

U. S. Department of Energy



Consolidated Audit Program Treatment, Storage and Disposal Facilities

Checklist 5 Radiological Control

Revision 1.2
November 30, 2007

Audit ID:

Date:

Audit ID: _____ TSDF: _____ Auditor: _____

Prepared by: Todd Hardt

Approved by: *Carolyn Thomas*

Areas of Review During Audit

____ Program Definition

____ Radiological Exposure Control

____ Radiation Surveys

____ Posting and Labeling

____ Respiratory Protection Program

____ Training

____ Annual Radiological Program Evaluation

A = Acceptable

NA = Not Applicable

F = Finding

O = Observation

Referenced regulations are accessible at the following URLs:

- <https://doecap.oro.doe.gov>
- <http://www.access.gpo.gov/nara/CFR/CFR-table-search.html#page1>

NOTE:

- When audit findings are written against *site-specific documents* (i.e., SOPs, QA Plans, licenses, permits, etc.), a *copy* of the *pertinent requirement text* from that document *must* be attached to this checklist for retention in DOECAP files.

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Item Number	Lines of Inquiry	Status	Response/Comment
1.0	Program Definition		
1.1	<p>The facility meets all provisions of its Radioactive Materials License (RML)?</p> <p>Note to Auditors: Verifying RML conditions have been met is considered the initial primary focus of the audit. The auditor should examine the RML for license conditions directly applicable to radiological control (<i>Transportation and Waste Operations are considered the purview of other auditors</i>). If the auditor determines that specific radiological control license conditions have been satisfactorily met, many of the items that follow on this checklist (emphasizing 10 CFR 20 or its state radiation control program equivalent) will NOT apply.</p> <p>When citing the RML, a specific reference to any finding or violation MUST be cited.</p>		
1.2	<p>A written Radiation Protection Program (RPP) has been issued and reflects currently licensed activities?</p> <p><i>10 CFR 20.1101(a)</i></p>		
1.3	<p>The RPP is supported with implementing procedures?</p> <p><i>10 CFR 20.1101(b)</i></p>		
1.4	<p>An ALARA program is defined and implemented to minimize occupational and public doses?</p> <p><i>10 CFR 20.1101(b)</i></p>		

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1.5	The facility maintains and retains records sufficient to satisfy the provisions of the RPP? <i>10 CFR 20.2102</i>		

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2.0	Radiological Exposure Control		
2.1	Exposure monitoring of external and internal doses are conducted <u>as required</u> to demonstrate compliance with the dose limits? <i>10 CFR 20.1502 and 1202(a)</i>		
2.2	Occupational annual doses for adults and minors are controlled to the established limits? <i>10 CFR 20.1201 and 1207</i>		
2.3	The facility ensures the dose equivalent to an embryo/fetus during the entire pregnancy of a declared pregnant woman does not exceed 0.5 rem? <i>10 CFR 20.1208</i>		
2.4	Suitable and timely measurements are conducted to determine internal exposures as required? <i>10 CFR 20.1204 and 10 CFR 20.1502(b)</i>		
2.5	The facility conducts operations so that the dose limit for individual members of the public does not exceed 100 mrem in a year as required? <i>10 CFR 20.1301(a)</i>		

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2.6	Facility staff supply external dose monitoring devices for individuals likely to receive a deep dose equivalent at a specified fraction of the annual limits OR when entering high or very high radiation areas? <i>10 CFR 20.1502(a)</i>		
2.7	Facility staff monitors and assesses the occupational intake of radioactive material for individuals likely to receive an internal dose at a specified fraction of the annual limits? <i>10 CFR 20.1502(b)</i>		
2.8	Personnel dosimeters used are appropriate for the licensed activities and are processed and evaluated by a currently accredited processor? <i>10 CFR 20.1501(c)</i>		
2.9	Staff uses process or other engineering controls or administrative controls to restrict internal exposures in restricted areas? <i>10 CFR 20.1701 and 1702</i>		
2.10	The facility properly monitors for and controls access to high radiation areas and very high radiation areas? <i>10 CFR 20.1601 and 1602</i>		
2.11	Workers are provided notifications and reports pertaining to occupational exposures? <i>10 CFR 19.13 and 10 CFR 20.2106</i>		

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3.0	Radiation Surveys		
3.1	Surveys are conducted as required in unrestricted and controlled areas to assess radiation levels and effluent releases to demonstrate compliance with public dose limits? <i>10 CFR 20.1302</i>		
3.2	Facility staff performs radiation and contamination surveys and monitoring as may be necessary in occupational areas to demonstrate regulatory compliance? <i>10 CFR 20.1501(a)</i>		
3.3	Survey meters are calibrated for the radiation measured? <i>10 CFR 20.1501(b)</i>		
3.4	The facility maintains records of surveys and calibrations and retains these records for a designated regulatory time period? <i>10 CFR 20.2103</i>		

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4.0	Posting and Labeling		
4.1	The licensee has complied with posting requirements for workers? <i>10 CFR 19.11</i>		
4.2	Areas containing radiation and radioactive materials are conspicuously posted with a sign(s) specifying the appropriate hazard as required? <i>10 CFR 20.1902 and 1903</i>		
4.3	Licensed radioactive material containers are labeled with a durable, clearly visible label to identify their hazards as required? <i>10 CFR 20.1904 and 1905</i>		

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5.0	Respiratory Protection Program		
5.1	A formal respiratory protection program has been implemented and maintained by the licensee for staff assigned or permitted to use respiratory protective equipment? <i>10 CFR 20.1703</i>		

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6.0	Training		
6.1	The applicant for a specific radioactive material license is qualified by training and experience to utilize the material for the intended purpose and protect health/minimize danger to life or property? <i>10 CFR 30.33(a)(3)</i>		

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7.0	Annual Radiological Program Evaluation		
7.1	The RPP is periodically (e.g., annually) evaluated for content and implementation. <i>10 CFR 20.1101(c)</i>		

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