



DIVISION OF  
CORPORATION FINANCE

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

January 14, 2011

**Via Facsimile ((410) 580-3170) and U.S. Mail**

Jason C. Harmon, Esq.  
DLA Piper LLP (US)  
6225 Smith Avenue  
Baltimore, MD 21209

**Re: Applied Signal Technology, Inc.  
Response letter filed on January 13, 2011 re: Schedule 14D-9 filed  
December 30, 2010  
SEC File No. 005-52819**

Dear Mr. Harmon:

We have limited our review of the filing to those issues we have addressed in our comment.

**Schedule 14D-9**

**Additional Information – Financial Projections, page 31**

1. We note your response to prior comment 2 and we reissue it. We note that the disclosure of projections is not required by Item 1015 of Regulation M-A as it relates to Schedule 14D-9. We also disagree with your policy argument. Please provide us with additional support for your statement that the required reconciliation is not available without unreasonable efforts. Alternatively, revise your disclosure to provide the reconciliation required by Rule 100(a) of Regulation G.

Please direct any questions to me at (202) 551-3619. You may also contact me via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

Daniel F. Duchovny  
Special Counsel  
Office of Mergers and Acquisitions