

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

February 10, 2011

Dennis Zeitler Senior Vice President – Finance, Principal Financial and Accounting Officer Mine Safety Appliances Company 121 Gamma Drive Pittsburgh, Pennsylvania 15238

Re: Mine Safety Appliances Company

Form 10-K for the Year Ended December 31, 2009

Filed February 26, 2010 File No. 001-15579

Dear Mr. Zeitler:

We have reviewed your letter dated January 31, 2011 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 ten business days, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Dennis Zeitler Mine Safety Appliances Company February 10, 2011 Page 2

Form 10-K for the year ended December 31, 2009

Note 19 – Contingencies, page 58

- 1. Please refer to our prior comment 1. We note from your response that you cannot reasonably estimate possible incurred but not reported cumulative trauma product liability losses because you cannot predict the number of claims that may be brought against you in the future, the allegations in such claims, or the possible outcomes. Because of these uncertainties and for the reasons discussed in further detail in your response, you do not maintain a reserve for incurred but not reported cumulative trauma product liability claims. However, we also noted your discussion on page 7 of your November 24, 2010 response where you indicate that you maintain a reserve for uninsured product liability claims based on expected settlement losses for pending claims and an estimate of losses for unreported claims derived from experience, sales volumes, and other relevant information. Please reconcile these statements and explain to us the facts and circumstances, which allow you to estimate a reserve for unreported claims that are uninsured but do not allow you to estimate a reserve for unreported claims or a reserve for incurred but not reported claims for those claims that you believe to be insured. In that regard, please further explain to us the method(s) used by you in estimating the losses for unreported claims that are uninsured and explain why those methods cannot be applied in estimating a reserve for unreported claims that you believe to be insured.
- 2. Please refer to our prior comment 6. As previously requested, please revise your proposed disclosure to include the total damages alleged at each balance sheet date, the average costs per settled claim, the aggregate settlement costs to date, and the aggregate costs of administering and litigating the claims for all related product liability claims. Please see SAB Topic 5.Y. for guidance.

Acknowledgements

3. We note that the acknowledgments in response to prior comment 7 use the word "we" but the letter is signed by your chief financial officer. Please provide written acknowledgments from the company.

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

Dennis Zeitler Mine Safety Appliances Company February 10, 2011 Page 3

• 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 Andri Boerman at (202) 551-3645 or Julie Sherman at (202) 551-3640 if you have any questions regarding these comments. In this regard, do not hesitate to contact me at (202) 551-3212.

Sincerely,

Jeff Jaramillo Accounting Branch Chief