

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

December 16, 2010

Via Facsimile (212) 403-2000 and U.S. Mail

Robert H. Young, Jr.
Senior Vice President, General Counsel and Secretary
Airgas, Inc.
259 North Radnor-Chester Rd.
Radnor, PA 19087-5283

Re: Airgas, Inc.

Amendments to Schedule 14D-9 Filed December 13, 2010

Amendment to Schedule 14D-9

Filed November 2, 2010

File No.: 5-38422

Dear Mr. Young:

We have limited our review of the above referenced filings to those issues we have addressed in our comments.

Schedules 14D-9/A

1. Reference is made to the authorized statement dated December 10, 2010 of director, Lumpkins, Clancey and Miller denying charges of division on the Board. Based on the contents of letters dated December 7 and December 10, 2010 that were exchanged between these directors and the Chairman of the Airgas Board, it appears that further clarification of the directors' December 10th statement is warranted. Please amend the "Background of the Offer" discussion in the Schedule 14D-9 and provide material information to shareholders about any meetings, discussions and material developments regarding the offer that occurred from November 1, 2010 to the present. Specifically, please file revised disclosure that addresses each of what appears to be divisive issues outlined in the letters and address the allegation in the December 7, 2010 letter that the three members' viewpoints on the appropriate price per share were not represented in the appropriate context in the November 2, 2010 letter that had been sent to Air Products. We may have further comment.

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> 2. We refer to your response letter to staff comments conveyed to you on September 14, 2010. In your response, you note that despite immense pressure from arbitrageurs, the Company and its representatives did not make more specific commitments or disclose more specific terms regarding share repurchases and other possible transactions prior to the annual meeting than what had already been publicly disclosed in its filings. The staff has received excerpts of the October 6, 2010 trial transcript of direct testimony of Mr. McCausland. The testimony references Mr. McCausland's and other directors' discussions with arbitrageurs regarding a possible \$70 per share starting point for negotiations with Air Products. With a view toward providing revised disclosure of the "Background of the Offer" discussion, please reconcile your response dated November 14, 2010 with the testimony provided by Mr. McCausland on October 6, 2010. Also, please supplementally advise us of whether Airgas or its representatives have had any discussions with shareholders in recent weeks in which specific terms as to the value of Airgas on a per share basis have been discussed. We may have further comment.

As appropriate, please amend your filing in response to these comments. You may wish to provide us with marked copies of the amended filing to expedite our review. Please furnish a cover letter with your amended filing that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amended filing and responses to our comments.

Please direct any questions to me at (202) 551-3757. 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,

Mellissa Campbell Duru Special Counsel Office of Mergers & Acquisitions

Cc (via facsimile): David Katz, Esq.

Wachtell, Lipton, Rosen & Katz