

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

For the quarter ended June 30, 1994

Commission File No. 0-2504

MINE SAFETY APPLIANCES COMPANY

(Exact name of registrant as specified in its charter)

Pennsylvania

25-0668780

(State or other jurisdiction of (IRS Employer Identification No.)
incorporation or organization)

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 code: 412/967-3000

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

As of July 31, 1994, there were outstanding 5,933,832 shares of common stock without par value.

PART I FINANCIAL INFORMATION
MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED CONDENSED BALANCE SHEET
(Thousands of dollars, except shares data)

	June 30 1994	December 31 1993
ASSETS		
Current assets		
Cash	\$ 10,761	\$ 10,953
Temporary investments, at cost plus accrued interest	39,317	35,481
Accounts receivable, less allowance (1994 - \$2,722; 1993 - \$2,516)	82,384	81,897
Inventories:		
Finished products	30,204	30,409
Work in process	17,644	20,001
Raw materials and supplies	25,260	31,044
Total inventories	73,108	81,454

Other current assets	16,153	14,824
	-----	-----
Total current assets	221,723	224,609
	-----	-----
Property, plant and equipment	316,399	306,691
Accumulated depreciation	(163,253)	(153,162)
	-----	-----
Net property	153,146	153,529
	-----	-----
Other assets	27,668	29,746
	-----	-----
TOTALS	\$ 402,537	\$ 407,884
	=====	=====

LIABILITIES AND SHAREHOLDERS' EQUITY

Current liabilities		
Notes and accounts payable	\$ 25,853	\$ 27,219
Federal, foreign, state and local income taxes	(2,264)	(3,474)
Other current liabilities	35,751	36,665
	-----	-----
Total current liabilities	59,340	60,410
	-----	-----
Long-term debt	20,482	27,476
Noncurrent liabilities (principally employee/retiree benefits) and deferred credits		
	62,020	60,254
Shareholders' equity		
Preferred stock, 4-1/2% cumulative - authorized 100,000 shares of \$50 par value; issued 71,373 shares, callable at \$52.50 per share	3,569	3,569
Second cumulative preferred voting stock - authorized 1,000,000 shares of \$10 par value; none issued		
Common stock - authorized 20,000,000 shares of no par value; issued 6,713,503 and 6,713,503 (outstanding 5,935,021 and 6,011,628)	8,048	8,048
Cumulative translation adjustments	(3,415)	(5,749)
Retained earnings	289,162	287,286
Less treasury shares, at cost:		
Preferred - 47,775 and 47,268 shares	(1,548)	(1,532)
Common - 778,482 and 701,875 shares	(35,121)	(31,878)
	-----	-----
Total shareholders' equity	260,695	259,744
	-----	-----
TOTALS	\$ 402,537	\$ 407,884
	=====	=====

MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED CONDENSED STATEMENT OF INCOME

(Thousands of dollars, except earnings per share and shares outstanding)

	Three Months Ended June 30		Six Months Ended June 30	
	1994	1993	1994	1993
Net sales	\$ 115,133	\$ 107,840	\$ 224,655	\$ 212,703
Other income	1,810	952	3,242	2,058
	-----	-----	-----	-----
	116,943	108,792	227,897	214,761
	-----	-----	-----	-----
Costs and expenses				
Cost of products sold	71,559	67,571	142,072	134,661
Selling, general and administrative	31,867	30,255	61,454	60,196
Depreciation	4,946	4,394	9,831	8,345
Interest	786	410	1,394	808
Currency exchange (gains)/losses	1,697	1,064	2,353	988
	-----	-----	-----	-----
	110,855	103,694	217,104	204,998

Income from operations				
before income taxes	6,088	5,098	10,793	9,763
Income taxes	2,620	2,135	4,765	4,284
Net income	\$ 3,468	\$ 2,963	\$ 6,028	\$ 5,479
Earnings per common share (1)	\$ 0.57	\$ 0.48	\$ 1.00	\$ 0.89
Weighted average number of common shares outstanding	5,963,238	6,096,385	5,963,238	6,096,385
Dividends paid on preferred stock	\$ 13	\$ 14	\$ 27	\$ 28

<FN>

(1) Computed after dividends paid on preferred stock. Common shares reserved for outstanding options under the stock option and incentive plans would have a negligible dilutive effect on earnings per common share.

MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED CONDENSED STATEMENT OF CASH FLOWS
(Thousands of dollars)

	Six Months Ended June 30	
	1994	1993
OPERATING ACTIVITIES		
Income from operations	\$ 6,028	\$ 5,479
Depreciation	9,831	8,345
Deferred taxes, pensions, and other non-cash charges/(credits)	801	1,197
Changes in operating assets and liabilities	(1,128)	(8,275)
Other - principally currency exchange adjustments	2,771	(588)
Cash flow from operating activities	18,303	6,158
INVESTING ACTIVITIES		
Property additions	(9,295)	(8,879)
Property disposals	1,009	286
Acquisitions and other investing	5,839	159
Cash flow from investing activities	(2,447)	(8,434)
FINANCING ACTIVITIES		
Additions to long-term debt	1,629	415
Reductions of long-term debt	(8,978)	(846)
Cash dividends	(2,774)	(2,837)
Purchases of company's stock	(3,259)	(739)
Changes in notes payable and short term debt	346	249
Cash flow from financing activities	(13,036)	(3,758)
Effect of exchange rate changes on cash	824	(534)
Increase/(decrease) in cash and cash equivalents	3,644	(6,568)
Beginning cash and cash equivalents	46,434	55,409
Ending cash and cash equivalents	\$ 50,078	\$ 48,841

<FN>

Note 1 - Basis of Presentation

The accompanying unaudited consolidated condensed financial statements

include all adjustments, which are, in the opinion of management of the registrant, necessary for a fair statement of the operating results for the six month periods ended June 30, 1994 and 1993. These financial statements have been prepared in accordance with the instructions to Form 10-Q and therefore do not include all information and footnotes necessary for a fair presentation of financial position, results of operations, and changes in cash flows in conformity with generally accepted accounting principles.

MINE SAFETY APPLIANCES COMPANY
MANAGEMENT'S DISCUSSION AND ANALYSIS

Most of the sales increase was due to the inclusion of HAZCO Services, Inc., Dayton, Ohio, which was acquired in the last half of 1993. This acquisition added equipment rental services and a significant presence in the hazardous materials/ environmental market. U.S. commercial safety equipment sales have been essentially flat, while sales of gas detection and monitoring instruments and specialty chemicals have maintained robust growth. Shipments of gas masks to the U.S. military have continued at reduced levels, although some modest improvement in the second half of this year is expected. Sales by the company's German and selected European affiliates remained depressed by economic conditions. Business grew particularly in Asia and Australia, while overall sales in other international markets have been firm.

The increase in other income in the second quarter of 1994 was primarily due to an increase in rental income.

The major contributors to the earnings increase were HAZCO, the U.S. Instrument Division and certain international operations. Operating earnings trends in 1994 in the U.S. were meaningfully better than net profit movement due to transitional expenses to reengineer the company's customer communications, distribution and cost management processes. European operations, although depressed by economic conditions, have improved as a result of restructuring. Earnings have shown encouraging growth in Canada, Australia and Asia to historically high levels. Latin American results, though, remain unsatisfactory. Earnings per share have benefitted from higher net income and reduced shares outstanding as a result of the share repurchase program.

These results represent another step along the journey to return MSA to a satisfactory level of performance with a good way yet to travel. The company continues its strategy of particularly emphasizing innovation in products, services and business processes with the goals of improved customer response and lower cost. This will enhance growth in expanding markets and improve profitability in weak markets. We will also continue selective geographic extension of MSA's activities. The company has made progress in overcoming some unfavorable economic and market trends. We will continue to move forward in our journey. If external factors become neutral or more favorable, our speed along the way could accelerate.

Comparative foreign currency exchange losses charged to income are as follows:

Three Months Ended

Six Months Ended

	June 30		June 30	
	1994	1993	1994	1993
	(Thousands of dollars)		(Thousands of dollars)	
Transaction (gains)/losses	437	125	548	(301)
Translation (gains)/losses	1,260	939	1,805	1,289
	-----	-----	-----	-----
	1,697	1,064	2,353	988
	=====	=====	=====	=====

Currency exchange adjustments charged directly to the equity cumulative translation adjustments account are shown below. Significant second quarter 1994 translation gains relate primarily to Germany, Australia, and Italy. Year to date 1993 translation losses relate primarily to Spain and Italy.

	Three Months Ended		Six Months Ended	
	June 30		June 30	
	1994	1993	1994	1993
	(Thousands of dollars)		(Thousands of dollars)	
Translation (gains)/losses	(2,048)	(2,625)	(2,335)	818

Available credit facilities along with internal cash resources are adequate to provide for ensuing capital requirements. The company's financial position and liquidity continue to be adequate. The current ratio and term debt in relation to capital as of June 30, 1994 were 3.7 and 8.2%, respectively, as compared to 3.7 and 11.0% at December 31, 1993.

PART II OTHER INFORMATION
MINE SAFETY APPLIANCES COMPANY

Item 1. Legal Proceedings

Not Applicable

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

(a) April 27, 1994 - Annual Meeting

(b) Directors elected at Annual Meeting:

Calvin A. Campbell, Jr.
G. Donald Gerlach
John T. Ryan, Jr.

Directors whose term of office continued after the meeting:

Helen Lee Henderson
John T. Ryan III
Leo N. Short, Jr.
John M. Arthur
Joseph L. Calihan

(c) Election of three Directors for a term of three years

Calvin A. Campbell, Jr.	For	5,523,828
	Withhold	24,743
	Broker Nonvotes	-0-

G. Donald Gerlach	For	5,525,028
	Withhold	23,543
	Broker Nonvotes	-0-

John T. Ryan, Jr.	For	5,539,478
	Withhold	9,093
	Broker Nonvotes	-0-

Amendment to the Company's 1990 Non-Employee Directors' Stock Option Plan to increase annual stock option grants under the plan from 200 to 500 shares of Common Stock per non-employee director.

For	5,310,324
Against	55,605
Abstain	182,642
Broker Nonvotes	-0-

Selection of Price Waterhouse as Auditors for the year ending December 31, 1994

For	5,104,670
Against	3,503
Abstain	440,398
Broker Nonvotes	-0-

(d) Not applicable

Item 6. Exhibits and Reports on Form 8-K

(a) Exhibits

3(i) Restated Articles of Incorporation as amended to April 27, 1989.

10(a)* 1990 Non-Employee Directors' Stock Option Plan as amended to April 27, 1994.

10(b)* Executive Insurance Program

(b) Reports on Form 8-K

No reports of Form 8-K were filed during the quarter ended June 30, 1994.

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

SIGNATURES

Pursuant to the requirements 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

Date: AUGUST 10, 1994

By S/James E. Herald
James E. Herald
Vice President - Finance;
Principal Financial and
Accounting Officer

ARTICLES OF AMENDMENT

To: The Corporation Bureau
 Department of State
 Commonwealth of Pennsylvania

In compliance with the requirements of Article VIII of the Business Corporation Law, approved the 5th day of May, 1933, P.L. 364 as amended, the applicant, MINE SAFETY APPLIANCES COMPANY, desiring to amend its Restated Articles, hereby certifies under its corporate seal that:

1. The name of the corporation is MINE SAFETY APPLIANCES COMPANY, and the location of its registered office in the Commonwealth of Pennsylvania is 121 Gamma Drive, RIDC Industrial Park, O'Hara Township, Pittsburgh, Allegheny County, Pennsylvania 15238.
2. The corporation was incorporated on January 25, 1917 under the Act of the General Assembly of the Commonwealth of Pennsylvania, approved April 29, 1874, P.L. 73, and the several supplements hereto, and is now subject to the provisions of the Business Corporation Law.
3. The meeting of the shareholders of the corporation at which the amendment was adopted was held on April 19, 1989 at 10:00 a.m., local Pittsburgh time, at the corporation's Executive Offices, 121 Gamma Drive, RIDC Industrial Park, O'Hara Township, Pittsburgh, Pennsylvania, pursuant to written notice mailed on March 13, 1989.
4. At the time of the action of the shareholders (a) the total number of shares outstanding was 6,578,314 shares of common stock, without par value, and 26,290 shares of 4 1/2% cumulative preferred stock, par value \$50 per share, and (b) the number of shares entitled to vote on the proposed amendment was 6,578,314 shares of common stock.
5. In the action taken by the shareholders, the number of shares voted for the proposal to amend was 5,036,017 shares of common stock, and the number of shares voted against the proposal to amend was 478,137 shares of common stock.
6. The amendment adopted by the shareholders was to add to Article 7th of the restated Articles of the corporation a new Section 7.9 to read as set forth in full below:

7.9. Applicability of BCL Section 910; Suspension of Article 7th. Section 910 of the Pennsylvania Business Corporation Law ("BCL Section 910") shall be applicable to the Company, and the provision of the By-Laws providing to the contrary is hereby repealed. For so long as BCL Section 910 as in effect on the date of approval by the Board of Directors of this Section 7.9 (the "Approval Date") or amendatory or replacement legislation substantially equivalent in effect thereto shall remain in effect and applicable to the Company, Sections 7.1 through 7.8 of this Article 7th shall be suspended. In the event that the Disinterested Directors by majority vote shall determine (the date of any such determination being referred to herein as the "Determination Date") that BCL Section 910 has been repealed in whole or in part or invalidated in whole or in part by any court or amended or replaced by other legislation such that provisions

substantially equivalent in effect to BCL Section 910 as in effect on the Approval Date shall not be applicable to the Company, then unless and until such determination shall be rescinded (whether by reason of further legislation or court decisions or otherwise) by a majority vote of the Disinterested Directors, Sections 7.1 through 7.8 of this Article 7th shall no longer be suspended and shall apply in the event that any Acquiring Person is on the Determination Date or thereafter becomes a 40% Shareholder. In the event that the Company has received prior to the Determination Date credible notice that an Acquiring Person has become a 40% Shareholder, then, notwithstanding Section 7.1, the term "Effective Date" as used in this Article 7th shall mean the Determination Date. In determining whether provisions substantially equivalent

in effect to those of BCL Section 910 on the Approval Date remain in effect and applicable to the Company, the Disinterested Directors may consider, in addition to whether any legislation then applicable to the Company provides substantially equivalent or greater rights to the shareholders of the Company, whether such legislation contains exclusions from the coverage of such legislation which are in practical effect substantially equivalent in coverage to those provided in clauses (a), (b) and (c) of BCL Section 910(B)(2)(ii) as in effect on the Approval Date. Nothing contained in this Section 7.9 shall prevent the Board of Directors from exercising any right provided by any amendment to BCL Section 910 or any replacement or other legislation to opt out from coverage of such legislation and, if appropriate, determining on such basis that the suspension of Articles 7.1 through 7.8 provided for herein has been terminated.

IN TESTIMONY WHEREOF, the undersigned corporation has caused these Articles of Amendment to be signed by its President and its corporate seal, duly attested by its Secretary, to be affixed onto this document this 25th day of April, 1989.

[Corporate Seal]

MINE SAFETY APPLIANCES COMPANY

Attest s/Charles L. Albright, Jr.
Charles L. Albright, Jr.
Secretary

By s/L. N. Short,
L. N. Short,
President

Filed in the Department of the State on the 27th day of April, 1989.

Secretary of the Commonwealth

s/James J. Haggerty
James J. Haggerty

ARTICLES OF AMENDMENT

To: The Corporation Bureau
Department of State
Commonwealth of Pennsylvania

In compliance with the requirements of Article VIII of the Business Corporation Law, approved the 5th day of May, 1933, P.L. 364 as amended, the applicant, MINE SAFETY APPLIANCES COMPANY, desiring to amend its Restated Articles, hereby certifies under its corporate seal that:

1. The name of the corporation is MINE SAFETY APPLIANCES COMPANY, and the location of its registered office in the Commonwealth of Pennsylvania is 201 North Braddock Avenue, Pittsburgh, Allegheny County, Pennsylvania 15208.

2. The corporation was incorporated on January 25, 1917 under the Act of the General Assembly of the Commonwealth of Pennsylvania, approved April 29, 1874, P.L. 73, and the several supplements hereto, and is now subject to the provisions of the Business Corporation Law.

3. The meeting of the shareholders of the corporation at which the amendment was adopted was held on April 24, 1987 at 10:00 a.m., local Pittsburgh time, at the corporation's Executive Offices, 121 Gamma Drive, RIDC Industrial Park, O'Hara Township, Pittsburgh, Pennsylvania, pursuant to written notice mailed on March 23, 1987.

4. At the time of the action of the shareholders (a) the total number of shares outstanding was 6,632,523 of common stock, without par value, and 28,793 shares of 4 1/2% cumulative preferred stock, par value \$50 per share, and (b) the number of shares entitled to vote on the proposed amendment was 6,632,523 shares of common stock.

5. In the action taken by the shareholders, the number of shares voted for the proposal to amend was 5,824,369 shares of common stock, and the number of shares voted against the proposal to amend was 57,860 shares of common stock.

6. The amendment adopted by the shareholders, which shall be new Article 14th of the Restated Articles of the corporation, is set forth in full below:

Article 14th. Personal Liability of Directors.

(a) To the fullest extent that the laws of the Commonwealth of Pennsylvania, as in effect on January 27, 1987 or as thereafter amended, permit elimination or limitation of the liability of directors, no Director of the Company shall be personally liable for monetary damages as such for any action taken, or any failure to take any action, as a Director.

(b) This Article 14th shall not apply to any actions filed prior to January 27, 1987, nor to any breach of performance of duty or any failure of performance of duty by any Director of the Company occurring prior to January 27, 1987. The provisions of this Article shall be deemed to be a contract with each

Director of the Company who serves as such at any time while this Article is in effect and each such Director shall be deemed to be doing so in reliance on the provisions of this Article. Any amendment or repeal of this Article or adoption of any other By-law or provision of the Articles of the Company which has the effect of increasing Director liability shall operate prospectively only and shall not affect any action taken, or any failure to act, prior to the adoption of such amendment, repeal, other By-law or provision.

IN TESTIMONY WHEREOF, the undersigned corporation has caused these Articles of Amendment to be signed by its Chairman of the Board and its corporate seal, duly attested by its Secretary, to be affixed onto this

document this 24th day of April, 1987.

[Corporate Seal]

MINE SAFETY APPLIANCES COMPANY

Attest S/Charles L. Albright
Charles L. Albright,
Secretary

By S/John T. Ryan, Jr.
John T. Ryan, Jr.
Chairman of the Board

Filed in the Department of the State on the 27th day of April, 1987.

S/James J. Haggerty
James J. Haggerty
Secretary of the Commonwealth

ARTICLES OF AMENDMENT

To: The Corporation Bureau
Department of State
Commonwealth of Pennsylvania

In compliance with the requirements of Article VIII of the Business Corporation Law, approved the 5th day of May, 1933, P.L. 364 as amended, the applicant, Mine Safety Appliances Company, desiring to amend its Articles, hereby certifies under its corporate seal that:

1. The name of the corporation is MINE SAFETY APPLIANCES COMPANY and the location of its registered office in the Commonwealth is 201 North Braddock Avenue, Pittsburgh, Allegheny County, Pennsylvania 15208.
2. The corporation was incorporated on January 25, 1917 under the Act of the General Assembly of the Commonwealth of Pennsylvania, approved April 29, 1874, P.L. 73, and the several supplements hereto, and is now subject to the provisions of the Business Corporation Law.
3. The meeting of the shareholders of the corporation at which the amendments were adopted was held on May 23, 1986 at 10:00 a.m., local Pittsburgh time, at 600 Penn Center Boulevard, Pittsburgh, Pennsylvania 15235, pursuant to written notice mailed on April 14, 1986.
4. At the time of the action of the shareholders:
 - (a) the total number of shares outstanding was 6,653,712 shares of common stock, par value \$.83 1/3 and 29,881 shares of 4 1/2% cumulative preferred stock, par value \$50 per share.

(b) the number of shares entitled to vote proposed amendments was 6,653,712 shares of common stock.

5. On the action taken by the shareholders, the numbers of shares voted for the proposals to amend were:

Proposal A to add new Articles 10th and 12th and related definitions in Article 6th: 5,520,518 shares of common stock

Proposal B to add new Article 11th and related definitions in Article 6th: 5,238,914 shares of common stock

Proposal C to add new Article 7th and related definitions in Article 6th: 5,318,497 shares of common stock

Proposel D to amend Article 5th: 5,458,430 shares of common stock

Proposal to restate the Articles as amended: 5,238,914 shares of common stock

The number of shares voted against the amendment was:

Proposal A to add new Articles 10th and 12th and related definitions in Article 6th: 275,201 shares of common stock

Proposal B to add new Article 11th and related definitions in Article 6th: 437,131 shares of common stock

Proposal C to add new Article 7th and related definitions in Article 6th: 366,545 shares of common stock

Proposal D to amend Article 5th: 221,375 shares of common stock

Proposal to restate the Articles as amended: -0- shares of common stock

6. The amendments adopted by the shareholders are set forth in the Restated Articles in Exhibit A attached.

IN TESTIMONY WHEREOF, the undersigned corporation has caused these Articles of Amendment to be signed by its Chairman of the Board and its corporate seal, duly attested by its Secretary, to be affixed onto this document this 23rd day of May, 1986.

