# UNITED STATES 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

For the fiscal year ended December 31, 2012

OR

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

For the transition period from \_\_\_\_\_\_ to \_\_\_\_\_

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:

MSA RETIREMENT SAVINGS PLAN

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

MINE SAFETY APPLIANCES COMPANY 1000 Cranberry Woods Drive Cranberry Township, PA 16066

### MSA RETIREMENT SAVINGS PLAN FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULE

#### **Table of Contents**

Report of Independent Registered Public Accounting Firm	3
Statements of Net Assets Available for Benefits as of December 31, 2012 and 2011	4
Statements of Changes in Net Assets Available for Benefits for the Years Ended December 31, 2012 and 2011	5
Notes to Financial Statements	6
Supplemental Schedule of Assets (Held at End of Year)*	13
<u>Signature</u>	14
Exhibit Index	15
* Other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.	

#### 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, 2012 and 2011, 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, 2012 and 2011, 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, 2012 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 11, 2013

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

	Decem	December 31,	
	2012	2011	
Investments, at fair value:			
Registered investment companies	\$150,408	\$123,122	
Common collective trust	40,254	38,305	
MSA common stock fund	1,837	1,204	
Total investments	192,499	162,631	
Notes receivable from participants	321		
Total assets	192,820	162,631	
Adjustment from fair value to contract value for fully benefit-responsive investment contracts within the common collective trust	(1,092)	(930)	
Net assets available for benefits	191,728	161,701	

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)

		For the year ended December 31,	
	2012	2011	
Investment income (loss):			
Net appreciation (depreciation) in fair value of investments	\$ 14,134	\$ (4,629)	
Interest	512	530	
Dividends	4,364	2,998	
Total investment income (loss)	19,010	(1,101)	
Interest income on notes receivable from participants	33	_	
Participants' contributions	10,017	8,091	
Employer contributions	3,954	3,461	
	33,014	10,451	
Distributions to participants	12,131	10,182	
Administrative expenses	21	22	
	12,152	10,204	
Net increase prior to plan transfer	20,862	247	
Balance transfer from General Monitors Savings for Retirement Plan	9,165		
Net increase	30,027	247	
Net assets available for benefits:			
Beginning of year	161,701	161,454	
End of year	191,728	161,701	

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

#### MSA RETIREMENT SAVINGS PLAN NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2012 AND 2011 (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 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 \$9,165 (including participant loans of \$451) were transferred into the Plan on January 3, 2012. The amendment retains certain hardship withdrawal and in-service withdrawal features of the GMI Plan with regard to GMI Plan participant account balances as of January 2, 2012.

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 generally does not permit hardship withdrawals, with the exception of certain predecessor plan balances.

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. On January 3, 2012, GMI Plan participant loan balances of \$451 were transferred into the Plan. The loans bear interest at an annual rate of approximately 8.5% and are collectible over various settlement periods through November 2016. Participant loans held at December 31, 2012 were \$321. There were no participant loans held at December 31, 2011.

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.

*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.

*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 1.3% and 1.6% at December 31, 2012 and 2011, 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 required to be valued at fair value, however, contract value is the relevant measurement to the extent it is fully benefitresponsive 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.

*Notes receivable from Participants* – Notes receivable from Participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Delinquent notes receivable from Participants are recorded as a distribution.

*Distributions to Participants* – Distributions to Participants are recorded when paid. At December 31, 2012 and 2011, 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 pronouncement* – 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 was effective for the Plan beginning in 2012. The adoption of the ASU did 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 \$21 and \$22 for the years ended December 31, 2012 and 2011, respectively.

Certain Plan investments are publicly traded common stock of the Company. During 2012, the Plan purchased 16,840 shares of Company stock at an aggregate cost of \$634 and sold 10,254 shares of Company stock for total proceeds of \$382. 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. The Plan received \$54 and \$28 in dividends on Company stock during 2012 and 2011, 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, 2012 and 2011.

*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, 2012 or 2011.

*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:

		December	31, 2012	
	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	\$ 90,555	\$ —	\$ —	\$ 90,555
Balanced funds	39,558	—	—	39,558
Fixed income funds	20,295			20,295
Total	150,408			150,408
Common collective trust	_	40,254		40,254
MSA common stock fund	1,837			1,837
Total investments	152,245	40,254		192,499
		December	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:		<u> </u>		
Equity funds	\$ 76,993	\$ —	\$ —	\$ 76,993
Balanced funds	28,354	—	—	28,354
Fixed income funds	17,775	—	—	17,775
Total	123,122			123,122
Common collective trust	_	38,305		38,305
MSA common stock fund	1,204	—	—	1,204
	124,326	38,305		162,631

The Plan did not hold any Level 3 investments as of or during the years ended December 31, 2012 or 2011.

