SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 11-K



(Mark One)

 \mathbf{X} ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2009

OR

TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 П

For the transition period from ______ to ____

Commission file number 1-15579

Full title of the plan and the address of the plan, if different from that of the issuer named below: A.

MSA RETIREMENT SAVINGS PLAN

В. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

> MINE SAFETY APPLIANCES COMPANY 121 Gamma Drive Pittsburgh, PA 15238

MSA RETIREMENT SAVINGS PLAN FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULE

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Report of Independent Registered Public Accounting Firm

Plan Administrator and participants MSA Retirement Savings Plan:

We have audited the accompanying statement of net assets available for benefits of the MSA Retirement Savings Plan (the "Plan") as of December 31, 2009 and the related statement of changes in net assets available for benefits for the year then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of the Plan as of and for the year ended December 31, 2008 were audited by other auditors whose report dated June 19, 2009 expressed an unqualified opinion on those statements.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2009 and the changes in net assets available for benefits for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Our audit was performed for the purpose of forming an opinion on the 2009 basic financial statements taken as a whole. The supplemental Schedule H, Line 4(i) - Schedule of Assets (Held at End of Year) as of December 31, 2009 is presented for the purpose of additional analysis and is not a required part of the 2009 basic financial statements, but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in our audit of the 2009 basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the 2009 basic financial statements taken as a whole.

/s/ ParenteBeard LLC Pittsburgh, Pennsylvania June 28, 2010

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

(Dollars in thousands)

	Decem	nber 31
	2009	2008
Investments, at fair value		
Registered investment companies	\$107,230	\$ 89,503
Common collective trust	36,467	39,806
MSA common stock fund	553	414
Net assets available for benefits, at fair value	144,250	129,723
Adjustment from fair value to contract value for fully benefit-responsive investment contracts within the common collective trust	458	1,615
Net assets available for benefits	144,708	131,338

The accompanying notes are an integral part of these financial statements.

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

(Dollars in thousands)

		For the year ended December 31	
	2009	2008	
Investment income (loss):			
Net appreciation (depreciation) in fair value of investments	\$ 19,276	\$ (57,623)	
Interest	713	1,357	
Dividends	1,800	3,781	
Participants' contributions	7,008	7,654	
Employer contributions	1,609	3,145	
	30,406	(41,686)	
Distributions to participants	17,028	12,904	
Administrative expenses	8	14	
	17,036	12,918	
Net increase (decrease)	13,370	(54,604)	
Net assets available for benefits:			
Beginning of year	131,338	185,942	
End of year	144,708	131,338	

The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2009 AND 2008 (Dollars in thousands)

Note 1 – Description of Plan

The description of the MSA Retirement Savings Plan ("Plan") provided below is for general information purposes only. More complete information is included in the applicable Plan document.

The Plan is a defined contribution plan maintained by Mine Safety Appliances Company ("MSA" or the "Company") for eligible U.S. employees ("Participants"). The Plan provides for automatic enrollment of new Participants at a Participant contribution rate of 3% of the Participant's pre-tax earnings. Participants may elect to not contribute or change their contribution rate during a 45-day election period. Participants may elect to contribute from 1% to 25% of their pre-tax earnings (highly compensated Participants are limited to 8%). During 2008, the Company matched 50% of each Participant's contribution up to 8% of their pre-tax earnings. On January 1, 2009, the Plan was amended to include, among other things, an enhanced rate of Company matching contributions equal to 100% of the first 1% and 50% of the next 6% of a Participant's eligible pay. Company matching contributions may not exceed 4% of a Participant's eligible pay. The Plan permits deferral of federal income taxes on Participants' contributions, as provided for under Section 401(k) of the Internal Revenue Code ("IRC").

On June 1, 2009, the Plan was amended to suspend Company matching contributions for payroll periods commencing on or after June 7, 2009. Company matching contributions, as described above, were reinstated effective January 1, 2010.

The Plan provides a number of investment options in registered investment companies, a common collective trust, and Company common stock. Participants may direct the investment of their account into any combination of the available investment options.

Participants are vested immediately in their contributions plus actual earnings thereon. Company matching contributions vest after three years of continuous service with the Company. Each Participant's account is credited with the Participant's contributions and allocations of (a) the Company's matching contributions and (b) Plan earnings, and charged with an allocation of administrative expenses. Allocations are based on Participant earnings or account balances, as defined. The benefit to which a Participant is entitled is the benefit that can be provided from the Participant's vested account. Participants or their beneficiaries are entitled to the current value of their accounts in the Plan upon death or upon termination of their employment with the Company after attainment of the vesting period.

