribution warehouses with aggregate floor space of approximately 201,000 sq. ft. in or near principal cities in 11 states in the United States. Leases expire at various dates through 1999. Sales offices and distribution warehouses are owned or leased in or near principal cities in 24 other countries in which the registrant's affiliates are located.

Item 3. Legal Proceedings

Not Applicable.

Item 4. Submission of Matters to a Vote of Security Holders

No matters were submitted to a vote of security holders during fourth quarter 1996.

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PART II

- Item 5. Market for the Registrant's Common Equity and Related Stockholder Matters
- Item 6. Selected Financial Data
- Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations
- Item 8. Financial Statements and Supplementary Data

Incorporated by reference herein pursuant to Rule 12b - 23 are

- Item 5 "Common Stock" appearing at page 12
- Item 6 "Five-Year Summary of Selected Financial Data" appearing at
 page 23
- Item 7 "Management's Discussion and Analysis" appearing at pages 10 to 12

of the Annual Report to Shareholders for the year ended December 31, 1996. Said pages of the Annual Report are submitted with this report and pursuant to Item 601(b)(13) of Regulation S-K shall be deemed filed with the Commission only to the extent that material contained therein is expressly incorporated by reference in Items 1, 5, 6, 7, 8 and 14 (a) hereof.

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

Financial Disclosure

Not applicable.

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PART III

- Item 10. Directors and Executive Officers of the Registrant
- Item 11. Executive Compensation
- Item 12. Security Ownership of Certain Beneficial Owners and Management
- Item 13. Certain Relationships and Related Transactions

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Incorporated by reference herein pursuant to Rule 12b - 23 are (1) "Election of Directors" appearing at pages 1 to 3, (2) "Other Information Concerning Directors and Officers" appearing at pages 4 to 10 (except as excluded below), and (3) "Stock Ownership" appearing at pages 11 to 14 of the Proxy Statement filed pursuant to Regulation 14A in connection with the registrant's Annual Meeting of Shareholders to be held on April 23, 1997. The information appearing in such Proxy Statement under the caption "Compensation Committee Report on Executive Compensation," and the other information appearing in such Proxy Statement and not specifically incorporated by reference herein, including without limitation the information under the captions "Comparison of Five-Year Cumulative Total Return" and "Shareholder Rights Plan," is not incorporated herein.

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

(a) 1 and 2. Financial Statements

The following information appearing on pages 13 to 22 inclusive in the Annual Report to Shareholders of the registrant for the year ended December 31, 1996, is incorporated herein by reference pursuant to Rule 12b-23.

Report of Independent Accountants

Consolidated Balance Sheet - December 31, 1996 and 1995

Consolidated Statement of Income - three years ended December 31, 1996

Consolidated Statement of Earnings Retained in the Business - three years ended December 31, 1996

Consolidated Statement of Cash Flows - three years ended December 31, 1996

Notes to Consolidated Financial Statements

Said pages of the Annual Report are submitted with this report and, pursuant to Item 601(b)(13) of Regulation S-K shall be deemed to be filed with the Commission only to the extent that material contained therein is expressly incorporated by reference in Items 1, 5, 6, 7, 8 and 14 (a)(1) and (2) hereof.

The following additional financial information for the three years ended December 31, 1996 is filed with the report and should be read in conjunction with the above financial statements:

Report of Independent Accountants on Financial Statement Schedule

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 financial statements and notes to the financial statements listed above.

(a) 3. Exhibits

- (3)(i) Restated Articles of Incorporation as amended to April 27, 1989, filed in Form 10-Q on August 5, 1994, are incorporated herein by reference.
- (3)(ii) By-laws of the registrant, as amended to August 29, 1990, filed in Form 10-Q on November 13, 1995, are incorporated herein by reference.
- (4) Rights Agreement dated as of February 10, 1997 between the registrant and Norwest Bank Minnesota, N.A., as Rights Agent, filed as Exhibit 1 to the registrant's Form 8-A on February 25, 1997, is incorporated herein by reference.
- (10)(a) * 1987 Management Share Incentive Plan, filed in Form 10-K on March 25, 1994, is incorporated herein by reference.
- (10)(b) * 1990 Non-Employee Directors' Stock Option Plan, as amended to April 27, 1994, filed in Form 10-Q on August 5, 1994, is incorporated herein by reference.
- (10)(c) * Executive Insurance Program, filed in Form 10-Q on August 5, 1994, is incorporated herein by reference.
- (10)(d) * December 29, 1993 Consulting agreement with Leo N. Short, Jr., filed in Form 10-K on March 25, 1994, is incorporated herein by reference.
- (10)(e) * Board of Directors April 24, 1984 Resolution providing for payment by the Company to officers the difference between amounts payable under terms of the Company's Non-Contributory Pension Plan and the benefit limitations of Section 415 of the Internal Revenue Code, filed in Form 10-Q on May 11, 1995 is incorporated herein by reference.
- (10)(f) Trust Agreement as of June 1, 1996 between the registrant and PNC Bank, N.A. re the Mine Safety Appliances Company Stock Compensation Trust, filed herewith.

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

(a) 3. Exhibits (continued)

- (13) Annual Report to Shareholders for year ended December 31, 1996
- (21) Affiliates of the registrant
- (23) Consent of Price Waterhouse LLP, independent accountants
- (27) Financial Data Schedule (filed in electronic format only)

The registrant agrees to furnish to the Commission upon request copies of all instruments with respect to long-term debt referred to in Note 4 of the Notes to Consolidated Financial Statements filed as part of Exhibit 13 to this annual report which have not been previously filed or are not filed herewith.

(b) Reports on Form 8-K

No reports on Form 8-K were filed during the last quarter of the year ended December 31, 1996.

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

March 26, 1997

(Date)

John T. Ryan III

Chairman of the Board 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 - and Chief Executive Officer	March 26, 1997
/S/James E. Herald James E. Herald	Vice President - Finance; - Principal Financial and Accounting Officer	March 26, 1997
/S/Joseph L. Calihan Joseph L. Calihan	Director -	March 26, 1997
/S/Calvin A. Campbell, Jr. Calvin A. Campbell	Director -	March 26, 1997
/S/G. Donald Gerlach G. Donald Gerlach	Director -	March 26, 1997
/S/Helen Lee Henderson Helen Lee Henderson		March 26, 1997
/S/Leo N. Short, Jr. Leo N. Short, Jr.	Director -	March 26, 1997

Report of Independent Accountants on Financial Statement Schedule

February 17, 1997

To the Board of Directors of Mine Safety Appliances Company

Our audits of the consolidated financial statements referred to in our report dated February 17, 1997, appearing on page 13 of the 1996 Annual Report to Shareholders of Mine Safety Appliances Company (which report and consolidated financial statements are incorporated by reference in this Annual Report on Form 10-K), also included an audit of the Financial Statement Schedule listed in Item 14(a) of this Form 10-K. In our opinion, this Financial Statement Schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

PRICE WATERHOUSE LLP

MINE SAFETY APPLIANCES COMPANY AND AFFILIATES VALUATION AND QUALIFYING ACCOUNTS THREE YEARS ENDED DECEMBER 31, 1996 (IN THOUSANDS)

	1996	1995	1994
Allowance for doubtful accounts:			
Balance at beginning of year	\$2,640	\$2,102	\$2,516
Additions - Charged to costs and expenses	812	949	741
Deductions from reserves (1)	459 	411	1,155
Balance at end of year	\$2,993 =====	\$2,640 =====	\$2,102 =====

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

MINE SAFETY APPLIANCES COMPANY
STOCK COMPENSATION TRUST

Effective as of June 1, 1996

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MINE SAFETY APPLIANCES COMPANY STOCK COMPENSATION TRUST

THIS TRUST AGREEMENT (the "Agreement") made effective as of June 1, 1996, between Mine Safety Appliances Company, a Pennsylvania corporation, and PNC Bank, N.A., as trustee.

WITNESSETH:

WHEREAS, the Company (as defined below) desires to establish a trust (the "Trust") in accordance with the laws of the Commonwealth of Pennsylvania and for the purposes stated in this Agreement;

WHEREAS, the Trustee (as defined below) desires to act as trustee of the Trust, for the purposes hereinafter stated and in accordance with the terms hereof:

WHEREAS, the Company or its subsidiaries have previously adopted the Plans (as defined below);

WHEREAS, the Company desires to provide assurance of the availability of the shares of its common stock necessary to satisfy certain of its obligations or those of its subsidiaries under the Plans (as defined below);

WHEREAS, the Company desires that the assets to be held in the Trust Fund (as defined below) should be principally or exclusively securities of the Company and, therefore, expressly waives any diversification of investments that might otherwise be necessary, appropriate, or required pursuant to applicable provisions of law, if any; and

WHEREAS, PNC Bank, N.A., has been appointed as trustee and has accepted such appointment as of the date set forth first above;

NOW, THEREFORE, the parties hereto hereby establish the Trust and agree that the Trust will be comprised, held and disposed of as follows:

ARTICLE 1.

Trust, Trustee and Trust Fund

1.1. Trust. This Agreement and the Trust shall be known as the Mine

Safety Appliances Company Stock Compensation Trust. The parties intend that the Trust will be an independent legal entity with title to and power to convey all of its assets. The parties hereto further intend that the trust not be subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). The Trust is not a part of any of the Plans (as herein defined). The assets of the Trust will be held, invested and disposed of by the Trustee, in accordance with the

terms of the Trust. The Company will not knowingly take any action that would cause the assets held pursuant to the Trust to become "plan assets" within the meaning of ERISA without so advising the Trustee. The Trust is intended to be a "grantor trust" within the meaning of Section 671 of the Internal Revenue Code of 1986.

1.2. Trustee. The trustee named above, and its successor or

successors, is hereby designated as the trustee hereunder, to receive, hold, invest, administer and distribute the Trust Fund in accordance with this Agreement, the provisions of which shall govern the power, duties and responsibilities of the Trustee.

1.3. Trust Fund. The assets held at any time and from time to time

under the Trust collectively are herein referred to as the "Trust Fund" and shall consist of contributions received by the Trustee, proceeds of any loans, investments and reinvestment thereof, the earnings and income thereon, less disbursements therefrom. Except as herein otherwise provided, title to the assets of the Trust Fund shall at all times be vested in the Trustee and securities that are part of the Trust Fund shall be held in such manner that the Trustee's name and the fiduciary capacity in which the securities are held are fully disclosed, subject to the right of the Trustee to hold title in bearer form or in the name of a nominee, and the interests of others in the Trust Fund shall be only the right to have such assets received, held, invested, administered and distributed in accordance with the provisions of the Trust.

