DIVISION OF

CORPORATION FINANCE

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

Mail Stop 3561

September 12, 2017

Via E-Mail
Barry W. Weiner
Chief Financial Officer
Enzo Biochem, Inc.
527 Madison Avenue
New York, NY 10022

Re: Enzo Biochem, Inc.

Registration Statement on Form S-3

Filed September 1, 2017 File No. 333-220312

Dear Mr. Weiner:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Jonathan Burr at (202) 551-5833 with any questions.

Sincerely,

/s/ James Lope (for)

John Reynolds Assistant Director Office of Beverages, Apparel, and Mining

cc: Robert H. Cohen, Esq.
McDermott Will & Emery LLP