



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

April 23, 1998

Docket No. 99990001

License No. General licensee

Mr. Gregory P. Roberts  
Chief Executive Officer  
Marlboro Psychiatric Hospital  
State of New Jersey  
Department of Human Services  
546 County Road 520  
Marlboro, NJ 07746-1099

SUBJECT: LOSS OF TRITIUM EXIT SIGNS AND INSPECTION NO. 99990001/98-006

Dear Mr. Roberts:

This is in reference to the loss of three tritium 25-curie exit signs which you discovered missing on February 26, 1998 from Cottages 10 and 12 of the Marlboro Psychiatric Hospital. On April 15, 1998, Sheri Minnick of this office conducted a safety inspection at the above address of activities authorized by the above listed NRC license. The inspection was limited to observations by the inspector, interviews with personnel, and confirmatory surveys of Cottages 10 and 12 consisting of wipe samples. The wipes were analyzed by the NRC Region I office. The analysis shows that there are no levels of contamination above the removable contamination criteria of 1,000 disintegrations per minute (dpm) per 100 centimeters squared (cm<sup>2</sup>), listed in Table 1 of the "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source or Special Nuclear Material" (Enclosure 1). The results of our analysis are attached for your review (Enclosure 2). The initial findings of the inspection were discussed with you at the conclusion of the inspection.

It should be noted as this time that the NRC may have further questions or concerns related to this event and therefore, considers Inspection No. 99990001/98-006 open. Thank you for your cooperation during this matter.

No response to this letter is required.

Sincerely,

A handwritten signature in cursive script, appearing to read "A. Randolph Blough".

A. Randolph Blough, Director  
Division of Nuclear Materials Safety

Enclosures:

1. "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source or Special Nuclear Material"
2. NRC Wipe Test Results

cc:

Vince Giampeitro, Director,  
Office of Operations Support  
State of New Jersey

ENCLOSURE 2

RESULTS OF NRC WIPE TESTS TAKEN ON APRIL 15, 1998 AT  
THE MARLBORO PSYCHIATRIC HOSPITAL

LOCATION	TRITIUM (H-3) DPM/100 cm <sup>2</sup>
Cottage 10 - Floor near Door 226	-2 + 8
Cottage 10 - Floor near Door 226	20 + 9
Cottage 10 - Floor near Door 227	5 + 9
Cottage 10 - Floor near Door 227	29 + 10
Cottage 10 - Center of Room between 226 and 227	3 + 9
Cottage 12 - Floor near basement tunnel	8 + 10
Cottage 12 - Floor near basement tunnel	35 + 11

301990

SAMPLE RECORD SHEET

LABORATORY --  REGION I  REGION III

ROUTINE  
 URGENT

DATE REQUIRED

SAMPLE LOCATION

Northwest State Hospital

DATE ANALYSIS BEGAN

DATE COMPLETED

ANALYZED BY

DATE

COLLECTED BY

S. Minnick

DIVISION

DIUMS

TELEPHONE

5342

CONTACT NOTIFIED

DATE

APPROVED BY

*JK*

DATE

4-23-98

NO.	DATE	HOUR	SAMPLE DESCRIPTION	ANALYZE FOR	INSTRUMENT USED	QUANTITY USED	DATE COUNTED	COUNT TIME	GROSS COUNT	BACK-GROUND	NET COUNT	EFF.	RESULT*
1	4/15	-	wipes	H-3	LSC	wipe	4/22	20m	350	358	-8±27	0.160	-2±8
2									375	319	56±26	0.142	20±9
3									335	320	15±26	0.143	5±9
4									340	302	78±26	0.135	29±10
5									298	281	9±24	0.129	±9
6									288	269	19±24	0.120	8±10
7									338	257	81±24	0.115	35±11

\* Random uncertainties as reported:  ± 1σ,  ± 2σ. Small negative and other results ≤ 2σ are interpreted as including "zero" or as not detected. If appropriate, estimates of possible systematic errors are reported in parentheses

REQUEST FOR ANALYSIS  
Region I Laboratory

CONTROL NUMBER

301990

SAMPLE LOCATION (LICENSEE)  
Marlboro State Hospital

LICENSE NO.

