



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3561

January 16, 2009

Via Fax & U.S. 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, 2007
Filed February 27, 2008
Form 10-Q for the quarter ended September 30, 2008
Filed October 31, 2008
File No. 001-06003

Dear Mr. Barker:

We have reviewed your response letter dated January 5, 2009 and have the following comments. Unless otherwise indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Please respond to confirm that such comments will be complied with, or, if certain of the comments are deemed inappropriate, advise the staff of your reason. Your response should be submitted in electronic form, under the label "corresp" with a copy to the staff. Please respond within ten (10) business days.

General

1. In connection with responding to our comments, please provide, in writing, a 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.

Definitive Proxy Statement on Schedule 14A

Annual Cash Incentives, page 15

2. We note your response to prior comment 8; however, the causal connection between the disclosure of your Economic Value improvement goals and any competitive harm is not entirely clear. If you believe that your performance targets may be omitted due to the risk of competitive harm, please provide additional detailed analysis in support of this conclusion. We request that you address, with greater specificity, how the disclosure of performance targets might allow your competitors to extrapolate sensitive information about the company's earning growth and capital strategies. Please describe how performance targets for the company and its business units, along with the company's other publically available information, might allow your competitors to acquire information relating to your past or present business plan or provide insight regarding your business strategies. Discuss how a competitor might deconstruct the target numbers to ascertain confidential commercial or financial information. Refer to Instruction 4 of Item 402(b) of Regulation S-K.

Long-Term Equity Incentives, page 16

3. We note your disclosure to previous comment 9; however, in future filings please state whether you use subjective criteria, such as an executive's level of responsibility, prior experience and individual performance, as well as competitive market data, to determine the overall value of equity incentive awards you grant to your executive officers and, if so, provide additional disclosure of such criteria, including a discussion of the manner in which qualitative inputs relating to individual performance are translated into objective pay determinations.

Mr. William G. Barker, III, CFO
Federal Signal Corporation
January 16, 2009
Page 3

You may contact Heather Clark at 202-551-3624 or Joe Foti at 202-551-3816 if you have questions regarding comments on the financial statements and related matters. If you have any questions regarding the legal comments, you may contact Michelle Lacko at (202) 551-3240. Please contact me at 202-551-3813 with any other questions.

Sincerely,

Linda Cvrkel
Branch Chief