SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 11-K



(Mark One) ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 \times

For the fiscal year ended December 31, 2011

OR

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

For the transition period from

Commission file number 1-15579

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

to

MSA RETIREMENT SAVINGS PLAN

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

MINE SAFETY APPLIANCES COMPANY

1000 Cranberry Woods Drive **Cranberry Township, PA 16066**

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 statements of net assets available for benefits of the MSA Retirement Savings Plan (the "Plan") as of December 31, 2011 and 2010, and the related statements of changes in net assets available for benefits for the years 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 audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the 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 audits provide 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, 2011 and 2010, and the changes in net assets available for benefits for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the 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, 2011 is presented for the purpose of additional analysis and is not a required part of the 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. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ ParenteBeard LLC Pittsburgh, Pennsylvania June 15, 2012

MSA RETIREMENT SAVINGS PLAN STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS (Dollars in thousands)

	Decem	iber 31
	2011	2010
Investments, at fair value:		
Registered investment companies	\$123,122	\$125,796
Common collective trust	38,305	35,256
MSA common stock fund	1,204	750
Net assets available for benefits, at fair value	162,631	161,802
Adjustment from fair value to contract value for fully benefit-responsive investment contracts within the common collective trust	(930)	(348)
Net assets available for benefits	161,701	161,454

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

MSA RETIREMENT SAVINGS PLAN STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS (Dollars in thousands)

	Decem	For the year ended December 31	
	2011	2010	
Investment income (loss):			
Net (depreciation) appreciation in fair value of investments	\$ (4,629)	\$ 13,442	
Interest	530	564	
Dividends	2,998	2,157	
Participants' contributions	8,091	7,051	
Employer contributions	3,461	2,935	
	10,451	26,149	
Distributions to participants	10,182	9,337	
Administrative expenses	22	66	
	10,204	9,403	
Net increase	247	16,746	
Net assets available for benefits:			
Beginning of year	161,454	144,708	
End of year	161,701	161,454	

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

MSA RETIREMENT SAVINGS PLAN NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2011 AND 2010 (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%). The Plan allows for 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").

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 two 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. The Plan does not permit hardship withdrawals.

Participant loans are not permitted by the Plan.

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

Although it has not expressed any intent to do so, 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 vested 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 4 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 1.6% and 1.8% at December 31, 2011 and 2010, 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 ("U.S. GAAP") 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.

Distributions to Participants – Distributions to Participants are recorded when paid. At December 31, 2011 and 2010, there were no significant 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 investment 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 pronouncements – In May 2011, the Financial Accounting Standards Board issued Accounting Standards Update ("ASU") 2011-04, "Fair Value Measurement—Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs." This ASU updated measurement guidance to improve the comparability of fair value measurements between U.S. GAAP and International Financial Reporting Standards and enhanced disclosure requirements. The most significant change in disclosures is an expansion of information related to fair value measurements categorized within Level 3 of the fair value hierarchy. The ASU will be effective beginning in 2012. The adoption of this ASU will not have a material effect on the Plan's financial statements.

Note 3 - 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 \$22 and \$66 for the years ended December 31, 2011 and 2010, respectively.

Certain Plan investments are publicly traded common stock of the Company. During 2011, the Plan purchased 18,960 shares of Company stock at an aggregate cost of \$625 and sold 7,335 shares of Company stock for total proceeds of \$233. During 2010, the Plan purchased 5,450 shares of Company stock at an aggregate cost of \$145 and sold 2,200 shares of Company stock for total proceeds of \$59. The Plan received \$28 and \$21 in dividends on Company stock during 2011 and 2010, respectively.

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

Note 4 - Fair Value Measurements

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

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

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

Level 3—Unobservable inputs for the asset or liability.

The 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, 2011 and 2010.

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 fund's investment objective is to seek the preservation of capital and to provide a competitive level of income over time that is consistent with the preservation of capital. To achieve its investment objective, the fund invests in assets (typically fixed-income securities or bond funds) and enters into "wrapper" contracts issued by third-parties and invests in cash equivalents represented by shares in a money market fund. The fund's NAV is classified within Level 2 of the valuation hierarchy because the fund's NAV 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. The Plan's investment in the fund is not subject to any withdrawal restrictions and distributions may be taken at any time. The Plan has no unfunded commitments relating to the fund at December 31, 2011 or 2010.

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.

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

		Decembe	er 31, 2011	
	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	\$ 76,993	\$ —	\$ —	\$ 76,993
Balanced funds	28,354		—	28,354
Fixed income funds	17,775		—	17,775
Totals	123,122			123,122
Common collective trust	_	38,305	_	38,305
MSA common stock fund	1,204			1,204
Total investments	124,326	38,305		162,631
		December 31, 2010		
	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:		<u> </u>		

Registered investment companies:				
Equity funds	\$ 84,448	\$ —	\$ —	\$ 84,448
Balanced funds	26,780		—	26,780
Fixed income funds	14,568			14,568
Totals	125,796		—	125,796
Common collective trust		35,256	_	35,256
MSA common stock fund	750			750
Total investments	126,546	35,256		161,802

The Plan did not hold any Level 3 investments as of or during the years ended December 31, 2011 or 2010.

