

Via Facsimile and U.S. Mail
Mail Stop 6010

April 16, 2009

Walter C. Herlihy, Ph.D.
President, Chief Executive Officer and Director
41 Seyon Street, Building #1, Suite 100
Waltham, Massachusetts 02453

**Re: Repligen Corporation
Supplemental Response to Form 10-K for the Year
Ended March 31, 2008
Filed March 31, 2009
File No. 000-14656**

Dear Dr. Herlihy:

We have reviewed your filing and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where it requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

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 year ended March 31, 2008

Item 1. Business, page 3

1. a. In your response to our prior comment 1 you state that Applied's purchases of Protein A from the Company account for "less 10% of the Company's product revenues and less than 4% of total revenues." However, we note that your disclosure on page 5 of the 10-K under "Significant Customers" states that Applied was one of two customers whose purchases of Protein A products

accounted for more than 10% of the Company's total revenues in 2008, 2007 and 2006. Please explain this apparent discrepancy.

- b. In addition, you state that the supply agreement does not obligate the parties to sell or purchase specific quantities of Protein A. Yet, you also state that Repligen and Applied are in fact obligated with respect to the quantities of Protein A reflected in Applied's short-term forecasts of its Protein A needs and these amounts are not fixed. So, while the amounts of Protein A under the supply agreement may have been immaterial so far, it seems possible that they could become much larger in the future. If true, while the agreement might qualify as immaterial right now, depending on the revenues involved thus far, it could become material in the future. Please inform us whether this is the case and, if so, that you will file the agreement as a material contract should revenues attributable to the contract become material.
2. We note your response to our prior comment 3. Please also provide the following material information regarding the exclusive license agreement between the company and the University of Michigan:
- a. Total amounts received to date under the agreement;
 - b. Any annual fees, if applicable;
 - c. The number of additional products you anticipate you will develop under this agreement; and
 - d. The term and termination provisions, including any payments the company would be required to make in the event of termination.

Definitive Proxy Statement

Annual Cash Incentive Compensation, page 19

3. We note your response to our prior comment 8. Please supplementally provide us with a detailed analysis of why you believe public disclosure of the requested information, based upon your specific facts and circumstances, would cause the company competitive harm. Your analysis in your response letter should clearly describe each target, describe how it is used in the calculation of performance, and explain how such information is likely to cause competitive harm, as opposed to conclusory statements that the information would represent a competitive disadvantage. Unless you disclose this information to the staff it is not possible for us to determine whether omission of the information from your 10-K disclosure is appropriate. Please note that you may request Rule 83 confidential

treatment for portions of your response letter that contain commercially sensitive information.

In the alternative, please provide complete disclosure of the specific targets against which company and individual performance was measured and the calculations used to determine and subsequently measure performance. The disclosure should allow the reader to understand how the Compensation Committee determined the percentage of achievement of individual and corporate goals.

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Please provide us the information requested within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provide any requested information. Detailed cover letters greatly facilitate our review. Please furnish your letter on 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 comment on your filing.

Walter C. Herlihy, Ph.D.
Repligen Corporation
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Please contact Laura Crotty, Staff Attorney, at (202) 551-3563, Dan Greenspan, Special Counsel, at (202) 551-36231 or myself at (202) 551-3715 if you have questions regarding the processing of your response as well as any questions regarding comments and related matters.

Sincerely,

Jeff Riedler
Assistant Director