Note 5 – Tax Status of the Plan

The Internal Revenue Service informed the Company by letter dated October 2, 2012, 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, 2012 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. There are currently no audits for any tax periods in progress, however, the Internal Revenue Service has advised the Company that it intends to perform an examination of the Plan for the year ended December 31, 2011. The Plan administrator believes it is no longer subject to income tax examinations for years prior to 2009.

#### Note 6 - Forfeited Accounts

At December 31, 2012 and 2011, 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 pay Plan expenses and then to reduce future Company matching contributions. During the years ended December 31, 2012 and 2011, forfeited non-vested accounts were used to pay Plan administrative expenses totaling \$21 and \$22, 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,	
	2012	2011	
Fidelity Managed Income Portfolio II	\$ 40,254	\$ 38,305	
Fidelity Contrafund K	21,390	18,617	
T. Rowe Price Dividend Growth Advantage Fund	15,920	14,263	
Spartan U.S. Bond Index Is	14,932	14,772	
Fidelity Diversified International K	11,557	9,637	

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,	
	2012	2011	
Registered investment companies	\$13,718	\$(4,697)	
MSA common stock fund	416	68	
	14,134	(4,629)	

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:

	December 31,	
	2012	2011
Net assets available for benefits per the financial statements	\$191,728	\$161,701
Adjustment from contract value to fair value for fully benefit-responsive investment		
contracts	1,092	930
Net assets available for benefits per the Form 5500	192,820	162,631

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,	
	2012	2011
Net increase in net assets available for benefits per the financial statements	\$30,027	2011 \$247
Change in adjustment from fair value to contract value for fully benefit-responsive investment		
contracts	162	582
Net increase in net assets available for benefits per Form 5500	30,189	829

#### 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, 2012

## (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 I	Registered Investment Company	**	\$ 5,610
	Artisan Mid Cap Val Is	Registered Investment Company	**	8,767
*	Fidelity Contrafund K	Registered Investment Company	**	21,390
*	Fidelity Diversified International K	Registered Investment Company	**	11,557
*	Fidelity Equity Income K	Registered Investment Company	**	4,544
*	Fidelity Freedom K 2000	Registered Investment Company	**	396
*	Fidelity Freedom K 2005	Registered Investment Company	**	50
*	Fidelity Freedom K 2010	<b>Registered</b> Investment Company	**	3,548
*	Fidelity Freedom K 2015	Registered Investment Company	**	6,056
*	Fidelity Freedom K 2020	Registered Investment Company	**	7,127
*	Fidelity Freedom K 2025	Registered Investment Company	**	2,970
*	Fidelity Freedom K 2030	Registered Investment Company	**	4,538
*	Fidelity Freedom K 2035	Registered Investment Company	**	2,290
*	Fidelity Freedom K 2040	Registered Investment Company	**	3,385
*	Fidelity Freedom K 2045	Registered Investment Company	**	1,295
*	Fidelity Freedom K 2050	Registered Investment Company	**	1,340
*	Fidelity Freedom K 2055	Registered Investment Company	**	83
*	Fidelity Freedom K Income	Registered Investment Company	**	551
*	Fidelity Magellan K	Registered Investment Company	**	7,121
*	Fidelity Puritan K	<b>Registered Investment Company</b>	**	5,929
*	Fidelity Total Bond	Registered Investment Company	**	5,363
	RidgeWorth Mid-Cap Value I	Registered Investment Company	**	1,779
	Spartan 500 Index Inst	Registered Investment Company	**	9,566
	Spartan Extended Market Index Adv	Registered Investment Company	**	3,866
	Spartan Intl Index Adv	Registered Investment Company	**	435
	Spartan U.S. Bond Index Is	Registered Investment Company	**	14,932
	T.Rowe Price Dividend Growth Advantage Fund	Registered Investment Company	**	15,920
	Total Registered Investment Companies			150,408
*	Fidelity Managed Income Portfolio II	Common/Collective Trust	**	40,254
*	MSA Common Stock Fund	Employer Securities	**	1,837
*	Participating loans	Interest rates of approximately 8%		321
	Total			192,820

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

\*\* Cost omitted for participant directed investments.

## SIGNATURE

*The Plan.* 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 11, 2013

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 11, 2013 is filed herein.

#### CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement No. 333-121196 of Mine Safety Appliances Company on Form S-8 of our report dated June 11, 2013, appearing in this annual report on Form 11-K of the MSA Retirement Savings Plan for the year ended December 31, 2012.

/s/ ParenteBeard LLC Pittsburgh, Pennsylvania June 11, 2013