Note 5 – Tax Status of the Plan

The Internal Revenue Service informed the Company by letter dated December 20, 2011, 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.

Accounting principles generally accepted in the United States of America require Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the organization has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service. The Plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2011 there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan administrator believes it is no longer subject to income tax examinations for years prior to 2008.

Note 6 – Forfeited Accounts

At December 31, 2011 and 2010, forfeited non-vested accounts were not significant. These balances are included in the common collective trust. Forfeited account balances 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. During the years ended December 31, 2011 and 2010, the use of forfeited non-vested accounts reduced Plan expenses by \$22 and \$66, 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	Fair Value at December 31	
	2011	2010	
Fidelity Managed Income Portfolio II	\$ 38,305	\$ 35,256	
Fidelity Contrafund	18,617	20,562	
Spartan U.S. Bond Index Fund*	14,772	14,366	
T. Rowe Price Dividend Growth Advantage Fund	14,263	14,216	
Fidelity Diversified International Fund	9,637	12,377	

* Effective April 28, 2011, the Fidelity U.S. Bond Index fund changed its name to the Spartan U.S. Bond Index Fund.

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

	For the yea Decemb	
	2011	2010
Registered investment companies	(\$ 4,697)	\$13,313
MSA common stock fund	68	129
	(4,629)	13,442

Note 9 - Subsequent Events

The Plan was amended to merge the General Monitors Savings for Retirement Plan ("GMI Plan") into the Plan effective January 3, 2012. General Monitors, Inc. and its affiliated companies ("GMI") are wholly-owned subsidiaries of MSA. On January 3, 2012, eligible employees of GMI became Participants in the Plan. Under the terms of the amendment, participant accounts in the GMI Plan were generally considered to be 100% vested on January 2, 2012. GMI Plan assets of approximately \$8.7 million were transferred into the Plan on January 3, 2012. The amendment retains certain hardship withdrawal and loan features of the GMI Plan with regard to GMI Plan participant account balances as of January 2, 2012.

Note 10 - 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:

	December 31	
	2011	2010
Net assets available for benefits per the financial statements	\$161,701	\$161,454
Adjustment from contract value to fair value for fully benefit- responsive investment		
contracts	930	348
Net assets available for benefits per the Form 5500	162,631	161,802

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

	For the year ended December 31	
	2011	2010
Net increase in net assets available for benefits per the financial statements	\$247	\$16,746
Change in adjustment from fair value to contract value for fully benefit-responsive investment		
contracts	582	806
Net increase in net assets available for benefits per Form 5500	829	17,552

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, 2011 (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	**	\$ 5,602
	Artisan Mid Cap Investor	Registered Investment Company	**	6,118
*	Fidelity Contrafund	Registered Investment Company	**	18,617
*	Fidelity Diversified International Fund	Registered Investment Company	**	9,637
*	Fidelity Equity Income Fund	Registered Investment Company	**	3,949
*	Fidelity Freedom K 2000	Registered Investment Company	**	349
*	Fidelity Freedom K 2005	Registered Investment Company	**	24
*	Fidelity Freedom K 2010	Registered Investment Company	**	2,852
*	Fidelity Freedom K 2015	Registered Investment Company	**	4,198
*	Fidelity Freedom K 2020	Registered Investment Company	**	5,271
*	Fidelity Freedom K 2025	Registered Investment Company	**	2,039
*	Fidelity Freedom K 2030	Registered Investment Company	**	2,771
*	Fidelity Freedom K 2035	Registered Investment Company	**	1,125
*	Fidelity Freedom K 2040	Registered Investment Company	**	2,217
*	Fidelity Freedom K 2045	Registered Investment Company	**	655
*	Fidelity Freedom K 2050	Registered Investment Company	**	777
*	Fidelity Freedom K Income	Registered Investment Company	**	623
*	Fidelity Magellan Fund	Registered Investment Company	**	6,018
*	Fidelity Puritan Fund	Registered Investment Company	**	5,453
*	Fidelity Total Bond	Registered Investment Company	**	3,003
	RidgeWorth Mid-Cap Value Equity Fund	Registered Investment Company	**	1,528
	Spartan 500 Index	Registered Investment Company	**	7,836
	Spartan Extended Market Index Fund	Registered Investment Company	**	3,226
	Spartan Intl Index Inv	Registered Investment Company	**	199
	Spartan U.S. Bond Index Fund	Registered Investment Company	**	14,772
	T.Rowe Price Dividend Growth Advantage Fund	Registered Investment Company	**	14,263
	Total Registered Investment Companies			123,122
*	Fidelity Managed Income Portfolio II	Common/Collective Trust	**	38,305
*	MSA Common Stock Fund		**	1,204
	Total			162,631

* 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.

June 15, 2012

MSA RETIREMENT SAVINGS PLAN

By: /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 15, 2012 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 15, 2012, appearing in this Annual Report on Form 11-K of the MSA Retirement Savings Plan for the year ended December 31, 2011.

/s/ ParenteBeard LLC Pittsburgh, Pennsylvania June 15, 2012