

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 September 30, 2000

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 incorporation or organization) (IRS Employer Identification No.)

121 Gamma Drive
RIDC Industrial Park
O'Hara Township
Pittsburgh, Pennsylvania

15238

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area 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 October 31, 2000, there were outstanding 13,497,879 shares of common stock without par value, including 1,639,320 shares held by the Mine Safety Appliances Company Stock Compensation Trust.

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

	September 30 2000	December 31 1999
ASSETS		
Current assets		
Cash	\$ 10,991	\$ 8,898
Temporary investments, at cost which approximates market	8,090	8,210
Trade receivables, less allowance for doubtful accounts \$2,055 and \$2,322	52,937	58,911
Other receivables	22,387	22,716
Inventories:		
Finished products	31,630	37,551
Work in process	9,357	11,739
Raw materials and supplies	29,293	32,807
	-----	-----
Total inventories	70,280	82,097
Deferred tax assets	15,431	13,348
Prepaid expenses and other current assets	10,438	8,910
	-----	-----
Total current assets	190,554	203,090
Property, plant and equipment	378,774	378,495
Less accumulated depreciation	(219,226)	(214,986)
	-----	-----
Net property	159,548	163,509
Prepaid pension cost	74,940	61,357
Deferred tax assets	3,775	4,152
Other noncurrent assets	43,067	19,633
	-----	-----
TOTALS	\$ 471,884	\$ 451,741
	=====	=====

LIABILITIES AND SHAREHOLDERS' EQUITY

Current liabilities		
Notes payable and current portion of long-term debt	\$ 4,388	\$ 4,477
Accounts payable	24,598	29,056
Employees' compensation	14,911	11,048
Insurance	9,027	10,402
Taxes on income	7,643	3,878
Other current liabilities	24,096	21,144
	-----	-----
Total current liabilities	84,663	80,005
	-----	-----
Long-term debt	76,891	36,550
Pensions and other employee benefits	51,490	54,111
Deferred tax liabilities	36,904	35,961
Other noncurrent liabilities	2,610	2,657
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 60,000,000 shares of no par value; issued 20,335,797 and 6,778,599 (outstanding 11,858,559 and 4,291,671)	18,841	12,596
Stock compensation trust - 1,639,320 and 567,630 shares	(25,683)	(26,679)
Less treasury shares, at cost:		
Preferred - 49,713 and 49,713 shares	(1,608)	(1,608)
Common - 6,837,918 and 1,919,298 shares	(128,422)	(95,154)
Deferred stock compensation	(1,342)	(504)
Accumulated other comprehensive loss	(20,852)	(14,831)
Earnings retained in the business	374,823	365,068
	-----	-----
Total shareholders' equity	219,326	242,457
	-----	-----
TOTALS	\$ 471,884	\$ 451,741
	=====	=====

See notes to consolidated condensed financial statements

MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED CONDENSED STATEMENT OF INCOME
(Thousands of dollars, except earnings per share)

	Three Months Ended September 30		Nine Months Ended September 30	
	2000	1999	2000	1999
Net sales	\$ 118,751	\$ 118,004	\$ 367,672	\$ 357,646
Other income/(expense)	(528)	515	1,390	1,992
	-----	-----	-----	-----
	118,223	118,519	369,062	359,638
	-----	-----	-----	-----
Costs and expenses				
Cost of products sold	75,875	76,774	231,104	228,931
Selling, general and administrative	30,945	33,918	96,934	100,143
Depreciation and amortization	6,162	6,004	17,977	17,253
Interest	1,277	891	2,938	2,655
Currency exchange gains	(73)	(215)	(266)	(569)
Special pension credits	(1,327)	(5,925)	(1,327)	(1,317)
	-----	-----	-----	-----
	112,859	111,447	347,360	347,096
	-----	-----	-----	-----
Income before income taxes	5,364	7,072	21,702	12,542
Provision for income taxes	1,444	2,731	7,497	4,894
	-----	-----	-----	-----
Net income	\$ 3,920	\$ 4,341	\$ 14,205	\$ 7,648
	=====	=====	=====	=====
Basic earnings per common share	\$ 0.33	\$ 0.34	\$ 1.14	\$ 0.59
	=====	=====	=====	=====
Diluted earnings per common share	\$ 0.33	\$ 0.33	\$ 1.13	\$ 0.58
	=====	=====	=====	=====

See notes to consolidated condensed financial statements

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

	Nine Months Ended September 30	
	2000	1999
OPERATING ACTIVITIES		
Net income	\$ 14,205	\$ 7,648
Depreciation and amortization	17,977	17,253
Pensions	(12,486)	(8,648)
Deferred income taxes	(1,213)	(2,414)
Changes in operating assets and liabilities	21,861	4,729
Other - including currency exchange adjustments	(7,524)	(3,928)
	-----	-----
Cash flow from operating activities	32,820	14,640
INVESTING ACTIVITIES		
Property additions	(16,133)	(19,766)
Dispositions of property and businesses	2,120	573
Acquisitions and other investing	(25,162)	(6,368)
	-----	-----
Cash flow from investing activities	(39,175)	(25,561)
FINANCING ACTIVITIES		
Additions to long-term debt	40,740	362
Reductions of long-term debt	(267)	(295)
Changes in notes payable and short-term debt	390	15,508
Cash dividends	(4,450)	(4,453)
Company stock purchases	(54,304)	(4,174)
Company stock sales	27,088	0
	-----	-----
Cash flow from financing activities	9,197	6,948
Effect of exchange rate changes on cash	(869)	(1,053)
	-----	-----
Increase/(decrease) in cash and cash equivalents	1,973	(5,026)
Beginning cash and cash equivalents	17,108	24,020
	-----	-----
Ending cash and cash equivalents	\$ 19,081	\$ 18,994
	=====	=====

See notes to consolidated condensed financial statements

MINE SAFETY APPLIANCES COMPANY
NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

- (1) The Management's Discussion and Analysis of Financial Condition and Results of Operations which follows these notes contains additional information on the results of operations and the financial position of the company. Those comments should be read in conjunction with these notes. The company's annual report on Form 10-K for the year ended December 31, 1999 includes additional information about the company, its operations, and its financial position, and should be read in conjunction with this quarterly report on Form 10-Q.
- (2) The results for interim periods are not necessarily indicative of the results to be expected for the full year.
- (3) Certain prior year amounts have been reclassified to conform with the current year presentation.
- (4) In the opinion of management, all adjustments, consisting of only normal recurring adjustments, necessary for a fair presentation of these interim periods have been included.
- (5) A pre-tax gain of \$1.3 million (\$750,000 after-tax) related to the settlement of pension benefit liabilities to retirees in Canada was recognized in the three and nine months ended September 30, 2000. Third quarter 1999 included a pre-tax gain of \$5.9 million (\$3.6 million after-tax) related to lump sum settlements of pension benefits for participants in a voluntary retirement incentive program (VRIP) for non-production employees in the U.S. Year-to-date 1999 results reflect a net VRIP-related gain of \$1.3 million (\$800,000 after-tax) which includes the third quarter settlement gain, partially offset by second quarter termination benefit charges of \$4.6 million (\$2.8 million after-tax).
- (6) On May 10, 2000 the shareholders of the company approved a 3-for-1 split of the common stock, which was paid May 24, 2000.
- (7) Basic earnings per share is computed on the weighted average number of shares outstanding during the period. Diluted earnings per share includes the effect of the weighted average stock options outstanding during the period, using the treasury stock method. Antidilutive options are not considered in computing earnings per share. All share and per share amounts have been restated to reflect the 3-for-1 stock split.

