

Offsite Radiological Monitoring

MSC-PRO-5856

Revision 1

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Topic: Radiation Protection

Offsite Radiological Monitoring

1.0 PURPOSE

This Level 2 Management Control Procedure provides instructions for Mission Support Contractor (MSC) Radiation Protection Organization when conducting radiological monitoring off the Hanford Site. Offsite radiological monitoring normally is performed to verify the presence or absence of radioactivity and provide information that may support mitigation of any potential radiological hazard.

2.0 SCOPE

This procedure applies to offsite radiological monitoring performed by organizations operating within the scope of the Mission Support Contractor (MSC) Radiation Protection Program Plan (RPP). Implementation practices will be based on the supporting information in [MSC-5173](#), *MSC Radiological Control Manual*. This procedure does not apply to emergency notification and response actions.

3.0 IMPLEMENTATION

This procedure is effective upon approval.

4.0 REQUIREMENTS

This procedure implements the requirements of:

[MSC-SP-1145](#), MSA Radiation Protection Program Plan

NOTE: *In the event radioactive material has moved offsite, the U.S. Department of Energy (DOE) may not be the appropriate controlling authority. However, there are times when MSA has the authority to continue management of and mitigate potential hazards associated with offsite DOE owned radioactive material. Examples of such situations include:*

- *When there is a known loss of control and the radiological monitoring is a continuation of a DOE activity, such as an alarming hand and shoe monitor when workers return to the job.*
- *When there is a suspected loss of control of DOE-owned material and it is reasonable that the radioactive material may have been removed from the site.*

5.0 PRECAUTIONS AND LIMITATIONS

NOTE: *Information disclosed in confidence and is sensitive in content should be protected against unauthorized disclosure and should be marked "business sensitive".*

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6.0 PROCEDURE

NOTE: A written log of all conversations and actions performed during conduct of this procedure should be maintained by participants (this log will be known as the event log for the purpose of record documentation)

Actionee	Step	Action
Event Identifier	1.	<p>Call the MSA Radiation Protection Manager and report the situation once a decision or request has been made that offsite radiological monitoring is desired.</p> <ul style="list-style-type: none"> Report the known facts regarding control of the radioactive material and the basis of the request to perform an offsite radiological monitoring.

NOTE: This action should not delay other facility response actions. See flow chart in [Appendix B](#).

RP Manager	2.	The MSA Radiation Protection Manager should consider calling the DOE, Richland Operations Office (RL)
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NOTE: The Washington State Department of Health (WDOH) should be kept informed of situations where offsite monitoring of radioactive material may occur. This notification can occur at anytime. After discussion with RL, determine who will contact the WDOH, if appropriate.

- For the Washington State Department of Health, use telephone number (509) 946-0685 to report non-emergency situations.

RP Manager or delegate	3.	Provide appropriate direction to the affected RP Manager or delegate.
RP Manager or delegate	4.	If appropriate, REQUEST the property owner's/occupant's permission to conduct a radiological monitoring. Notify the MSA RP Manager if the property owner/occupant does not give permission to conduct radiological monitoring.

NOTE: This should include arrangements to meet the owner/occupant at a specific time and place to gain access to the property. The person contacted and date/time of contact and permission should be recorded on Event Log(s).

5. SELECT a Radiological monitoring Team as follows:
- Two radiological control technicians (RCTs) are recommended; one male and one female.
 - Exempt Radiological Control staff member (should be knowledgeable about the event).
 - A qualified Radioactive Material Shipper.

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
RCT Supervisor or delegate	6.	DEVELOP and document a Survey/Recovery plan (see Appendix A), as necessary. Insure plan is attached with Radiological Survey Report(s) for formal documentation purposes.
	7.	IF chemical hazardous material is suspected, THEN contact the Hazardous Material Specialist of the applicable Project/Activity for direction.
	8.	CONDUCT and document a pre-job safety briefing (BD-6000-696) before leaving the Hanford Site. The pre-job briefing should include all available information to familiarize personnel with the event and a reminder of appropriate actions while off the Hanford Site.
	9.	MAKE the initial contact with the property owners/occupants and explain in general terms how the radiological monitoring will be conducted, monitoring could include all parts of the property.
	10.	QUESTION the occupants of the subject property to determine if they are aware of any radioactive material at the radiological monitoring site that might interfere with MSA radiological monitoring results (e.g., Coleman lantern mantles, disassembled smoke alarms, old luminous dial clocks and compasses, etc.)
	11.	QUESTION the occupants to determine where the individual(s) have traversed within the property since arrival from the Hanford Site.
Radiological Control Technician	12.	USE Appendix A , "Radiological monitoring Checklist," to assist identifying areas requiring radiological monitoring and Survey/Recovery plan.
	13.	PERFORM radiological monitoring.
	14.	RETAIN smears for further analysis (Also retain any items with fixed radioactivity if allowed by property owner.). Place each smear in a separate envelope and label with location, date, and time of smear. Ensure smears are delivered to the applicable laboratory for analysis (in accordance with step 24 of this procedure). Include proper analysis paperwork.
	15.	REPORT radiological monitoring results to the RCT Supervisor or delegate exempt staff member.

