United States Securities and Exchange Commission Division of Corporation Finance 450 Fifth St., N.W. Washington, DC 20549

Attn: Mr. Jim B. Rosenberg, Sr. Assistant Chief Accountant

Re: Enzo Biochem, Inc.

Form 10-K for the FYE 7/31/04, filed 10/14/04

File no. 001-09974

Comment Letter dated October 26, 2005

Ladies and Gentlemen:

In response to your requests made in a letter dated October 26, 2005, we are pleased to provide you with this additional information:

Q1. Critical Accounting Policies, page 29, re: Contractual allowance percentage

The reciprocal of the reimbursement percentage is the contractual allowance expense percentage, which is applied to gross amounts billed. The reimbursement percentage calculation is based on a monthly rolling analysis of the experience of amounts approved and reimbursed by payers versus the corresponding gross amount billed to the respective payers. This rolling analysis provides us with an average reimbursement percentage. The reciprocal of that reimbursement percentage is our contractual allowance expense percentage and represents the proportion of the billed amount we do not expect to collect. The contractual allowance is an adjustment that reduces our gross revenue, based on our gross billing rates, to amounts that we expect to collect. If the Company experiences a significant change in reimbursement policy or procedure for a particular payer, we review the contractual allowance percentage for that payer. The historical reimbursement statistics, determined over a rolling 24 month period, provide us with payer mix trends, which are constantly reviewed and updated if necessary by the Company.

The Company determines the allowance for doubtful accounts after the contractual allowance has been applied to the gross open receivables. The allowance for doubtful accounts is calculated based on a percentage applied to open receivables. The allowance for doubtful accounts percentage is calculated by comparing the sum of gross accounts receivable over 210 days at balance sheet date and direct writeoffs during a rolling period, to gross billings during the same rolling period. This doubtful accounts percentage is applied to net open receivables under 210 days at the balance sheet date. The allowance for doubtful accounts represents amounts that the Company does not expect to collect after the Company has exhausted its collection procedures.

 ${\tt Q2.}$ Quantify the amount of changes in estimates of prior period contractual adjustments recorded in a current period

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The Company's laboratory accounting billing system does not have the capacity to quantify the amount of changes in estimates of prior period contractual adjustments, since it can only generate billing information at our standard billing rates. The process to estimate contractual allowances is based on the development of rolling monthly averages of historical reimbursement statistics. We account for final settlements on a prospective basis by adjusting the contractual allowance percentage based on the developed statistics, which we believe encompasses an adequate time period of reimbursement experience, and provides us with a reasonable estimate of our contractual allowances. On page 29 of our fiscal 2005 10-K, we noted in the paragraph denoted as "Clinical laboratory services" the following: "Our accounting system does not record contractual adjustments at the time of billing. Instead, contractual adjustments, and the provision for doubtful accounts, are estimated based on historical collection experience using a retrospective collection analysis and aging models."

Q3. Change in contractual allowance percentage

In our response of July 8, 2005, the Company used a 1% change in the contractual allowance percentage to quantify the effect such a change would have on the results of operations, and to provide a meaningful sensitivity analysis that readers of our financial statements could utilize to understand the impact of potential changes in our contractual allowance percentage.

Per Section V of Financial Reporting Release 72, the disclosure should be based on our best estimate of the outcome we believe reasonably likely to occur. As disclosed in our 10-K for the fiscal year ended July 31, 2005, the following was

our contractual allowance percentage experience, and the change over the prior year:

FYE	2005	2004	2003
Contractual allowance %	72.5%	70.9%	68%
Change over prior year (% points)	1.6%	2.9%	

On the basis of our disclosure in our Fiscal 2005 10-K, we modify our July 8, 2005 response as follows:

The Company's contractual allowance is an accounting estimate based on various historical factors, and bears the risk of change. The contractual allowance percentage increased to 70.9% during the fiscal year ended July 31, 2004, from 68% during the fiscal year ended July 31, 2003, an increase of 2.9 percentage points. Had the contractual allowance percentage in fiscal 2004 remained the same as in fiscal 2003, revenue from the clinical laboratory services would be greater by approximately \$2.9 million in fiscal year 2004.