[Corpoate Seal]

MINE SAFETY APPLIANCES COMPANY

Attest: S/Charles L. Albright, Jr.
Charles L. Albright, Jr.
Secretary

By S/John T. Ryan, Jr.
John T. Ryan, Jr.
Chairman of the Board

Filed in the Department of the State on the 23rd day of May, 1986.

S/Robert A. Gleason, Jr.
Robert A. Gleason, Jr.
Secretary of the Commonwealth

RESTATED ARTICLES
OF
MINE SAFETY APPLIANCES COMPANY

Article 1st. The name of the corporation is MINE SAFETY APPLIANCES COMPANY (hereinafter the "Company").

Article 2nd. The location and post office address of its current registered office in this Commonwealth is 201 North Braddock Avenue, Pittsburgh, Allegheny County, Pennsylvania 15208.

Article 3rd. The Company is organized under the provisions of the Business Corporation Law for the following purposes, which shall be construed independently of each other:

(a) To manufacture, develop, prepare, install, buy, sell, maintain, service, lease as lessor and lessee, import, export and otherwise deal in and with all types of appliances, equipment, apparatus, instruments, systems, clothing, chemicals, materials and other articles of commerce for industry and mines, both in this country and in foreign countries and territories;

(b) To purchase, lease or otherwise acquire, invest in, own, mortgage, pledge, lease, sell, assign and transfer or otherwise dispose of, trade, deal in and deal with real property and goods, wares, merchandise and other personal property of every class and description;

(c) To engage in mercantile, manufacturing, processing, research, development, trading and service businesses of any kind and character; and

(d) To invest in, and to aid by loans, by making guarantees and in any other manner, any business enterprise affiliated with the Company, or in which the Company has any direct or indirect interest, or the business of which is a direct or indirect benefit to the Company.

The Company shall also have unlimited power to engage in and to do any lawful act concerning any or all lawful business for which corporations may be incorporated under the Business Corporation Law.

Article 4th. The term of its existence is perpetual.

Article 5th. The aggregate number of shares which the Company shall have authority to issue shall be 21,100,000 shares, divided into three classes so that 100,000 shares shall be 4 1/2% Cumulative Preferred Stock of the par value of \$50 per share (hereinafter referred to as the "4 1/2% Preferred Stock"), 1,000,000 shares shall be Second Cumulative Preferred Stock of the par value of \$10 per share (hereinafter referred to as the "Second Preferred Stock"), and 20,000,000 shares shall be Common Stock without par value.

A description of said classes of stock and a statement of the preferences, qualifications, privileges, limitations, options, conversion rights, and other special or relative rights granted to or imposed upon the shares of each class are as follows:

Section I. 4 1/2% Cumulative Preferred Stock.

A. DIVIDENDS. The holders of 4 1/2% Preferred Stock shall be entitled to receive and the Company shall be required to pay, when and as declared by the Board of Directors, out of any assets or funds of the Company available for the

payment of dividends in accordance with law, dividends at the rate of 4 1/2% per annum payable quarterly upon the first day of March, June, September and December in each year. Dividends on the 4 1/2% Preferred Stock shall be cumulative from the first day of the quarterly dividend period in which such shares are issued, whether or not earned or declared, but arrears in payment thereof shall not bear interest. The said 4 1/2% Preferred Stock shall be

preferred over the shares of all other classes of the Company's stock (hereinafter referred to as "Junior Stock"). No dividends shall be paid upon, nor shall any distribution be ordered or made, in respect of the Junior Stock of the Company in any year while any dividends are accumulated and unpaid upon the 4 1/2% Preferred Stock and unless and until dividends at the rate aforesaid for the current year shall have been declared and paid or set apart for the 4 1/2% Preferred Stock. So long as any of the 4 1/2% Preferred Stock shall be outstanding, the Company shall not pay or declare any dividend (except dividends payable in its shares of a class ranking junior to the 4 1/2% Preferred Stock as to dividends and assets) on any shares of Junior Stock which will reduce the earned surplus of the Company below an amount equal to 50% of the par value of the shares of said 4 1/2% Preferred Stock outstanding as of the time any such calculation is required to be made.

B. REDEMPTION. On and after December 1, 1955, the Board of Directors of the Company, at its option, may redeem at any time or from time to time the whole or any part of the 4 1/2% Preferred Stock at the redemption price of \$52.50 per share plus all accrued and unpaid dividends on such shares at the date fixed for redemption. Notice of each such intended redemption shall be given by publication at least once in each of two successive calendar weeks, in each case on any day of the week, in a daily newspaper of general circulation in the City of Pittsburgh, Allegheny County, Pennsylvania, the first publication to be made not less than thirty (30) days nor more than sixty (60) days prior to the date fixed for such redemption. A similar notice shall be mailed by the Company, postage prepaid, not less than thirty (30) days nor more than sixty (60) days prior to the date fixed for such redemption, to the holders of record of the shares to be redeemed, addressed to each such shareholder at his address as the same appears upon the stock transfer books of the Company, but failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the proceedings for the redemption of any shares of the 4 1/2% Preferred Stock to be redeemed, and the mailing of such notice shall not be a condition of such redemption. In case of redemption of only a part of the outstanding shares of the 4 1/2% Preferred Stock, the shares to be redeemed shall be selected by lot or pro rata as the Board of Directors shall determine. On or after the date of redemption stated in such notice, each holder of the shares of the 4 1/2% Preferred Stock called for redemption shall surrender his certificate for such shares to the Company at the place designated in such notice, and shall thereupon be entitled to receive payment of the redemption price. In case less than all the shares represented by such surrendered certificate are redeemed, a new certificate shall be issued representing the non-redeemed shares. If the aforesaid notice of redemption shall have been duly published, and if, on or before the redemption date specified in such notice, the funds necessary for such redemption shall have been deposited in trust for such purpose with a bank or trust company in good standing, designated in such notice, doing business in the City of Pittsburgh, Pennsylvania, from and after the date of redemption so designated, notwithstanding that any certificate for shares of 4 1/2% Preferred Stock so called for redemption shall not have been surrendered for cancellation, the shares represented thereby so called for redemption shall no longer be deemed outstanding, the dividends on the number of shares called for redemption represented thereby shall cease to accrue, and all rights with respect to the shares of 4 1/2% Preferred Stock so called for redemption shall forthwith after such redemption date cease and determine, except only the right of the holder to receive out of the moneys so deposited the redemption price, but without interest thereon. None of the 4 1/2% Preferred Stock so redeemed by the Company shall be reissued, and no 4 1/2% Preferred Stock shall be issued in lieu thereof or in exchange therefor, and the Company shall from time to time cause all of such 4 1/2% Preferred Stock so redeemed to be cancelled and its capital reduced in the manner provided by law.

Nothing in this Subparagraph B contained shall prevent the purchase by the Company of the whole or any part of the 4 1/2% Preferred Stock, so long as dividends thereon are not in arrears, at public or private sale, or upon call for tender, upon such terms as the Board of Directors may prescribe, and at prices not to exceed the redemption price thereof and all accrued and unpaid dividends on the shares so purchased to the date of purchase.

C. DISTRIBUTION ON LIQUIDATION OR DISSOLUTION. The 4 1/2% Preferred Stock

shall be preferred over all shares of Junior Stock as to assets, and in the event of any liquidation or dissolution or winding up of the Company, the holders of such stock shall be entitled to receive out of the assets of

the Company available for distribution to its shareholders, whether from capital, surplus or earnings, the preferential amounts hereinafter provided for each share held by them before any distribution of the assets shall be made to the holders of shares of Junior Stock, but the holders of such 4 1/2% Preferred Stock shall be entitled to no other or further amounts. Upon liquidation, dissolution or winding up of the Company, the holders of the 4 1/2% Preferred Stock shall be entitled to receive the sum of \$50 per share if such liquidation, dissolution or winding up be involuntary, and the redemption price of such stock hereinbefore provided if such liquidation, dissolution or winding up be voluntary, together in either case with all accrued and unpaid dividends on such shares to the date fixed for payment of such preferential amounts.

D. VOTING RIGHTS. Except as otherwise herein provided or otherwise required by law, the entire voting power of the Company shall be vested exclusively in the holders of its Junior Stock. If at any time dividends payable on the 4 1/2% Preferred Stock shall be accrued and unpaid in an amount equivalent to or exceeding six quarterly dividends then, and in such event, the holders of the 4 1/2% Preferred Stock shall be entitled, voting separately as a class, to elect two directors, at all elections of directors, in addition to the directors to be elected by the holders of the Junior Stock, but such voting power and the terms of office of any directors so elected by the holders of the 4 1/2% Preferred Stock shall continue only until, and shall cease when, all accrued and unpaid dividends on such stock to the beginning of the then current dividend period shall have been paid in full or funds for the payment thereof shall have been set apart, subject always to the same provisions for the revesting of such voting power in the case of any similar future default or defaults. In such election, the holders of 4 1/2% Preferred Stock shall be entitled to one vote per share. A meeting of the holders of the 4 1/2% Preferred Stock having voting power may be called upon notice to such holders similar to that provided in the By-Laws for shareholders' meetings, at the expense of the Company at any time after the accrual of such voting power and prior to the next annual meeting of shareholders (and the termination of such voting power), by the holders of not less than 10% of the 4 1/2% Preferred Stock then outstanding.

E. RESTRICTION ON CORPORATE ACTION. Except upon the affirmative vote or written consent of the holders of record of at least 60% of the aggregate number of shares of the 4 1/2% Preferred Stock at the time outstanding (in addition to any other vote or consent at the time required by law) the Company shall not in any manner, whether by amendment of the Articles, by sale of all or substantially all the Company's assets or business, by merger or consolidation, or otherwise.

(a) amend, alter or repeal any of the provisions of the Articles so as to affect adversely the relative rights, preferences or powers of the 4 1/2% Preferred Stock; or

(b) authorize, or increase the authorized amount of, the 4 1/2% Preferred Stock or any class or series of stock ranking senior to or on a parity with the 4 1/2% Preferred Stock in the payment of dividends or the preferential distribution of assets;

Provided, however, that no such vote or consent shall be required for any sale of all or substantially all the Company's assets or business or for any merger or consolidation if (i) such holder of shares of 4 1/2% Preferred Stock immediately prior thereto shall thereafter and in connection therewith continue to hold or shall receive the same number of shares of preferred stock, with the same relative rights, preferences and powers, of such acquiring, surviving or resulting corporation, or (ii) the authorized capital stock of the acquiring, surviving or resulting corporation immediately thereafter shall include only classes of stock for which no such vote or consent would have been required for the authorization thereof under clauses (a) or (b) above; and Provided Further, However, that no such consent shall be required under the provisions of this Subparagraph E if, at or prior to the time when the act with respect to which such vote would otherwise be required shall be effected, provision is made in accordance with the Articles for the redemption of all shares of 4 1/2% Preferred Stock at the time outstanding.

