

From: "Huston, Thomas E." <Thomas.Huston2@va.gov>
To: "William Snell" <WGS@nrc.gov>
Date: 11/01/2007 11:31:17 AM
Subject: New Jersey Health Care System, East Orange, NJ

Bill,

Regarding your questions, Gary Williams and myself were able to speak this morning with the previous Radiation Safety Officer, Mr. Peter Goyer, for the East Orange facility. Mr. Goyer was the individual that directed the Bldg. 13 survey effort and prepared these survey reports. He provided the following additional information regarding the surveys with the Bicron 2000 survey meter:

1) What probe was used? The probe used with the Bicron 2000 was an external GM pancake probe. Mr. Goyer stated that there was only such meter at the facility and the probe was calibrated with/stayed with that meter. He was able to quote from memory the Bicron meter serial number as B550Q. I have attached a typical spec sheet for this type of meter.

2) How extensive were the surveys (e.g., the entire floor, only where wipes were collected)? Mr. Goyer stated that the building was rather small and the entire floor area was scanned.

3) What was the height the probe was from the floor (e.g., were these scans at floor level or were they at 1 meter)? Mr. Goyer stated that the probe was held about 1 to 2 inches from the floor surface during scans.

4) Any other pertinent information relevant to the survey conducted? Mr. Goyer stated that the building consisted of a concrete floor and walls composed of a fiberboard. He stated that the building was clear of any obstructions so that the entire floor was able to be surveyed. He stated that best practices were used when performing surveys.

Best regards,
Tom

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-----Original Message-----

From: William Snell [mailto:WGS@nrc.gov]
Sent: Thursday, November 01, 2007 8:54 AM
To: Huston, Thomas E.
Subject: New Jersey Health Care System, East Orange, NJ

Tom,

In regard to the August 6, 2007, submittal for the release of Building 13 for the New Jersey Health Care System, there is a November 16, 2004 letter that states that a meter survey was conducted. The letter indicates that a Bicron 2000 was used for the surveys and says readings were "< 0.05 mR/hr all locations". Could you please provide additional information on the surveys. What probe was used, how extensive were the surveys (e.g., the entire floor, only where wipes were collected), the height the probe was from the floor (e.g., were these scans at floor level or were they at 1 meter), and any other pertinent information relevant to the survey conducted.

Thanks
Bill Snell
NRC Region III
630-829-9871

Mail Envelope Properties (4729FF42.233 : 20 : 8755)

Subject: New Jersey Health Care System, East Orange, NJ
Creation Date 11/01/2007 11:29:56 AM
From: "Huston, Thomas E." <Thomas.Huston2@va.gov>
Created By: Thomas.Huston2@va.gov

Recipients

nrc.gov
ch_po.CH_DO
WGS (William Snell)

Post Office
ch_po.CH_DO

Route
nrc.gov

Files	Size	Date & Time
MESSAGE	2647	11/01/2007 11:29:56 AM
Bicron2000.pdf	46750	
Mime.822	68522	

Options

Expiration Date: None
Priority: Standard
ReplyRequested: No
Return Notification: None

Concealed Subject: No
Security: Standard

Junk Mail Handling Evaluation Results

Message is eligible for Junk Mail handling
This message was not classified as Junk Mail

Junk Mail settings when this message was delivered

Junk Mail handling disabled by User
Junk Mail handling disabled by Administrator
Junk List is not enabled
Junk Mail using personal address books is not enabled
Block List is not enabled

Survey Meters & Probes

The Surveyor 2000 model is a portable survey meter designed for gamma and x-ray with internal probe; plus measurements of alpha, beta and gamma countrate with the appropriate external GM probe.

The Surveyor 2000 combines an internal energycompensated GM tube (for the 2 R/h range) with a choice of external GM probes to meet or exceed the survey instrument requirements of 10CFR 35 for Nuclear Medicine use.

The unit checks HV to insure the detector is operating at its proper voltage. An anti-saturation circuit keeps the meter reading off scale when the detector saturates in a high radiation field. Automatic dead time compensation assures the accuracy of

higher exposure rate reading for linear response on all ranges.

The Surveyor 2000 is the perfect Survey Meter for your Nuclear Medicine Department and eliminates

the need for two survey instruments for high and low radiation readings.

Surveyor 2000™ Portable Survey Meter

ITEM # DESCRIPTION

5250-0019 Surveyor 2000 Rate Meter

FEATURES

- Alpha, beta, gamma and x-ray detection
- Internal GM tube and optional external probe
- Anti-saturation circuit
- Built-in audio
- Counts up to 2000 mR/h
- Exceeds 10CFR35 requirements
-
- Warm-up Time: None
- Saturation: Typically > 1000R/h on all ranges for most GM probes; (>5 R/h for pancake GM probes)
- Response Time: Switch-selectable, optimized for each range, 0-90% of final reading as follows:
 - Range Fast Slow
 - X0.1 6 sec 25 sec
 - X1 2 sec 6 sec
 - X10 1 sec 3 sec
 - X100 <1 sec 1 sec
 - X1000 <1 sec 1 sec
- Size: 4.25" x 8" x 6.8" (10.8 x 20.3 x 17.3 cm) including handle and probe clip.