	Three Months Ended		Nine Months Ended	
	September 30		September 30	
	2000	1999	2000	1999
	(In thousands)		(In thousands)	
Net income	\$ 3,920	\$ 4,341	\$ 14,205	\$ 7,648
Preferred stock dividends declared	13	0	37	37
Income available to common shareholders	3,907	4,341	14,168	7,611
Basic shares outstanding	11,900	12,945	12,457	12,999
Stock options	46	42	50	33
Diluted shares outstanding	11,946	12,987	12,507	13,032
Antidilutive stock options	29	21	29	21

- (8) Comprehensive income was \$1,134,000 and \$8,184,000 for the three and nine months ended September 30, 2000, respectively, and \$4,390,000 and \$2,908,000 for the three and nine months ended September 30, 1999, respectively. Comprehensive income includes net income and changes in accumulated other comprehensive income, primarily cumulative translation adjustments, for the period.
- (9) The company is organized into three geographic operating segments (North America, Europe and Other International), each of which includes a number of operating companies. North America (formerly U.S.) includes the United States, Canada and Mexico. Canada and Mexico were formerly part of Other Non-U.S. Comparative amounts for 1999 have been restated.

Reportable segment information is presented in the following table:

	(In Thousands)		Other	Recon-	Consol.
	North	Europe	Inter-	ciling	totals
	America		national		
Three Months Ended September 30, 2000					
Sales to external customers	\$78,405	\$22,282	\$18,085	(\$21)	\$118,751
Intercompany sales	5,101	4,140	729	(9,970)	
Net income(loss)	3,718	(807)	821	188	3,920
Nine Months Ended September 30, 2000					
Sales to external customers	240,575	73,803	53,501	(207)	367,672
Intercompany sales	18,777	11,647	1,992	(32,416)	
Net income(loss)	13,296	(1,512)	2,144	277	14,205
Three Months Ended September 30, 1999					
Sales to external customers	71,990	28,131	17,895	(12)	118,004
Intercompany sales	9,179	4,227	567	(13,973)	
Net income(loss)	4,900	(783)	862	(638)	4,341
Nine Months Ended September 30, 1999					
Sales to external customers	227,729	84,109	46,204	(396)	357,646
Intercompany sales	24,630	13,360	1,594	(39,584)	
Net income(loss)	7,678	(1,081)	1,671	(620)	7,648

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

MINE SAFETY APPLIANCES COMPANY
MANAGEMENT'S DISCUSSION AND ANALYSIS

Forward-looking statements

This report contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements may include, without limitation, statements regarding expectations for new product introductions, cost reduction and restructuring plans, specialty chemicals market conditions, sales and earnings outlook, liquidity, and market risk. Actual results may differ from expectations contained in such forward-looking statements and can be affected by any number of factors, many of which are outside of management's direct control. Among the factors that could cause such differences are the effects of restructuring efforts in Europe, timing and market acceptance of new safety and instrument product introductions, the company's ability to fulfill backlog orders, market and operating conditions of specialty chemical customers, the economic environment, and interest and currency exchange rates.

Results of operations

Three months ended September 30, 2000 and 1999

Sales for the third quarter of 2000 were \$118.8 million, an increase of \$800,000, or 1%, from \$118.0 million in the third quarter of 1999.

Third quarter 2000 sales for North American operations were 9% higher than the third quarter of last year. Shipments of gas masks for military and civilian defense preparedness and head protection for construction and general industry were significantly higher in 2000. Sales to the fire service market also improved significantly compared to third quarter 1999, reflecting continued strength in self-contained breathing apparatus shipments, the introduction of the Evolution 4000 thermal imaging camera, and the late-August acquisition of the Cairns Helmets firefighter head protection line. Specialty chemical sales in third quarter 2000 were 8% lower than last year's third quarter, continuing a market slow-down that began in mid-1999. The company's specialty chemical products are sold to a limited number of pharmaceutical and chemical companies and sales levels are largely dependent on the performance of these customers' products in their respective markets.

Overall, incoming commercial orders of safety products in the U.S. exceeded shipments in third quarter 2000, resulting in an increase in backlog. This increase was offset by a decrease in government backlog for safety products as gas mask shipments to the military exceeded incoming orders during third quarter 2000. Specialty chemical order backlog increased during the current quarter.

In Europe, local currency sales for third quarter 2000 were approximately 6% lower than third quarter 1999. When stated in U.S. dollars, however, sales in Europe were 21% lower due to adverse currency exchange rate movements. The decrease in local currency sales in the current quarter reflects lower shipments in Britain, France, and Italy. Sales in other European companies, including Germany, were flat quarter-to-quarter.

Third quarter 2000 sales for other international operations were slightly higher than in third quarter 1999, reflecting strong shipments in Australia and Brazil and relatively flat sales in other markets. Adverse currency exchange effects reduced sales of other international operations when stated in U.S. dollars.

Gross profit for the third quarter of 2000 was \$42.9 million, an increase of \$1.7 million, or 4%, from \$41.2 million in third quarter 1999. The ratio of gross profit to sales was 36.1% in the third quarter of 2000 compared to 34.9% in the corresponding quarter last year. The slightly higher gross profit percentage is primarily due to changes in sales mix.

Selling, general and administration costs in the third quarter of 2000 were \$30.9 million, a decrease of \$3.0 million, or 9%, compared to \$33.9 million in the prior year third quarter. The decrease occurred primarily in Europe. Approximately half of the decrease is due to the absence in third quarter 2000 of one-time restructuring costs incurred in Germany and Britain during third quarter 1999. The remainder of the decrease relates to the effect of currency exchange rate movements in 2000 that reduced European selling, general and administrative expenses when stated in U.S. dollars.