1.4. Trust Fund Subject to Claims. Notwithstanding any provision of

this Agreement to the contrary, the Trust Fund shall at all times remain subject to the claims of the Company's general creditors under federal and state law.

In addition, the Board of Directors and Chief Executive Officer of the Company shall have the duty to inform the Trustee in writing of the Company's Insolvency (as defined below). If a person claiming to be a creditor of the Company alleges in writing to the Trustee that the Company has become Insolvent, the Trustee shall determine whether the Company is Insolvent and, pending such determination, the Trustee shall discontinue allocations pursuant to Article 3.

Unless the Trustee has actual knowledge of the Company's Insolvency, or has received notice from the Company or a person claiming to be a creditor alleging that the Company is Insolvent, the Trustee shall have no duty to inquire whether the Company is Insolvent. The Trustee may in all events rely on such evidence concerning the Company's solvency as may be furnished to the Trustee and that provides the Trustee with a reasonable basis for making a determination concerning the Company's Insolvency.

If at any time the Trustee has determined that the Company is Insolvent, the Trustee shall discontinue allocations $\,$

pursuant to Article 3 and shall hold the Trust Fund for the benefit of the Company's general creditors. Nothing in this Trust Agreement shall in any way diminish any rights of employees as general creditors of the Company with respect to benefits due under the Plans or otherwise.

The Trustee shall resume allocations pursuant to Article 3 only after the Trustee has determined that the Company is not Insolvent or is no longer Insolvent as the case may be.

1.5 Use of Trust. The Trust Fund shall be used for the exclusive

purpose of aiding the Company in delivering the benefits provided by the Plans and defraying the expenses of the Trust in accordance with this Trust Agreement. The Company may terminate the Trust in accordance with Section 8.2 hereof, but, income or corpus of the Trust Fund is recoverable by the Company only as provided in Section 2.2 and 8.2.

1.6. Definitions. In addition to the terms defined in the preceding portions of the Trust, certain capitalized terms have the meanings set forth

Change of Control. "Change of Control" means any of the following events:

rollowing events:

(a) an acquisition by any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of the combined voting power of the then outstanding voting securities of the Company; provided,

however, that the following acquisitions shall not constitute a Change of $\overline{}$

Control: (i) an acquisition by or directly from the Company, (ii) an acquisition by any employee benefit plan or trust sponsored or maintained by the Company; and (iii) any acquisition described in subclauses (A) or (B) of subsection (b) below; or

(b) approval by the stockholders of the Company of (i) a complete dissolution or liquidation of the Company, (ii) a sale or other disposition of all or substantially all of the Company's assets or (iii) a reorganization, merger, or consolidation ("Business Combination") unless either (A) all or substantially all of the stockholders of the Company immediately prior to the Business Combination own more than 50% of the voting securities of the entity surviving the Business Combination, or the entity which directly or indirectly controls such surviving entity, in substantially the same pro-portion as they owned the voting securities of the Company immediately prior thereto, or (B) the consideration (other than cash paid in lieu of fractional shares or payment upon perfection of appraisal rights) issued to stockholders of the Company in the Business Combination is solely

common stock which is publicly traded on an established securities exchange in the United States.

Code. "Code" means the Internal Revenue Code of 1986, as

amended.

Committee. "Committee" means a committee of officers or other

individuals, subject to Section 9.2, appointed by the Board of Directors from time to time to administer the Trust.

Company. "Company" means Mine Safety Appliances Company, a

Pennsylvania corporation, or any successor thereto. References to the Company shall include its subsidiaries where appropriate.

Company Stock "Company Stock" means shares of common stock,

no par value, issued by the Company or any successor securities.

companies in the Company's line of business.

Extraordinary Dividend. "Extraordinary Dividend" means any

dividend or other distribution of cash or other property (other than Company Stock) made with respect to Company Stock, which the Board of Directors declares generally to be other than an ordinary dividend.

Fair Market Value. "Fair Market Value" means as of any date the

closing price quotation, or, if none, the average of the bid and asked prices, as reported with respect to the Company Stock on the most recently available date, on any national exchange on which the Company Stock is then listed, or if date, on any national exchange on which the Company Stock is then listed, or if not so listed, on the NASDAQ National Market, or other consolidated reporting system reporting trades of the Company Stock. If the Company Stock is not so listed, "Fair Market Value" shall mean the average of the bid and asked prices as quoted by all market makers in the Company Stock. In the event that a market for the Company Stock does not exist, the Committee may determine, in any case or cases, that "Fair Market Value" shall be determined on the basis of the opinion of one or more independent and reputable appraisers qualified to value companies in the Company's line of business.

Insolvency. "Insolvency" means (i) the inability of the Company

to pay its debts as they become due, or (2) the Company being subject to a pending proceeding as a debtor under the provisions of Title ${\tt 11}$ of the United States Code (Bankruptcy Code).

> "Loan" means the loan and extension of credit to the Trust Loan.

evidenced by a promissory note dated as of the date of the Closing (as defined in the Stock Purchase Agreement dated June 4, 1996 between the Trust and the Company), with which the Trustee will purchase Company Stock.

Option Grant. "Option Grant" means an option granted under one

of the Plans to a Plan Participant to acquire shares of Company Stock.

Plan Committee Certification. "Plan Committee Certification"

means a certification to be provided to the Trustee by the Committee from time to time which (i) sets forth the number of shares of Company Stock to be transferred to a Plan Participant, and (ii) certifies that the determination of such number is in accordance with the terms of each Plan.

Plans. "Plans" means the employee plans listed on Schedule A

hereto and any other employee benefit plan of the Company or its subsidiaries designated as such by the Board of Directors.

Plan Participant. "Plan Participant" means an individual who

has an Option Grant under any of the Plans.

Suspense Account. "Suspense Account" means the account in which

shares of Company Stock acquired with the Loan are held until they are released pursuant to Section 3.1.

Trustee. "Trustee" means PNC Bank, N.A., or any successor

trustee.

Trust Year. "Trust Year" means the period beginning on the

date of the Closing (the "Closing Date") and ending on the next following December 31st and on each December 31st thereafter.

ARTICLE 2.

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Contributions and Dividends

 ${\tt 2.1.} \quad {\tt Contributions.} \quad {\tt For each Trust Year \ the \ Company \ shall \ contribute}$

to the Trust in cash such amount, which together with dividends, as provided in Section 2.2, and any other earnings of the Trust, shall enable the Trustee to make all payments of principal and interest due under the Loan on a timely basis. Unless otherwise expressly provided herein, the Trustee shall apply all such contributions, dividends and earnings to the payment of principal and interest due under the Loan. If, at the end of any Trust Year, no such contribution has been made in cash, such contribution shall be deemed to have been made in the form of forgiveness of principal and interest on the Loan to the extent of the Company's failure to make contributions as required by this Section 2.1. The Company may from time to time, in its sole discretion, make additional contributions to the Trust for the purpose of enabling the Trust to make prepayments of principal with respect to the Loan (a "Prepayment Contribution"). The Trustee shall immediately use any Prepayment Contribution to make a prepayment of principal with respect to the Loan. All contributions made under the Trust shall be delivered to the

Trustee. The Trustee shall be accountable for all contributions received by it, but shall have no duty to require any contributions to be made to it.

2.2. Dividends. Except as otherwise provided herein, dividends paid $% \left(1\right) =\left(1\right) \left(1\right)$

in cash on Company Stock held by the Trust, including Company Stock held in the Suspense Account, shall be applied to pay interest and repay scheduled principal due under the Loan. In the event that dividends paid on Company Stock held in the Trust, other than Extraordinary Dividends, exceed the amount of scheduled principal and interest due in any Trust Year, such excess shall be used to purchase additional shares of Company Stock and/or shall be distributed to a broad cross-section of individuals employed by the Company, as determined in good faith by the Committee. Dividends which are not in cash or in Company Stock (including Extraordinary Dividends, or portions thereof) shall be reduced to cash by the Trustee and reinvested in Company Stock as soon as practicable. For purposes of this Agreement, Company Stock purchased with the proceeds of an Extraordinary Dividend, any excess dividend or with the proceeds of a non-cash dividend shall for purposes of this Agreement (including without limitation Section 3.1 hereof), be deemed to have been acquired with the proceeds of the Loan. In the Trustee's discretion, investments in Company Stock may be made through open-market purchases, private transactions or (with the Company's consent) purchases from the Company.

ARTICLE 3.

Release and Allocation of Company Stock

3.1. Release of Shares. Upon any payment (including a prepayment) or

forgiveness in any Trust Year of any principal on the Loan (a "Principal Payment"), the following number of shares of Company Stock acquired with the proceeds of the Loan shall be available for allocation ("Available Shares") as provided in this Article 3: the number of shares so acquired and held in the Suspense Account immediately before such payment or forgiveness, multiplied by a fraction the numerator of which is the amount of the Principal Payment and the denominator of which is the sum of such Principal Payment and the remaining principal of the Loan outstanding after such Principal Payment.

3.2. Allocations. Available Shares shall be allocated as directed by a Plan Committee Certification to the Plan Participants at such times as may be

ARTICLE 4.

required to provide shares in accordance with the Plans.

Compensation, Expenses and Tax Withholding

4.1. Compensation and Expenses. The Trustee shall be entitled to such reasonable compensation for its services as may

be agreed upon from time to time by the Company and the Trustee and to be reimbursed for its reasonable legal, accounting and appraisal fees, out-of-pocket expenses and other charges reasonably incurred in connection with the administration, management, investment and distribution of the Trust Fund. Such compensation shall be paid, and such reimbursement shall be made out of the Trust Fund. The Company agrees to make sufficient contributions to the Trust to pay such amounts owing the Trustee in addition to those contributions required by Section 2.1 and, in the event the Company fails to make the contributions necessary to pay amounts owing to the Trustee, the Trustee shall be entitled to seek payment directly from the Company or the Trust Fund.

