



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

July 20, 2006

Room 7010

James S. Sawyer
Senior Vice President and Chief Financial Officer
Praxair, Inc.
39 Old Ridgebury Road
Danbury, Connecticut 06810

Re: Praxair, Inc.
Form 10-K for Fiscal Year Ended December 31, 2005
Forms 10-Q for the Fiscal Quarter Ended March 31, 2006
File No. 001-11037

Dear Mr. Sawyer:

We have reviewed your response letter dated June 30, 2006 and have the following comment. Where indicated, we think you should revise your document or revise your document in future filings in response to this comment. 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 our comment, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Form 10-K for Fiscal Year Ended December 31, 2005

Note 4. Segment Information, page 49

1. We have reviewed your response to prior comment 2 as well as the financial information that is regularly reviewed by your CODM. Based on your response, we note that due to the size of your North American industrial gases business and to facilitate day-to-day control and decision making, you established a management structure for your industrial gases business consisting of six business units within North America (NAIG, Mexico, PDI, Healthcare Services, Electronics and GSS) and that these business units are based on either distribution methods and/or market segments. We also note that the financial reports that are regularly reviewed by your CODM do not appear to have discrete financial information for your North American segment as presented in Note 4. Rather

James S. Sawyer
Praxair, Inc.
July 20, 2006
Page 2

these financial reports include discrete financial information for each of the six business units identified above. These units therefore appear to be operating segments as defined by paragraph 10 of SFAS 131. Based on your CODM reports, it is not clear to us that these units are economically similar such that aggregation of these units pursuant to paragraph 17 of SFAS 131 is appropriate. In this regard, we note significant differences in sales growth and operating growth amongst these business units. Please provide us with an analysis that addresses the economic differences amongst your business units and that supports your basis for aggregating these business units (operating segments) into your North American reportable segment. Otherwise, tell us how you will revise your segment reporting to fully comply with the disclosure requirements of SFAS 131.

As appropriate, please respond to this comment within 10 business days or tell us when you will provide us with a response. Please submit all correspondence and supplemental materials on EDGAR as required by Rule 101 of Regulation S-T. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Melissa Rocha at (202) 551-3854, Jeanne Baker at (202) 551-3691 or me at (202) 551-3255 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Nili N. Shah
Branch Chief