On termination of service due to death, disability, retirement, or other reasons, Participants may elect to receive a distribution of their vested account balance as a single sum or in monthly installments, request a direct rollover of their vested account balance into an eligible retirement plan, or maintain their account balance in the Plan, subject to certain restrictions.

NOTES TO FINANCIAL STATEMENTS—(Continued) DECEMBER 31, 2009 AND 2008 (Dollars in thousands)

Participant loans are not permitted by the Plan. As a result of plan mergers, the Plan will occasionally hold existing participant loans through the settlement period. There were no participant loans held at December 31, 2009 or 2008.

The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA").

The Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan at any time according to the provisions of ERISA. In the event of Plan termination, Participants will become fully vested in their accounts and will receive a lump sum cash payment, or some other method of payment in accordance with the Plan provisions, equal to their account balance.

The Plan is administered by a committee appointed by the Board of Directors of the Company. The committee establishes rules of procedure, interprets the provisions of the Plan and decides all questions of administration.

Fidelity Management Trust Company is the trustee of the Plan. Fidelity Investments Institutional Operations Company, Inc. provides recordkeeping services for the Plan.

Note 2 – Significant Accounting Policies

Accounting method – The financial statements of the Plan are prepared using the accrual method of accounting.

Investments – The Plan's investments are stated at fair value and consist of various registered investment companies, a common collective trust (Fidelity Managed Income Portfolio II) and the MSA common stock fund. See Note 3 for discussion of fair value measurements. As discussed in the following paragraphs, the Plan's investment in the common collective trust is presented at fair value with an adjustment to contract value. The average yield to maturity and crediting interest rate for the insurance contracts held within the common collective trust was 1.5% and 3.5% at December 31, 2009 and 2008, respectively.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation (depreciation) in fair value of investments includes the Plan's gains and losses on investments bought and sold, as well as held during the year.

An investment contract is generally permitted to be valued at contract value, rather than fair value, to the extent it is fully benefit-responsive because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. Fully benefit-responsive investment contracts held within the common collective trust are included at fair value in the investments of the Plan and are adjusted to contract value in the statements of net assets available for benefits. The statements of changes in net assets available for benefits are prepared on a contract value basis.

Use of estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

NOTES TO FINANCIAL STATEMENTS—(Continued) DECEMBER 31, 2009 AND 2008 (Dollars in thousands)

Distributions to Participants – Distributions to Participants are recorded when paid. At December 31, 2009 and 2008, there were no unpaid benefits allocated to accounts of Participants who had elected to withdraw from the Plan.

Funding – The Plan is funded by contributions from Participants and the Company. The cost of administering the Plan is borne by the Plan. Investment management fees paid by each fund are deducted directly from dividend income.

Subsequent events – The Plan has evaluated subsequent events and has concluded that all events that would require recognition or disclosure are appropriately reflected in these financial statements.

New accounting standards – In June 2009, the Financial Accounting Standards Board ("FASB") established the FASB Accounting Standards Codification ("Codification") as the sole source of authoritative accounting principles generally accepted in the United States of America. As a result, all references to accounting literature will conform to the appropriate reference within the Codification. The adoption of the Codification, which became effective during September 2009, did not have any impact on the Plan's financial statements.

Effective January 1, 2009, the Plan adopted FASB guidance on accounting for and disclosure of subsequent events. The new standard establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or available to be issued. The new standard did not have a significant effect on the Plan's financial statements.

Note 3 – Fair Value Measurements

The Plan measures on a recurring basis its investments at fair value in accordance with FASB guidance. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) the reporting entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are:

- Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2 Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.

NOTES TO FINANCIAL STATEMENTS—(Continued) DECEMBER 31, 2009 AND 2008 (Dollars in thousands)

• Level 3 - Inputs that are both significant to the fair value measurement and unobservable.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following is a description of the valuation methodologies used for Plan assets measured at fair value. There have been no changes in the methodologies used at December 31, 2009 and 2008.

Registered investment companies – These investments are public investment vehicles valued using the Net Asset Value ("NAV") provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The NAV is a quoted price in an active market and is classified within Level 1 of the valuation hierarchy.

Common collective trust – This investment is a public investment vehicle valued using the NAV provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The NAV is classified within Level 2 of the valuation hierarchy because the NAV's unit price is quoted on a private market that is not active; however, the share price is based on underlying investments which are primarily based on observable inputs.