NOTE: Facility management should determine in accordance with facility procedures and MSC-PRO-060, Reporting Occurrences and Processing Operations Information.

NOTE: Before each use, check MSC Documents Online to ensure this copy is current.

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<i>Actionee</i>	<i>Step</i>	<i>Action</i>
RP Manager or delegate	16.	INFORM the applicable RL RCM and individual(s) of radiological monitoring findings.
<p>NOTE: <i>When reporting information to the public, give it in terms that will be understood by a person who is not trained in radiation protection.</i></p>		
Radiological Control Technician	17.	ISOLATE areas that have removable contamination until removal or decontamination is complete.
	18.	DECONTAMINATE areas or items that can not be returned to the site.
	19.	IF decontamination is unsuccessful, THEN notify the RCT Supervisor or delegate exempt staff member for direction
	20.	PACKAGE and LABEL materials at the direction of the qualified radioactive material shipper to conform packaging and labeling requirements in Department of Transportation (DOT) regulations.
RCT Supervisor or delegate	21.	MAINTAIN a written inventory of all labeled items and document in the Event Log(s).
	22.	CREATE a hand-written receipt for personal property. This receipt is for contaminated personal property to be removed from the residence.
	23.	REVIEW receipt with property owners/occupants and sign the detailed receipt for all items removed from premises (document this action in the Event Log).
<p>NOTE: <i>Steps 24, 25 and 26 may be performed anytime prior to Step 27.</i></p>		
Radiological Control Technician	24.	TRANSPORT radioactive material and smear media in accordance with MSC-5173 , Article 423, and return to the Project/Activity for decontamination and disposition.
	25.	Document radiological survey result on a numbered Radiological Survey Report(s) (A-6002-696).
Radiological Control Technician	26.	Complete Personnel Contamination Data sheet(s) (A-6000-962 , A-6000-957), as needed.
	27.	PROVIDE a copy of the Radiological Survey Report(s) and attachments to the RP Manager upon approval.
RCT Supervisor or delegate	28.	PROVIDE summary to the RL RCM within three days.

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7.0 FORMS

Radiological Survey Report ([A-6002-696](#)).
 Personnel Contamination Data - Clothing ([A-6000-962](#) [as required])
 Personnel Contamination Data - Skin ([A-6000-957](#) [as required]).
 MSA Pre-Job Briefing Checklist - ([BD-6000-696](#))

8.0 RECORD IDENTIFICATION

The following records are generated during the performance of this procedure. Maintain as radiological records and include on the records inventory and disposition schedules (RIDS) in accordance with the MSA records management program.

NOTE: *Radiological records maintained on individuals shall be protected from disclosure in accordance with requirements established in the Privacy Act of 1974.*

Name of Document	Submittal Responsibility	Retention Responsibility
Radiological Survey Report (A-6002-696)	Radiation Protection Organization	Radiation Protection Organization
Personnel Contamination Data – Clothing (A-6000-962)	Radiation Protection Organization	Radiation Protection Organization
Personnel Contamination Data- Skin (A-6000-957)	Radiation Protection Organization	Radiation Protection Organization
MSA Pre-Job Briefing Checklist (BD-6000-696)	Radiation Protection Organization	Radiation Protection Organization
Event Log	Radiation Protection Organization	Radiation Protection Organization

9.0 REFERENCES

9.1 Source Requirements

[MSC-5173](#), MSC Radiological Control Manual
[MSC-SP-1145](#), MSA- Radiation Protection Program Plan
[MSC-PRO-060](#), Reporting Occurrences and Processing Operations Information

9.2 Working References

10 CFR 835, Occupational Radiation Protection.

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APPENDIX A Radiological Monitoring Checklist

NOTE: *This checklist is for consideration when radiological monitoring off-site items.*

- Clothing worn at time of occurrence
- Furniture used since time of occurrence
- Telephone(s) if used since the occurrence
- Washing machine and drain line, dryer and dryer lint filter
- Vacuum cleaner and filter
- Bathroom (e.g., toilet, towels, sink, bathtub, shower, drains, personal items such as razor, and any floor drains, etc.)
- Bedroom used by the person involved in the occurrence
- Kitchen (e.g., counter tops, sinks, lunch box, dishes, etc.)
- Floor coverings such as rugs and carpets
- Clothes closets (especially the floor)
- Items which property owners/occupants/exempt staff member want radiological monitored
- Personal radiological monitoring of those who could be potentially cross contaminated
- Personal vehicles used since the occurrence
- Furnace and/or air conditioner filters as applicable

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APPENDIX B