For the purpose of obtaining the affirmative vote or written consent of the holders of any specified number of shares of 4 1/2% Preferred Stock at the

time outstanding there shall be excluded, in computing the number of shares outstanding, and there shall be excluded from voting, all shares of such stock owned directly or indirectly by or for the account of the Company.

Section II. Second Cumulative Preferred Stock.

A. AUTHORITY OF BOARD; VARIATIONS IN SERIES. The shares of Second Preferred Stock may be divided into and issued in series. Authority is hereby expressly vested in the Board of Directors of the Company, at any time or from time to time, by resolution to divide any or all of the shares of the Second Preferred Stock into series, and to fix and determine the designation and the relative rights and preferences of any series so established, to the fullest extent now or hereafter permitted by the laws of the Commonwealth of Pennsylvania, including, but not limited to, the variations between different series in the following respects:

(i) the rate of dividend upon the shares of such series;

(ii) the price or prices at which, and the terms and conditions on which, the shares of such series may be redeemed at the option of the Company;

(iii) the amount or amounts payable upon the shares of such series in the event of voluntary or involuntary liquidation;

(iv) the obligation, if any, of the Company to purchase, redeem and/or retire shares of such series pursuant to a sinking fund;

(v) the terms and conditions upon which shares of such series may be converted, in the event that the shares of such series are issued with the privilege of conversion;

(vi) the voting rights, if any, of the holders of shares of such series; and

(vii) the relative seniority, parity or junior rank of such series with respect to other series of Second Preferred Stock then or thereafter to be issued.

The Board of Directors is hereby expressly authorized (a) to fix the number of shares which shall constitute any series of Second Preferred Stock, which number may at any time or from time to time be increased or decreased (but not below the number of shares thereof then outstanding), unless the Board of Directors shall have otherwise provided in establishing such series; (b) to fix the dates in each year on which dividends upon any such series shall be payable, and the date or dates from which such dividends shall be cumulative; and (c) to fix and determine such other terms, limitations and relative rights and preferences, if any, of any such series as it may now or hereafter lawfully do under the laws of the Commonwealth of Pennsylvania.

B. VOTING RIGHTS. (i) Except as otherwise provided in these Articles or in the resolution or resolutions establishing any series of Second Preferred Stock, the holders of Common Stock shall exclusively have the sole voting power.

(ii) If at the time of any annual meeting of shareholders a default in preference dividends on the Second Preferred Stock, as hereinafter defined, shall exist, the number of directors constituting the Board of Directors of the Company shall be increased by two, and the holders of the Second Preferred Stock, voting separately as a class without regard to series, shall, to the exclusion of the holders of the 4 1/2% Preferred Stock (whose voting rights upon default in dividends are hereinabove described in Section I) and the holders of Common Stock, have the right at such meeting to elect two directors of the Company to fill such newly created directorships. Such right shall continue until there are no dividends in arrears upon the Second Preferred Stock. Each director elected by the holders of the Second Preferred Stock, voting as a class as aforesaid (herein called a Second Preferred Director), shall continue to serve as such director for the full term for which he shall have been elected, notwithstanding that prior to the end of such term a default in preference dividends shall cease to exist. Any Second Preferred Director may be removed by, and shall not be removed except by, the vote of the holders of record of the outstanding shares of Second Preferred Stock, voting separately as a class without regard to series, at a meeting of the shareholders, or of the holders of shares of Second Preferred Stock, called for the purpose. So long as a default in any preference dividends on the Second Preferred Stock

shall exist any vacancy in the office of a Second Preferred Director may be filled either by an instrument in writing signed by the remaining Second Preferred Director and filed with the Company or by the vote of the holders of

the outstanding Second Preferred Stock, voting separately as a class without regard to series. Whenever the term of office of the Second Preferred Directors shall end and a default in preference dividends shall no longer exist, the number of directors shall be the number otherwise specified without reference to the provisions of this Subparagraph B. For the purposes of this Subparagraph B, a default in preference dividends on the Second Preferred Stock shall be deemed to have occurred whenever the amount of dividends accrued or in arrears upon any series of the Second Preferred Stock shall be equivalent to six full quarter-yearly (or three full semi-annual) dividends or more, and, having so occurred, such default shall be deemed to exist thereafter until all dividends accrued or in arrears on all shares of Second Preferred Stock then outstanding, of each series, shall have been paid to the end of the last preceding quarterly dividend period.

(iii) Except upon the affirmative vote of the holders of at least 60% of the aggregate number of shares of Second Preferred Stock at the time outstanding (in addition to any other vote at the time required by law), the Company shall not in any manner, whether by amendment of the Articles, by sale of all or substantially all the Company's assets or business by merger or consolidation, or otherwise,

(a) amend, alter or repeal any of the provisions of the Articles so as to affect adversely the relative rights, preferences or powers of the Second Preferred Stock, or

(b) authorize, or increase the authorized amount of, the Second Preferred Stock or any class or series of stock ranking senior to or on a parity with the Second Preferred Stock in the payment of dividends or the preferential distribution of assets;

Provided, However, that no such vote shall be required for any sale of all or substantially all the Company's assets or business or for any merger or consolidation if (x) each holder of shares of Second Preferred Stock immediately prior thereto shall thereafter and in connection therewith continue to hold or shall receive the same number of shares of preferred stock, with the same relative rights, preferences and powers, of such acquiring, surviving or resulting corporation, and (y) the authorized capital stock of the acquiring, surviving or resulting corporation immediately thereafter shall include only classes of stock for which no such vote would have been required for the authorization thereof under clauses (a) or (b) above; and Provided Further, However, that no such vote shall be required under the provisions of clause (iii) of this Subparagraph B if, at or prior to the time when the act with respect to which such vote would otherwise be required shall be effected, provision is made in accordance with the Articles for the redemption of all shares of Second Preferred Stock at the time outstanding.

Section III. Preemptive Rights.

No holder of any shares of any class of stock shall be entitled to have any right, as such holder, to subscribe for or to purchase

(a) any part of any issue of shares of any class whatsoever, which the Company may hereafter issue or sell; or

(b) any obligations or securities of whatsoever kind and character which the Company may hereafter issue or sell, convertible into or exchangeable for any shares of the Company of any other class or classes, or to which shall be attached or shall appertain any warrant or warrants or other instruments which shall confer upon the holder or owner thereof the right to subscribe for or purchase from the Company any of its shares of any class or classes;

whether such shares, obligations or securities hereafter issued shall be part of the number of shares authorized by the Articles as now or hereafter amended, or whether such shares, obligations or securities hereafter issued shall be part of any new or additional issue of shares, obligations or securities of any class whatsoever. The approval of this amendment shall be effective to eliminate and deny any preemptive rights which may have existed in respect of any outstanding shares.

Section IV. Non-Cumulative Voting of Second Preferred Stock and Common Stock.

No holder of Second Preferred Stock and no holder of Common Stock shall have any right to cumulate his votes and cast them for one candidate or distribute them among two or more candidates in any election of directors.

Article 6th. Definitions; Interpretation.

6.1. Definitions. As used in Articles 6th, 7th, 10th, 11th and 12th of the Articles of the Company, the following terms shall have the following meanings:

(a) The term "Acquiring Person" at any particular time shall mean any Person (other than the Company or any Subsidiary of the Company or a trustee holding stock for the benefit of the employees of the Company or any of its Subsidiaries pursuant to one or more employee benefit plans or arrangements) which

(i) Beneficially Owns, or any Person which is a member of a group acting in concert which Beneficially Owns in the aggregate, shares representing 20% or more of the Voting Power of the outstanding Voting Stock of the Company;

(ii) is at such time a director of the Company and at any time within the two-year period immediately prior to such time was the Beneficial Owner of shares representing 20% or more of the Voting Power of the outstanding Voting Stock of the Company; or

(iii) is at such time an assignee of or otherwise has succeeded to the Beneficial Ownership of any shares of Voting Stock which were at any time within the two-year period immediately prior to such time Beneficially Owned by any Acquiring Person, if such assignment or succession shall have occurred in the course of a transaction or series of transactions not involving a public offering within the meaning of the Securities Act of 1933;

except that the term "Acquiring Person" shall not include a Person or group which on February 14, 1986, Beneficially Owned 20% or more of the Voting Power of the outstanding Voting Stock of the Company. A group shall be deemed to continue in existence, and not to have become a new group, notwithstanding the addition or deletion of particular Persons owning shares of Voting Stock to an existing group. With respect to any particular transaction, the term "Acquiring Person" means any Acquiring Person involved in such transaction, any Affiliate or Associate of such Acquiring Person, and any other member of a group acting in concert with such Person. Where any reference is made to a transaction involving, or ownership of securities by, an Acquiring Person, it shall mean and include one or more transactions involving different Persons all included within the definition of "Acquiring Person", or ownership of securities by any or all of such Persons.

(b) An "Affiliate" of, or a Person "Affiliated" with, a specific Person means a Person (other than the Company or a Subsidiary of the Company) that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified.

(c) The term "Associate", used to indicate a relationship with any Person, means (i) any director, officer or partner of, or the Beneficial Owner of 10% or more of any class of equity securities of, such Person or any of its Affiliates, (ii) any corporation or organization (other than the Company or a Subsidiary of the Company) of which such Person is a director, officer or partner or is the Beneficial Owner of 10% or more of any class of equity securities, (iii) any trust or other estate in which such Person has a substantial beneficial interest or as to which such Person serves as trustee or in a similar fiduciary capacity, (iv) any relative or spouse of such Person, or any relative of such spouse, who has the same home as such Person or who is a director or officer of the Company or any of its Subsidiaries or (v) any investment company registered under the Investment Company Act of 1940 for which such Person or any Affiliate or Associate of such Person serves as investment advisor.

(d) A Person shall be a "Beneficial Owner" of any Voting Stock:

(i) which such Person or any of its Affiliates or Associates beneficially owns, directly or indirectly; or

(ii) which such Person or any of its Affiliates or Associates has (A) the right to acquire (whether or not such right is exercisable immediately) pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, exchange rights, warrants or options, revocation of a trust, or otherwise, or (B) the right to vote pursuant to any agreement, arrangement or understanding; or

(iii) which is beneficially owned, directly or indirectly, by any other Person with which such Person or any of its Affiliates or Associates has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting or disposing of any shares of Voting Stock.

For the purpose of determining whether a Person is an Acquiring Person pursuant to paragraph (a) of this Section 6.1, the number of shares of Voting Stock deemed to be outstanding shall include shares deemed owned by such Person through application of this paragraph (d) but shall not include any other shares of Voting Stock which may be issuable pursuant to any agreement, arrangement or understanding, or upon exercise of conversion rights, warrants or options, or otherwise.

(e) The term "Business Combination" shall mean:

(i) any merger, consolidation or share exchange of the Company or a Subsidiary of the Company with an Acquiring Person or into or with another Person which is or after such merger, consolidation or share exchange would be an Affiliate or an Associate of an Acquiring Person, in each case without regard to which entity is the surviving entity;

(ii) any sale, lease, exchange or other disposition (whether in one transaction or a series of related transactions), including without limitation a mortgage or any other security device, of all or any Substantial Part of the assets of the Company (including without limitation any voting securities of a Subsidiary of the Company) or of a Subsidiary of the Company to an Acquiring Person or of all or any Substantial Part of the assets of an Acquiring Person to the Company or a Subsidiary of the Company;

(iii) the issuance, transfer or delivery of any securities of the Company or a Subsidiary of the Company by the Company or any of its Subsidiaries to an Acquiring Person, or of any securities of an Acquiring Person by the Acquiring Person to the Company or a Subsidiary of the Company (other than issuance or transfer of securities which is effected or offered on a pro rata basis to all shareholders of the Company or of the Acquiring Person, as the case may be):

(iv) any recapitalization, reorganization, reclassification of securities (including any reverse stock split) or other transaction or series of related transactions involving the Company that would have the effect, directly or indirectly, of increasing the voting power of an Acquiring Person; or

(v) the adoption of any plan or proposal for the liquidation or dissolution of the Company in which an Acquiring Person owning shares of any class of the Company is treated differently from other shareholders of the same class (other than dissenting shareholders exercising statutory appraisal rights).

As used in this definition, a "series of related transactions" shall be deemed to include not only a series of transactions with the same Acquiring Person but also a series of separate transactions with different Persons all included in the definition of Acquiring Person.

(f) The Term "Disinterested Director" at any time shall mean any director of the Company at the time in office except that if at any time there exists an Acquiring Person, then the term shall mean a director of the Company who is unaffiliated with and not a representative of any Acquiring Person and either (i) was a director of the Company immediately prior to the time that the Acquiring Person became an Acquiring Person or (ii) shall have been recommended for election by a majority of the then Disinterested Directors. Where any provision in the Articles calls for a determination, recommendation or approval by a majority of the Disinterested Directors, if there is at any particular relevant time no Disinterested Director in office, then such provision shall be deemed to be satisfied if the Board, by a two-thirds vote of all the Directors

in office, makes or gives such determination, recommendation or approval.

(g) The term "Fair Market Value" means: (i) in the case of stock, the highest closing sale price on the date in question of a share of such stock on the Composite Tape for the New York Stock Exchange Listed Stocks, or, if not so quoted, on the New York Stock Exchange, or if not so listed, on the principal United States securities exchange registered under the Securities Exchange Act of 1934 on which such stock is listed, or, if not so listed, the closing sale or, if none, the closing bid quotation with respect to a share of such stock on the date in question on the National Association of Securities Dealers, Inc. Automated Quotations System or any system then in use, or if no such quotations are available, the fair market value on the date in question of a share of such stock without regard to any depreciation thereof in consequence of any Business Combination then proposed, as determined by a majority of the Disinterested Directors in good faith; and (ii) in the case of property other than cash or stock, the fair market value of such property on the date in question as determined by a majority of the Disinterested Directors in good faith.

(h) The term "Person" shall mean any individual, partnership, corporation, group or other entity. When two or more Persons act as a partnership, limited partnership, syndicate, association or other group for the purpose of acquiring, holding or disposing of shares of stock, such partnership, syndicate, association or group shall be deemed a "Person". As used herein, the pronouns "which", "that" and "it" in relation to Persons that are individuals shall be construed to mean who" or "whom", "he" or "she", and "him" or "her", as appropriate.

(i) The term "Subsidiary" of any Person shall mean any corporation of which a majority of the Voting Power of the Voting Stock is Beneficially Owned by such Person directly or indirectly through other Subsidiaries of such Person.

(j) The term "Substantial Part" of the assets of any Person shall mean assets having a book value or Fair Market Value, whichever is greater, equal to 10% or more of the total assets reflected on any balance sheet of such Person and its Subsidiaries as of a date no earlier than six months prior to the time the determination is being made.

(k) A specified percentage of "Voting Power", with reference to any matter being voted upon by the shareholders, shall mean such number of shares of stock as shall enable the holders thereof to cast such percentage of the total number of votes entitled to be cast by holders of shares entitled to vote thereon.

(l) The term "Voting Stock" at any time shall mean outstanding shares of capital stock of a corporation entitled to vote at its next annual election of directors (without consideration of the rights of any class of stock other than the Common Stock to elect directors by a separate class vote).

6.2. Authority of Disinterested Directors. The Disinterested Directors, by a majority vote, are authorized to determine on the basis of information known to them after reasonable inquiry: (i) whether a Person is an Acquiring Person, (ii) the number of shares of Voting Stock Beneficially Owned by any Person, (iii) whether a Person is an Affiliate or Associate of another, (iv) whether certain assets constitute a Substantial Part of the assets of any Person and (v) any other fact required to be determined in the application of Articles 6th, 7th, 10th, 11th or 12th of the Articles of the Company. The Disinterested Directors, by a majority vote, are authorized to interpret all the terms and provisions of Articles 6th, 7th, 10th, 11th or 12th of the Articles of the Company. Any such determination or interpretation made in good faith shall be binding and conclusive on all parties.

6.3. Fiduciary Obligations. Nothing contained in Articles 6th, 7th, 10th, 11th or 12th of the Articles shall be construed to relieve any Acquiring Person from any fiduciary obligation imposed by law.

Article 7th. Repurchase Rights.

7.1. Triggering Events. Except as provided below, in the event that any Acquiring Person (hereinafter referred to as a "40% Shareholder") becomes the

Beneficial Owner of shares representing more than forty percent of the Voting Power of the outstanding Voting Stock of the Company, each Person who is a holder of shares of Voting Stock of the Company at any time until and including

the 90th day following the date the notice referred to in Section 7.2 below is mailed, other than the 40% Shareholder or a transferee of the 40% Shareholder, shall have the right, until and including such 90th day, to have some or all of the shares of Voting Stock held by such holder repurchased by the Company at the Repurchase Price and in the manner set forth in this Article 7th. Any holder of securities convertible into shares of Voting Stock, or of options, warrants or rights to acquire shares of Voting Stock, other than the 40% Shareholder or a transferee of the 40% Shareholder, who converts such securities or exercises such options, warrants or rights after such an event and on or prior to the 90th day following the date the notice aforesaid is mailed, shall have the same right (except as provided below) to have the shares of Voting Stock to be received upon such conversion or exercise repurchased at the Repurchase Price. No person shall have any right to have shares of Voting Stock repurchased by the Company pursuant to this Article (i) if a determination that the acquisition of shares by the 40% Shareholder is in the best interests of the Company and its shareholders shall have been expressly made by a resolution duly adopted by a majority vote of the Disinterested Directors within 20 days following the date on which the Company receives credible notice that an Acquiring Person has become a 40% Shareholder (the "Effective Date"), or (ii) if such repurchase is at the time prohibited by the general corporate law of the Company's state of incorporation.

7.2. Notice. If holders of shares of Voting Stock become entitled to have their shares repurchased as provided in Section 7.1, then not later than 90 days following the Effective Date, the Company shall give written notice, by first class mail, postage prepaid, at the address shown on the records of the Company, to each holder of record of shares of Voting Stock other than the 40% Shareholder (and to any other person known by the Company to have rights to demand repurchase pursuant to Section 7.1 as of any date on or after the Effective Date), advising each such holder or other person of the right to have shares repurchased and the procedures for such repurchase, and setting forth the Repurchase Price. In the event that the Company fails to give notice as required by this Section 7.2, any Person entitled to receive such notice may within twenty days thereafter serve written demand upon the Company to give such notice. If within twenty days after the receipt of written demand the Company fails to give the required notice, such Person may at the expense and on behalf of the Company take reasonable action as may be appropriate to give notice or to cause notice to be given pursuant to this Section 7.2.

7.3. Repurchase Price. The Repurchase Price shall be the greater amount determined by a majority vote of the Disinterested Directors on either of the following bases, but in no event shall the Repurchase Price be less than the amount of its involuntary liquidation preference, in the case of preferred stock, and otherwise the amount of shareholders' equity per share of the particular class or series as determined in accordance with generally accepted accounting principles and as reflected in any report published by the Company or filed with any governmental agency as at the end of the latest fiscal quarter for which such a report has been published or filed prior to the notice to shareholders referred to in Section 7.2:

(i) the highest per share price (including any brokerage commissions, transfer taxes, dealer management compensation and soliciting dealers' fees) that can be determined to have been paid by the 40% Shareholder for any shares of Voting Stock of the particular class or series acquired by it at any time; for this purpose, if the consideration paid in any such acquisition of shares by a 40% Shareholder consisted, in whole or in part, of consideration other than cash, the Disinterested Directors by a majority vote shall take such action as in their judgment they deem appropriate to establish the cash value of such consideration, but such valuation shall not be less than the cash value, if any, ascribed to such consideration by the 40% Shareholder; and

(ii) the highest Fair Market Value per share of the particular class or series at any time during the three months prior to the Effective Date.

The determination to be made pursuant to this Section 7.3, when made by the Disinterested Directors acting in good faith on the basis of such information

and assistance as was then reasonably available for such purpose, shall be conclusive and binding upon the Company and its shareholders, including any Person referred to in Section 7.1.

7.4. Repurchase Agent. If holders of shares of Voting Stock become entitled to have their shares repurchased as provided in Section 7.1, the Board

of Directors shall designate a Repurchase Agent, which shall be a corporation or association (i) organized and doing business under the laws of the United States or any State, (ii) subject to supervision or examination by Federal or State authority, (iii) having combined capital and surplus of at least \$50,000,000 and (iv) having the power to exercise corporate trust powers.

7.5. Election to Have Shares Repurchased. For a period of 90 days from the date of the mailing of the notice, holders of shares of Voting Stock and other persons entitled to have shares of Voting Stock repurchased pursuant to this Article 7th may, at their option, deposit certificates representing all or less than all shares of Voting Stock held of record by them with the Repurchase Agent together with written notice that the holder elects to have all or a specified number of such shares repurchased pursuant to this Article 7th. Repurchase of shares evidenced by certificates deposited in proper form with the Repurchase Agent shall be deemed to have been effected at the close of business on the 90th day after the date of the mailing of the notice.

7.6. Deposit and Payment of Repurchase Price. Promptly after the end of the 90-day period referred to in Section 7.5, the Company shall deposit in trust with the Repurchase Agent cash in an amount equal to the aggregate Repurchase Price of all of the shares of Voting Stock deposited with the Repurchase Agent for purposes of repurchase. As soon as practicable after receipt by the Repurchase Agent of the cash deposit, the Repurchase Agent shall issue checks payable to the order of the persons entitled to receive the Repurchase Price of the shares of Voting Stock in respect of which such cash deposit was made.

