

**EMERGENCY PREPAREDNESS AND RESPONSE PLAN**

(Requirements as per Atomic Energy radiation Protection Rules, 2004)

The typical action plans prescribed in this manual should be implemented in the event of occurrence of an emergency involving a Radiography devices.

**a. Emergency Response Committee:**

*Members of the Emergency Response Committee of our institution is as follows,*

Shri/Smt ..... Chairman  
Shri/Smt ..... Member  
..... "  
..... "  
....., Site-In-Charge/RSO, Member-Secretary

**b. List of RSO/Site-in-charges responsible for each site:**

Name of radiography Site	RSO/Site In Charge Name	Contact Numbers

The above Radiation Safety Officers/Site in charges are responsible for handling emergencies involving radiography devices and Radiography sources at their respective radiography sites. All the emergencies and subsequent operation for handling emergency should be intimated to the Chairman, ERC.

**c. List of Emergency Handling Equipments at Site**

- i. -----
- ii. -----
- iii. -----
- iv. -----

**d. Radiation Monitoring Instruments for Handling Emergencies available at site. (Site-wise distribution)**

Name of the Radiation Survey Meter	Model/Sr. No. of Survey Meter	Range of Survemeter
<b>Pocket Dosimeters</b>	<b>Model &amp; Sr.No.</b>	<b>Range</b>

The Site-in-charge of respective site is responsible for carrying out the maintenance of emergency

handling accessories regularly.

**d. Procedure for Reporting Emergency**

- i. RSO/Site-in-charge to report to employer/licensee/Chairman, ERC of the Institution with copy to Head, RSD, AERB.
- ii. Employer/Licensee to report the incident to AERB within 24 hours of its occurrence. Format for reporting Emergency will be used as provided by the AERB.
- iii. RSO to carry out investigations and submit report to AERB
- iv. Lodge a written complaint with the Police in case of loss/theft if IGRED not traced within 24 hours.

**e. General Guidelines to handle emergency situations**

- Rescue is primary concern with ALARA principle
- Cordon off the area
- In fire, fight from upwind side
- Notification to the Responsible person
- Monitoring of radioactive contamination
- Security of the area

**f. *Emergency Situations***

The occurrence if any one or more of the following situations may be deemed constitute an emergency:

- i. Loss/theft of radiography sources from storage / radiography sites
- ii. Loss of radiography sources during transport
- iii. Failure to retrieve the source pigtail into the source housing due to either, - Source Stuck in the Guide Tube  
- Source Detachment
- iv. Over-Exposure due to unsafe radiography work practices
- v. Contamination due to damage Source.

(Institution should list out the likely scenario which may lead to emergency)

Anyone noticing any of the above instances should immediately bring the matter to the notice of RSO/Site-in-charge available at the site. Site-in-charge is the only person at site who is responsible person for handling any emergency taking place at site. Radiographer should cordon off the area and act as per the instructions and guidance of Site-in-charge/RSO.

**g. Action Plans for handling the above emergency scenarios**

The following action plans for each of the above emergency scenarios.

**i. Loss/theft of radiography sources from storage / radiography sites:**

- Gathered Information Regarding the Source
- Collect Handling & Monitoring Equipment
- Inform the security.

**Procedure to be Followed**

- If area is known ; Determine with survey meter presence of source
- Cordon off the area
- Switch on survey meter & move in direction where radiation level increases.
- Radiation level in R/h indicates source is nearby (RL < 1 R/hr)
- Bring the lead pot and transfer the source with 2 m CV tong to the container
- Bend the female coupling portion of the pigtail and connect the drive cable and draw the pigtail back into the camera.

**If location of Source not known**

- Search for the source in suspected areas
- Deploy more search teams
- Intimate Regulatory Body
- Lodge Police Complaint
- Public Announcement after getting clearance from AERB.
- Intimation to Government & Municipal Hospitals

(\*\* Institution should prepare the action plan as provided above for every emergency scenario and should include here\*\*)

**ii.**

**iii.**

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**PERSONS TO BE CONTACTED IN THE EVENT OF AN EMERGENCY**

(To be displayed in the dark room and source storage facility at every site)

Name of Persons	Designation	Mobile number	Address		Telephone No	
			Office	Residence	Office	Residence
Radiation Safety Office						
Site-in-charge						
Head of the Institute						
Chairman, ERC						
Security Officer at Site						
Representative of Contract Awarding Party at site						
Police						
Local Hospital						
Head, RSD, AERB						

