



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

October 9, 2012

Via E-Mail

Mr. William G. Barker III
Chief Financial Officer
Federal Signal Corporation
1415 West 22nd Street
Oak Brook, Illinois 60523

**Re: Federal Signal Corporation
Form 10-K for the Year Ended December 31, 2011
Filed March 14, 2012
Form 10-Q for the Quarter Ended June 30, 2012
Filed August 3, 2012
Form 8-K Dated September 4, 2012
Filed September 7, 2012
File No. 001-06003**

Dear Mr. Barker:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by confirming that you will revise your document in future filings (unless otherwise indicated as in comment 9 below) and providing any requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your Form 8-K filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2011

Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations, page 16

Safety and Security Systems, page 19

1. We note that net sales increased \$6.9 million or 3.2% compared to the prior year period as a result of increases in sales of U.S. industrial products, mining products, and U.S. export products to Asia and Latin America, which were partially offset by a soft U.S. police market as well as weakness in Europe and public safety markets. In future filings,

in addition to quantification, ensure that each of the identified underlying cause of material increases or decreases is adequately analyzed. For example, for material increases or decreases due to changes in the mix of products sold, sales prices, productivity levels, etc., consider disclosing quantitative analysis of the number of units sold by product along with the selling price of the product, or other relevant measures, in the current period versus the prior period and address the reasons for any significant changes between the periods. In addition to indicating the product line that accounts for the decrease or increase in sales, please considering explain why you believe that decrease/increase occurred and your expectations for future sales. See Item 303 of Regulation S-K.

2. Please revise to discuss and analyze net sales and cost of sales (rather than gross profit margins) separately for each segment. Because margins are impacted by both net sales and cost of sales, we believe a separate discussion of cost of sales results is appropriate.

Fire Rescue, page 20

3. Please expand your discussion of cost of sales and operating income to quantify and discuss the significant cost components within operating income such as product costs, product development costs, marketing costs, depreciation and amortization, and any other significant components that would enable readers to understand your business better. For example, you state that operating income for the Fire Rescue segment decreased \$2.8 million in 2011 due to lower sales volumes and unfavorable product mix, partially offset by favorable currency impacts, but you do not quantify these changes or provide the actual cost figures necessary to put these changes in proper context.

Audited Financial Statements

Consolidated Statements of Operations, page 41

4. We note from your disclosure in Note 1 that in addition to the sale of products, you generate revenue from services such as repairs, equipment rentals, training, maintenance contracts, and implementation services. Please tell us the amount of revenue generated from the sale of services as opposed to the sale of product during each period presented in your financial statements. If the amount exceeds ten percent of your consolidated revenues, please revise to separately report revenue and cost of sales related to products and services on the face of the statements of operations. See Rule 5-03(b)(1) and (2) of Regulation S-X.

Notes to the Financial Statements

Note 9. Derivative Financial Instruments and Fair Value Measurements, page 67

5. We note your disclosures in Note 9 related to the fair value measurements for assets and liabilities measured at fair value on a recurring basis. Please revise to disclose the information required by ASC 820-10-50-5 for your assets and liabilities measured at fair value on a non-recurring basis such as the goodwill and intangible assets that were impaired during 2011 and 2010.

Note 10. Stock Based Compensation, page 70

6. We note that you have established a long term incentive plan for executive officers in which you grant performance share units. We also note that the fair value of these units is calculated using a Monte Carlo simulation model. Please revise to include the detailed assumptions used in the Monte Carlo model for each year in which grants of performance shares were made.

Note 13. Discontinued Operations, page 73

7. Please tell us and revise the notes to your financial statements to explain the nature of the \$15 million loss from discontinued operations that was recorded for the year ended December 31, 2010. In this regard, the detailed table in Note 13 appears to disclose total losses on discontinued operations of \$3 million for 2010. Please advise and revise.

Form 10-Q for the Quarter Ended June 30, 2012

Note 12. Discontinued Operations, page 19

8. We note your disclosure that on June 21, 2012 you announced you signed a definitive agreement to sell the FS Tech Group for \$110 million. We also note that the net assets held for sale with a carrying value of \$121.1 million were written down to fair value less costs to sell or \$97.6 million (fair value \$101 million and costs to sell of \$3.4 million). Please explain to us why a fair value of \$101 million was used in the valuation methodology when it appears you will be selling the net assets for \$110 million. Also, please explain to us why the net assets of discontinued operations on the balance sheet as of June 30, 2012 is only \$78.9 million.

Report on Form 8-K dated September 4, 2012

Item 9.01 Financial Statements and Exhibits

9. We note that you have included a pro forma statement of operations for the year ended December 31, 2011 giving effect to the disposal of the Federal Signal Technologies Group business as Exhibit 99.2 to your report on Form 8-K. As the operations disposed of have been accounted for as a discontinued operation in the Company's June 30, 2012 financial statements included in your recent quarterly report on Form 10-Q, please revise to also include pro forma statements of operations for the other audited periods included in your most recent annual report on Form 10-K (i.e., the years ended December 31, 2010

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and 2009) in an amendment to your report on Form 8-K. Your report on Form 8-K should also be revised to include a pro forma balance sheet as of June 30, 2012, giving effect to the disposition transaction. Refer to the guidance outlined in Rule 11-02 of Regulation S-X.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Claire Erlanger at (202) 551-3301 if you have questions regarding comments on the financial statements and related matters. You may also contact me at (202) 551-3813.

Sincerely,

/s/ Linda Cvrkel

Linda Cvrkel
Branch Chief