7.7. Pro Rata Repurchase. If the Company is unable to repurchase all shares deposited for repurchase because of limitations upon repurchase contained in the general corporation law of the Company's state of incorporation, the Company shall promptly deposit with the Repurchase Agent cash in the maximum amount which may be used for the repurchase of shares of Voting Stock. In the event of deposit of less than the full aggregate Repurchase Price pursuant to the provisions of this Section 7.7, the Repurchase Agent shall use the amount so deposited to repurchase the deposited shares pro tanto, in proportion to the Repurchase Price of the shares deposited by each shareholder for repurchase. Certificates representing all shares which remain unpurchased shall be returned to the depositors thereof as soon as practicable thereafter and there shall be no further repurchase rights with respect to such shares arising in connection with the transactions already completed.

7.8. Vote Needed to Amend. In addition to any vote required by any other provisions of law, the Articles or the By-Laws of the Company, the affirmative vote of the holders of at least a majority of the outstanding Voting Power of the Voting Stock which is not Beneficially Owned, directly or indirectly, by an Acquiring Person, shall be required to amend, alter, change or repeal, or adopt any provision inconsistent with, this Article 7th (including the provisions in Article 6th which are applicable to this Article 7th), unless such action has been previously approved by a majority vote of the Disinterested Directors.

Article 8th. Except as provided in subparagraph B below, no corporate action of a character described in subparagraph A below, and no agreement, plan or resolution providing therefor, shall be valid or binding upon the Company unless such corporate action shall have been approved in compliance with all applicable provisions of the Business Corporation Law and these Articles and shall have been authorized by the affirmative vote of at least seventy-five percent of the outstanding shares of Common Stock entitled to vote, given in person or by proxy, at a meeting called for such purpose.

A. Corporate actions subject to the voting requirements of this Article 8th shall be:

(i) any merger or consolidation to which the Company and an interested person (as defined in subparagraph C of this Article 8th) are parties; or

(ii) any sale, lease, exchange or other disposition, in a single transaction or series of related transactions, of all or substantially all or a substantial part of the properties or assets of the Company to an interested person; or

(iii) any transaction of a character described in clause (i) or (ii) above involving an affiliate or an associate of an interested person or involving an associate of any such affiliate or involving an affiliate of

an associate of an interested person; or

(iv) removal of the entire Board of Directors or any member of the Board of Directors without cause.

B. The voting requirements of this Article shall not apply to any transaction of a character described in clause (i), (ii) or (iii) of subparagraph A above should any of the following obtain with respect to the transaction:

(a) The Board of Directors shall have approved the transaction upon the vote of not less than a majority prior to the time the interested person referred to in subparagraph A above became an interested person.

(b) The Board of Directors shall have approved the transaction prior to consummation thereof upon the vote of not less than a majority disregarding the vote of each director who was an interested person referred to in subparagraph A above, or an affiliate, associate or agent of such interested person, or an associate or agent of any such affiliate.

C. For purposes of this Article 8th of these Restated Articles of Incorporation (as amended), the following definitions shall apply:

(i) "Affiliate" shall mean a person that directly, or indirectly through one or more intermediaries, controls or is controlled by or is under common control with another person.

(ii) "Associate" shall mean any corporation or organization of which a person is an officer or partner or is, directly or indirectly, the beneficial owner of ten percent or more of any class of securities of that corporation or organization; or any trust or other estate in which a person has a ten percent or larger beneficial interest or as to which a person serves as a trustee or in a similar fiduciary capacity; or any relative or spouse of a person and any relative of a spouse, who had the same residence as such person.

(iii) "Beneficial Ownership" shall mean all shares directly or indirectly owned by a person and all shares which a person has the right to acquire through the exercise of any option, warrant or right (whether or not currently exercisable), through the conversion of a security, pursuant to the power to revoke a trust, discretionary account or similar arrangement, pursuant to automatic termination of a trust, discretionary account or similar arrangement or otherwise. All shares shall be deemed indirectly owned by a person as to which such person enjoys benefits substantially equivalent to those of ownership by reason of any contract, understanding, relationship, agreement or other arrangement, including without limitation any written or unwritten agreement to act in concert.

(iv) "Control" shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person, whether through ownership of voting securities, by contract or otherwise.

(v) "Interested Person" shall mean any person who beneficially owns twenty percent or more of the outstanding shares of Common Stock of the Company.

(vi) "Person" shall mean an individual, a corporation, a partnership, an association, a jointstock company, a trust, any unincorporated organization, a government or political subdivision thereof and any other entity.

(vii) "Substantial Part" shall mean more than twenty percent of the total consolidated assets of the Company, as shown on its consolidated balance sheet as of the end of the most recent fiscal year

D. The affirmative vote of the holders of at least seventy-five percent of the outstanding shares of Common Stock entitled to vote shall be required to amend or repeal this Article 8th or Article 9th hereof.

Article 9th. The Board of Directors of the Company, when evaluating any proposal

(i) involving a tender or exchange offer for any securities of the

Company,

(ii) to merge or consolidate the Company with another corporation or other person, or

(iii) to purchase or otherwise acquire all or substantially all or a substantial part of the properties or assets of the Company,

shall, in connection with the exercise of its judgment in determining what is in the best interests of the Company and its shareholders, give due consideration to all relevant factors, including without limitations, the economic effect, both immediate and long-term, upon the Company's shareholders, including shareholders, if any, not to participate in the transaction, and the social and economic effect on the employees, suppliers and customers of, and other dealing with, the Company and its subsidiaries and on the communities in which the Company and its subsidiaries operate or are located. The definitions set forth in subparagraph C of Article 8th shall apply to this Article 9th.

Article 10th. Classification of the Board of Directors and Related Matters.

10.1. Number, Election, etc. The business and affairs of the Company shall be managed by or under the direction of a Board of Directors comprised as follows:

(a) Number. The whole Board of Directors shall consist of such number of persons, not less than 5 nor more than 15, as may from time to time be determined by the Board pursuant to a resolution adopted by a majority vote of the Disinterested Directors then in office.

(b) Classes; Election and Terms. Beginning with the Board of Directors to be elected at the annual meeting of shareholders to be held in 1986, the directors shall be classified in respect of the time for which they shall severally hold office by dividing them into three classes, as nearly equal in number as possible. If the classes of directors are not equal, the Board of Directors by a majority vote of the Disinterested Directors then in office shall determine which class shall contain an unequal number of directors. At the annual meeting of shareholders to be held in 1986, separate elections shall be held for the directors of each class, the term of office of directors of the first class to expire at the first annual meeting after their election; the term of office of the directors of the second class to expire at the second annual meeting after their election; and the term of office of the directors of the third class to expire at the third annual meeting after their election. At each succeeding annual meeting, the shareholders shall elect directors of the class whose term then expires, to hold office until the third succeeding annual meeting. Each director shall hold office for the term for which elected and until his or her successor shall be elected and shall qualify.

(c) Removal of Directors. Any directors, any class of directors or the entire Board of Directors may be removed from office by shareholder vote at any time, without assigning any cause, but only if shareholders entitled to cast at least 80% of the votes which all shareholders would be entitled to cast at an annual election of directors or of such class of directors shall vote in favor of such removal; provided, however, that the shareholders shall have such power of removal without cause only if and so long as the general corporate law of the Company's state of incorporation specifically mandates such power. If such power of removal without cause is not mandated by statute, the shareholders may remove a director or directors from office at any time only for cause and only if, in addition to any vote required by any other provision of law, the Articles or the ByLaws of the Company, such removal is approved by the affirmative vote of at least a majority of the Voting Power of the outstanding shares of

Voting Stock of the Company which are not Beneficially Owned by an Acquiring Person..

(d) Vacancies. Vacancies in the Board of Directors, including vacancies resulting from an increase in the number of directors, shall be filled only by a majority vote of the Disinterested Directors then in office, though less than a quorum, except as otherwise required by law. All directors elected to fill vacancies shall hold office for a term expiring at the annual meeting of shareholders at which the term of the class to which they have been elected expires. No decrease in the number

of directors constituting the Board of Directors shall shorten the term of an incumbent director.

(e) Nominations of Director Candidates. Nominations for the election of directors may be made only by the Board of Directors or a committee appointed by the Board of Directors or by any holder of record of stock entitled to vote in the election of the directors to be elected; but a nomination may be made by a shareholder only if written notice of such nomination has been given, either by personal delivery or by United States mail, postage prepaid, to the Secretary of the Company not later than 90 days in advance of the meeting at which the election is to be held. Each such notice shall set forth: (a) the name and address of the shareholder who intends to make the nomination and of the person or persons to be nominated; (b) a representation that the shareholder is a holder of record of stock of the Company entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice; (c) a description of all arrangements or understandings between the shareholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the shareholder; (d) such other information regarding each nominee proposed by such shareholder as would be required to be included in a proxy statement filed pursuant to the proxy rules of the Securities and Exchange Commission, had the nominee been nominated by the Board of Directors; and (e) the consent of each nominee to serve as a director of the Company if so elected.

(f) Exception for Directors Elected by Preferred Stock. Whenever the holders of any class or series of stock having a preference over the Common Stock of the Company as to dividends or assets shall have the right, voting separately as a class, to elect one or more directors of the Company, none of the foregoing provisions of this Section 10.1 shall apply with respect to the director or directors elected by such holders of preferred stock.

10.2. Vote Needed to Amend. In addition to any vote required by any other provisions of law, the Articles or the By-Laws of the Company, the affirmative vote of the holders of at least a majority of the Voting Power of the Voting Stock of the Company which is not Beneficially Owned, directly or indirectly, by an Acquiring Person, shall be required to amend, alter, change or repeal, or adopt any provision inconsistent with, this Article 10th (including the provisions in Article 6th which are applicable to this Article 10th), unless such action has been previously approved by a majority vote of the Disinterested Directors.

Article 11th. Extraordinary Vote for Business Combinations.

11.1. Votes Required. In addition to any vote required by any other provisions of law, the Articles or the By-Laws of the Company, the affirmative vote of the holders of at least a majority of the Voting Power of the Voting Stock of the Company which is not Beneficially Owned by an Acquiring Person shall be required for the approval or authorization of (i) any Business Combination or (ii) any proposal to amend, alter, change or repeal, or adopt any provision inconsistent with, this Article 11th (including the provisions in Article 6th which are applicable to this Article 11th); provided, however, that the foregoing voting requirements shall not be applicable if the Board of Directors of the Company shall have approved the Business Combination or proposal upon the vote of not less than a majority of the Disinterested Directors.

Article 12th. Amendments to Articles of Incorporation or By-Laws; Shareholder Action.

