

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-4631

Mail Stop 4631

July 23, 2009

via U.S. mail and facsimile

John A. Sorel, Chief Financial Officer Minerals Technologies Inc. 405 Lexington Avenue New York, New York 10174-0002

RE: Minerals Technologies Inc.

Form 10-K for the Fiscal Year Ended December 31, 2008

Filed February 26, 2009

Definitive Proxy Statement on Schedule 14A

Filed April 6, 2009

Form 10-Q for the Fiscal Quarter Ended March 29, 2009

File No. 1-11430

Dear Mr. Sorel:

We have reviewed your response letter dated July 14, 2009, and have the following additional comments. Where indicated, we think you should revise your document in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is 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.

Form 10-K for the Fiscal Year Ended December 31, 2008

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>, page 16

Results of Operations, page 18

1. We note your response to comment 4 in our letter dated June 29, 2009. Please confirm to us that you intend to include your response in future filings. If you do not intend to include the information provided in your response, please provide us with your reasons for not providing the requested disclosures in future filings. If you do

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intend to include this information in future filings, please revise this information to state whether the cost savings realized is in line with the expected cost savings from when the plan was originally developed. If there is a material difference between the expected cost savings and the actual cost savings, please explain why. Please provide us with the revised disclosure you intend to include in future filings.

Critical Accounting Policies, page 23

Pension Benefits, page 26

2. We note your response to comment 11 in our letter dated June 29, 2009. As you have identified the estimate of your pension benefits as a critical accounting estimate to your consolidated financial statements, it is unclear why you have not agreed to provide investors with a better understanding as to how you estimated one of the material assumptions used to estimate your pension benefits. As previously requested, please include disclosure in future filings that explains to investors why you believe an expected return on plan assets of 8% is appropriate considering 85.7% of plan assets are fixed income securities as of December 31, 2008. In this regard, we note the explanation you provided to us in your response letter, which should be further expanded to state the average rate of return over the life of the plan as of the most recent period presented. Further, you should state when the composition of the assets did or is expected to return to your long-term investment strategy, which should also be included in your audited footnotes in future filings. As previously requested, please provide us with the disclosures you intend to include in future filings, or explain to us why you do not think this information is material to investors. Please also tell us the average rate of return over the life of the plan as of December 31, 2008.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter on EDGAR that keys your responses to our comments and provides any requested information. Detailed response letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

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You may contact Tracey Houser, Staff Accountant, at (202) 551-3736, or in her absence, Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691, or me at (202) 551-3355, if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Terence O'Brien Accounting Branch Chief