N/A

DOCKET NO.

N/A

SAMPLES SUBMITTED

#(TOTAL)	TYPE	VOLUME	WEIGHT
7	wipes		

DATE SAMPLES SUBMITTED

PRIORITY

ROUTINE

URGENT \*\*\*

SAMPLE COLLECTION INTERVAL

	MONTH	DAY	YEAR	TIME
START	4	15	98	
STOP	4	15	98	

INSPECTOR RESPONSIBLE  
Sheri Minnick

PHONE EXT.  
X5342

ANALYSIS TO BE PERFORMED	LIST DESIRED LLD (Optional)	OTHER TYPE OF ANALYSIS (Specify)	LIST DESIRED LLD (Optional)
GROSS ALPHA			
GROSS BETA			
GAMMA SPEC			
TRITIUM			
CARBON-14			
IODINE-125			

REMARKS

NOTE: Samples will be discarded after analysis unless reasons are noted above in Remarks.

\*\*\* FOR URGENT USE ONLY— Signature Blocks below must be filled out by the Inspector's appropriate Section Chief and by the Chief, Effluents Radiation Protection Section BEFORE submitting this form to the Region I Laboratory.

SIGNATURE — APPROPRIATE NUCLEAR MATERIALS SAFETY SECTION CHIEF \_\_\_\_\_ DATE \_\_\_\_\_

SIGNATURE — CHIEF, EFFLUENTS RADIATION PROTECTION SECTION \_\_\_\_\_ DATE \_\_\_\_\_



**State of New Jersey**  
DEPARTMENT OF HUMAN SERVICES  
PO Box 700  
TRENTON NJ 08625-0700

CHRISTINE TODD WHITMAN  
*Governor*

WILLIAM WALDMAN  
*Commissioner*

TEL (609) 292-3717

March 6, 1998

Judy Joustra  
Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Dear Ms. Joustra:

As per our discussion, attached is a report from Marlboro Psychiatric Hospital concerning the missing, self-illuminating, exit signs. Unfortunately, the signs were not located.

Subsequent to our conversation, I did some calling around and did determine that the facility was in error. Self-Powered Lighting is, indeed, still in business. In addition to Self-Powered and SRB Technologies, I provided the facility with phone numbers for Isolite and Co Physics. Between these vendors, I am sure we can arrange for appropriate return shipment.

As indicated in the report, there is no evidence of any damage to the signs. I will update you, should additional information become available, and would appreciate your letting me know if there are any other steps which need to be taken.

Sincerely,

A handwritten signature in black ink, appearing to read "Vince Giampeitro".

Vince Giampeitro, Director  
Office of Operations Support

Attachment

c: Alan Kaufman  
Terri Wilson  
Greg Roberts

MAR 12 1998

**MARLBORO PSYCHIATRIC HOSPITAL**

**Office Memorandum**

**March 2, 1998**

**TO:** Vince Giampeitro, Director  
Office of Operations Support  
Department of Human Services

**FROM:** Greg Roberts   
Chief Executive Officer

**SUBJECT:** Missing Exit Signs

Attached is a report from Garry Jackson, Fire Chief, Marlboro Psychiatric Hospital, detailing the events in chronological order from when the exit signs were first reported missing to present. I would like to add several points not written in Mr. Jackson's report:

