

# PROCESS SPECIFICATION RADIATION EMERGENCY PROCEDURE

P-664 ISSUE: A FEBRUARY, 2007

### **DOCUMENT REVISION STATUS**

REVISION LEVEL	DESCRIPTION OF CHANGE	DATE	ECN#
-	ORIGINAL RELEASE	1/25/07	N/A
А	ADDED SECTION 5.0. UPDATED PHONE NUMBERS. SEE ECN.	2/8/07	14562

**APPROVALS** 

APPROVED: PROCESS ENGINEERING:

DATE 2-13-07

**APPROVED:** 

**ENGINEERING MANAGER!** 

DATE: 2/13/07

**APPROVED:** 

MANUFACTURING MANAGER!

DATE: 2 13-07

APPROVED:

**QUALITY ASSURANCE MANAGER:** 

161 BS. DATE: 2/13/07



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#### 1.0 PURPOSE:

This procedure details the proper response to accidental radiation exposure or potential exposure and to cases of lost, stolen or damaged radioactive materials.

### 2.0 BASIC GUIDELINES IN CASE OF EXPOSURE TO SOURCES OF RADIATION:

- **2.1** Terminate the source of exposure and prevent others from being exposed. Use additional shielding as needed.
- 2.2 Notify the Radiation Safety Officer (RSO) so that nature and extent of exposure can be determined. Seek medical attention if severe exposure is suspected.

#### 3.0 MINOR SPILLS:

- **3.1** NOTIFY: Notify persons in the area that a spill has occurred.
- **3.2** PREVENT SPREADING: Cover the spill with absorbent material and prevent access to the area by unauthorized personnel.
- 3.3 CLEAN UP: Using disposable gloves and/or remote handling devices, carefully fold the absorbent material. Insert the material in to a plastic bag with all other contaminated materials such as disposable gloves and dispose of it in the radioactive waste container.
- 3.4 SURVEY: With a low-range, thin window G-M survey instrument, check the area around the spill, hands and clothing for contamination. For beta emitters, conduct wipe tests at the spill area.
- **3.5** REPORT: Report incident to the RSO.

### 4.0 MAJOR SPILLS:

- **4.1** CLEAR THE AREA: Notify all persons not involved in the spill to vacate the room.
- **4.2** PREVENT SPREADING: Cover the spill with absorbent material but do not attempt to clean it up. Confine the movement of all personnel potentially contaminated to prevent the spread.
- **4.3** SHIELD THE SOURCE: If possible the spill should be shielded, but only if it can be done without further contamination or without significantly increasing radiation exposure.
- **4.4** CLOSE THE ROOM: Leave the room and lock the door(s) to prevent entry.
- **4.5** CALL FOR HELP: Notify the RSO of the situation immediately.



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### 4.0 MAJOR SPILLS (cont.):

4.6 PERSONNEL DECONTAMINATION: Contaminated clothing should be removed and stored for further evaluation by the RSO. If the spill is on the skin, flush thoroughly and then wash with mild soap and lukewarm water. Injured persons should be decontaminated and first aid performed as necessary. If life threatening injuries are present, the individual should be given immediate life saving first aid and transported to a hospital for further medical treatment regardless of any contamination present. The hospital should be given prior notification that the patient is contaminated so that the appropriate controls can be implemented.

### 5.0 EXPOSURE TO SOURCES OF RADIATION:

- **5.1** Terminate the source of exposure and prevent others from being exposed. Use additional shielding as needed.
- **5.2** Notify the RSO so the nature and extent of exposure can be determined. Seek medical attention if severe exposure is suspected.

#### 6.0 LOSS, THEFT OR DAMAGE OF A SOURCE OF RADIOACTIVE MATERIAL

6.1 In addition to following the applicable procedures outlined above, notify the RSO immediately and the Agency at:

Massachusetts Department of Public Health
Radiation Control Program 24-Hour Emergency Number (617) 242-3453
Radiation Control Program Business Number (617) 242-3035
Radiation Control Program Fax Number (617) 242-3457

Radiation Safety Officer (RSO): Peter McGondel Office Phone (781) 729-9450 ext. 274 Home Phone (781) 932-8798



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Figure 1 - Herley New England Posting

### PROCEDURES FOR MINOR SPILLS AND CONTAMINATION

Most accidents will involve only minor quantities of radioactivity. (i.e. in the microcurie level)

- Put on gloves to prevent contamination of hands.
- Drop absorbent paper or cloth on spills to limit the spread of contamination.
- Place contaminated cleaning materials in to plastic bags or other closed containers. Seal and label bag or container. Mark area of spill as "CONTAMINATED" as soon as possible if immediate decontamination is not instituted. A wet spill shall not be allowed to dry and become powdery if significant amounts of radioactivity are involved as this may cause serious air contamination.
- Notify the Radiation Safety Officer of the incident.
- Start approved decontamination procedures as soon as possible.