

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

January 12, 2011

Via U.S. Mail and Facsimile (212) 878-1877

Joseph C. Muscari, Chief Executive Officer Minerals Technologies Inc. The Chrysler Building 405 Lexington Avenue New York, New York 10174-0002

Re: Minerals Technologies Inc.

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

Definitive Proxy Statement on Schedule 14A

File No. 001-11430

Dear Mr. Muscari:

We have reviewed your response letter dated December 29, 2010 and have the following comment. Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response.

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

1. We note your response to comment two regarding your product quality standards. Please include a statement with your reserve estimates similar to your response in future filings.

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

Mr. Joseph C. Muscari Minerals Technologies Inc. January 12, 2011 Page 2

• 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 Chambre Malone at (202) 551-3262 or, in her absence, Andrew Schoeffler at (202) 551-3748 if you have questions regarding the above comment.

Sincerely,

Pamela Long Assistant Director