4.2. Withholding of Taxes. The Trustee may withhold, require

withholding, or otherwise satisfy its withholding obligation, on any distribution which it is directed to make. The amount to be withheld shall be such amount as the Company advises the Trustee it reasonably estimates to be necessary to comply with applicable federal, state and local withholding requirements. Upon determination of the tax withholding liability, the Trustee shall distribute the balance of the distribution to the appropriate Participant and deliver to the Company the amount necessary to satisfy any withholding obligation. The Company will then deliver the withholding amount to the appropriate governmental entity. Prior to making any distribution hereunder, the Trustee may require such indemnity, as the Trustee shall reasonably deem necessary for its protection.

ARTICLE 5.

${\bf Administration} \ {\bf of} \ {\bf Trust} \ {\bf Fund}$

5.1. Management and Control of Trust Fund. Subject to the terms of this Agreement, the Trustee shall have exclusive authority and responsibility to manage and control the assets of the Trust Fund. The Trustee's duties shall be limited to those duties specified in this Agreement.

5.2. Investment of Funds. Except as otherwise provided in Section

2.2 and in this Section 5.2, the Trustee shall invest and reinvest the Trust Fund exclusively in Company Stock, including any accretions thereto resulting from the proceeds of a tender offer, recapitalization or similar transaction which, if not in Company Stock, shall be reduced to cash as soon as practicable. To the extent the Trust Fund is invested in Company Stock, the Company waives any diversification of investments that might otherwise be necessary, appropriate or required pursuant to applicable law. The Trustee may invest any portion of the Trust Fund temporarily pending investment in Company Stock, distribution or payment of expenses in (i) investments in United States Government obligations with maturities of less than one year, (ii) interest-bearing accounts including but not limited to

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certificates of deposit, time deposits, saving accounts and money market accounts with maturities of less than one year in any bank, including the Trustee, with aggregate capital in excess of \$1,000,000,000 and a Moody's Investor Services rating of at least P1, or an equivalent rating from a nationally recognized ratings agency, which accounts are insured by the Federal Deposit Insurance Corporation or other similar federal agency, (iii) obligations issued or guaranteed by any agency or instrumentality of the United States of America with maturities of less than one year, (iv) short-term discount obligations of the Federal National Mortgage Association or (v) any mutual fund or funds which invests primarily in one or more of the above-described investments, including funds for which Trustee or its affiliates provide investment advisory, custodian, transfer agent or other services.

- 5.3. Trustee's Administrative Powers. Except as otherwise provided herein, and subject to the Trustee's duties hereunder, the Trustee shall have the following powers and rights, in addition to those provided elsewhere in this Agreement or by law:
 - (a) to retain any asset of the Trust Fund;
- (b) subject to Section 5.4 and Article 3, to sell, transfer, mortgage, pledge, lease or otherwise dispose of, or grant options with respect to, any Trust Fund assets at public or private sale;
- (c) upon direction from the Committee, to borrow from any lender (including the Company pursuant to the Loan), to acquire Company Stock at Fair Market Value as authorized by this Agreement, to enter into lending agreements upon such terms (including reasonable interest and security for the loan and rights to renegotiate and prepay such loan) as may be determined by the Committee; provided, however, that any collateral given by the Trustee for the Loan shall be limited to cash and property contributed by the Company to the Trust and dividends paid on Company Stock held in the Trust and shall not include Company Stock acquired with the proceeds of Loan;
- (d) with the consent of the Committee, to settle, submit to arbitration, compromise, contest, prosecute or abandon claims and demands in favor of or against the Trust Fund;
- (e) to vote or to give any consent with respect to any securities, including any Company Stock, held by the Trust either in person or by proxy for any purpose, provided that the Trustee shall vote, tender or exchange all shares of Company Stock as provided in Section 5.4;
- (f) to exercise any of the powers and rights of an individual owner with respect to any asset of the Trust Fund $\,$

and to perform any and all other acts that in its judgment are necessary or appropriate for the proper administration of the Trust Fund, even though such powers, rights and acts are not specifically enumerated in this Agreement;

- (g) to employ such accountants, actuaries, investment bankers, appraisers, other advisors and agents as may be reasonably necessary in collecting, managing, administering, investing, valuing, distributing and protecting the Trust Fund or the assets thereof or any borrowings of the Trustee made in accordance with Section 5.3(c); and to pay their reasonable fees and out-of-pocket expenses, which shall be deemed to be expenses of the Trust and for which the Trustee shall be reimbursed in accordance with Section 4.1;
- (h) to cause any asset of the Trust Fund to be issued, held or registered in the Trustee's name or in the name of its nominee, or in such form that title will pass by delivery, provided that the records of the Trustee shall indicate the true ownership of such asset;
- (i) to utilize another entity as custodian to hold, but not invest or otherwise manage or control, some or all of the assets of the Trust Fund; and ${\bf r}$
- (j) to consult with legal counsel (who may also be counsel for the Trustee generally) with respect to any of its duties or obligations hereunder; and to pay the reasonable fees and out-of-pocket expenses of such counsel, which shall be deemed to be expenses of the Trust and for which the Trustee shall be reimbursed in accordance with Section 4.1.

Notwithstanding the foregoing, neither the Trust nor the Trustee shall have any power to, and shall not, engage in any trade or business.

- 5.4. Voting and Tendering of Company Stock.
- (a) Voting of Company Stock. The Trustee shall follow the directions

of each Plan Participant other than Plan Participants who are members of the Board of Directors of the Company (such non-members being hereinafter the "Directing Plan Participants"), as to the manner in which shares of Company Stock held by the Trust are to be voted on each matter brought before an annual or special stockholders' meeting of the Company or the manner in which any consent is to be executed, in each case as provided below. Before each such meeting of stockholders, the Trustee shall cause to be furnished to each Directing Plan Participant, a copy of the proxy solicitation material received by the Trustee, together with a form requesting confidential instructions as to how to vote the shares of Company Stock held by the Trustee. Upon timely receipt of directions from the Directing Plan Participants, the Trustee shall on each such

matter vote the number of shares (including fractional shares) of Company Stock held by the Trust as follows:

The Company Stock shall be voted by the Trustee as directed by the Directing Plan Participants with each Directing Plan Participant directing a number of shares of Company Stock (the "Participant Directed Amount") equal to the quotient of (x) the total number of shares of Company Stock held by the Trust and (y) the number of Directing Plan Participants on the relevant date. Any Shares for which the Trustee does not receive a signed voting-direction instrument shall be voted for, against or to abstain in the same proportions as those shares of Company Stock for which the Trustee did receive instructions.

Similar provisions shall apply in the case of any action by shareholder consent without a meeting.

- (b) Tender or Exchange of Company Stock. The Trustee shall use its $% \left\{ \left\{ 1\right\} \right\} =\left\{ 1\right\} =\left$
- best efforts timely to distribute or cause to be distributed to each Plan Participant any written materials distributed to stockholders of the Company generally in connection with any tender offer or exchange offer, together with a form requesting confidential instructions as to whether or not to tender or exchange shares of Company Stock held in the Trust. Upon timely receipt of instructions from a Directing Plan Participant, the Trustee shall tender such Directing Participant's Participant Directed Amount if such Directing Plan Participant has directed the Trustee to tender. The Company will cooperate in registering the Company Stock held by the Trust which is the subject of a tender or exchange offer. The Company shall be responsible for all expenses incurred in connection with the registration of such Company Stock.
- (c) The Company shall maintain appropriate procedures to ensure that all instructions by Directing Plan Participants in the Plans are collected, tabulated, and transmitted to the Trustee without being divulged or released to any person affiliated with the Company or its affiliates. All actions taken by Directing Plan Participants shall be held confidential by the Trustee and shall not be divulged or released to any person, other than (i) agents of the Trustee who are not affiliated with the Company or its affiliates or (ii) by virtue of the execution by the Trustee of any proxy, consent or letter of transmittal for the shares of Company Stock held in the Trust.

5.5. Indemnification.

(a) The Company shall and hereby does indemnify and hold harmless the Trustee from and against any claims, demands, actions, administrative or other proceedings, causes of action, liability, loss, cost, damage or expense (including reasonable attorneys' fees), which may be asserted against it, in any way arising out of or incurred as a result of its action or failure to act in connection with the establishment, operation and administration of the Trust; provided that such indemnification

shall not apply to the extent that a court of competent jurisdiction finally determines that the Trustee has acted (i) negligently, (ii) in violation of applicable law or its duties under this Trust or (iii) in bad faith. The Trustee shall be under no liability to any person for any loss of any kind which may result (i) by reason of any action taken by the Trustee in accordance with any direction of the Committee or any Directing Plan Participant acting pursuant to Section 5.4 (ii) by reason of the Trustee's failure to exercise any power or authority or to take any action hereunder because of the failure of any such Directing Plan Participant to give directions to the Trustee, as provided for in this Agreement, or (iii) by reason of any act or omission of any of the Directing Plan Participants with respect to the Trustee's duties under this Trust. The Trustee shall be fully protected in acting upon any instrument, certificate, or paper delivered by the Committee or any Plan Participant or beneficiary and believed in good faith by the Trustee to be genuine and to be signed or presented by the proper person or persons, and the Trustee shall be under no duty to make any investigation or inquiry as to any statement contained in any such writing, but may accept the same as conclusive evidence of the truth and accuracy of the statements therein contained.

- (b) The Company may, but shall not be required to, maintain liability insurance to insure its obligations hereunder. If any payments made by the Company or the Trust pursuant to this indemnity are covered by insurance maintained by the Company, the Company or the Trust (as applicable) shall be subrogated to the rights of the indemnified party against the insurance company.
- (c) Without limiting the generality of the foregoing, the Company will, at the request of the Trustee, advance to the Trustee reasonable amounts of expenses, including reasonable attorneys' fees and expenses, which the Trustee advises have been incurred in connection with its investigation or defense of any claim, demand, action, cause of action, administrative or other proceeding arising out of or in connection with the Trustee's performance of its duties under this Agreement.
- (d) In no event shall the Trustee be liable for consequential damages.
- (e) The Trustee may initiate an action in interpleader with respect to any issue under this Agreement and the Company shall indemnify the Trustee from and against any reasonable legal expenses incurred by the Trustee in connection therewith.
- 5.6. General Duty to Communicate to Committee. The Trustee shall promptly notify the Committee of all communications with or from any government agency or with respect to any legal proceeding with regard to the Trust and with or from any Plan Participants concerning their entitlements under the Plans or the Trust.