12.1. Amendments to By-Laws. The Board of Directors, by vote of a majority of the Disinterested Directors, may adopt, amend and repeal the By-Laws with respect to those matters which are not, by statute, reserved exclusively to the shareholders. No By-Law may be adopted, amended or repealed by the shareholders unless, in addition to any vote required by any other provisions of law, the Articles or the By-Laws of the Company, such action is approved by the holders of a majority of the Voting Power of the Voting Stock of the Company which is not Beneficially Owned by an Acquiring Person, unless such action has been previously approved by a majority vote of the Disinterested Directors.

12.2. Amendments to Articles of Incorporation. Except in a case where it is specifically provided that this Article 12.2 does not apply to an amendment

or deletion of another provision of the Articles, the approval of the holders of a majority of the Voting Power of the Voting Stock of the Company which is not Beneficially Owned by an Acquiring Person, in addition to any vote required by any other provisions of law, the Articles or the By-Laws of the Company, shall be required to amend the Articles or delete any provision thereof, unless such action has been previously approved by a majority vote of the Disinterested Directors.

12.3 Shareholder Action--Meetings; Special Meetings. Any action required or permitted to be taken by the shareholders of the Company must be effected at a duly called annual or special meeting of such holders and may not be effected without a meeting by any consent in writing by such holders. Except as otherwise required by law and subject to the rights of the holders of any class or series of preferred stock with respect to any vote of the holders of such class or series when voting by class, special meetings of shareholders of the Company may be called only by the Board of Directors pursuant to a resolution approved by a majority vote of the Disinterested Directors.

Article 13th. Articles Defined. Henceforth, the Articles as defined in the Business Corporation Law shall not include any prior documents.

MINE SAFETY APPLIANCES COMPANY

1990 NON-EMPLOYEE DIRECTORS' STOCK OPTION PLAN

(As amended April 27, 1994)

The purposes of the 1990 Non-Employee Directors' Stock Option Plan (the "Plan") are to promote the long-term success of Mine Safety Appliances Company (the "Company") by creating a long-term mutuality of interests between the non-employee Directors and shareholders of the Company, to provide an additional inducement for such Directors to remain with the Company and to provide a means through which the Company may attract able persons to serve as Directors of the Company.

SECTION 1

Administration

The Plan shall be administered by a Committee (the "Committee") appointed by the Board of Directors of the Company (the "Board") and consisting of not less than two members of the Board. The Committee shall keep records of action taken at its meetings. A majority of the Committee shall constitute a quorum at any meeting, and the acts of a majority of the members present at any meeting at which a quorum is present, or acts approved in writing by a majority of the Committee, shall be the acts of the Committee.

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

Notwithstanding the above, the selection of the Directors to whom stock options are to be granted, the timing of such grants, the number of shares subject to any stock option, the exercise price of any stock option, the periods during which any stock option may be exercised and the term of any stock option shall be as hereinafter provided, and the Committee shall have no discretion as to such matters.

SECTION 2

Shares Available under the Plan

The aggregate number of shares which may be issued and as to which grants of stock options may be made under the Plan is 50,000 shares of the Common Stock, without par value, of the Company (the "Common Stock"), subject to adjustment and substitution as set forth in Section 5. If any stock option granted under the Plan is cancelled by mutual consent or terminates or expires for any reason without having been exercised in full, the number of shares subject thereto shall again be available for purposes of the Plan. The shares which may be issued under the Plan may be either authorized but unissued shares or treasury shares or partly each, as shall be determined from time to time by the Board.

SECTION 3

Grant of Stock Options

On the third business day following the day of each annual meeting of the shareholders of the Company, each person who is then a member of the Board and who is not then an employee of the Company or any of its subsidiaries (a "non-employee Director") shall automatically and without further action by the Board or the Committee be granted a "nonstatutory stock option" (i.e., a stock option which does not qualify under Section 422 of the Internal Revenue Code of 1986 (the "Code")) to purchase 500 shares of Common Stock, subject to adjustment and substitution as set forth in Section 5. If the number of shares

then remaining available for the grant of stock options under the Plan is not sufficient for each non-employee Director to be granted an option for 500 shares (or the number of adjusted or substituted shares pursuant to Section 5), then each non-employee Director shall be granted an option for a number of whole shares equal to the number of shares then remaining available divided by the number of non-employee Directors, disregarding any fractions of a share.

SECTION 4

Terms and Conditions of Stock Options

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

(A) The purchase price at which each stock option may be exercised (the "option price") shall be one hundred percent (100%) of the fair market value per share of the Common Stock covered by the stock option on the date of grant, determined as provided in Section 4(G).

(B) The option price for each stock option shall be paid in full upon exercise and shall be payable in cash in United States dollars (including check, bank draft or money order); provided, however, that in lieu of such cash the person exercising the stock option may pay the option price in whole or in part by delivering to the Company shares of the Common Stock having a fair market value on the date of exercise of the stock option, determined as provided in Section 4(G), equal to the option price for the shares being purchased; except that (i) any portion of the option price representing a fraction of a share shall in any event be paid in cash and (ii) no shares of the Common Stock which have been held for less than one year may be delivered in payment of the option price of a stock option. The date of exercise of a stock option shall be determined under procedures established by the Committee, and as of the date of exercise the person exercising the stock option shall be considered for all purposes to be the owner of the shares with respect to which the stock option has been exercised. Payment of the option price with shares shall not increase the number of shares of the Common Stock which may be issued under the Plan as provided in Section 2.

(C) No stock option shall be exercisable by a grantee during the first six months of its term except in case of death or disability as provided in Section 4(E). Subject to the terms of Section 4(E) providing for earlier termination of a stock option, no stock option shall be exercisable after the expiration of ten years from the date of grant. A stock option to the extent exercisable at any time may be exercised in whole or in part.

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

(E) If a grantee ceases to be a Director of the Company for any reason, any outstanding stock options held by the grantee shall be exercisable and shall terminate according to the following provisions:

(i) If a grantee ceases to be a Director of the Company for any reason other than resignation, removal for cause or death, any then outstanding stock option held by such grantee shall be exercisable by the grantee (but only to the extent exercisable by the grantee immediately prior to ceasing to be a Director) at any time prior to the expiration date of such stock option or within two years after the date the grantee ceases to be a Director, whichever is the shorter period, provided that, in the case of a grantee who is disabled within the meaning of Section 22(e)(3) of the Code (a "Disabled Grantee"), any then outstanding stock option shall be exercisable in full whether or not exercisable by the grantee immediately prior to ceasing to be a Director;

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

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

(iv) Following the death of a grantee after ceasing to be a Director and during a period when a stock option is exercisable, any outstanding stock option held by the grantee at the time of death shall be exercisable by such person entitled to do so under the Will of the grantee or by such legal representative (but only to the extent the stock option was exercisable by the grantee immediately prior to the death of the grantee) at any time prior to the expiration date of such stock option or within one year after the date of death, whichever is the shorter period.

A stock option held by a grantee who has ceased to be a Director of the Company shall terminate upon the expiration of the applicable exercise period, if any, specified in this Section 4(E). Whether a grantee is a Disabled Grantee shall be determined, in its discretion, by the Committee, and any such determination by the Committee shall be final and binding.

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

(G) Fair market value of the Common Stock shall be the mean between the following prices, as applicable, for the date as of which fair market value is to be determined as quoted

in The Wall Street Journal (or in such other reliable publication as the Committee, in its discretion, may determine to rely upon): (a) if the Common Stock is listed on the New York Stock Exchange, the highest and lowest sales prices per share of the Common Stock as quoted in the NYSE-Composite Transactions listing for such date, (b) if the Common Stock is not listed on such exchange, the highest and lowest sales prices per share of Common Stock for such date on (or on any composite index including) the principal United States securities exchange registered under the Securities Exchange Act of 1934 (the "1934 Act") on which the Common Stock is listed, or (c) if the Common Stock is not listed on any such exchange, the highest and lowest sales prices per share of the Common Stock for such date on the National Association of Securities Dealers Automated Quotations System or any successor system then in use ("NASDAQ"). If there are no such sale price quotations for the date as of which fair market value is to be determined but there are such sale price quotations within a reasonable period both before and after such date, then fair market value shall be determined by taking a weighted average of the means between the highest and lowest sales prices per share of the Common Stock as so quoted on the nearest date before and the nearest date after the date as of which fair market value is to be determined. The average should be weighted inversely by the respective numbers of trading days between the selling dates and the date as of which fair market value is to be determined. If there are no such sale price quotations on or within a reasonable period both before and after the date as of which fair market value is to be determined, then fair

market value of the Common Stock shall be the mean between the bona fide bid and asked prices per share of Common Stock as so quoted for such date on NASDAQ, or if none, the weighted average of the means between such bona fide bid and asked prices on the nearest trading date before and the nearest trading date after the date as of which fair market value is to be determined, if both such dates are within a reasonable period. The average is to be determined in the manner described above in this Section 4(G). If the fair market value of the Common Stock cannot be determined on the basis previously set forth in this Section 4(G) for the date as of which fair market value is to be determined, the Committee shall in good faith determine the fair market value of the Common Stock on such date. Fair market value shall be determined without regard to any restriction other than a restriction which, by its terms, will never lapse.

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

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

SECTION 5

Adjustment and Substitution of Shares

If a dividend or other distribution shall be declared upon the Common Stock payable in shares of the Common Stock, the number of shares of the Common Stock set forth in Section 3, the number of shares of the Common Stock then subject to any outstanding stock options and the number of shares of the Common Stock which may be issued under the Plan but are not then subject to outstanding stock

options shall be adjusted by adding thereto the number of shares of the Common Stock which would have been distributable thereon if such shares had been outstanding on the date fixed for determining the shareholders entitled to receive such stock dividend or distribution.

If the outstanding shares of the Common Stock shall be changed into or exchangeable for a different number or kind of shares of stock or other securities of the Company or another corporation, whether through reorganization, reclassification, recapitalization, stock split-up, combination of shares, merger or consolidation, then there shall be substituted for each share of the Common Stock set forth in Section 3, for each share of the Common Stock subject to any then outstanding stock option, and for each share of the Common Stock which may be issued under the Plan but which is not then subject to any outstanding stock option, the number and kind of shares of stock or other securities into which each outstanding share of the Common Stock shall be so changed or for which each such share shall be exchangeable.

In case of any adjustment or substitution as provided for in this Section 5, the aggregate option price for all shares subject to each then outstanding stock option prior to such adjustment or substitution shall be the aggregate option price for all shares of stock or other securities (including any fraction) to which such shares shall have been adjusted or which shall have been substituted for such shares. Any new option price per share shall be carried to at least three decimal places with the last decimal place rounded upwards to the nearest whole number.

No adjustment or substitution provided for in this Section 5 shall require the Company to issue or sell a fraction of a share or other security. Accordingly, all fractional shares or other securities which result from any such adjustment or substitution shall be eliminated and not carried forward to any subsequent adjustment or substitution.