MSA common stock fund – This investment is valued at the closing price of MSA common stock reported on the New York Stock Exchange, plus cash and accrued interest, and is classified within Level 1 of the valuation hierarchy.

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

NOTES TO FINANCIAL STATEMENTS—(Continued) DECEMBER 31, 2009 AND 2008

(Dollars in thousands)

The Plan's investments measured at fair value on a recurring basis by fair value hierarchy level were as follows:

	December 31, 2009			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Registered investment companies:				
Equity funds	\$ 60,673	\$ —	\$ —	\$ 60,673
Balanced funds	33,717			33,717
Fixed income funds	12,840			12,840
Totals	107,230			107,230
Common collective trust	—	36,467		36,467
MSA common stock fund	553		—	553
Total investments	107,783	36,467		144,250
		December 31, 2008		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Registered investment companies:				
Equity funds	\$ 47,931	\$ —	\$ —	\$ 47,931
Balanced funds	28,748			28,748

Fixed income funds	12,824			12,824
Totals	89,503		_	89,503
Common collective trust		39,806	—	39,806
MSA common stock fund	414	—	—	414
Total investments	89,917	39,806		129,723

The Plan held no Level 3 investments at December 31, 2009 or 2008. Changes in the fair value of the Plan's Level 3 investments during the year ended December 31, 2008 were as follows

	Participant Loans
Balance, January 1, 2008	\$ 4
Purchases, sales, issuances and settlements, net	(4)
Balance, December 31, 2008	

Note 4 - Tax Status of the Plan

The Internal Revenue Service informed the Company by letter dated December 4, 2001, that the Plan, as then designed, was in compliance with the applicable requirements of the IRC, and was, therefore, not subject to tax under income tax law. The Plan has been amended since receiving the determination letter, however, the Plan administrator believes the Plan is designed and is currently operating in compliance with the applicable requirements of the IRC.

Note 5 – Related Party Transactions

Certain Plan investments are shares of registered investment companies and a common collective trust managed by Fidelity Management Trust Company. Fidelity Management Trust Company is the trustee of the Plan and, therefore, these transactions are considered to be party-in-interest transactions. Fees paid by the Plan to Fidelity Management Trust Company for administrative services were \$8 and \$14 for the years ended December 31, 2009 and 2008, respectively.

NOTES TO FINANCIAL STATEMENTS—(Continued) DECEMBER 31, 2009 AND 2008 (Dollars in thousands)

Certain Plan investments are publicly traded common stock of the Company. During 2009, the Plan purchased 390 shares of Company stock at an aggregate cost of \$11 and sold 519 shares of Company stock for total proceeds of \$14. During 2008, the Plan purchased 7,697 shares of Company stock at an aggregate cost of \$259 and sold 2,274 shares of Company stock for total proceeds of \$82. The Plan received \$5 and \$13 in dividends on Company stock during 2009 and 2008, respectively.

The Company performs administrative functions on behalf of the Plan, for which no fees are charged.

Note 6 – Forfeited Accounts

At December 31, 2009 and 2008, forfeited non-vested accounts totaling \$77 and \$27, respectively, were included in common collective trust investment balances. These accounts are used first to reinstate previously forfeited amounts for Participants who are re-employed by the Company within five years, then to reduce Plan expenses and then to reduce future Company matching contributions. The use of forfeited non-vested accounts reduced Plan expenses by \$7 and \$13 in 2009 and 2008, respectively.

Note 7 – Risks and Uncertainties

The Plan provides investment options in registered investment companies, a common collective trust and a Company common stock fund. Investments are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investments and the level of uncertainty related to changes in the value of investments, it is at least reasonably possible that changes in the values of investments will occur in the near term and that such changes could materially affect Participants' account balances and the amounts reported in the statements of net assets available for benefits.

Note 8 – Investments

Individual investments exceeding 5% of net assets available for benefits were as follows:

	Fair Value at December 31	
	2009	2008
Fidelity Managed Income Portfolio II	\$ 36,467	\$ 39,806
Fidelity Contrafund	17,995	15,542
Fidelity U.S. Bond Index Fund	12,840	12,824
Fidelity Diversified International Fund	12,299	10,215
Fidelity Growth and Income Fund	12,195	10,842
Fidelity Magellan Fund	7,443	*

* Did not meet the 5% threshold at December 31, 2008.