ARTICLE 6.

Accounts and Reports of Trustee

6.1. Records and Accounts of Trustee. The Trustee shall maintain

accurate and detailed records and accounts of all transactions of the Trust, which shall be available at all reasonable times for inspection or audit by any person designated by the Company and which shall be retained as required by applicable law.

6.2. Fiscal Year. The fiscal year shall be the same as the Trust

Year. The fiscal year of the Trust shall be the twelve month period or a shorter period in the case of the initial fiscal year.

6.3. Reports of Trustee. The Trustee shall prepare and present to

the Committee a report for the period ending on the last day of each fiscal year, and for such shorter periods as the Committee may reasonably request, listing all securities and other property acquired and disposed of and all receipts, disbursements and other transactions effected by the Trust after the date of the Trustee's last account, and further listing all cash, securities, and other property held by the Trust, together with the fair market value thereof, as of the end of such period. In addition to the foregoing, the report shall contain such information regarding the Trust Fund's assets and transactions as the Committee in its discretion may reasonably request.

The Committee may approve of any report furnished by the Trustee pursuant to the foregoing paragraph either by written statement of approval furnished to the Trustee or shall be deemed to have approved any such report by failure to file written objection to the report with the Trustee within one hundred and eighty (180) days of the date on which the Committee received the report. The Committee shall not be liable to any person for the approval, disapproval or failure to approve or object to any report rendered by the Trustee.

 $\ensuremath{\text{6.4.}}$ Final Report. In the event of the resignation or removal of a

Trustee hereunder, the Committee may request and the Trustee shall then with reasonable promptness submit, for the period ending on the effective date of such resignation or removal, a report similar in form and purpose to that described in Section 6.3.

ARTICLE 7.

Succession of Trustee

7.1. Resignation of Trustee. The Trustee or any successor thereto

may resign as Trustee hereunder at any time upon delivering a written notice of such resignation, to take effect thirty (30) days after the delivery thereof to the

Committee, unless the Committee accepts shorter notice; provided, however, that

no such resignation shall be effective until a successor Trustee has assumed the office of Trustee hereunder.

- 7.2. Removal of Trustee. The Trustee or any successor thereto may be removed by the Company by delivering to the Trustee so removed an instrument executed by the Committee informing the Trustee of the Committee's decision. Such removal shall take effect at the date specified in such instrument, which shall not be less than thirty (30) days after delivery of the instrument, unless the Trustee accepts shorter notice; provided, however, that no such removal
- shall be effective until a successor Trustee has assumed the office of Trustee hereunder.
- 7.3. Appointment of Successor Trustee. Whenever the Trustee or any successor thereto shall resign or be removed or a vacancy in the position shall otherwise occur, the Company shall use its best efforts to appoint a successor Trustee as soon as practicable after receipt by the Committee of a notice described in Section 7.1, or the delivery to the Trustee of a notice described in Section 7.2, as the case may be, but in no event more than sixty (60) days after receipt or delivery, as the case may be, of such notice. A successor Trustee's appointment shall not become effective until such successor shall accept such appointment by delivering its acceptance in writing to the Company. If a successor is not appointed within such 60 day period, the Trustee, at the Company's expense, may petition a court of competent jurisdiction for appointment of a successor.
- 7.4. Succession to Trust Fund Assets. The title to all property held hereunder shall vest in any successor Trustee acting pursuant to the provisions hereof without the execution or filing of any further instrument, but a resigning or removed Trustee shall execute all instruments and do all acts necessary to vest title in the successor Trustee. Each successor Trustee shall have, exercise and enjoy all of the powers, both discretionary and ministerial, herein conferred upon its predecessors. A successor Trustee shall not be obliged to examine or review the accounts, records, or acts of, or property delivered by, any previous Trustee and shall not be responsible for any action or any failure to act on the part of any previous Trustee.
- 7.5. Continuation of Trust. In no event shall the legal disability, resignation or removal of a Trustee terminate the Trust, but the Company shall forthwith appoint a successor Trustee in accordance with Section 7.3 to carry out the terms of the Trust.
- 7.6. Changes in Organization of Trustee. In the event that any corporate Trustee hereunder shall be converted into, shall merge or consolidate with, or shall sell or transfer substantially all of its assets and business to, another corporation, state or federal, the corporation resulting from such conversion, merger or consolidation, or the corporation to

which such sale or transfer shall be made, shall thereupon become and be the Trustee under the Trust with the same effect as though originally so named.

7.7. Continuance of Trustee's Powers in Event of Termination of the

Trust. In the event of the termination of the Trust, as provided herein, the

Trustee shall dispose of the Trust Fund in accordance with the provisions hereof. Until the final distribution of the Trust Fund, the Trustee shall continue to have all powers provided hereunder as necessary or expedient for the orderly liquidation and distribution of the Trust Fund.

7.8. Corporate Trustee. The Trustee or any successor Trustee shall
be an independent corporate entity with assets of at least \$15 billion.

ARTICLE 8.

Amendment or Termination

8.1. Amendments. Except as otherwise provided herein, the Company

may amend the Trust at any time and from time to time in any manner which it seems desirable, provided that no amendment shall permit the Company to receive any distribution prohibited by the last sentence of Section 1.5 hereof and no amendment which would adversely affect the duties of the Trustee shall be made without the Trustee's written consent, which consent shall not be unreasonably withheld. Notwithstanding the foregoing, the Company shall retain the power under all circumstances to amend the Trust to correct any errors or clarify any ambiguities or similar issues of interpretation in this Agreement, except to the extent any such amendment adversely affects the duties of the Trustee.

8.2. Termination. Subject to the terms of this Section 8.2, the

Trust shall terminate on the earliest of the date (i) all available shares are distributed, (ii) on which the Loan is paid in full and (iii) the 20th anniversary of the effective date of the Trust (the "Termination Date"). The Company may terminate the Trust at any time prior to the Termination Date. The Trust shall also terminate automatically upon the Company giving the Trustee written notice of a Change of Control. Immediately upon a termination of the Trust, the Company shall be deemed to have forgiven all amounts then outstanding under the Loan. As soon as practicable after receiving notice from the Company of a Change of Control or upon any other termination of the Trust, the Trustee shall sell all of the Company Stock and other non-cash assets (if any) then held in the Trust Fund provided, that the Trustee will not be required to sell such Company Stock unless such sale can be completed without violating applicable securities laws. In the event of a Change of Control or any other termination of the Trust, the Company will cooperate in registering the Company Stock held by the Trust. The Company shall be responsible for all expenses

incurred in connection with the registration of such Company Stock. The proceeds of such sale shall first be returned to the Company up to an amount equal to the principal amount, plus any accrued interest, of the Loan that was forgiven upon such termination. Any funds remaining in the Trust after such payment to the Company (the "Excess Funds") shall be used to fund (1) the existing obligations of the Company under (i) the Plans and, then, (ii) all broad-based employee benefit plans maintained by the Company, and (2) the anticipated future obligations of the Company to the pre Change-of-Control employee population under one or more broad based employee plans, and, (3) if any Excess Funds remain, such amount shall be paid directly to the active participants in the Company's 401(k) defined contribution plan in proportion to each participant's base pay. Any determination as to which plans are entitled to funding pursuant to this paragraph or the extent of any obligation to such plan shall be made by the Committee.

8.3. Form of Amendment or Termination. Any amendment or termination $% \left(1\right) =\left(1\right) \left(1\right)$

of the Trust shall be evidenced by an instrument in writing signed by an authorized officer of the Company, certifying that said amendment or termination has been authorized and directed by the Company or the Board of Directors, as applicable, and, in the case of any amendment, shall be consented to by signature of an authorized officer of the Trustee, if required by Section 8.1.

ARTICLE 9.

Miscellaneous

- 9.2. Committee Action. Any action required or permitted to be taken by the Committee may be taken on behalf of the Committee by any individual so authorized. The Company shall furnish to the Trustee the name and specimen signature of each member of the Committee upon whose statement of a decision or direction the Trustee is authorized to rely. Until notified of a change in the identity of such person or persons, the Trustee shall act upon the assumption that there has been no change. In the event that a Change of Control occurs, the Board of Directors shall no longer have the authority to remove or appoint members of the Committee and the members of the Committee in place immediately preceding such a Change of Control shall continue as such members and shall have the authority to appoint new members to replace any members who resign or otherwise cease to be members after the Change of Control.
- 9.3. Notices. All notices, requests, or other communications required or permitted to be delivered hereunder

shall be in writing, delivered by registered or certified mail, return receipt requested as follows:

To the Company

Donald H. Cuozzo, Esquire Secretary Mine Safety Appliances Company P.O. Box 426 Pittsburgh, PA 15230

To the Trustee:

PNC Bank, N.A. One Oliver Plaza 27th Floor 6th Avenue Pittsburgh, PA 15222

Attn: Frank Leja, Vice President

Any party hereto may from time to time, by written notice given as aforesaid, designate any other address to which notices, requests or other communications addressed to it shall be sent.

- 9.4. Severability. If any provision of the Trust shall be held illegal or invalid or unenforceable for any reason, such provision shall not affect the remaining parts hereof, but the Trust shall be construed and enforced as if said provision had never been inserted herein.
- 9.5. Protection of Persons Dealing with the Trust. No person dealing with the Trustee shall be required or entitled to monitor the application of any money paid or property delivered to the Trustee, or determine whether or not the Trustee is acting pursuant to authorities granted to it hereunder or to authorizations or directions herein required.
- 9.6. Tax Status of Trust. It is intended that the Company, as grantor hereunder, be treated as the owner of the entire Trust and the trust assets under Section 671 et seq. of the Code. Until advised otherwise, the Trustee may presume that the Trust is so characterized for federal income tax purposes and shall make all filings of tax returns on that presumption.
- 9.7. Participants to Have No Interest in the Company by Reason of the Trust. Neither the creation of the Trust nor an anything contained in the Trust shall be construed as giving any person, including any individual employed by the Company or any subsidiary of the Company, any equity or interest in the assets, business, or affairs of the Company except to the extent that any such individuals are entitled to exercise stockholder rights with respect to Company

Stock pursuant to Section 5.4.