1. The longest time period for a missing sign to be unnoted is one week, since we instituted a weekly visual check of all signs and all were accounted for on the 2/19/98 check.
2. The search for the missing sign consisted of both inside and outside the two cottages involved. There is no evidence of damage to the signs. The search was first done on Friday and repeated on Saturday.
3. We have removed signs from all unoccupied buildings and Mr. Jackson is going to re-survey occupied buildings to remove all signs without necessitating extensive wiring or the requesting of variances. As soon as buildings become unoccupied we would remove the remaining signs.
4. We are still working out the procedures for returning signs to the manufacturer. As you know, one manufacturer (Self-Powered Lighting) has apparently gone out of business and the other (SRB Technologies) is not on the accounting system. We are in the process of getting all the necessary information so that they can be entered in the system. SRB Technologies has unofficially quoted a price of \$100 to take another manufacturer's sign. I would appreciate your office providing us with other vendors that can take these signs so that we can bid this out. If you wish, my Business Office can contact NRC directly to get such a vendor list.


Marlboro Psychiatric Hospital is eager to remove these exit signs as safely and as quickly as possible. Your advice and help is always appreciated. Please contact me if there are any other questions.

Thank you.

GR/aph  
Attachment

pc: A. Kaufman, Director, DMHS  
T. Wilson, Assistant Director, DMHS  
J. Whitenack, Deputy Chief Executive Officer, MPH

MARLBORO PSYCHIATRIC HOSPITAL  
FIRE DEPARTMENT

TO: John Whitenack  
FROM: Garry Jackson   
DATE: March 2, 1998  
RE: Missing Self-Luminous Exit Signs

On Thursday February 26, 1998 while conducting a visual inspection of self-luminous exit signs Assistant Fire Chief James Kelly noted three signs missing.

Two were missing from the second floor dayroom of Cottage 10 and one was missing from the basement of Cottage 12. Both of these units are unoccupied.

I was advised by AFC Kelly of the missing signs when I relieved him at 0700 hours Friday 2-27-98. I checked the areas myself and asked John Perry, Jr., Electric Shop supervisor if he had taken the signs down which he stated he had not.

At 0845 the same date I notified the Human Services Police Department of the missing signs. At 0850 I notified your office.

As per your request at 1050 I called the DEP Hotline 609-984-5462 and spoke to a staff member who identified herself as Joyce. She indicated that a missing sign was not reportable but referred me to Bill Csaszar of DEP's radiation section at 609-984-5463. I left a message on Mr. Csaszars voice mail to call me.

At 1305 Mr. Csaszar called back and referred me to Robert Bores of the Nuclear Regulatory Com. at 610-337-5213. I left a message on Mr. Bores voice mail to call. As per your instructions since leaving the message I have not spoken to anyone from the NRC.

As per our policy draft for incidents involving self-luminous signs a search for the missing signs was conducted on both Friday and Saturday.

All results were negative.



11 self-luminous signs were removed from unoccupied buildings on Saturday 2-28-98. This includes the 23 surplus signs which were at the Electric Shop. A total of 77 have been placed in a secure room in storage 12 pending shipment back to the manufacturer.

The return protocol for signs manufactured by SRBT was forwarded to our office last week. They charge \$15. per sign with no more than 10 signs per package pre-paid or with payment.

We have been unable to locate Self-Powered Lighting Inc. the manufacturer of many of our signs. SRBT will accept competitors signs at a charge of \$100. per sign.

I believe we have three options regarding S-P Lighting Signs.

- 1) Ship them to SRBT at \$100. per sign.
- 2) Request bids from disposal firms authorized to accept the signs.
- 3) Request the NRC to locate S-P Lighting and determine if they are still in business.

Options 2 & 3 will require we keep the signs in storage.

Signs in occupied areas remain in use and accounted for. As you know proper egress signage is required by both the New Jersey Uniform Fire Code and NFPA 101. Removal of the self-luminous signs would require an alternate code compliant replacement.

If a code compliant replacement such as electrically wired signs is not feasible we can request a variance from the Division of Fire Safety.

I would point out that even if we were granted a variance to reduce signage below standards it would effect our position with JCAHO as their standards are independent of local or state agencies.

I am of course available to meet at your convenience to discuss this issue in greater detail.

pc: M. Corbett, Safety Office