

Via Facsimile and U.S. Mail
Mail Stop 6010

May 22, 2007

Douglas S. Prince
Executive Vice-President Finance and
Chief Financial Officer
MDS, Inc.
2700 Matheson Blvd., East
Suite 300, West Tower
Mississauga, Ontario
L4W 4V9 Canada

Re: MDS, Inc.
Form 40-F for Fiscal Year Ended October 31, 2006
Filed January 26, 2007
File No. 001-15016

Dear Mr. Prince:

We have reviewed your April 18, 2007 response to our April 3, 2007 letter and have the following comment. In our comment, we 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.

Management's Discussion and Analysis

Critical accounting policies and estimates

Revenue recognition

1. In reviewing your response to prior comment three, we noted some inconsistencies between your revenue recognition policy within Management's Discussion and

Analysis and the accounting policy in the Notes to Financial Statements. For example:

- Your notes to the financial statements disclose that the majority of product revenue is recognized at time of shipment whereas MD&A discloses revenue is recognized at shipment or delivery;
- MD&A discloses products that require customer approval or acceptances but the notes to the financial statements do not include this disclosure; and,
- MD&A disclosure related to revenue recognition for long term contracts appears to be inconsistent with the disclosure in the financial statements. In MD&A you appear that you use the percentage of completion using an input (i.e. costs) measure whereas the financial statements appear to have the correct policy using the proportional performance method using an output measure.

Please provide in disclosure-type format a revenue recognition policy that is consistent throughout the filing and confirm that you will eliminate these inconsistencies in future filings.

* * * *

Please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your response to our comment and provides requested information. Detailed letters greatly facilitate our review. You should furnish the letter to us via EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filing includes all information required under the Securities and Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comment, please provide, in your letter, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- 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

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- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

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You may contact Todd Sherman, Staff Accountant, at 202-551-3665 or Don Abbott, Senior Accountant, at 202-551-3608 if you have questions regarding the comments. In this regard, do not hesitate to contact me, at 202-551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant