



**Enzo Biochem, Inc.**

527 Madison Avenue  
New York, NY 10022  
212.583.0100  
fax: 212.583.0150

February 3, 2009

United States Securities and Exchange Commission  
Division of Corporation Finance  
450 Fifth St., N.W.  
Washington, DC 20549-3561  
Attn: Mr. John Reynolds, Assistant Director

Re: Enzo Biochem, Inc.  
Form 10-K for the FYE 7/31/08, filed 10/14/08  
File No. 001-09974  
Comment Letter dated January 27, 2009

Dear Mr. Reynolds:

In response to your request made in the Commission's letter dated January 27, 2009, please be advised that Barry W. Weiner, a signatory to the Company's Form 10-K for the fiscal year ended July 31, 2008 and certifications pursuant to 18 U.S.C. section 1350, as adopted pursuant to sections 302 and 906 of the Sarbanes-Oxley Act of 2002 is, in addition to holding the position as the Company's Chief Financial Officer, also its Chief Accounting Officer. The Company hereby confirms that he has signed the Form 10-K and the aforementioned certifications in such capacity as Chief Accounting Officer in addition to the officer positions listed on the signature page to said Form 10-K. Although the Form 10-K does not identify Mr. Weiner as holding such position, the Company hereby confirms that it will identify each capacity in which an officer signs the Report in the Company's future filings.

Furthermore, the Company hereby acknowledges 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 proceedings initiated by the Commission or any person under the federal securities laws of the United States.

Very truly yours,

/s/ Elazar Rabbani Ph.D.

Elazar Rabbani Ph.D.  
Chief Executive Officer

cc: John Dana Brown  
Pamela Howell

---