9.8. Nonassignability. No right or interest of any person to receive

distributions from the Trust shall be assignable or transferable, in whole or in part, either directly or by operation of law or otherwise, including, but not by way of limitation, execution, levy, garnishment, attachment, pledge, or bankruptcy, but excluding death or mental incompetency, and no right or interest of any person to receive distributions from the Trust shall be subject to any obligation or liability of any such person, including claims for alimony or the support of any spouse or child.

9.9. Gender and Plurals. Whenever the context requires or permits, $% \left(1\right) =\left(1\right) \left(1\right)$

the masculine gender shall include the feminine gender and the singular form shall include the plural form and shall be interchangeable.

9.10. Counterparts. This Agreement may be executed in any number of

counterparts, each of which shall be considered an original.

IN WITNESS WHEREOF, the Company and the Trustee have caused this Agreement to be signed, and their seals affixed hereto, by their authorized officers all as of the day, month and year first above written.

PNC BANK, N.A.

By: /s/ Frank H. Leja
Title: Vice President
Attest: /s/Howard H. Giles

Title: Ass't. Vice President

MINE SAFETY APPLIANCES COMPANY

By: /s/D. L. Zeitler

Title: Treasurer

Attest: /s/D. H. Cuozzo

Title: Secretary

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SCHEDULE A

Employee Benefit Plans

- 1. Mine Safety Appliances Company 1987 Management Share Incentive Plan
- 2. Mine Safety Appliances Company 1990 Non-Employee Directors' Stock Option Plan.

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Management's Discussion and Analysis

Sales and Earnings

Sales were \$500,985,000 in 1996, a 3% increase over the prior year's \$487,668,000. Sales in 1995 were 6% higher than sales in 1994 of \$459,607,000. Net income increased 22% in 1996 to \$23,061,000 from \$18,912,000 in 1995, which was 23% higher than 1994's income of \$15,329,000. Earnings per share of common stock was \$4.74 in 1996, \$3.32 in 1995, and \$2.58 in 1994. Earnings per share have benefitted from share repurchases that have reduced average shares outstanding 14% in 1996 and 4% in 1995.

The 1996 sales increase occurred primarily in U.S. commercial markets, while sales to U.S. government agencies once again decreased significantly. International sales improved only slightly, principally in Europe. As in 1995, commercial sales in the U.S. continue to be adversely affected by the impasse on issuance of new Superfund and government site cleanup contracts. The 1995 sales increase occurred primarily in the international markets, particularly in Europe. Overall, 1995 sales by U.S. operations were about the same as 1994, with increases in domestic commercial sales being offset by lower sales to the U.S. government.

U.S. commercial sales increased almost 6% in 1996, as compared to increases of 4% in 1995 and 9% in 1994. Sales of instruments and specialty chemicals sustained in 1996 the growth patterns shown in 1995 and 1994. Conversely, lower government funding and changing customer preferences continue to reduce sales of respiratory protection equipment. A large part of the comparative sales increase in 1994 resulted from the acquisition of Hazco Services, Inc. in the last half of 1993.

Sales by international operations, stated in U.S. dollars, increased 1-1/2% in 1996, 16-1/2% in 1995, and 4-1/2% in 1994. The European economic environment was stagnant in 1996 after notable market growth occurred in Europe in 1995 following stabilization of economic conditions in 1994. Other international markets were about the same in 1996 after significant market growth in 1995 and 1994 occurred in Australia, Brazil and Chile.

Shipments of products to U.S. government agencies in 1996 were \$30,893,000, an 11% decrease from 1995 sales of \$34,815,000, which were 25% lower than 1994 shipments of \$46,478,000. These sales represent 6% of consolidated sales in 1996 as compared to 7% in 1995 and 10% in 1994. New contracts received in 1996 were \$14,834,000 as compared to \$29,002,000 in 1995 and \$27,832,000 in 1994. The 1996 year-end backlog was \$14,371,000, a 53% decrease from the 1995 year-end backlog of \$30,430,000.

The 1996 gross profit rate was 38.7%, as compared to 39.1% in 1995 and 37.6% in 1994. The profitability of operations reflects cost reductions from improved manufacturing and distribution processes, along with careful expense management. Additionally, commercial sales carry greater margins than military sales; thus the change of sales mix has also contributed to higher profit margins. The 1996 and 1995 gross profit have also been favorably affected by LIFO credits of \$10,361,000 and \$5,455,000, respectively, arising from liquidations of LIFO inventory values calculated at lower costs incurred in prior years, and adversely affected by charges of \$5,200,000 and \$2,140,000, respectively, arising from inventory valuation adjustments. The completion and partial termination of some government contracts and ongoing process reengineering has resulted in significant reductions in U.S. manufacturing inventories.

Depreciation, selling and administrative expenses were 31% of sales in 1996, 32% in 1995, and 31% in 1994. The after-tax effects of foreign currency exchange losses charged to income in 1996 reduced net income \$667,000 or \$.14 per share, as compared to \$1,279,000 or \$.23 per share in 1995, and \$3,840,000 or \$.65 per share in 1994. The more significant losses resulted from the currency valuation changes that occurred in Brazil and Mexico in each of the three years. The effective income tax rates were 37.1% in 1996, 42.9% in 1995, and 40.6% in 1994.

Restructuring

During 1996 the company initiated restructuring efforts to reduce its cost structure and improve its competitive position. These actions included employee reductions, writedowns for impaired assets, and facilities consolidation, the most significant of which is the planned closing of the Esmond, Rhode Island plant primarily because of the low level of personal protective equipment business with the U.S. government. Commercial product activities currently performed at Esmond will be relocated to other safety product manufacturing facilities.

The more significant costs included in the \$7,786,000 charge to 1996 operations are:

- (1) separation pay of \$4,581,000, of which \$1,303,000 was paid in 1996. The number of employees affected is approximately 270, of which about 110 had terminated as of December 31, 1996. These terminations were primarily in manufacturing operations and administration.
- (2) building, machinery and tooling writedowns, the primary non-cash provisions, of \$2,961,000.

The accrued termination benefits will be paid during 1997. Other significant cash outlays over the next one to two years will be incurred for relocation of people and equipment, site preparation, start-up costs, and new equipment, and will be charged to income primarily when incurred. The major portion of these costs are expected to occur in 1997. Anticipated future benefits will result from the reduced costs associated with a downsized production capacity better aligned with product demands.

Restructuring charges of \$730,000 in 1995 related primarily to workforce reductions at international locations, whereas charges of \$3,086,000 in 1994 were primarily applicable to completing the disposition of assets of the former Catalyst Research Division, which was closed in 1992.

Financial Condition and Funds Flow

Cash and cash equivalents decreased \$6,854,000 during 1996. Accounts receivable increased \$10,785,000 to \$101,740,000 at December 31, 1996. Trade receivables expressed in number of days sales outstanding were 71 days, as compared to 65 days in 1995. Inventories decreased \$6,581,000 to \$77,040,000 at December 31, 1996, resulting from completion of government contracts, improvements in manufacturing and distribution processes, and currency exchange rate changes. Inventory measured against sales turned 6.5 times in 1996 and 5.8 times in 1995. The working capital ratio was 2.5 and 3.2 to 1 at years-end 1996 and 1995, respectively.

Short-term debts of international affiliates are payable in local currencies, which is in keeping with the company's policy of minimizing foreign currency exposures by offsetting foreign currency assets with foreign currency debt. The average interest rate on these loans, which include the effects of borrowing in certain countries where local inflation has resulted in high interest rates, was approximately 13%.

Long-term debt and the current portion thereof decreased \$1,458,000 to \$15,871,000, a conservative 6% of total capital. Total capital is defined as long-term debt plus current portion of long-term debt and shareholders' equity.

Capital expenditures were \$21,583,000 in 1996, as compared to \$19,136,000 in 1995. The company has continued its program of plant and equipment modernization to increase efficiency of existing manufacturing and distribution facilities. For the most part, capital expenditures were financed internally through retained earnings. In the past five years, approximately \$107 million has been spent on new plants, equipment and distribution facilities.

Dividends paid on the common stock during 1996 (the 79th consecutive year of a dividend payment) were \$1.10 per share, up from the \$1.06 per share paid during 1995 and \$.94 per share paid

in 1994. Cash dividends have been paid at a conservative percentage of income, which has permitted the company to finance its growth almost exclusively through retained earnings. During 1996, the company repurchased 601,962 common shares for \$28,853,000. As of December 31, 1996, an additional 500,000 shares may be repurchased under current authorizations.

Credit available at year-end with banks was the U.S. dollar equivalent of \$17,157,000. The company's financial position remains strong and should provide adequate capital resources for growth.

Cumulative Currency Translation Adjustment

The year-end position of the U.S. dollar relative to foreign currencies resulted in translation losses of \$747,000 being charged to the cumulative translation adjustments shareholders equity account in 1996, as compared to gains of \$2,876,000 in 1995 and \$5,050,000 in 1994. Significant losses occurred in Germany and Japan, offset to some degree by gains in Australia and Britain, in 1996, while significant gains occurred in Germany in 1995 and in Australia, Britain, and Germany in 1994.

The company's stock transfer agent is Norwest Bank Minnesota, N.A., 161 North Concord Exchange, P. O. Box 738, South St. Paul, MN 55075-0738.

Common Stock

At December 31, 1996, there were 4,611,125 shares of common stock outstanding. There were approximately 410 identifiable common stockholders as of November 15, 1996, a recent date for dividends. The common stock last-sale price and up-to-the-minute volume information (Symbol: MNES) is included in the National Association of Security Dealers, Inc., (NASDAQ) National Market System. The quarterly high and low price quotations for common shares follow:

	1996		19	95
Quarter	High	Low	High	Low
First Second Third Fourth	\$52-1/4 \$48 \$51-5/8 \$55-1/2	\$41 \$41-1/4	\$45-3/4 \$53 \$55 \$52-1/4	\$42-1/2 \$43-1/2 \$50-1/2 \$41

Common stock quarterly cash dividend information is as follows:

Quarter	Amoun Pe Shar	r Record	Payment Date
1996			
First Second Third Fourth	\$.: \$.:	27 Feb. 16, 1996 27 May 17, 1996 28 Aug. 16, 1996 28 Nov. 15, 1996	June 10, 1996 Sept. 10, 1996
Total	\$ 1.:	10 	
1995			
First Second Third Fourth	\$.: \$.:	25 Feb. 17, 1995 27 May 12, 1995 27 Aug. 11, 1995 27 Nov. 17, 1995	June 10, 1995 Sept. 10, 1995
Total	\$ 1.0	 06 	

MSA 1996 Financial Review

Report of Management

Mine Safety Appliances Company's consolidated financial statements and related notes that appear in this Annual Report to Shareholders were prepared by the company in accordance with generally accepted accounting principles. In fulfilling its responsibilities for the integrity and objectivity of the consolidated financial statements, management maintains accounting procedures designed to provide accurate books, records and accounts which reasonably and fairly reflect the transactions of the company in a consistent manner on the accrual basis of accounting.

