



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

Mail Stop 7010

December 18, 2006

via U.S. mail and facsimile

Mr. Steven L. Fritze
Executive Vice President and Chief Financial Officer
Ecolab Inc.
370 Wabasha Street North
St. Paul, MN 55102

**RE: Ecolab Inc.
Form 10-K for Fiscal Year Ended December 31, 2005
Filed February 28, 2006
File No. 001-09328**

Dear Mr. Fritze:

We have reviewed the financial statements and Management's Discussion and Analysis in your filing and have the following 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 supplemental 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 filings. 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.

Segment Disclosure

1. We note that you currently disclose three reportable segments; United States Cleaning & Sanitizing segment, United States Other Services segment, and International segment. In consideration that sales in your United States Cleaning and Sanitizing segment represented 43% of your total consolidated net sales for both December 31, 2005 and December 31, 2004, we note the following:
 - You indicate that your United States Cleaning & Sanitizing segment is comprised of eight divisions.

- We note your disclosure on page 3 that you provide products and services to a variety of different types of customers that are hotels and restaurants, healthcare and educational facilities, quick-service units, grocery stores, commercial and institutional laundries, light industry, dairy plants and farms, food and beverage processors, pharmaceutical and cosmetics facilities and vehicle wash industry.
- Your sales growth information presented on page 25 indicates significant differences in net sales from the prior year in each of the eight businesses compared to each other that you have aggregated into your United States Cleaning & Sanitizing segment.
- You further disclose on page 25 that you experienced various sales growth among the eight businesses. For example, you disclose you experienced double digit growth in your Kay, Healthcare and Vehicle divisions, good growth in your Institutional and Food & Beverage divisions, and Professional Products sales were flat.

We further note that sales in your International segment represented 49% and 51% of your total consolidated net sales for the years ended December 31, 2005 and December 31, 2004, respectively. We also note that your International segment serves a number of markets for which we would expect economic performance to differ. Specifically, we note the following:

- On page 6, you disclose that your largest international operations are located in Europe, Asia Pacific, Latin America, and Canada, with smaller operations in Africa and the Middle East.
- Your disclosure on page 6 indicates that you customize your products and services to meet unique local requirements.
- You disclose your sales growth information on page 25 that demonstrates a decrease in sales growth in Europe, similar growth between Asia Pacific and Canada, and significant growth in Latin America.
- Your operating segment performance discussion on page 26 that discloses your sales in Europe have been affected by an overall weak economy in Europe, sales in Asia Pacific were driven primarily by growth in East Asia, and you experienced double-digit sales growth in Latin America.
- There are several executive vice presidents that manage various international regions based on your disclosures on page 11.

We note that you have aggregated Pest Elimination and GCS Service into your United States Other Services segment. You disclose on page 48 of Exhibit 13 that your pest elimination business in the United States is a part of your United States Other Services segment, while your International pest elimination business is a part of your International segment. We further note you disclose in Note 2 on page 36 that GCS Service is currently reporting losses.

In light of these disclosures, it is unclear to us how you have determined that you have three reportable segments. Please identify for us your operating segments pursuant to paragraph 10 of SFAS 131. As part of your response, please identify your chief operating decision maker and provide us with copies of the relevant financial reports reviewed by your chief operating decision maker.

Please also tell us in detail how you determined that your operating segments met each of the criteria in paragraph 17 of SFAS 131 for aggregation. To the extent you are aggregating operating segments because you believe your segments are economically similar, please provide us with an analysis that includes historical revenues, gross profits, gross profit margins, operating profits, and operating profit margins, along with any other information you believe would be useful for each of your operating segments to help us understand how these operations are economically similar. Please also address any differences in the trends these financial indicators depict (e.g. if operating income is decreasing for one operation and increasing for another).

Item 1A. Risk Factors, page 14

2. We note that you have provided the risks and uncertainties that may affect your operating results and business performance. In future filings, please expand this section of your filing to provide a discussion of each of these risks and uncertainties. Refer to Item 1A of Form 10-K and Item 503(c) of Regulation S-K.

Consolidated Statement of Income, page 31

3. We note the following disclosures regarding your business:
 - Your disclosures on page 3 under Business states that you develop and market premium products and services for the hospitality, foodservice, healthcare and industrial markets.
 - On page 3, you disclose that your United States Cleaning and Sanitizing segment is comprised of eight divisions which provide cleaning and sanitizing services to United States markets.
 - You disclose on page 5 that your pest elimination division provides services for the detection, elimination and prevention of pests and GCS Service provides commercial equipment repair services and installed parts.
 - On page 6, your disclosures indicate that you customize your products and services to meet unique local requirements.

In future filings, please breakout your net sales and revenues from services separately and the related cost of goods sold from cost of services. Refer to paragraphs (b)1-2 of Item 5-03 of Regulation S-X.

16. Quarterly Financial Data, page 50

4. We note that your 4th quarter operating results for both 2005 and 2004 have been unusually low relative to your second and third quarter results. Your current disclosures are unclear as to why this has occurred. Please explain to us and include a discussion in your MD&A in future filings why consolidated gross margins and your United States Cleaning and Sanitizing segment operating margins are lowest in the 4th quarter. Refer to paragraph 31 of APB 28.

* * * *

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 supplemental response letter that keys your response to our comments and provide any requested supplemental information. Detailed letters greatly facilitate our review. Please submit your supplemental 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 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 filings or in response to our comments on your filings.

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If you have any questions regarding these comments, please direct them to Ryan Rohn, Staff Accountant, at (202) 551-3739 or, in his absence, to Al Pavot, Staff Accountant, at (202) 551-3738, or to the undersigned at (202) 551-3689.

Sincerely,

John Hartz
Senior Assistant Chief Accountant