

September 18, 1990

Mr. John D. Kinneman, Chief
Nuclear Materials Safety Section B
Division of Radiation Safety and Safeguards
United States Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406

RE: Routine Inspection # 030-31060-90/001

Dear Mr. Kinneman:

This letter is in response to your follow-up letter, Docket No. 030-31060, dated August 23, 1990.

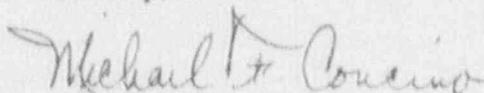
In response to the notice of violation, corrective steps have been taken to achieve compliance. Our NaI probe was calibrated on September 13, 1990. A copy of the calibration certificate with the results is attached. Our probe will be inspected and calibrated every six months.

In response to discussions with Mr. Reber on June 1, 1990 regarding water sewage discharge from 840 Memorial Drive, we have contacted the building manager and found this discharge to be at the rate of 10⁷cc/day. Further, our number of released radioactive material has never exceeded the limits as outlined in 10CFR 20.303. Our expected annual discharge is 200mCi/year for tritium, 10mCi/year for ¹⁴C and 100mCi/year for ³⁵S/³²P.

From our discussion on June 1, 1990, we understand that we were unable to quantify our release of I-125 to an unrestricted area because of inadequate hardware and therefore, were unable to compare the concentration of release to the limits set in 10CFR 20.106. We are currently in the process of acquiring the necessary materials that would allow us to quantify our release of I-125 into an unrestricted area as soon as possible.

We will be happy to review all matters with you during your next inspection.

Sincerely,



Michael F. Concino, Ph.D.
Director, Molecular Biology
License No. 20-28366-01

MFC/mr

Attachment

BOLTON & GALANEK, INC.

Consultants · Radiochemistry & Health Physics

P.O. Box 366 M.I.T. Branch

Boston, MA 02139

Tel. (617) 253-2180

CALIBRATION CERTIFICATE Radiation Survey Meter Calibration

Customer: Procept, Inc. Address: _____

Manufacturer: Ludlum Model 3 Serial # 68095

Detector: GM end window	_____	Model	_____	Serial #	_____
GM cylindrical	_____	Model	_____	Serial #	_____
GM pancake	_____	Model	_____	Serial #	_____
Ion Chamber	_____	Model	_____	Serial #	_____
NaI (Tl)	<u>XX</u>	Model	<u>44-3</u>	Serial #	<u>056453</u>
Alpha	_____	Model	_____	Serial #	_____

Calibration Source: _____
 Radionuclide: I-129 Activity: 0.113uCi Calibration date: 1/1/90

N.B.S. Traceable #: 4407L-D Accuracy: ±5.0%

Calibration: Battery check: OK Check source reading: N/A Scale: N/A

Scale	True Exposure Rate (calculated) mr/hr	Measured Exposure Rate mr/hr	Scale Maximum mr/hr
<u>X100</u>	<u>1.13uCi</u>	<u>140K CPM</u>	<u>500K CPM</u>
<u>X10</u>	<u>0.113uCi</u>	<u>14K CPM</u>	<u>50K CPM</u>
<u>X1</u>	<u>0.014uCi</u>	<u>1.8 CPM</u>	<u>5K CPM</u>

Comments: Calibration information attached to NaI detector.

This instrument has been calibrated under U.S. Nuclear Regulatory Commission license # 20-13302-01.
 Calibration frequency: 6 months Calibrated by: Matthews Dahl
 Date: 9/13/90