Company personnel are trained and given responsibilities to ensure adequate internal accounting controls at a cost commensurate with the risks involved. Internal accounting controls, monitored by an internal audit staff, provide reasonable assurances that transactions are executed in accordance with proper authorization and that adequate accountability for the company's assets is maintained.

The Board of Directors, through its Audit Committee, is responsible for assuring that management fulfills its responsibilities in the preparation of the financial statements. The Audit Committee meets at least twice a year with the company's independent accountants to discuss the scope of their examination and any significant findings resulting therefrom.

/s/ James E. Herald

James E. Herald Vice President--Finance Chief Financial Officer

Report of Independent Accountants
To the Shareholders and Board of Directors of Mine Safety Appliances Company

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income, of earnings retained in the business, and of cash flows present fairly, in all material respects, the financial position of Mine Safety Appliances Company and its subsidiaries at December 31, 1996 and 1995, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 1996, in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes 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. We believe that our audits provide a reasonable basis for the opinion expressed above.

/s/ Price Waterhouse LLP

Price Waterhouse LLP Pittsburgh, Pennsylvania February 17, 1997

(In thousands, except per share amounts) Year Ended December 31	1996	1995	1994
Net sales Other income	\$500,985 5,870	\$ 487,668 4,191	\$ 459,607 5,463
	506,855	491,859	
Costs and expenses Cost of products sold	307,112	296,845	286,725
Selling, general and administrative	133,071		
Depreciation		20,002	
Interest Foreign currency losses		1,730 1,233	
Facilities consolidation and restructuring charges		730	
Contract costs recovery	(2,484)		0,000
	470,188	458,727	439,244
Income before income taxes	36,667	33,132	25,826
Provision for income taxes	13,606	14,220	10, 497
Net income	. ,	\$ 18,912	. ,
Earnings per common share	\$4.74	\$3.32	\$2.58
Consolidated Statement of Earnings Retained in the Business			
(In thousands) Year Ended December 31	1996	1995	1994
At beginning of year	\$309,712	\$ 296,993	\$ 287,286
Net income	23,061		15,329
Dividends declared Common Preferred		(6,140) (53)	(5,569) (53)
At end of year	\$325,898	. ,	
	========	=========	========

See notes to consolidated financial statements.

(In thousands, except per share amounts) December 31	1996	1995
Assets Current Assets Cash Temporary investments, at cost which approximates market Receivables, less allowance for doubtful accounts \$2,993 and \$2,640	17,133	
Inventories Deferred tax assetsnet Prepaid expenses and other current assets	101,740 77,040 18,659 5,872	90,955 83,621 16,165 5,934
Total current assets	228,407	228,625
Property Land Buildings Machinery and equipment Construction in progress	6,196 106,767 224,390 10,079	6,639 106,927 218,977 6,720
Total Less accumulated depreciation	347,432 (200,374)	339,263 (188,157)
Net property	147,058	151,106
Other Assets	32,217	26,869
Total		\$ 406,600
Liabilities Current Liabilities Notes payable and current portion of long-term debt Accounts payable Employees' compensation Insurance Taxes on income Other current liabilities	\$ 8.239	\$ 6,003 24,123 13,109 9,760 466 18,523
Total current liabilities	91,814	71,984
Long-term Debt	13,278	14,746
Other Liabilities Deferred tax liabilitiesnet Pensions and other employee benefits Other noncurrent liabilities	16,781 43,504 873	16,957 48,276 1,097
Total other liabilities	61,158	66,330
Shareholders' Equity Preferred stock, 4-1/2% cumulative, \$50 par value (callable at \$52.50) Common stock, no par value (shares outstanding: 19964,611,125; 19955,182,757)	3,569 10,866	
Stock compensation trust Cumulative translation adjustments Earnings retained in the business Treasury shares, at cost	(28,200) 1,430 325,898 (72,131)	2,177 309,712 (70,218)
Total shareholders' equity	241, 432	253,540
Total	\$407,682 =======	\$ 406,600

See notes to consolidated financial statements.

(In thousands) Year Ended December 31	1996	1995	1994
Operating Activities Net income Depreciation Pensions Deferred income taxes Receivables Inventories Accounts payable and accrued liabilities Other assets and liabilities Otherincluding currency exchange adjustments	22,373 (2,716) (2,525) (10,785) 6,581 16,157 961 3,348	\$ 18,912 20,002 (2,510) (601) (2,257) (6,655) 4,902 210 3,607	18,527 (1,305) 61 (6,801) 4,488 6,963 (754) 4,163
Cash Flow From Operating Activities	56,455	35,610	40,671
Investing Activities Property additions Property disposals Acquisitions and other investing Cash Flow From Investing Activities	(21,583) 1,889 (10,276)	(19,136) 1,811 (2,170) (19,495)	(22,614) 4,983 6,130
Financing Activities Additions to long-term debt Reductions of long-term debt Cash dividends Stock options and purchases of company's stock Changes in notes payable and short-term debt Cash Flow From Financing Activities	2,247 (32,037)	(40,056)	2,978 (22,952)
Effect of exchange rate changes on cash	(1,302)	1,471	1,768
Increase (decrease) in cash and cash equivalents Beginning cash and cash equivalents	(6.854)	(22,470) 54,420	7.986
Ending cash and cash equivalents	\$ 25,096	\$ 31,950	\$ 54,420
Supplemental cash flow information: Interest payments Income tax payments	\$ 1,419	\$ 1,922 13,638	\$ 1,983

See notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Note 1--Basis of Presentation

Significant accounting policies are stated in italics at the applicable notes to consolidated financial statements.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

All significant majority-owned companies are included in the consolidated financial statements. Investments in which the company has an equity interest of 20% to 50% are carried at equity in net assets. Intercompany transactions are eliminated in consolidation.

Sales under contracts are recorded at fixed or estimated contract sales prices as deliveries are made. Contracts requiring performance over several periods are accounted for by the percentage-of-completion method of accounting. Profits expected to be realized are based on estimates of total sales and costs at completion. These estimates are periodically reviewed and revised during the contract performance period. Adjustments to profits are recorded in the period in which estimates are revised; losses are recognized in full as they are identified.

Property is stated at cost. Depreciation is based on estimated useful lives using accelerated and straight-line methods. Maintenance and repairs are charged to expense. Renewals and betterments which substantially extend the useful life of property are capitalized. Profits or losses resulting from dispositions are included in income.

The financial statements of companies for which the United States dollar is determined to be the functional currency are translated using current and historic exchange rates; adjustments related thereto are included in income for the current period. The financial statements of all other companies are translated from their functional currency into United States dollars using current exchange rates; the resultant translation adjustments are not included in income but are accumulated in a separate equity account. Transaction gains and losses are recognized in income for the current period.

Cash and cash equivalents in the Consolidated Statement of Cash Flows includes temporary investments that are readily marketable and have minimal risk as to change in value. Certain securities have maturities in excess of ninety days; but, as part of the company's cash management program, maturities are scheduled based on expected cash needs for the ensuing twelve months.

Earnings per share is computed based upon the weighted average number of common shares outstanding during each year. Shares held by the stock compensation trust that have not been committed to be released are not considered as outstanding shares. The computation recognizes dividends paid on preferred stock but does not include a negligible dilutive effect of stock options.

Note 2--Other Income

Other income is summarized as follows:

	(In thousands)		
	1996	1995	1994
Interest Commissions, royalties	\$ 2,628	\$3,585	\$3,043
and product services	1,944	1,959	1,940
Dispositions of assets Equity in earnings of affiliates	1,725 656	(320) (451)	103 212
Other	(1,083)	(582)	165
Total	5,870	4,191	5,463

Note 3--Inventories

The U.S. inventories are valued on the last-in, first-out (LIFO) cost method. Other inventories are valued at the lower of cost, using average or current standard costs which approximate actual costs on a first-in, first-out (FIFO) basis, or market, determined by replacement cost or net realizable value.

Significant reductions of domestic inventories during 1996, 1995 and 1994 caused liquidations of LIFO inventory values calculated at lower costs incurred in prior years. The effect of these liquidations has been to reduce cost of sales by \$10,361,000 in 1996, \$5,455,000 in 1995 and \$6,923,000 in 1994, and to increase net income by \$6,217,000 (\$1.28 per share), \$3,200,000 (\$.56 per share) and \$4,189,000 (\$.71 per share), respectively.

Inventories are summarized as follows:

	(In thousands)			
	1996	1995	1994	
Finished products Work in process Raw materials and supplies	,	\$34,970 16,135 32,516	,	
Total inventories	77,040	83,621	76,966	
Excess of FIFO costs over LIFO costs	45,740	55,185	59,178	

Inventories stated on the LIFO basis represent 39%, 39%, and 43% of the total inventories at December 31, 1996, 1995, and 1994, respectively.

Note 4--Long-Term Debt

	(In thousands)		
U.S.	1996	1995	
Industrial development debt issues			
payable through 2022, 4.6%	\$10,950	\$10,750	
Other, 2.2% to 16.9%	218	336	
International companies Various notes payable through 1998,			
5.3% to 9.0% (\$3,348 secured			
by pledge of assets located abroad)	4,703	6,243	
Total	15 071	17 220	
Total		17,329	
Amounts due within one year	2,593	2,583	
Long-term debt	13,278	14,746	

Approximate maturities of these obligations over the next five years are \$2,593,000 in 1997, \$1,142,000 in 1998, \$404,000 in 1999, \$330,000 in 2000, and \$326,000 in 2001. Some U.S. loan agreements contain covenants to maintain specified levels of shareholders' equity.