Depreciation and amortization expense in third quarter 2000 was \$6.2 million, an increase of \$158,000, or 3%, over \$6.0 million in the corresponding quarter last year. The increase is primarily due to goodwill amortization associated with the recent ISI Group and Cairns Helmets acquisitions.

Interest expense was \$1.3 million in third quarter 2000 compared to \$891,000 in third quarter 1999. Higher interest expense in third quarter 2000 was related to the additional debt required for the June 2000 repurchase of common stock and the August 2000 acquisition of Cairns Helmets.

A special pension credit of \$1.3 million was recognized in third quarter 2000 related to the settlement of retiree and deferred vested benefit liabilities in Canada. Third quarter 1999 included a settlement gain of \$5.9 million related to a voluntary retirement incentive program (VRIP) in the U.S. The third quarter 1999 gain more than offset a second quarter 1999 VRIP special termination benefit charge of \$4.6 million.

Other income and expense for third quarter 2000 was an expense of \$528K compared to income of \$515K in third quarter 1999. The net expense for third quarter 2000 includes losses totaling approximately \$1.2 million on dispositions of assets.

Income before income taxes was \$5.4 million for third quarter 2000 compared to \$7.1 million in third quarter 1999. Income before taxes in both quarters included the previously-mentioned special pension credits. Excluding these items in both quarters, income before taxes in the third quarter of 2000 was \$2.9 million higher than in 1999, primarily due to lower selling, general and administration costs and improved margins.

The effective income tax rate for the third quarter of 2000 was 26.9% compared to 38.6% in third quarter 1999. The lower effective rate in 2000 reflects tax benefits on international operating losses, primarily in Germany, and adjustments to prior year taxes in the U.S. related to foreign sales corporation tax benefits.

Net income in the third quarter of 2000 was \$3.9 million, or 33 cents per basic share, compared to \$4.3 million, or 34 cents per basic share, in the third quarter last year.

Nine months ended September 30, 2000 and 1999

Sales for the nine months ended September 30, 2000 were \$367.7 million, an increase of \$10 million, or 3%, from \$357.7 million last year.

North American sales for the first nine months of 2000 were 6% higher than the same period last year. Improved sales of safety products were partially offset by lower specialty chemical sales. Shipments of self-contained breathing apparatus, thermal imaging cameras and helmets to the fire service market; gas masks to defense and civilian preparedness markets; and helmets for construction and industrial markets all improved significantly. Portable instrument sales also improved compared to the same period last year, reflecting new product introductions. Sales of specialty chemicals were significantly lower than in the first nine months of 1999. The company's specialty chemical products are sold to a limited number of large pharmaceutical and chemical companies and are largely dependent on the performance of these customers' products in their respective markets.

Overall, sales of safety products in the U.S. were somewhat higher than incoming orders in the first nine months of 2000, which reduced backlog slightly. Specialty chemical order backlog increased during the first nine months of 2000.

Local currency sales in Europe for the first nine months of 2000 were generally flat compared to the same period in 1999. When stated in U.S. dollars, however, sales in Europe were 12% lower due to adverse currency exchange rate movements. Current year sales improved in Eastern Europe and were mixed in other European markets.

Sales of other international operations for the first nine months of 2000 were 16% higher than in the same period last year, with improvements in nearly every market. Sales in Africa benefited from the acquisition of Campbell Gardwel in late 1999. Currency exchange effects reduced sales of other international operations about 5% year-to-year.

Gross profit for the nine months ended September 30, 2000 was \$136.6 million, an increase of \$7.9 million, or 6%, from \$128.7 million in the first nine months of 1999. The ratio of gross profit to sales was 37.1% in the nine months ended September 30, 2000 compared to 36.0% in the corresponding period last year. The somewhat higher gross profit percentage is largely related to changes in sales mix.

Selling, general and administration costs in the nine months ended September 30, 2000 were \$96.9 million compared to \$100.1 million in the same period last year. Approximately half of the decrease is due to the absence in 2000 of one-time restructuring costs incurred in Germany and Britain during 1999. The

remainder of the decrease relates to the effect of currency exchange rate movements in 2000 that reduced European selling, general and administrative expenses when stated in U.S. dollars.

Depreciation and amortization expense was \$18.0 million in the nine months ended September 30, 2000 an increase of \$700,000, or 4%, from \$17.3 million in the same period last year. The increase was primarily due to mid-1999 production equipment and information technology additions in Europe and additional goodwill associated with the ISIG and Cairns Helmets acquisitions in 2000.

Higher interest expense in the nine months ended September 30, 2000 reflects the additional debt required for the June 2000 repurchase of common stock and the August 2000 acquisition of Cairns Helmets.

Special pension credits were \$1.3 million in the first nine months of both 2000 and 1999. The 2000 special pension credit related to the settlement of retiree and deferred vested benefit liabilities in Canada. The nine months ended September 30, 1999 included a second quarter charge of \$4.6 million for special termination benefits related to a voluntary retirement incentive program in the U.S and a related settlement gain of \$5.9 million in the third quarter.

Other income and expense for the nine months ended September 30, 2000 was income of \$1.4 million compared to income of \$2.0 million for the same period last year. The decrease in 2000 is primarily due to a net loss on dispositions of assets and lower rental income in 2000.

Income before income taxes was \$21.7 million for the nine months ended September 30, 2000 compared to \$12.5 million in the first nine months of 1999. Improved income before tax in 2000 is primarily due to higher gross profits and lower selling, general and administrative expenses.

The effective income tax rate for the nine months ended September 30, 2000 was 34.5% compared to 39% in the same period last year. The lower effective rate reflects tax benefits on international operating losses, primarily in Germany, and adjustments in the U.S. related to prior year foreign sales corporation tax benefits.

Net income in the nine months ended September 30, 2000 was \$14.2 million, or \$1.14 per basic share, compared to \$7.6 million, or 59 cents per basic share, in the first nine months of 1999.

Other Matters

In August 2000, the company acquired Cairns Helmets, the leading U.S. manufacturer of protective helmets for the fire service. This acquisition is expected to significantly strengthen the company's presence in the fire service market by adding fire helmets to an already strong product line of self-contained breathing apparatus, thermal imaging cameras, and portable gas detection instruments.

During 2000, the company purchased approximately 2.2 million shares of common stock for \$54 million and sold approximately 1.1 million shares held in treasury to the MSA pension plan for \$27 million. The combined effect of these transactions reduced total shares outstanding by approximately 1.1 million shares, or 8.4%. The financial impact of these transactions is expected to be accretive to earnings per share and return on shareholders' equity.

Liquidity and Financial Condition

Cash and cash equivalents increased \$2.0 million during the first nine months of 2000 compared with a decrease of \$5.0 million in the first nine months of 1999.

