Via Facsimile and U.S. Mail Mail Stop 6010

March 5, 2007

Mr. Walter C. Herlihy Chief Executive Officer and President Repligen Corporation 41 Seyon Street Building 1, Suite 100 Waltham, MA 02453

**Re:** Repligen Corporation

Form 10-K for Fiscal Year Ended March 31, 2006

File No. 0-14656

Dear Mr. Herlihy:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In our comments, we ask you to provide us with more information so we may better understand your disclosure. After reviewing this information, we may 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 comment or 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 fiscal year ended March 31, 2006

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

# Critical Accounting Estimates, page 20

1. Your revenue recognition disclosure does not appear to disclose the judgments you must make each period and the uncertainties surrounding those judgments. In addition, your revenue recognition, inventory reserve and accrued liabilities disclosures do not appear to discuss the potential variability of reasonably likely changes in your underlying estimates nor do your disclosures appear to discuss how accurate your estimates have been in prior periods. Please provide us in a disclosure-type format, revised discussions of your critical accounting estimates that discuss specifically the judgments you make, why your estimates or

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assumptions bear the risk of change, the impact on your financial results, financial condition and liquidity of reasonably likely changes in the underlying assumptions and the extent to which actual subsequent experience has differed materially from your initial estimates in each of the periods presented. Please see FR-72.

### Results of Operations, page 22

- 2. Please provide us in a disclosure-type format, revised discussions of your revenue fluctuations from period to period that clearly differentiate between volume and pricing changes as required by Item 303(a)(3)(iii) of Regulation S-K.
- 3. Although you identify the nature of the expense items associated with your fluctuations in operating expenses, you do not appear to discuss the underlying causes of those changes. The following lists examples of your disclosure and is not intended to be exhaustive:
  - higher clinical trial expenses of \$192,000 (in your R&D disclosure);
  - increased personnel costs of \$124,000 (in your R&D disclosure);
  - increased license expense of \$59,000 (in your R&D disclosure);
  - clinical material decreased by \$124,000 (in your R&D disclosure);
  - increased personnel expenses of \$291,000 (in your SG&A disclosure);
  - increased professional expenses of \$271,000 (in your SG&A disclosure); and
  - increased legal expenses of \$176,000 (in your SG&A disclosure).

Please provide us in a disclosure-type format revised operating expense discussions that clearly explain the underlying causes of all the various increase or decreases you identify. For example, please explain why legal expenses increased by \$176,000 in fiscal 2006.

#### **Financial Statements**

## Note 3: Long-Lived Assets, page F-13

4. You disclose that you recorded an impairment charge in fiscal 2004 related to a license intangible with ChiRhoClin, Inc. resulting from a dispute with the licensor and that you fully amortized the remaining intangible asset in fiscal 2005. In Note 11 on page F-18, in Business on page 8 and in Legal Proceedings on page 17, you disclose that you entered into a settlement agreement with ChiRhoClin in May 2005 whereby you are entitled to continue to market SecreFlo for the next several years and ChinRhoClin will be obligated to provide you supplies of SecreFlo for the next few years. Please explain to us how you determined your impairment and why you have no remaining intangible asset at March 31, 2005 when you apparently continue to sell SecreFlo. In your response, please explain to us why you do not disclose the exact or estimated date through which you may market SecreFlo and an exact or estimated date through which you expect to

Mr. Walter C. Herlihy Repligen Corporation March 5, 2007 Page 3

purchase SecreFlo from ChiRhoClin. In addition, please explain to us why you do not apparently disclose and discuss your SecreFlo revenues in your fiscal 2007 Forms 10-Q.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please submit a letter that keys your responses to our comments and provides the requested information. Detailed letters greatly facilitate our review. Please submit your letter to us via EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment 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 your letter, 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 filing or in response to our comments on your filing.

If you have any questions, please contact Mark Brunhofer, Senior Staff Accountant, at (202) 551-3638. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant