

Via Facsimile and U.S. Mail
Mail Stop 6010

April 3, 2007

James A. H. Garner
Chief Financial Officer
MDS, Inc.
Suite 300, West Tower
2700 Matheson Blvd., East
Mississauga, Ontario Canada L4W 4V9

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

Dear Mr. Garner:

We have reviewed your filing and have the following comments. We have limited our review of your filing to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In our comments, 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

Use of non-GAAP measures

1. You disclose in the "Management's Responsibility for Financial Reporting" section of the consolidated financial statements that "MD&A has been prepared in accordance with National Instrument 51-102 of the Canadian Securities Administrators, taking into consideration other relevant guidance, including Regulation S-K of the US Securities and Exchange Commission ("SEC")." Please explain to us if National Instrument 51-102 of the Canadian Securities Administrators requires or expressly permits the use of non-GAAP measures in MD&A. If you have

taken into consideration other relevant guidance, including Item 10 of Regulation S-K, please explain to us why it is meaningful to investors to include significant disclosure of non-GAAP measures such as: adjusted EBITDA (on a consolidated and segment basis), adjusted EBITDA margin, and adjusted EPS in your filing. For example, it appears that you have replaced a discussion of changes in your net income for the periods presented with a discussion of changes in adjusted EBITDA.

Contractual obligations

2. It appears that scheduled interest payments on long-term debt are not included in the table. If true, please provide us a revised table that includes interest obligations.

Critical accounting policies and estimates

Revenue recognition

3. You disclose that certain products may require formal approval or acceptance by your customers. Also, you state that approval may not be received until some time after the product has been shipped; however, you recognize revenue (less the minimal holdback amount subject to final approval) based on shipping terms that identify when the title has passed to the customer. Please tell us in disclosure-type format, the approval or acceptance provisions of your contracts to clarify why recognition of revenue upon shipment is appropriate under Canadian and US GAAP. For US GAAP please address the guidance in SAB Topic 13:A.3.b.

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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.

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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