Operating activities provided \$32.8 million of cash in the first nine months of 2000 compared to providing \$14.6 million in the same period last year. The improvement is due to higher net income and favorable changes in operating assets and liabilities, primarily related to lower inventories.

Cash of \$39.2 million was used for investing activities in the first nine months of 2000 compared with the use of \$25.6 million in the nine months ended September 30, 1999. The increased use of cash is primarily related to the August 2000 acquisition of Cairns Helmets.

Financing activities provided \$9.2 million in the first nine months of 2000 and provided \$6.9 million in the same period last year. Higher cash provided by financing activities in 2000 relates to the issuance of \$40 million in private placement notes partially offset by significant treasury stock purchases.

Available credit facilities and internal cash resources are considered adequate to provide for future capital requirements.

Financial Instrument Market Risk

There have been no material changes in the company's financial instrument market risk during the first nine months of 2000. For additional information, refer to page 15 of the company's Annual Report to Shareholders for the year ended December 31, 1999.

Recently Issued Accounting Standards

FAS No. 133, Accounting for Derivative Instruments and Hedging Activities, establishes accounting and reporting standards for derivative instruments, including those embedded in other contracts. FAS No. 133 is effective for fiscal years beginning after September 15, 2000. Adoption of this statement is not expected to have a significant effect on company results or financial position.

SEC Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements, which is effective beginning in fourth quarter 2000, provides guidance on the recognition, presentation, and disclosure of revenue. The company is evaluating the effects of this guidance, if any, on its financial statements.

FASB Emerging Issues task Force Issue No. 00-10, Accounting for Shipping and Handling Costs, which is effective beginning in fourth quarter 2000, requires that shipping and handling costs billed to a customer in a sale transaction be classified as revenue in the income statement. Adoption of this guidance by the company will increase both net sales and cost of products sold by reclassifying shipping costs that are billed to customers, with no effect on gross profit dollars or net income. Adoption of this guidance will result in lower gross profit percentages than currently reported. Comparative financial statements for periods prior to fourth quarter 2000 will also be reclassified to comply with this guidance. The company is currently evaluating the effect on reported sales and cost of sales for each applicable reporting period.

PART II OTHER INFORMATION
MINE SAFETY APPLIANCES COMPANY

Item 1. Legal Proceedings

Not Applicable

Item 6. Exhibits and Reports on Form 8-K

(a) Exhibits

(3) (ii) By-Laws of the registrant, as amended to August 29,
1990.

(b) Reports on Form 8-K

No reports on Form 8-K were filed during the third quarter ended
September 30, 2000.

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: November 1, 2000

By S/Dennis L. Zeitler
Dennis L. Zeitler
Vice President - Finance;
Principal Financial and
Accounting Officer

THE SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM SEPTEMBER 2000 FINANCIAL STATEMENTS AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS

9-MOS	DEC-31-2000	
	SEP-30-2000	
		10,991
		8,090
		77,379
		(2,055)
		70,280
		25,869
		378,774
		(219,226)
		471,884
84,663		
		76,891
		0
		3,569
		18,841
		196,916
471,884		
		367,672
		369,062
		231,104
		249,081
		(1,593)
		0
		2,938
		21,702
		7,497
14,205		
		0
		0
		0
		14,205
		1.14
		1.13

MINE SAFETY APPLIANCES COMPANY

(A Pennsylvania Corporation)

By-Laws

As Amended to August 29, 1990*

* * * * *

ARTICLE I
Meetings of Shareholders

Section 1.01. Annual Meetings. An annual meeting of the shareholders shall be held at each year within five months after the end of the fiscal year of the Company on such day and at such time and place as may be designated by the Board of Directors, or if not do designated on the third Wednesday of April in each year if not a legal holiday, and if a legal holiday then on the next business day following, at 10:00 o'clock A.M., local time, at the principal office of the Company.

* Note: References in the By-Laws to the "Restated Articles" are to the Articles of the Corporation as amended by resolutions adopted at the Annual Meeting of shareholders on May 23, 1986, and as they may be thereafter amended or

supplemented. Section references in brackets are to specific provisions of the Restated Articles, and indicate that the preceding provision is taken substantially verbatim from the Restated Articles; and capitalized terms are used as those terms are defined in the Restated Articles.

Section 1.02. Business at Annual Meetings. The business at an annual meeting of shareholders shall include: (a) a review of the business of the preceding year; (b) the election of directors to succeed those whose terms shall expire; (c) the selection of auditors; and (d) such other business as may properly be brought before the meeting. No business may be transacted at any annual meeting other than with respect to (i) matters referred to in the notice of meeting (or any supplement thereto) and matters which are incidental or germane thereto, (ii) matters otherwise properly brought before the meeting by or at the direction of the Board of Directors, and (iii) matters properly brought before the meeting by a shareholders, but only in accordance and upon compliance with the provisions of the proxy rules of the Securities and Exchange Commission relating to shareholder proposals. If for any reason the annual meeting is not held at the time fixed therefor, the

election of directors may be held at a subsequent meeting called for that purpose.

Section 1.03. Special Meetings. 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 (as that term is defined in the Restated Articles). [Restated Articles Section 12.03] Special meetings shall be held at such place as may be designated by the Board of Directors, or if not so designated, at the principal office of the Company.

Section 1.04. Business at Special Meetings. No business may be transacted at any special meeting of shareholders other than that the general nature of which has been stated in the notice of meeting, and business which is incidental or germane thereto.

Section 1.05. Notice of Shareholders' Meetings. Written notice specifying the place, date and time of each meeting of the shareholders and the purpose or purposes for which the meeting is called shall be given to all shareholders of record entitled to vote at such meeting at least ten days before the day named for the meeting.

Section 1.06. Quorum; Organization. A shareholders' meeting duly called shall not be organized for the transaction of business unless a quorum is present. At any meeting the presence in person or by proxy of shareholders entitled to cast at least a majority of the votes which all shareholders are entitled to cast on the particular matter shall be necessary and sufficient to constitute a quorum for the purpose of considering such matter. The shareholders present at a duly organized meeting can continue to do business until adjournment, notwithstanding the withdrawal of enough shareholders to leave less than a majority. If a meeting cannot be organized because a quorum has not attended, those present in person or by proxy may adjourn the meeting to such time and place as they may determine, without notice other than announcement at the meeting, until

a quorum as aforesaid shall be present; and in the case of any meeting called for the election of directors, such meeting may be adjourned only from day to day, or for such longer periods not exceeding fifteen days each, as may be directed by shareholders who are present in person or by proxy, and those who attend the second of such adjourned meetings, although entitled to cast less than a majority of the votes which all outstanding shares are entitled to cast, shall nevertheless constitute a quorum for the purpose of electing directors. The Chairman, or in his absence, the President, shall preside, and the Secretary shall take the minutes, at all meetings of the shareholders. In the absence of the foregoing officers the presiding officer shall be designated by the Board of Directors or if not so designated selected by the shareholders present; and in the absence of the Secretary, the presiding officer shall designate any person to take the minutes of the meeting.