2

The effect of a 1% change for the fiscal year ended July 31, 2004 was inaccurately computed in our July 8, 2005 response; however, it is correctly reported in our fiscal 2005 10-K filling. We disclosed on page 30 of our Form 10-K for fiscal 2005 the effect such a change would have on operations for all three years presented.

Q4. Gross billing percentages by billing category

On page 29 of our Form 10-K for fiscal 2005, we disclosed gross billing percentages by billing category, which represents the gross billings during fiscal 2005 and 2004, not gross billings outstanding as of the end of the periods. In future filings, we will provide this information on a net basis; see Table 1 for this information. In future filings, we will also disclose the net accounts receivable by billing category. See Table 2 for net accounts receivable by billing category for the three years ended July 31, 2005.

Q5. Allowance for doubtful accounts

The Company's closing procedures include the review of the collectibility of the receivables based on a number of factors, besides the period they have been outstanding. The historical collection experience is an integral part of the estimation process related to the allowance for doubtful accounts. The collectibility of our receivables is directly linked to the timing of our collection procedures, most notably those related to obtaining the correct information in order to bill effectively for the services provided. During fiscal 2005, we put into service at the ordering physician's office a sophisticated information technology system (Enzo Direct) to obtain upfront billing information directly from the ordering physician at the time of service. This new "IT" system reduced the timing of the collection process for inaccurate or missing billing information. Also in fiscal 2005, the Company increased the billing department's collection staff, and refocused collection procedures and processes, which allowed for an acceleration of collection procedures for calendar year 2004 open invoices. Based on the expanded review procedures, the Company determined that collection procedures had been fully exhausted for receivables outstanding from the calendar year 2004 and prior as of July 31, 2005. These improved collection procedures will continue in the current fiscal

With the increase in the collection and billing department staff and the improvement in information technology system during fiscal 2005, we were able to shorten the time required to complete our collection procedures. In fiscal 2005, internal collection efforts occurred on a regular basis 90 days after invoice date using an electronic mailing process system. In fiscal 2004 and prior the collection process occurred 150 days after invoice date using a manual mailing system. On the basis of the above enhanced collection procedures the Company gained an improved visibility which enabled it to conclude that the collectability of the open receivables from all billing parties that are 210 days and older is doubtful.

3

We consider this change a change in accounting estimate, as contemplated by APB 20, since it is a change based on the evaluation of current experience factors. The change was accounted for in fiscal 2005 since the change affects only that fiscal year presented and future periods.

I hope this information is helpful. Please do not hesitate to contact me if you have additional questions.

Very truly yours,

/s/ Barry W. Weiner

President, Chief Financial Officer and Director

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4

<TABLE> <CAPTION>

Enzo Biochem TABLE 1 Clinical laboratory services, net of contractual allowances, by billing category

	7/31/2005	7/31/2004		7/31/2003	
CATEGORY to total	In \$	As % to total	In \$	As % to total	In \$ As %
	<c> 6,905,914</c>	<c></c>	<c> 7,431,637</c>	<c></c>	<c> 6,276,010</c>
THIRD PARTY CARRIERS 42%	17,527,645	53%	12,882,527	45%	12,380,284
PATIENT-SELF PAY 24%	6,904,016	21%	6,929,926	24%	7,152,500
HMO'S 13%	1,519,048	5%	1,428,069	5%	3,705,085
Total 100%	32,856,623	100%	28,672,159	100%	29,513,879

Enzo Biochem

Accounts Receivable, net of contractual allowances and allowance for doubtful accounts

CATEGORY	7/31/2005	% to Total	7/31/2004	% to Total	7/31/2003	% to Total
MEDICARE	1,593,624	13%	3,830,010	29%	1,880,098	13%
THIRD PARTY CARRIERS	6,742,469	54%	4,227,131	32%	3,372,415	23%
PATIENT-SELF PAY	3,819,442	30%	4,580,187	35%	6,117,059	43%
HMO'S	393 , 959	3%	479,322	4%	3,025,446	21%
Clinical Labs accounts receivable, net Life Sciences accounts receivable, net	12,549,494 870,963	100%	13,116,650 1,677,717	100%	14,395,018 2,871,295	100%
Consolidated accounts receivable, net	13,420,457		14,794,367		17,266,313	