



February 1, 2007

U.S. Nuclear Regulatory Commission
Mr. James Caldwell, Regional Administrator
Region III
801 Warrenville Road
Suite 210
Lisle, IL 60532-4352

Subject: Thirty Day Follow Up Report of Lost Source, Event # 43077

Dear Mr. Caldwell:

This letter is to satisfy the requirement of 10 CFR 20.2201 to provide a written report within 30 days of an initial report of a lost source. The report below follows the format given in 2201.

1. The source is a Betalux-E self-luminous Exit sign manufactured by SRB Technologies, Inc. (Device Registry Number NC-585-D-103-G). Within the sign are seven model Type C cylindrical glass capsule sources containing Hydrogren-3 (Device Registry Number NC-585-S-102-S). These are also manufactured by SRB Technologies, Inc. The original activity of the sign was 20 Ci on May 1, 1998 with a current, decayed activity of 12.3 Ci.
2. The sign was found to be missing during a semi-annual device inventory survey by the facility Radiation Safety Officer (Mr. Kostas Kaounas) at the 3M Brookings, SD facility. This was reported to Mr. Nick Bates of 3M Corporate Health Physics who immediately notified the NRC at 10:14 am (EST) on January 5, 2007 and spoke to Mr. John MacKinnon (301-816-5100).

The Exit sign was located above a door in an unoccupied Boiler Room. The facility RSO interviewed employees and learned that the sign was last seen behind an electrical conduit next to the door. The date of the sighting is unknown. Given the location of the conduit relative to the door, the sign must have been placed in this area by an employee or contractor. During the previous semi-annual inventory (July 17, 2006), the sign was confirmed by the RSO as being in place above the door.

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3. We believe the Exit sign was taken down from above the door and placed behind the electrical conduit. We further believe it was later removed from the premises – either by theft or by discarding into the trash.
4. Under the presumed circumstances of loss, exposures to persons from this source are negligible. The Device Registry safety analysis of the Betalux-E sign states that there should be no detectable radiation levels outside the device. Liquid Scintillation wipe tests were taken in the area and processed for Hydrogen-3 counting. All wipes were measured to be in the background range.
5. Actions taken to recover the lost source included interviews with area personnel (utility workers, guards, custodians, contractors). No individual confirmed they removed the sign from the door or the site premises. A search of the Boiler room and both sides of the door was conducted by the RSO for evidence of the sign or sign breakage. None was found. A financial reward was offered at the facility for information regarding the sign. However, no additional information was learned. No further actions are planned to recover the lost source.
6. Measures to ensure against a recurrence are:
 - a. The remaining Exit sign at the 3M Brookings facility has been taken down and put into storage for future disposal.
 - b. 3M Corporate Health Physics has contacted every 3M facility utilizing similar Hydrogen-3 Exit signs. These facilities will either remove the signs from service or ensure that they are mechanically fastened in place with tamper-proof fasteners.

If you have any questions please contact me at 651-736-0740.

Sincerely,



Frederick B. Entwistle
3M Corporate Radiation Safety Officer

cc: M. G. Magnusson – Plant Manager, Brookings – US-SDBR01
L. R. Zobel – Medical Department Administration – 220-6W-08

3M Corporate Health Physics

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PO Box 33283
St. Paul, MN 55133-3283

3M

From N. Bates		
Bldg. - Fl 020-6W-08	Phone 71019	Package I.D. Number 83379900

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3M General Offices

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Form 38758 - A



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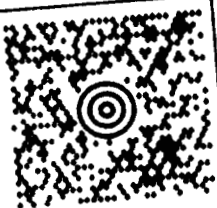
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TO:

U.S. NUCLEAR REGULATORY COMMISSION
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LISLE, IL 60532



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