



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

Mail Stop 4631

June 22, 2009

Via U.S. mail and facsimile

Mr. Robert M. McLaughlin
Senior Vice President and Chief Financial Officer
Airgas, Inc.
259 North Radnor-Chester Road; Suite 100
Radnor, PA 19087-5283

**RE: Form 10-K for the fiscal year ended March 31, 2009
File No. 001-09344**

Dear Mr. McLaughlin:

We have reviewed your filings and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. If you disagree with a comment, 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 information so we may better understand your disclosure. After reviewing this information, we may or may not 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

FORM 10-K FOR THE YEAR ENDED MARCH 31, 2009

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. These revisions should be included in your future filings, including your interim filings.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Estimates, page 40

2. You disclose on pages 41 and 42 that you perform your annual goodwill impairment tests as of October 31 of each year and that your sensitivity analysis indicated a hypothetical 10% decrease in the fair value of each reporting unit as of October 31, 2008 would have triggered the need to perform additional step 2 analyses for three of your reporting units. In light of the weak fourth quarter sales environment for fiscal 2009 as described starting on page 20, please tell us how you considered whether an interim impairment analysis as of March 31, 2009 was appropriate for the three reporting units at risk for additional analyses based on your October 31, 2008 assessment. Please tell us the qualitative and quantitative factors you considered (including the factors listed in paragraph 8 of SFAS 144) in determining that either no interim analysis was necessary or that an interim analysis was performed and did not result in any impairment losses as of March 31, 2009.

Consolidated Financial Statements

Note 11 – Derivative Instruments and Hedging Activities, page F-30

3. Please either revise your filing to provide the disclosures required by paragraph 3(b) of SFAS 161 or confirm to us that your derivative instruments have no credit-risk related contingent features.
4. It appears that your presentation of the components of net change in fair value of interest rate swap agreements in the Statement of Stockholders' Equity for the year ended March 31, 2009 is not consistent with your tables on page F-31 demonstrating the effect of derivative instruments on the Consolidated Statements of Earnings. For example, it appears that the \$8.3 million gain recognized in other comprehensive income for interest rate swaps is net of the \$13 million in losses reclassified from accumulated other comprehensive income into income for the year ended March 31, 2009. Since it appears you have chosen the net presentation for all classifications of other comprehensive income as described in paragraph 20 of SFAS 130, please revise the table on page F-31 titled "Amount of Gain (Loss) Recognized in OCI on Derivative" to disclose the gross changes in other comprehensive income as a result of interest rate swaps.
5. Please disclose the components of accumulated other comprehensive income (loss) as of each balance sheet date as required by paragraph 26 of SFAS 130.

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Please respond to these comments within 10 business days, or tell us when you will provide us with a response. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please furnish your response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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 their 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
- 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.

If you have any questions regarding these comments, please direct them to Lisa Haynes, Staff Accountant, at (202) 551-3424 or, in her absence, to the undersigned at (202) 551-3769.

Sincerely,

Rufus Decker
Accounting Branch Chief