

Mail Stop 3720

January 19, 2007

Mr. Gary L. Yancey
President, Chairman
and Chief Executive Officer
Applied Signal Corporation
400 West California Ave.
Sunnyvale, CA 94086

**Re: Applied Signal Corporation
Item 4.02 Form 8-K
Filed January 16, 2007
File No. 000-21236**

Dear Mr. Yancey:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document 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 more 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.

1. In your Form 8-K you state that the company's financial statements relating to fiscal years 2000 through 2005 should no longer be relied upon. Clarify for us whether previously issued financial statements for the first three quarters of 2006 also require restatement and should no longer be relied upon. If so, please revise your Form 8-K as appropriate.
2. Based on your disclosure, it appears that you do not intend to amend your previously issued financial statements, but to instead reflect the restatements in

your Form 10-K for the fiscal year ended October 31, 2006. Please confirm that you intend to comply with guidance recently released by the staff in a "Sample Letter Sent in Response to Inquiries Related to Filing Restated Financial Statements for Errors in Accounting for Stock Option Grants". This guidance can be found on the Commissions website at <http://www.sec.gov/divisions/corpfin/guidance/oilgasltr012007.htm>.

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As appropriate, please amend your filing and respond to these comments, via EDGAR, within five business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities 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 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
- 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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If you have any questions, please call Kenya Wright Gumbs at (202) 551-3373.

Sincerely,

Robert S. Littlepage
Accountant Branch Chief