Note 5--Business Segments and International Operations

The company is primarily engaged in the manufacture and sale of safety and health equipment. Principal products include respiratory protective equipment, head protection, eye and face protection, hearing protectors, safety clothing, industrial emergency care products, mining safety equipment and monitoring instruments. These safety and health products account for more than 90% of revenues, operating profits and assets. Other products which do not fall within the safety and health equipment segment of the company's business include boron-based and other specialty chemicals.

Information about the company's operations in different geographic areas is summarized as follows:

	(In thousands)		
		1995	
Net Sales and Revenues U.S. operations European operations Other non-U.S. operations	\$283,805 139,083 79,371	\$274,148 135,367 79,164	\$277,591 114,030 70,091
Net Sales and Revenues	502,259	488,679	461,712
Intercompany Transfers U.S. operations European operations Other non-U.S. operations	24,364 17,588 769	22,779 18,014 795	19,067 13,601 625
Intercompany Transfers	42,721	41,588	33,293
Operating Profit and Income Before Income Taxes U.S. operations European operations Other non-U.S. operations Eliminations	30,048 4,810 4,980 (897)	22,870 4,984 6,475 (1,970)	20,195 3,896 4,624 (935)
Operating Profit Interest expense Corporate income/(expense)net	38,941 (1,595)	32,359 (1,730) 2,503	27,780 (2,224)
Income Before Income Taxes	36,667	33,132	25,826
Identifiable Assets and Total Assets U.S. operations European operations Other non-U.S. operations Eliminations	246,329 104,676 45,799 (19,211)	234,237 106,854 44,050 (14,684)	236,286 96,963 38,615 (14,476)
Identifiable Assets Corporate assets Discontinued operations	377,593	370,457 35,820 323	357,388
Total Assets	407,682	406,600	417,051
Net Assets of Non-U.S. Operations		99,163	
Net Income of Non-U.S. Operations	8,882	6,364	4,675

Transfers between geographic areas are stated at established intercompany selling prices. Operating profit is total revenues less operating expenses. Interest income and expense, equity in unconsolidated affiliates, facilities consolidation and restructuring charges, contract costs recovery, and income taxes have not been included in computing operating profit. Corporate assets not included in identifiable assets are principally cash and investments.

Sales by U.S. operations to U.S. government agencies were \$30,893,000 in 1996,\$34,815,000 in 1995, and \$46,478,000 in 1994.

Note 6--Restructuring

Restructuring charges of \$7,786,000 in 1996, most of which relate to the planned closing of the company's Esmond, Rhode Island safety products manufacturing facility, include \$4,581,000 for separation pay to approximately 270 employees and \$2,961,000 for impaired assets. Charges of \$730,000 in 1995 related primarily to workforce reductions at international locations, and 1994 charges of \$3,086,000 applied primarily to disposition of assets of the Catalyst Research Division, which was closed in 1992.

Note 7--Research and Development Expense

Research and development costs, charged against income as incurred, were \$19,122,000 in 1996, \$20,366,000 in 1995, and \$20,575,000 in 1994.

Income taxes are accounted for in accordance with Statement of Financial Accounting Standards No. 109. Deferred tax balances are stated at tax rates expected to be in effect when taxes are actually paid or recovered. No provision is made for undistributed earnings of international companies since little or no tax would result under applicable existing statutes or because management intends that these earnings be permanently reinvested for working capital and capital expenditure requirements.

The U.S. and non-U.S. components of income before income taxes, and provisions for income taxes are summarized as follows:

	(In thousands)			
		1995		
Income Before Income Taxes U.S. income Non-U.S. income Currency translation (losses) Eliminations	12,267	\$ 28,501 11,700 (887) (6,182)	11,177	
Income Before Income Taxes	36,667	33,132	25,826	
Provisions For Income Taxes Current Federal State Non-U.S.	4,948	8,451 1,642 4,728	2,679	
Total current provision	16,131	14,821	10,436	
Deferred Federal State Non-U.S.	(146)	(584) (13) (4)	(43)	
Total deferred provision	(2,525)	(601)	61	
Provisions for Income Taxes	13,606	14,220	10,497	

The components of deferred taxes are as follows:

Deferred tax assets			
Postretirement benefits	5,905	5,666	5,903
Inventory reserves and unrealized profits	5,463	5,975	5,344
Vacation allowances	2,023	2,048	2,054
Postemployment benefits	1,251	1,251	1,580
Liability insurance	3,124	3,153	2,319
Loss carryforwards	350	1,785	2,502
Restructuring	1,089		
Other -	4,900	3,489	3,583
Total deferred tax assets	24,105	23,367	23,285
Deferred tax (liability)depreciation	(22,227)	(24,159)	(24,588)
Net deferred taxes	1,878	(792)	(1,303)

The following is a reconciliation of income taxes calculated at the U.S. Federal income tax rate of 35% to the provision for income taxes:

Provision for income taxes at statutory rate	12,833	11,596	9,039
State income taxes	967	1,059	971
Currency translation	313	310	1,058
Non-U.S. taxes	(995)	694	(293)
Othernet	488	561	(278)
Provision for income taxes	13,606	14,220	10,497

Undistributed earnings of international companies for which U.S. income taxes have not been provided were \$66,690,000 at December 31, 1996.

- . Common stock, no par value--20,000,000 shares . Second cumulative preferred voting stock, \$10 par value--1,000,000 shares . 4-1/2% cumulative preferred stock, \$50 par value--100,000 shares

Common stock activity is summarized as follows:

	Stock	ck Stock		(In thousands)			
	Stock Shares Issued		Shares In Treasury	Common Stock	Compensation Trust	Treasury Cost	
Balances January 1, 1994 Management Share Incentive Plan forfeitures Purchased for treasury	6,713,503		701,875 632 195,324	\$ 8,048		\$(31,878) (27) (8,483)	
Balances December 31, 1994 Stock options exercised Purchased for treasury	6,713,503 5,900		897,831 638,815	8,048 252		(40,388) (28,277)	
Balances December 31, 1995 Management Share Incentive Plan issues Management Share Incentive Plan forfeitures Stock options exercised	6,719,403 17,050 (560) 13,840		1,536,646	8,300 771 (25) 602	A (00, 000)	(68, 665)	
Sale to Stock Compensation Trust Purchased for treasury		600,000	(600,000) 601,962	1,218	\$(28,200)	26,982 (28,853)	
Balances December 31, 1996	6,749,733	600,000	1,538,608	10,866	(28,200)	(70,536)	

Second cumulative preferred voting stock--none has been issued.

As to the 4-1/2% cumulative preferred stock, 71,373 shares have been issued (none during the three years ended December 31, 1996), while the amounts held in treasury at each year end are 1996 - 49,313 shares, \$1,595; 1995 - 47,935 shares, \$1,553; and 1994 - 47,775 shares, \$1,548.

The company has established the Mine Safety Appliances Company Stock Compensation Trust, the purpose of which is to fund certain benefit plans, including employee stock options and awards. In June 1996, the company sold 600,000 treasury shares, at market value, to the Trust, in exchange for a \$28,200,000 promissory note, 8% interest, payable to the company.

On February 10, 1997, the company adopted a Shareholder Rights Plan which includes distribution of rights as a dividend at the rate of one right for each share of the company's common stock owned on February 21, 1997. Each right will entitle the holder to buy a fraction of a share of a participating preferred stock for \$225 in the event certain persons or groups acquire 15% or more of the company's outstanding common stock. Each right will entitle its holder to purchase common stock having a value twice the exercise price. These rights will expire on February 21, 2007.

Note 10--Leases

The company leases warehouses, sales offices, manufacturing facilities and equipment under agreements expiring at various dates through 2001, with renewal options existing for varying periods. Rental expense for these leases charged to income was \$6,956,000 in 1996, \$6,970,000 in 1995, and \$6,452,000 in 1994. Future minimum rental commitments under noncancelable leases are not significant.

Note 11/Quarterly Financial Information (Unaudited) (In thousands, except earnings per share)

	1996			1995						
		Quarters			Quarters					
	1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year
Net sales	\$115,371	\$123,879	\$121,744	\$139,991	\$500,985	\$118,162	\$125,207	\$119,995	\$124,304	\$487,668
Gross profit	41,325	44,491	47,465	60,592	193,873	46,346	48,523	45,110	50,844	190,823
Net income	3,139	3,756	6,116	10,050	23,061	5,718	5,611	3,836	3,747	18,912
Earnings per share	.61	.76	1.26	2.11	4.74	.98	.96	. 67	.71	3.32

Short-term bank lines of credit amounted to \$19,131,000 of which \$17,157,000 was unused at December 31, 1996. Generally, these short-term lines of credit are renewable annually and there are no significant commitment fees or compensating balance requirements. Short-term borrowings with banks, which exclude the current portion of long-term debt, were \$5,491,000 and \$3,362,000 at December 31, 1996 and 1995, respectively. The average month-end balance of total short-term borrowings during 1996 was \$2,912,000 while the maximum month-end balance of \$5,491,000 occurred at December 31, 1996. The average interest rate during 1996 was approximately 13% based upon total short-term interest expense divided by the average month-end balance outstanding, and 18% at year-end. This average interest rate is affected by borrowings in certain countries where local inflation has resulted in relatively high interest rates.

Note 13--Retirement Plans

Substantially all employees are covered by non-contributory pension plans. Various U.S. employees also participate in a contributory retirement savings plan wherein employees may contribute from 1% to 10% of their compensation to a trust fund, to which the company contributes an amount equal to 50% of the employees' contributions not in excess of 8%. The company's expense for these plans was \$2,798,000 in 1996, \$3,069,000 in 1995, and \$4,647,000 in 1994.

The non-contributory pension plans are accounted for in accordance with Statement of Financial Accounting Standards No. 87 which requires use of the projected unit credit cost method to determine the projected benefit obligation and plan cost. The principal U.S. plan is funded in compliance with the Employee Retirement Income Security Act (ERISA). It is the general policy to fund current costs for the international plans except in Germany, where it is common practice and permissible under tax laws to accrue book reserves. Non-contributory plan benefits are generally based on years of service and employees' compensation during the last years of employment. Benefits are paid from funds previously provided to trustees or are paid by the company and charged to the book reserves.

Information pertaining to the non-contributory defined benefit plans is provided in the following tables.

Cost for Defined Benefits Plans	U.S. Plans			International Plans			
(In thousands)	1996	1995	1994	1996	1995	1994	
Service costbenefits earned during the period Interest cost on projected benefit obligation Actual (return)/loss on plan assets Net amortization and deferral Special pension benefit adjustments associated with early retirement and restructuring	\$ 3,205 9,892 (33,411) 15,667	\$ 2,826 10,023 (45,817) 29,169 (508)	\$ 3,458 9,834 (971) (13,137)	\$ 2,036 4,003 (1,861) 601	4,055	\$ 1,686 3,170 (704) (267)	
Pension expense (income)	(4,647)	(4,307)	(816)	4,779	4,926	3,885	
Funding Status and Projected Benefit Obligation Reconciliation December 31 (In thousands)							
Actuarial present value of benefit obligations Accumulated benefit obligation Vested Nonvested	119,131 1,904	119,959 1,962	108,697 2,043			41,058 2,422	
Total	121,035	121,921	110,740	47,962	48,355	43,480	
Plan assets at fair value, primarily listed stocks and bonds Projected benefit obligation	234,591 141,702	209,902 146,097	173,171 128,389	20,744 50,565	18,211 54,101	16,922 48,112	
Plan assets in excess of (less than) projected benefit obligation	92,889	63,805	44,782	(29,821)	(35,890)	(31,190)	
The excess (less than) consists of Unamortized portion of transition gain (loss), being recognized over future years Unrecognized net gain (loss) from past experience different from that assumed Unrecognized prior service cost Minimum liability for unfunded plans (Accrued)/prepaid pension cost included in the consolidated balance sheet	6,104 77,562 (2,326) 963 10,586	7,017 52,979 (2,693) 1,301 5,201	7,931 38,144 (3,074) 1,042	. , ,	(1,422) (331) (815) (33,322)	(1,325) (1,719) (544) (27,602)	
Total	92,889	63,805	44,782	(29,821)	(35,890)	(31,190)	
Assumed long-term rates of return on assets Assumed discount rates for future benefits Assumed long-term rates for compensation increases	9% 7-1/2 4-1/2	9% 7-1/4 5	9% 8-1/4 5	8-9% 6.1-8 3-6	8-9% 7-8-1/2 4-6-1/2	8-9% 7-8.9 4-6	

Note 14--Postretirement Benefits

The company provides certain health care benefits and limited life insurance for retired employees and their eligible dependents, the costs for which are accounted for in accordance with Statement of Financial Accounting Standards (SFAS) No. 106. SFAS No. 106 requires recognition of retiree health and life insurance benefits during the employees' service with the company. Further information about these benefits is provided in the following tables.

Cost for Benefits (In thousands)	1996	1995	1994
Service costbenefits earned during the period Interest cost on projected benefit obligation Amortization of (gain)/loss	\$ 408 1,152	\$ 349 1,168	
Special benefit adjustments associated with early retirement and restructuring	36	(247)	
Retirement benefits expense	1,596	1,270	1,709
Funded Status and Accumulated Postretirement Benefit Obligation Reconciliation December 31 (In thousands)			
Accumulated postretirement benefit obligation			
Active employees Other active participants	6,955	3,352 7,224	6,098
Retirees	10,169	10,576 6,031	9,286
Total Unamortized (loss)		16,607 (2,241)	,
Accrued postretirement benefit cost included in consolidated balance sheet	15,006	14,366	14,453
Assumed discount rates for future benefits	7-1/2%	7-1/4%	8-1/4%

Annual rates of increase in the costs of covered health care benefits assumed for 1996 were 7%, decreasing gradually to 4% for the year 1999 and thereafter. The health care cost trend rate assumption has a significant effect on the amounts reported; a one-percentage-point increase in each year would increase the accumulated postretirement benefit obligation by \$1,157,000 and increase the current service and interest costs for the year by \$147,000.

Note 15--Stock Plans

The company's Management Share Incentive Plan permits the granting of restricted stock awards and stock options to eligible key employees through December 1997. The 1990 Non-Employee Directors' Stock Option Plan provides for annual grants of stock options to eligible directors. As of December 31, 1996, there were 257,090 shares and 37,800 shares, respectively, reserved for future grants pursuant to these Plans.

Stock options are generally granted at market value option prices and expire after ten years (limited instances of option prices in excess of market value and expiration after five years). Restricted stock awards are granted (17,050 shares in 1996) to employees without payment to the company in consideration of services to be performed in ensuing five-year periods. The company applies Accounting Principles Board Opinion No. 25 and related Interpretations in accounting for the Plans. Accordingly, no compensation cost has been recognized for the stock option grants. Compensation cost for the restricted stock awards is measured by the market value of the shares when awarded and is amortized by charges to operations over the period that the employee provides the service. The expense charged to operations was \$350,000 in 1996, \$238,000 in 1995, and \$413,000 in 1994. The company's net income and earnings per share would not be significantly affected if compensation cost for these Plans was determined based on fair value at grant dates consistent with the method provided in Statement of Financial Accounting Standards No. 123.

A summary of the two stock option plans follows:

	:		1995	1994		
	Shares	Weighted-Average Exercise Price		Weighted-Average Exercise Price		Weighted-Average Exercise Price
Outstanding at beginning of year Granted Exercised Forfeited	46,360 31,455 (13,840) (5,610)	\$46.18 46.37 43.49 47.50	49,260 3,000 (5,900)		32,520 20,140 (3,400)	\$48.31 44.59 61.33
Outstanding at end of year	58,365	46.77	46,360	46.18	49,260	45.89
Options exercisable at year-end	58,365		44,473		45,101	

SUMMARY OF OPERATIONS	1996	1995	1994	1993	1992
(In thousands, except as noted) Net sales	\$500,985	\$487,668	\$459,607	\$429,220	\$502,366
Other income	5,870	4,191	5,463	5,885	9,755
Cost of products sold	307,112	296,845	286,725	273,350	327,555
Selling, general and administrative	133,071	138,187	124,714	121,529	130,182
Depreciation	22,373	20,002	18,527	17,294	16,831
Interest expense	1,595	1,730	2,224	1,713	1,536
Foreign currency losses	735	1,233	3,968	3,201	5,507
Unusual items	5,302	730	3,086	(223)	2,700
Taxes on income	13,606	14,220	10,497	7,686	11,107
Income from continuing operations	23,061	18,912	15,329	10,555	16,703
Per common share (in dollars)(1)	4.74	3.32	2.58	1.73	2.67
Discontinued operations					(5,067)
Cumulative effect to January 1, 1992 of changes in accounting principles(2)					(8,964)
Net income	23,061	18,912	15,329	10,555	2,672
Per common share (in dollars)(1)	4.74	3.32	2.58	1.73	.42
Cash dividends	5,438	6,193	5,622	5,640	5,608
Per common share (in dollars)	1.10	1.06	.94	.92	.89
Weighted average number of common shares outstanding(1)	4,852	5,681	5,921	6,069	6,225
VEAD FUD DOOTTEN					
YEAR-END POSITION					
Working capital		\$156,641		\$164,199	\$177,287
Working capital ratio	2.5	3.2	3.4	3.7	4.2
Property, at cost	347,432	339, 263	322,109	306,691	305,908
Total assets	407,682 	406,600	417,051 	407,884	407,772
Long-term debt	13,278 	14,746	16,564	27,476	28,868
Common shareholders' equity	240,329	252,368	264,795	258,539	261,927

Equity per common share (in dollars) 52.12 48.69 45.53 43.00 43.09

⁽¹⁾ Earnings per common share are calculated after deducting dividends on preferred stock and are based on the weighted average number of shares outstanding during each year. Shares not committed by the Stock Compensation Trust are not considered as outstanding shares.

⁽²⁾ Statements of Financial Accounting Standards No. 106 (Postretirement Benefits), No. 109 (Income Taxes), and No. 112 (Postemployment Benefits) adopted January 1, 1992.

State or Other

MINE SAFETY APPLIANCES COMPANY

The registrant's present affiliates include the following:

Name Compania MSA de Argentina S.A. MSA (Aust.) Pty. Limited MSA Export Limited MSA do Brasil Ltda. MSA Canada MSA de Chile Ltda. Baseline Industries, Inc. Rose Manufacturing Company MSA International, Inc. MSA de France Auergesellschaft GmbH MSA-Auer Safety Technology MSA Italiana S.p.A. MSA Japan Ltd. Better Breathing, Inc. MSA de Mexico, S.A. de C.V. MSA Nederland, B.V. HAZCO Services, Inc. MSA del Peru S.A. MSA-Auer Polska Sp. z o.o. MSA (Britain) Limited MSA S.E. Asia Pte. Ltd. MSA Espanola S.A.

AB Tegma

MSA (Świtzerland) Ltd.

Aritron Instrument A.G.

MSA Zimbabwe (Pvt.) Limited

Jurisdiction of Incorporation Argentina Australia Barbados Brazil Canada Chile Colorado Colorado Delaware France Germany Hungary Italy Japan Massachusetts Mexico Netherlands Ohio Peru Poland Scotland Singapore Spain Sweden Switzerland Switzerland Zimbabwe

The above-mentioned affiliated companies are included in the consolidated financial statements of the registrant filed as part of this annual report. The names of certain other affiliates, which considered in the aggregate as a single affiliate would not constitute a significant affiliate, have been omitted.

Consent of Independent Accountants

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 33-22284) of the 1987 Management Share Incentive Plan and the Registration Statement on Form S-8 (No. 33-43696) of the 1990 Non-Employee Directors' Stock Option Plan of Mine Safety Appliances Company of our report dated February 17, 1997, appearing on page 13 of the 1996 Annual Report to Shareholders of Mine Safety Appliances Company, which is incorporated in this Annual Report on Form 10-K. We also consent to the incorporation by reference of our report on the Financial Statement Schedule, which appears on page F-1 of this Form 10-K.

PRICE WATERHOUSE LLP

600 Grant Street Pittsburgh, PA 15219 March 26, 1997

THE SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM DECEMBER 1996 FINANCIAL STATEMENTS AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS

0000066570 MINE SAFETY APPLIANCES CO

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       DEC-31-1996
            DEC-31-1996
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104,733
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             506,855
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                 735
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                  23,061
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                   4.74
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