



Bell Hospital

Superior Healthcare System

January 23, 2009

U.S. Nuclear Regulatory Commission
Radioisotopes Licensing Division
Region III
2443 Warrenville Road, Suite 210
Lisle, Illinois 60532-4352

Subject: Response to NRC Memorandum dated January 8, 2009

Control #: 317799

RE: #21-02037-03, Bell Memorial Hospital in Ishpeming, Michigan

Dear Ms Casey:

1. The 901 Lakeshore Drive and 900 Old Farm Road are the same location. The Lakeshore Drive is the current updated address associated with this hospital. We wish to add this location as the official mailing address and official location for use of radioactive material. With this action completed the 900 Old Farm Road listing can be removed from the license. A close out survey should not be required since this is still our current active location.
2. The following information is provided in response to your questions concerning the close out survey.

RECEIVED JAN 30 2009

- a. Survey meter, Ludlum, 14C, SN: 145004, Cal Date: Jun 25, 2008; was used for the area survey measurements. The calibration certificate was provided with the previous amendment request. Background was determined to be 0.03mR/hr. The trigger limit for the ambient measurements was 0.05mR/hr. All locations were found to be less than the trigger limit.
 - b. Well counter, Biodex, Atomlab 930, SN: 1023018, Cal Date: May 13, 2008 was used for the wipe test contamination measurements. The calibration certificate for this well counter is attached to this letter. The efficiency of the well counter was determined to be 90.0%. The trigger limit for the wipe tests was 200 dpm. The closeout survey results confirm that the measurements at all locations were less than the 200 dpm trigger limit. The background for the well counter was 535 cpm.
3. We do request the removal of the 101 South Fourth Street address from license. The additional close out survey information has been provided with this response.

We believe this information is sufficient to complete our amendment request. If you have any questions please contact Steve Hill, Nuclear Medicine Department, at (906) 486-4431.

Sincerely,
Bell Memorial Hospital

A handwritten signature in blue ink, appearing to read "Michael G. Altmann M.D.", with a stylized flourish at the end.

Michael G Altmann M.D.
Radiology RSO

STAN A. HUBER CONSULTANTS, INC.
200 NORTH CEDAR ROAD, NEW LENOX, IL 60451-1751
PHONE (815)485-6161
Certificate of Calibration for Well Counter

5/13/08

FACILITY:
 Bell Memorial Hospital

CITY:
 Ischpeming

STATE:
 MI

INSTRUMENT IDENTIFICATION
 MANUFACTURER: Biodex MODEL #: Atomlab 930 SERIAL #: 1023018

SOURCE IDENTIFICATION
 MANUFACTURER: IPL MODEL # Rod SERIAL # 1193-22-3
 ISOTOPE: Co-57 ACTIVITY: 186414 dpm DATE: 01-Jun-06

CHI-SQUARE DETERMINATION: Calibration Date 13-May-08

COUNTS	
1	168480
2	168320
3	167968
4	168540
5	168896
6	168180
7	169152
8	167808
9	168032
10	167712

$$\chi^2 = \frac{(n-1)s^2}{\bar{X}}$$

(n-1) =

s² =

\bar{X} =

χ^2 =

The Chi-Square value is between the values of 3.3 and 17.0 and is, therefore, acceptable.

EFFICIENCY DETERMINATION

Background <input type="text" value="566"/> cpm	Total cpm <input type="text" value="168309"/> cpm
NET CPM=TOTAL CPM-BKG CPM	%EFF=NET CPM/DPM *100
167743 NET CPM	0.900 EFF
The Efficiency of the Detector is <input type="text" value="0.900"/> or <input type="text" value="90.0 %"/>	

LOWER LIMIT OF DETECTION (LLD)

$$LLD = 2.71 + 4.65 \sqrt{\frac{\text{Background rate}}{\text{Sample Count Rate} \times \text{EFFICIENCY}}}$$

$$LLD = \frac{2.71 + 4.65 \sqrt{\frac{566 \text{ cpm}}{1 \text{ min}}}}{0.900}$$

LLD = DPM or uCi

CALIBRATED BY: Matthew A. Hadden NEXT CALIBRATION DATE: May-09



901 LAKESHORE DRIVE
ISHPEMING, MI 49849-1367

9E9T 6S26 T000 0T0T E002



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01/27/2009

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