NOTES TO FINANCIAL STATEMENTS—(Continued) DECEMBER 31, 2009 AND 2008 (Dollars in thousands)

The Plan's investments appreciated (depreciated) in value, including gains and losses on investments bought and sold during the year, as follows:

		For the year ended December 31	
	2009	2008	
Registered investment companies	\$19,190	\$(57,275)	
MSA common stock fund	86	(348)	
	19,276	(57,623)	

Note 9 - Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500:

	Decem	December 31	
	2009	2008	
Net assets available for benefits per the financial statements	\$144,708	\$131,338	
Adjustment from contract value to fair value for fully benefit- responsive investment			
contracts	(458)	(1,615)	
Net assets available for benefits per the Form 5500	144,250	129,723	

The following is a reconciliation of the net increase (decrease) in net assets available for benefits per the financial statements to the Form 5500:

	For the year ended December 31	
	2009	2008
Net increase (decrease) in net assets available for benefits per the financial statements	\$13,370	\$(54,604)
Change in adjustment from fair value to contract value for fully benefit-responsive		
investment contracts	1,157	(1,348)
Net increase (decrease) in net assets available for benefits per Form 5500	14,527	(55,952)

MSA Retirement Savings Plan EIN: 25-0668780 Plan number: 002 Schedule H, line 4i (Form 5500) - Schedule of Assets (Held at End of Year) As of December 31, 2009 (Dollars in Thousands)

<u>(a)</u>	(b) Identity of issue, borrower, lessor or similar party	(c) Description of Investment	(d) Cost	(e) Current Value
	Allianz NFJ Small Cap Value AD	Registered Investment Company	**	\$ 4,108
	Artisan Mid Cap Investor	Registered Investment Company	**	3,497
*	Fidelity Contrafund	Registered Investment Company	**	17,995
*	Fidelity Diversified International Fund	Registered Investment Company	**	12,299
*	Fidelity Equity Income Fund	Registered Investment Company	**	3,318
*	Fidelity Freedom 2000	Registered Investment Company	**	453
*	Fidelity Freedom 2005	Registered Investment Company	**	11
*	Fidelity Freedom 2010	Registered Investment Company	**	3,554
*	Fidelity Freedom 2015	Registered Investment Company	**	1,943
*	Fidelity Freedom 2020	Registered Investment Company	**	4,129
*	Fidelity Freedom 2025	Registered Investment Company	**	1,317
*	Fidelity Freedom 2030	Registered Investment Company	**	2,431
*	Fidelity Freedom 2035	Registered Investment Company	**	545
*	Fidelity Freedom 2040	Registered Investment Company	**	1,426
*	Fidelity Freedom 2045	Registered Investment Company	**	320
*	Fidelity Freedom 2050	Registered Investment Company	**	277
*	Fidelity Freedom Income	Registered Investment Company	**	517
*	Fidelity Growth and Income Fund	Registered Investment Company	**	12,195
*	Fidelity Magellan Fund	Registered Investment Company	**	7,443
*	Fidelity Puritan Fund	Registered Investment Company	**	4,599
*	Fidelity U.S. Bond Index Fund	Registered Investment Company	**	12,840
	Legg Mason Value Trust FI	Registered Investment Company	**	816
	Lord Abbett Mid Cap Value P	Registered Investment Company	**	1,007
	Spartan Extended Market Index Fund	Registered Investment Company	**	3,147
	Spartan 500 Index	Registered Investment Company	**	7,043
	Total Registered Investment Companies			107,230
*	Fidelity Managed Income Portfolio II	Common/Collective Trust		36,467
*	MSA Common Stock Fund	Company Common Stock		553
	Total			144,250

* Denotes a party-in-interest, for which a statutory exemption exists.

** Cost omitted for participant directed investments.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Employee Benefits Administrative Committee has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

By:

June 28, 2010

MSA RETIREMENT SAVINGS PLAN

/S/ PAUL R. UHLER

Paul R. Uhler Chairman of the Employee Benefits Administrative Committee

EXHIBIT INDEX

23. Consent of Independent Registered Public Accounting Firm dated June 28, 2010 is filed herein.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-121196 of Mine Safety Appliances Company on Form S-8 of our report dated June 28, 2010, appearing in this Annual Report on Form 11-K of the MSA Retirement Savings Plan for the year ended December 31, 2009.

/s/ ParenteBeard LLC Pittsburgh, Pennsylvania June 28, 2010