Section 1.07. Vote Required; Meeting Procedure. When a quorum is present at any meeting, the vote of shareholders present, in person or by proxy, entitled to cast at least a majority of the votes which all shareholders present

and voting (excluding abstentions) are entitled to cast on the particular matter shall decide any question brought before such meeting, except that (a) if the question is one upon which, by express provision of statute or of the Restated Articles, a different or additional vote is required, such express provision shall govern, (b) all elections shall be determined by a plurality of the votes cast, and (c) in the case of privileged, subsidiary or incidental motions or questions involving the convenience of the shareholders present, the Chairman may call for a per capita vote, either by voice or by show of hands. Elections for directors need not be by ballot, unless otherwise ordered by the presiding officer at the meeting or unless a demand is made by a shareholder at the meeting and before the voting begins. The chairman of any meeting shall determine the order of business and the procedure at the meeting, including such regulation of the conduct of discussion as seems to him in order. The conduct of meetings shall be governed by accepted corporate practice, the fundamental rule being that all who are entitled to take part shall be treated with fairness and good faith.

Section 1.08. Proxies; Appointment and Revocation. Every shareholder entitled to vote at a meeting of shareholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons, but not more than three, to act for him by proxy. Every proxy shall be appointed by an instrument in writing (including telegram, cable or radio-gram, telex or similar transmission), executed by such shareholder or by his authorized attorney, and filed with the Secretary of the Company. A proxy shall not be revoked by the death or incapacity of the maker unless, before the vote is counted or the proxy is exercised, written notice of such death or incapacity is given to the Secretary of the Company.

ARTICLE II
Directors

Section 2.01. Number, election, etc.

(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. [Restated Articles Section 10.1(a)]

(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. [Restated Articles Section 10.1(b)]

(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 By-Laws 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 [Restated Articles Section 10.1(c)]

(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. [Restated Articles Section 10.1(d)]

(e) Nomination 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. [Restated Articles Section 10.1(e)]

(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 2.01 shall apply with respect to the director or directors elected by such holders of preferred stock. [Restated Articles Section 10.1(f)]

(g) In case of a vacancy in the office of any director elected by the preferred stock, the remaining directors or director elected by the preferred stock may choose a successor who shall hold office for the unexpired term in respect of which such vacancy occurred.

(h) Each director shall hold office from the time of his election, but shall be responsible as a director from such time only if he consents to his election; otherwise from the time he accepts office or attends his first meeting of the Board.

Section 2.02. Organization Meeting; Notice. An organization meeting of the newly elected Board of Directors shall be held each year promptly after the annual meeting of shareholders at a place designated by the Chairman or the President. At such meeting the Board of Directors shall organize itself and elect the executive officers of the Company and members of standing Committees for the ensuing year, and may transact any other business. Notice of the organization meeting of the Board or of the business to be transacted thereat shall not be required to be given, except as otherwise expressly required herein or by law.

Section 2.03. Regular Meetings; Notice. Regular meetings of the Board shall be held at such time and place as shall be designated by the Board of Directors from time to time, or if not so designated, as determined by the

Chairman or the President. Notice of such regular meetings of the Board shall not be required to be given, except as otherwise expressly required herein or by law, except that whenever the time or place of regular meetings shall be initially fixed or changed, notice of such action shall be given promptly by telephone or otherwise to each director not participating in such action. Any business may be transacted at any regular meeting.

Section 2.04. Special Meetings; Notice. Special meetings of the Board may be called at any time by the Board itself by vote at a meeting, or by any three directors, or by the Chairman or the President, to be held at such place and day and hour as shall be specified by the person or persons calling the meeting, or if not so specified by the Secretary. Notice of every special meeting of the Board of Directors, which states the place, day and hour thereof, shall be given to each director either by being mailed on at least the second calendar day prior to the date of the meeting, or by being sent by telex or telegraph or given personally or by telephone prior to the date of the meeting. Neither the call of a special meeting nor the notice thereof

need specify the purpose thereof or the business to be transacted thereat, except as otherwise expressly required herein or by law.

Section 2.05. Quorum. At all meetings of the Board of Directors, the presence or participation by other lawful means of a majority of the directors in office shall be necessary and sufficient to constitute a quorum for the transaction of business. The Directors present at a duly organized meeting shall continue to constitute a quorum until adjournment, notwithstanding the withdrawal of enough Directors to leave less than a majority. If a quorum is not present at any meeting, the meeting may be adjourned from time to time by a majority of the directors present, without notice other than announcement at the meeting, until a quorum as aforesaid shall be present.

Section 2.06. Action. Resolutions of the Board shall be adopted, and any action of the Board at a meeting upon any matter shall be taken and be valid, with the affirmative vote of at least a majority of the directors

present at a meeting duly organized, except as otherwise provided herein, in the Restated Articles or by law. The Chairman, or in his absence the President, shall preside at all meetings of the Board of Directors. The Secretary shall take the minutes at all meetings of the Board. In the absence of the foregoing officers the Directors present shall select a member of the Board to preside; and in the absence of the Secretary, the presiding officer shall designate any person to take the minutes of the meeting. The yeas and nays shall be taken and recorded in the minutes at the request of any director present at a meeting.

Section 2.07. Participation Other Than By Attendance. One or more of the Directors may participate in any regular or special meeting of the Board or of a committee of the Board by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting are able to hear each other, or by any other lawful means in lieu of attendance, any may act by proxy to the extent at the time permitted by law. All directors so participating shall be deemed present at the meeting.

Section 2.08. Emergency Provisions.

Notwithstanding any other provisions of law, the Articles or these By-Laws, during any emergency period caused by war or any other national catastrophe or local disaster of sufficient severity to prevent the conduct and management of the business and affairs of the Company by its Board of Directors and officers as contemplated by the other provisions of these By-Laws, a majority of the available Directors (or the sole such Director) who have not been rendered incapable of acting because of incapacity or the difficulty of communication or transportation to the place of meeting shall constitute a quorum for the sole purpose of electing Directors to fill such vacancies or to reduce the size of the full Board or both; and a majority of the directors (or the sole survivor) present at such a meeting may take such action. Directors so elected shall serve until the absent Directors are able to attend meetings or until the shareholders act to elect Directors to succeed them. During such an emergency period, if both the Board and the Executive Committee are unable or fail to meet, any action appropriate to the circumstances may be taken by such officers of the Company as may be present and able.

