



DMD COPY

May 20, 1985

D.J. Sreniawski, Chief  
Nuclear Materials Safety Section 2  
United States Nuclear Regulatory  
Commission, Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

RE: License No. 21-17189-01 MD

Dear Mr. Sreniawski,

Regarding your letter of May 8, 1985, received May 14, 1985.

The reason we chose to use the maximum variation for correcting the Barium-133 reading on all three (3) dose calibrators was because all three calibrators measured the Ba-133 standard to a degree of accuracy of 1.1% (variation over two quarters 9.9 to 11.2%). It appeared to us that all three (3) dose calibrators were consistent and that a 10% correction factor was appropriate. Possibly a 7.5% correction factor would have been more realistic but because of the consistency between the three (3) calibrators, because the Co-57 standard and Cs-137 standard and quarterly linearity test met the + 5% accuracy criteria, we felt that a 10% correction was reasonable. If all of the other standards and test which we perform were off we would not have felt comfortable with the 10% correction. We felt that the low energy photon contribution from the plastic vial standard was consistent for all three calibrators.

We have also had the opportunity to calibrate these calibrators against a NBS Tc-99m standard in a 3 ml syringe and all three calibrators were very accurate for this standard.

I have sent another Ba-133 standard to Ferndale from our Toledo location and it measures + 7% on all three calibrators.

I have contacted Capintec and we will send the Ba-133 standard from Ferndale to Capintec where it will be compared to a NBS Ba-133 standard in glass. They will give us a correction factor for our standard which will be used for future Ba-133 accuracy checks.

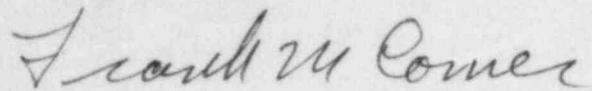
Syncor International Corporation  
Health Physics Group  
7586 Trade Street  
San Diego, California 92121  
(619) 578-8400

8506100269 850520  
REG3 LIC30  
21-17189-01MD PDR

IE07  
110  
MAY 23 1985

Please advise us if you feel that further action has to be taken concerning this matter.

Sincerely,

A handwritten signature in cursive script that reads "Frank M. Comer". The signature is written in dark ink and is positioned above the typed name and title.

Frank M. Comer  
Corporate Health Physicist  
Syncor International Corp.

FMC/jm