SECTION 6

Effect of the Plan on the Rights of Company and Shareholders

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

SECTION 7

Amendment and Termination

The right to amend the Plan at any time and from time to time and the right to terminate the Plan at any time are hereby specifically reserved to the Board; provided always that no such termination shall terminate any outstanding stock options granted under the Plan; and provided further that no amendment of the Plan shall (a) be made without shareholder approval if shareholder approval of the amendment is at the time required for stock options under the Plan to qualify for the exemption from Section 16(b) of the 1934 Act provided by Rule 16b-3 or by the rules of the NASDAQ National Market System or any stock exchange on which the Common Stock may then be listed, (b) amend more than once every six months the provisions of the Plan relating to the selection of the Directors to whom stock options are to be granted, the timing of such grants, the number of shares subject to any stock option, the exercise price of any stock option, the periods during which any stock option may be exercised and the term of any stock option other than to comport with changes in the Code or the rules and regulations thereunder or (c) otherwise amend the Plan in any manner that would cause stock

options under the Plan not to qualify for the exemption provided by Rule 16b-3. No amendment or termination of the Plan shall, without the written consent of the holder of a stock option theretofore awarded under the Plan, adversely affect the rights of such holder with respect thereto.

Notwithstanding anything contained in the preceding paragraph or any other provision of the Plan or any stock option agreement, the Board shall have the power to amend the Plan in any manner deemed necessary or advisable for stock options granted under the Plan to qualify for the exemption provided by Rule 16b-3 (or any successor rule relating to exemption from Section 16(b) of the 1934 Act), and any such amendment shall, to the extent deemed necessary or advisable by the Board, be applicable to any outstanding stock options theretofore granted under the Plan notwithstanding any contrary provisions contained in any stock option agreement. In the event of any such amendment to the Plan, the holder of any stock option outstanding under the Plan shall, upon request of the Committee and as a condition to the exercisability of such option, execute a conforming amendment in the form prescribed by the Committee to the stock option agreement referred to in Section 4(F) within such reasonable time as the Committee shall specify in such request.

SECTION 8

Effective Date and Duration of Plan

The effective date and date of adoption of the Plan shall be December 17, 1990, the date of adoption of the Plan by the Board, provided that on or prior to December 31, 1991 such adoption of the Plan by the Board is approved by the affirmative vote of the holders of at least a majority of the outstanding shares of voting stock of the Company represented in person or by proxy at a duly called and convened meeting of such holders. Notwithstanding any other provision contained in the Plan, no stock option granted under the Plan may be exercised until after such shareholder approval.

MINE SAFETY APPLIANCES COMPANY
EXECUTIVE INSURANCE PROGRAM
As Amended June 24, 1992

Section 1 - Purpose

The purpose of the Executive Insurance Program ("EIP" or "Plan" is to enable Mine Safety Appliances Company (the "Company") to assist certain of the Company's senior management employees in providing life insurance benefits for their families and dependents during their working career with the Company and to provide them with additional flexibility and post-employment benefits upon their retirement from active employment with the Company. This result is to be accomplished by substituting, for eligible employees, all but \$50,000 of group term life insurance with permanent life insurance. The major portion of the premium cost will be paid by the Company and the balance will be paid by the Participant.

Section 2 - Definitions

The following definitions shall apply for purposes of the Plan unless another meaning is clearly required by the context.

"Beneficiary" shall mean any person, persons or entity who or which may be designated by a Participant as the recipient of any benefits to which the same may be entitled under the terms of the Plan upon the death of the Participant.

"Board" shall mean the Board of Directors of the Company as it may be constituted from time to time.

"Company" shall mean Mine Safety Appliances Company, including any subsidiaries or affiliates, or any successor thereto.

"Death Benefit" shall mean the gross amount payable by an Insurer under the terms of a policy issued hereunder upon the death of a Participant. A portion of the Death Benefit, referred to as the "Insurance Amount" (as listed in the "Table of Insurance Amounts" attached hereto), will be paid to the Participant's Beneficiaries and the balance paid to the Company.

"Insurer" shall mean the Connecticut Mutual Life Insurance Company and/or any other insurance carrier selected by the Company to issue Policies hereunder and which is authorized to do business in the Commonwealth of Pennsylvania.

"Participant" shall mean any member of senior management of the Company authorized by the Board to participate in the Plan.

"Plan" shall mean the Executive Insurance Program described herein.

"Policy" shall mean an insurance contract issued by an Insurer on the life of a Participant.

"Retired Participant" shall mean a Participant who has terminated his active employment as an employee of the Company, under conditions which would then entitle the Participant to immediate receipt of either an Early, Normal, or Postponed Retirement benefit under the Company's Non-Contributory Pension Plan.

Section 3 - Eligibility

Those members of management who are eligible to participate in the Executive Insurance Program shall be the President of the Company and such other key members of senior management as shall be designated from time to time by the

President of the Company and approved for participation by the Board of Directors.

Section 4 - Amount and Effective Date of Coverage

The initial amount of life insurance coverage provided under the Plan to those selected for participation as of the effective date of the Plan shall be as described in the "Table of Insurance Amounts" attached hereto. The amount of life insurance provided to executives who are selected for participation after the effective date of the Plan shall be in an amount determined by the President and approved by the Board at the time of their selection.

The effective date of insurance coverage hereunder shall be the later of the date of the employee's selection for participation herein or acceptance by the Insurer as a standard risk. The cancellation of a Participant's group term life insurance in excess of \$50,000, and his actual participation in this Plan shall be conditioned upon his insurability in a standard risk category for the benefit to be provided herein or, if not insurable in a standard risk category, the acceptance by the Company of the non-standard risk category proposed by the Insurer.

The Board reserves the right to change the amount of insurance on the life of any Participant from time to time, and any such change in the level of insurance shall be effective as of the later of the first day of the month coincident with or next following the effective date of the change or the date of acceptance by the Insurer of the new insurance amount at standard rates, or acceptance by the Company of an offer of insurance made by the Insurer at non-standard rates.

Section 5 - Payment for Coverage

The cost of the applicable amount of life insurance shall be borne jointly by the Company and the Participant as follows.

The Company shall pay, not later than the due date therefor (including any "grace period"), the gross amount of

premium due under each Policy issued to fund the benefits of the Plan. Thereafter, each Participant shall reimburse the Company, by direct payment in cash or through payroll deduction, an amount equal to the Imputed Cost of Benefit ("ICOB"). The ICOB shall be determined by multiplying the Participant's Insurance Amount (expressed in one thousand dollar increments) by the "Unit Price" determined pursuant to "Table of Unit Values" attached hereto, based upon the age of the Participant as of the Policy anniversary date. Alternatively, there shall be substituted for the applicable Unit Price, the Insurer's initial issue, one-year term insurance standard risk rate, but only if such rate is lower than the otherwise applicable Unit Price.

Section 6 - Payment of Proceeds Upon Death Prior to Retirement

In the event of the death of the Participant prior to his retirement from the Company, the gross death benefit payable under the Policy shall be split between the Company and the Participant's Beneficiary. The Beneficiary shall receive an amount equal to the Insurance Amount and the Company shall receive the difference between the gross Death Benefit and the Insurance Amount. The amounts payable to the Company and the Beneficiary shall be paid directly to each payee by the Insurer directly from the Insurer.

Section 7 - Options Upon Retirement of a Participant

On or before the date on which a Participant becomes a Retired Participant, he shall be given the right to elect one of the following options with respect to his Insurance Amount.

(1) Maintain the Existing Arrangement. Under this option the Executive Insurance Program would remain as it existed

prior to the Participant's retirement except that the Retired Participant will not be required to reimburse the Company for any cost associated with the post-retirement coverage. For federal income tax purposes, however, a Retired Participant will be deemed

to have received taxable income equal to the "Imputed Cost of Benefit" described in Section 5, but the Death Benefit received by the Participant's Beneficiary will not be subject to federal income tax.

(2) Company-Paid Post-Retirement Death Benefit.

Alternatively, the Participant can elect not to continue the Executive Insurance Program, but in lieu thereof, can elect a non-insured post-retirement death benefit equal to the Insurance Amount in effect at the date of the Participant's retirement. Under this Option there is not imputed "cost of benefit" to the Retired Participant but the Death Benefit paid to the Participant's Beneficiary by the Company will be subject to federal income tax when received.

(3) Supplemental Retirement Benefits. Rather than a continuation of the Death Benefit described in either Option 1 or Option 2 above, a Retired Participant can elect to receive a series of supplemental retirement payments which, in the aggregate, equal three-quarters (75%) of the pre-retirement Insurance Amount. Payment of the supplemental retirement benefits shall be made in a series of approximately equal monthly payments over a period of 15 years.

The Supplemental Retirement Benefit Option may be elected by a Participant at any time on or after August 1, 1991. It shall be available to any Participant who retires on or after that date as well as to any previously Retired Participant who had previously elected either Option 1 or Option 2. If the supplemental retirement payments of Option 3 are elected, and in the event of the death of the Retired Participant prior to the completion of the 15-year payment period, the then unpaid installments shall continue to be paid to the Retired Participant's Beneficiary or, at the discretion of the Board, may be commuted and paid to such Beneficiary in a single sum.

Section 8 - Administration, Amendment, Termination

The Board, or its delegate, shall be the "Administrator" of this Plan, and shall have full power and authority to interpret, construe and administer the same. Any such interpretation and construction shall be final and binding upon any and all parties in interest. In addition, the Board shall have the right to amend this Plan from time to time, and to terminate it at any time.

Section 9 - Miscellaneous Matters

(a) No Right to Assets. No Participant, Beneficiary or other person or entity claiming entitlement to any benefit from or through such person shall have any right to or title in any policy or any other asset obtained by the Company for the purpose of funding the benefits provided hereunder except as otherwise expressly provided herein.

(b) Alienation. Except with respect to the designation of a Beneficiary to be the recipient of any death benefits hereunder, or the assignment of the incidents of ownership of any death benefits hereunder, the interest of Participants and their Beneficiaries under the Plan are not in any way subject to their debts or other obligations and may not be voluntarily or involuntarily sold, transferred, assigned, alienated or encumbered, and any attempt to do so shall be void.

(c) Construction. The Plan shall be construed and administered according to the laws of the Commonwealth of Pennsylvania and any federal laws which may from time to time be applicable. Whenever any words are used herein in the masculine

gender, they shall be construed as though they were also used in the feminine gender in all cases where they would apply, and whenever any words are used in the singular form, they shall be construed as though they were also used in the plural form in all cases where they would so apply. Headings of sections of this

instrument are inserted for convenience of reference only and as such they constitute no part of this Plan and are not to be considered in the construction hereof.

(d) Limitation of Benefit. All benefits hereunder except those described in Options 2 and 3 of Section 7 shall be payable solely by the Insurer(s) under the Policies issued hereunder, and the Company does not assume any liability or responsibility therefor or guarantee such benefits. The liability and responsibility of the Company are strictly limited to the provisions of this Plan.