Questions as to the existence of a national catastrophe or local disaster and the number of surviving members capable of acting shall be conclusively determined at the time by the Directors or the officers so acting.

Section 2.09. Presumption of Assent. Minutes of each meeting of the Board shall be made available to each director at or before the next succeeding regular meeting. Every director shall be presumed to have assented to such minutes unless his objection thereto shall be made to the Secretary within two days after such next regular meeting.

Section 2.10. Resignations. Any director may resign by submitting to the Chairman of the Board or the President his resignation, which (unless otherwise specified therein) need not be accepted to make it effective and shall be effective immediately upon its receipt by such officer.

Section 2.11. Committees.

(a) Appointments; Powers. Except as otherwise provided in subsection (b) pertaining to the Executive

Committee, standing or temporary committees shall consist of one or more Directors of the Company and such other members, who need not be directors, as the Board may direct and may be appointed from time to time by a majority of the Directors present or participating at any regular or special meeting. The Board may from time to time invest committees with such power and authority, subject to such conditions as it may see fit, except that no committee shall have any power or authority to adopt, amend or repeal any By-Law.

(b) Executive Committee. An Executive Committee of three or more directors may be appointed by resolution adopted by a majority of the directors in office; it shall have all the powers and exercise all of the authority of the Board during intervals between meetings, except as specially limited by the Board. Meetings of the Executive Committee may be called at any time by any member, to be held at such place and day and hour as shall be specified by the person or persons calling the meeting, or if not so specified by the Secretary. Notice of every meeting of the Executive Committee, which states the place, day and hour thereof, but need not state the purposes thereof, shall be given to each

member either by being mailed on at least the second calendar day prior to the date of the meeting, or by being sent by telegraph or given personally or by telephone prior to the date of the meeting. The presence or participation by other lawful means of a majority of the members of the Committee shall be necessary and sufficient to constitute a quorum for the transaction of business, and any action of the Committee upon any matter shall be taken and be valid with the affirmative vote of at least a majority of the members of the Committee. The Executive Committee shall keep a record of all action taken and report such action to the Board of Directors at its next meeting thereafter.

(c) Term; Vacancies; Absence or Disqualification. All committee members appointed by the Board shall serve during the pleasure of the Board, which may fill vacancies and may designate one or more Directors as alternate members of any committee, to take the place of any absent or disqualified member at any meeting. In the absence or disqualification of any member or alternate member of any committee or committees, the member or members thereof participating at any meeting and not disqualified from

voting, whether or not he, she or they constitute a quorum, may unanimously appoint another Director to act at the meeting in the place of any such absent or disqualified member or alternate member.

(d) Organization; Finality of Action. All committees shall keep such record of the transactions of their meetings as the Board or these By-Laws shall direct. All committees shall determine their own organization, procedures, and times and places of meeting, unless otherwise directed by the Board and except as otherwise provided in these By-Laws. Any action taken by any committee shall be subject to alteration or revocation by the Board; provided, however, that third parties shall not be prejudiced by such alteration or revocation.

Section 2.12. Compensation. By resolution of the Board, Directors may be paid a fixed sum and expenses, if any, of attendance for any regular or special meeting of the Board or any committee, and may in addition be paid an annual retainer fee or a retirement allowance, or both. Directors shall also be entitled to receive such

compensation for services rendered to the Company as officers, committee members, or in any capacity other than as directors, as may be provided from time to time by resolution of the Board. [Amended by Board of Directors 12-17-87.]

ARTICLE III
Officers and Employees

Section 3.01. Executive Officers. The executive officers of the Company shall be the Chairman of the Board, the President, one or more Vice Presidents (as may be determined by the Board of Directors), the Secretary and the Treasurer. The executive officers shall be elected by the Board of Directors. Any two or more offices may be held by the same person, except that the same person shall not be President and Secretary. Each executive officer shall hold office at the discretion of the Board until the next succeeding annual meeting of the Board of Directors and thereafter until his or her successor is duly elected and qualifies, or until his or her earlier death, resignation or removal. The Board may authorize the Company to enter into

employment contracts and/or consulting agreements with any executive officer for such periods as may be deemed appropriate including periods longer than one year, and the provision herein for annual election shall be without prejudice to the contract rights, if any, of executive officers under such contracts.

Section 3.02. Additional and Assistant Officers, Agents and Employees. The Board of Directors, the Chairman and the President each may from time to time appoint or hire one or more other officers, assistant officers, agents, employees and independent contractors as are deemed advisable; and the Board of Directors, the Chairman or the President may prescribe their duties, conditions of employment and compensation and may dismiss them without prejudice to their contract rights, if any. [Amended by Board of Directors 8-29-90.]

Section 3.03. The Chairman of the Board. The Chairman of the Board, who shall be elected from among the Directors, shall be the Chief Executive Officer of the Company and shall preside at all meetings of the Board of

Directors and of the Shareholders. He shall exercise the powers and perform duties usual to the Chief Executive officer and, subject to the control and direction of the Board of Directors, shall have management and supervision over and exercise general executive powers concerning all the property, business and affairs of the Company. He shall see that all policies, programs, orders and resolutions of the Board of Directors are carried into effect, and shall have such other powers and duties as from time to time may be assigned to him by the Board of Directors or these By-Laws. He shall have the power to execute deeds, bonds, mortgages, and other contracts, agreements and instruments of the Company. He shall be, ex officio, a member of all standing committees of the Board except the committee on officers' compensation. [Amended by Board of Directors 6-27-90.]

Section 3.04. The President. The President shall be subject to the control and direction of the Chairman of the Board and shall direct and supervise those affairs of the Company assigned to him by the Chairman, the Board of Directors, or the By-Laws. In the absence of or disability

of the Chairman of the Board, the President shall be the Chief Executive Officer. He shall have the power to execute deeds, bonds, mortgages, and other contracts, agreements and instruments of the Company. [Amended by Board of Directors 6-27-90.]

Section 3.05. The Vice Presidents. The Vice Presidents, one or more of whom may be designated executive, senior, group or administrative vice president, or given other descriptive title, shall have such powers and perform such duties in such capacities as may be assigned by the Board of Directors or the Chairman of the Board. [Amended by Board of Directors 6-27-90.]

Section 3.06. The Secretary. The Secretary shall: (a) be custodian of the Company's contracts, policies, leases, deeds and other indicia of title, and all other business records; (b) keep or cause to be kept at the registered office or the principal place of business of the Company an original or duplicate record of the proceedings of the shareholders and the Board of Directors, and a copy of the Articles of the Company and of these By-Laws; (c)

attend to the giving of notices of the Company as may be required by law or these By-Laws; (d) be custodian of the corporate records and of the seal of the Company and see that the seal is affixed to such documents as may be necessary or advisable; (e) have charge of and keep at the registered office or the principal place of business of the Company, or cause to be kept at the office of a transfer agent or registrar an original or duplicate share register, giving the names of the shareholders in alphabetical order, and showing their respective addresses, the number and classes of shares held by each, the number and date of certificates issued for the shares, and the date of cancellation of every certificate surrendered for cancellation; and (f) have such powers and duties as may from time to time be prescribed by the Board of Directors or the Chairman. [Amended by Board of Directors 8-29-90.]

Section 3.07. The Vice President - Finance. If a Vice President - Finance is elected by the Board of Directors, he or she (a) shall serve as the Company's Chief Financial Officer; (b) shall, subject to the approval of the Chairman, recommend financing, investing, borrowing, tax,

insurance and internal audit policies for the Company; (c) shall be responsible for the preparation of consolidated financial statements required by the Board of Directors or the Chairman; (d) shall see that the lists, books, reports, statements, tax returns, certificates and other documents and records required by law are properly prepared, completed and filed; and (e) shall have such other powers and duties in such capacities as may from time to time be prescribed by the Board of Directors or the Chairman. If the Board does not elect a Vice President - Finance, the powers and duties herein set forth shall be exercised by the Treasurer. [Amended by Board of Directors 8-29-90.]

Section 3.08. The Treasurer. The Treasurer (a) shall have powers and perform such duties in such capacities as may be assigned by the Board of Directors or the Vice President - Finance in the development of financing, investing and borrowing policies, and shall administer these policies; (b) shall have charge and custody of and be responsible for the corporate funds, securities and investments; (c) shall receive, endorse for collection, and give receipts for checks notes, obligations, funds and

securities of the Company, and deposit monies and other valuable effects in the name and to the credit of the Company in such depositories as shall be designated by the Board of Directors; (d) subject to the provisions of Section 5.01 of the By-Laws, shall cause to be disbursed the funds of the Company by payment in cash or by checks or drafts upon the authorized depositories of the Company, and cause to be taken and preserved proper vouchers and receipts for such disbursements; (e) shall coordinate financing of the Company's international subsidiaries; and (f) shall have such other powers and duties as may from time to time be prescribed by the Board of Directors or the Vice President - Finance. [Amended by Board of Directors 8-29-90.]

Section 3.9. Delegation of Duties. In case of the absence of any officer of the Company, or for any other reason that the Board may deem sufficient, the Board of Directors may delegate for the time being the powers and duties, or any of them, of any officer to any other officer or director or other person whom it may select.

ARTICLE IV

Shares of Capital Stock

Section 4.01. Share Certificate. Every holder of fully-paid stock in the Company shall be entitled to a certificate or certificates, consecutively numbered, to be in such form as the Board of Directors may from time to time prescribe, and signed (in facsimile or otherwise, as permitted by law) by the Chairman, the President or a Vice President and by the Secretary or the Treasurer which shall represent and certify the number of shares of stock owned by such holder. The Board may authorize the issuance of certificates for fractional shares or, in lieu thereof, scrip or other evidence of ownership, which may (or may not) as determined by the Board entitle the holder thereof to voting, dividend or other rights of shareholders.

Section 4.02. Transfer of Shares. Transfers of shares of stock of the Company shall be made on the books of the Company only upon surrender to the Company for cancellation of the certificate or certificates for such shares properly endorsed, by the registered shareholder or by his assignee, agent or legal representative, who shall

furnish proper evidence of succession, assignment or authority to transfer, or by the agent of one or the foregoing there unto duly authorized by an instrument duly executed and filed with the Company in accordance with regular commercial practice.

Section 4.03. Replacement of Certificates. New certificates for shares of stock may be issued to replace certificates alleged to have been lost, stolen, destroyed or mutilated upon such terms and conditions, including an affidavit of loss or destruction and the giving of a satisfactory bond of indemnity, as the Board of Directors from time to time may determine.

Section 4.04. Regulations Relating to Shares. The Board of Directors shall have power and authority to make all such rules and regulations not inconsistent with these By-Laws as it may deem expedient concerning the issue, transfer and registration of certificates representing shares of the Company.

Section 4.05. Record Date. The Board of Directors may fix a record date for the determination of shareholders for any purpose, including the right to notice of or to vote at meetings, payment of dividends or distributions, allotment of rights, or change, reclassification, conversion or exchange of shares, up to 110 days prior to the action for which the record date is fixed. The Company shall be entitled to treat the holder of record of any share or shares of stock of the Company as the holder and owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or right, title or interest in any share on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise expressly provided by the laws of Pennsylvania.

ARTICLE V

Miscellaneous Corporate Transactions and Documents

Section 5.01. Borrowing. No officer, agent or employee of the Company shall have any power or authority to

borrow money on its behalf, to guarantee or pledge its credit, or to mortgage or pledge any of its real or personal property, except within the scope and to the extent of the authority delegated by the Board of Directors. Authority may be granted by the Board for any of the above purposes and may be general or limited to specific instances.

Section 5.02. Execution of Instruments Generally. All properly authorized notes, bonds, drafts, acceptances, checks, endorsements (other than for deposit), guarantees, and all evidences of indebtedness of the Company whatsoever, and all properly authorized deeds, mortgages, contracts and other instruments requiring execution by the Company may be executed and delivered by the Chairman, the President or any Vice President or the Treasurer of the Company; and authority to sign any such contracts or instruments, which may be general or confined to specific instances, may be conferred by the Board of Directors upon any other person or persons, subject to such requirements as to countersignature or other conditions, as the Board of Directors from time to time may determine. Facsimile signature on checks, notes, bonds and other instruments may be used if authorized by the

Board of Directors. Any person having authority to sign on behalf of the Company may delegate, from time to time, by instrument in writing, all or any part of such authority to any person or persons if authorized so to do by the Board of Directors.

Section 5.03. Voting and Acting with Respect to Securities Owned by Company. The Chairman of the Board of Directors, the President or any Vice President each shall have the power and authority to vote and act with respect to all stock and other securities in any other corporation held by this Company, unless the Board confers such authority, which may be general or specific, upon some other person. Any person so authorized to vote securities shall have the power to appoint an attorney or attorneys, with general power of substitution, as proxies for the Company, with full power to vote and act in behalf of the Company with respect to such stock and other securities.

ARTICLE VI
General Provisions

Section 6.01. Offices. The principal office and place of business of the Company shall be at 121 Gamma Drive, Pittsburgh, Allegheny County, Pennsylvania. The Company may also have offices at such other places within or without the Commonwealth of Pennsylvania as the business of the Company may require.

Section 6.02. Corporate Seal. The Board of Directors shall prescribe the form of a suitable corporate seal, which shall contain the full name of the Company and the year and state of incorporation.

Section 6.03. Fiscal Year. The fiscal year of the Company shall begin the first day of January and terminate on the last day of December in each year.

Section 6.04. Financial Reports to Shareholders. The Board of Directors shall have discretion to determine whether financial statements shall be sent to shareholders, what such reports shall contain, and whether they shall be audited or accompanied by the report of an independent or certified public accountant.

ARTICLE VII
Indemnification
[Approved by Shareholders 4/24/87.]

Section 7.01. Indemnification of Directors, Officers and Others.

(a) Right to Indemnification. Except as prohibited by law, every Director and officer of the Company shall be entitled as of right to be indemnified by the Company against expenses and any liability paid or incurred by such person in connection with any actual or threatened claim, action, suit or proceeding, civil, criminal, administrative, investigative or other, whether brought by or in the right of the Company or otherwise, in which he or she may be involved, as a party or otherwise, by reason of such person being or having been a Director or officer of the Company or by reason of the fact that such person is or was serving at the request of the Company as a director, officer, employee, fiduciary or other representative of another corporation, partnership, joint venture, trust,

employee benefit plan or other entity (such claim, action, suit or proceeding hereinafter being referred to as "Action"); provided that no such right or indemnification shall exist with respect to an Action brought by an indemnitee (as hereinafter defined) against the Company except as provided in the last sentence of this Subsection (a). Persons who are not directors or officers of the Company may be similarly indemnified in respect of service to the Company or to another such entity at the request of the Company to the extent the Board of Directors at any time denominates any of such persons as entitled to the benefits of this Section. As used in this Section 7.01, "indemnitee" shall include each Director and officer of the Company and each other person denominated by the Board of Directors as entitled to the benefits of this Section, "expenses" shall include fees and expenses of counsel selected by any such indemnitee and "liability" shall include amounts of judgments, excise taxes, fines, penalties and amounts paid in settlement. An indemnitee shall be entitled to be indemnified pursuant to this Subsection (a) for expenses incurred in connection with any Action brought by an indemnitee against the Company only (i) as provided under

Subsection (c) of this Section, (ii) if the indemnitee is successful in whole or in part in the Action for which expenses are claimed or (iii) if the indemnification for expenses is included in a settlement of the Action or is awarded by a court.

(b) Right to Advancement of Expenses. Every indemnitee shall be entitled as of right to have his or her expenses in defending any Action or in any Action under Subsection (c) paid in advance by the Company prior to final disposition of such Action, subject to any obligation which may be imposed by law or by provision in the Articles, By-Laws, agreement or otherwise to reimburse the Company in certain events.

(c) Right of Indemnitee to Initiate Action. If a written claim under Subsection (a) or Subsection (b) of this Section is not paid in full by the Company within thirty days after such claim has been received by the Company, the indemnitee may at any time thereafter initiate an Action against the Company to recover the unpaid amount of the claim and, if successful in whole or in part, the indemnitee

shall also be entitled to be paid the expense of prosecuting such Action. The only defense to any Action to recover a claim under Subsection (a) of this Section shall be that the indemnitee's conduct was such that under Pennsylvania law the Company is prohibited from indemnifying the indemnitee for the amount claimed, but the burden of proving such defense shall be on the Company. Neither the failure of the Company (including its Board of Directors, independent legal counsel and its shareholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances, nor an actual determination by the Company (including its Board of Directors, independent legal counsel or its shareholders) that the indemnitee's conduct was such that indemnification is prohibited by law, shall be a defense to such Action or create a presumption that the indemnitee's conduct was such that indemnification is prohibited by law. The only defense to any such Action to receive payment of expenses in advance under Subsection (b) of this Section shall be failure to make an undertaking to reimburse if such an undertaking is required by law or by provision in the Articles, By-Laws, agreement or otherwise.

(d) Insurance and Funding. The Company may purchase and maintain insurance to protect itself and any person eligible to be indemnified hereunder against any liability or expense asserted or incurred by such person in connection with any Action, whether or not the Company would have the power to indemnify such person against such liability or expense by law or under the provisions of this Section. The Company may create a trust fund, grant a security interest, cause a letter of credit to be issued or use other means (whether or not similar to the foregoing) to ensure the payment of such sums as may become necessary to effect indemnification as provided herein.

(e) Non-Exclusivity; Nature and Extent of Rights. The right of indemnification and advancement of expenses provided for in this Section (i) shall not be deemed exclusive of any other rights, whether now existing or hereafter created, to which any indemnitee may be entitled under any agreement or by-law, charter provision, vote of shareholders or directors or otherwise (ii) shall be deemed to create contractual rights in favor of each indemnitee, (iii) shall continue as to each person who has ceased to have the

status pursuant to which he or she was entitled or was denominated as entitled to indemnification under this Section and shall inure to the benefit of the heirs and legal representatives of each indemnitee and (iv) shall be applicable to Actions commenced after the adoption of this Section, whether arising from acts or omissions occurring before or after the adoption of this Section. The rights of indemnification and advancement of expenses provided for in this Section may not be amended or repealed so as to limit in any way the indemnification or the right to advancement of expenses provided for in this Section with respect to any acts or omissions occurring prior to the adoption of any such amendment or repeal.

(f) Effective Date. This Section 7.01 shall apply to every Action other than an Action filed prior to January 27, 1987, except that it shall not apply to the extent that Pennsylvania law does not permit its application to any breach of performance of duty or any failure of performance of duty by an indemnitee occurring prior to January 27, 1987. [Approved by Shareholders 4/24/87.]

[Approved by Shareholders 4/24/87] [Restated Articles, Article 14th.]

Section 7.02. 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 Section 7.02 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 Section shall be deemed to be a contract with each Director of the Company who serves as such at any time while this Section is in effect and each such Director shall be deemed to be doing so in reliance on the provisions of this Section. Any amendment or repeal of

this Section 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. [Approved by Shareholders 4/24/87.] [Restated Articles, Article 14th.]

ARTICLE VIII
Amendments

Section 8.01. 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 provision 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.
[Restated Articles Section 12.1]

ARTICLE IX
Non-Applicability of Statute

Section 9.01. Non-Applicability of Statute. Subchapter 25G (Control-Share Acquisitions) of the Pennsylvania Business Corporation Law, added by the Act of April 27, 1990 (P.L. 129, No. 36), shall not be applicable to the Company. [This By-Law provision was adopted by action of the Board of Directors on June 27, 1990.]