

9713508.0062

RELEASE INSTRUCTIONS (RI)

DOCUMENT NO.:

WHC-CM-7-5

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Route a copy of the implementation notice to all users of this copy of the manual.

IMPLEMENTATION NOTICE**5.0, Rev. 3, Change 2, "Records, Reporting and Response Activities"**

5.3 - Spills and Release Reporting. Editorial changes were made throughout the section for organizational name changes. The text was modified to reflect the appropriate changes covered by an approved ECM waiver request for this section. Most of the "Best Management Practices" areas were removed on the previous sections total rewrite.

5.4 - Environmental Monitoring. Editorial changes were made to remove "Best Management Practices" (where appropriate), and to reflect organization changes, and current methods of program documentation.

5.5 - Emergency Planning and Community Right-to-Know (EPCRA). Minor editorial changes were made throughout Section 5.5, with updating organizational names in 5.5.1 and "Best Management Practices" were removed in Section 5.5.1 and 5.5.2.

5.6 - Environmental Compliance Issue Coordination

5.7 - Record and Reporting Requirements

5.8 - Reporting Enforcement Notices. Minor changes were made to Section's 5.6, 5.7, and 5.8. The revisions entailed updating these sections to reflect current Organizational Changes within the company and title changes. No "Best Management Practices" required revision.

6.0, Rev. 3, "Inactive Waste Sites"

Editorial changes were made throughout Section 6.0 Inactive Waste Sites. The changes consisted of deleting Basis Statements referring to Best Management Practices. Also, this include updating sections to reflect current Organizational Changes within the company.

13.0, Rev. 1, Change 1. "Environmental Issue Identification, Review, and Interface Requirements"

Section 13.5 - Environmental Review. A revision to this section was made to reflect organizational changes, a review of the basis statements, including an assessment of the best management practice requirements. The resulting revision eliminated unnecessary or redundant requirements to streamline and clarify this section.

No additional requirements were added as a result of these changes. Editorial changes were made to Section 14 which consisted of deleting 4.1.7, 4.1.8, 4.4.4, 4.6.3, and 4.6.5. Modifications were also made to update organizational changes. In Section 4.1.9, a revision was added to show the source of corrective actions. In other sections, changes were made to correct references (e.g., reference to the quarterly report was deleted and errors in reference titles were changed.)

Section 13.6 - Environmental Compliance Issue Identification and Resolution Protocol. A revision to this section was made to reflect organizational changes and the unnecessary "Best Management Practices" were eliminated. The section was also updated to include commitments made to RL by WHC in the letter by A. L. Trego, WHC, to J. D. Wagoner, RL, "Achieving Environmental Compliance, "dated May 4, 1995.

Appendix A - Central Environmental Committee (CEC) Charter. The CEC Charter has been removed as Appendix A from Section 13 since the CEC charter is also included as Appendix I of the manual. However, Appendix I now includes the most current version of the CEC Charter.

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14.0, Rev. 0, Change 2, "Pollution Prevention"

Editorial changes were made to Section 14 which consisted of deleting 4.1.7, 4.1.8, 4.4.4, 4.6.3, and 4.6.5. Modifications were also made to update organizational changes. In Section 4.1.9, a revision was added to show the source of corrective actions. In other sections, changes were made to correct references (e.g., reference to the quarterly report was deleted and errors in reference titles were changed.)

15.0, Rev. 1, Change 1, "High-Level Waste"

Editorial changes were made throughout Section 15.0 High-Level Waste to reflect current Organizational Changes within the company and update current references used in this section.

Appendix I, Rev. 1, "Central Environmental Committee (CEC) Charter"

The most current version of the CEC Charter has been included and replaces the earlier 1993 version. This Charter was the one removed from Section 13.

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4.0	National Environmental Policy Act/State Environmental Policy Act CHANGE 1 (all) CHANGE 2 (all) CHANGE 3 (all)	1	06/01/93 03/28/95 05/09/95 01/30/96
5.0	Records, Reporting and Response Activities CHANGE 1 (i, 3, 6, 48, 49) CHANGE 2 (all)	3	11/10/95 04/10/96 09/27/96
6.0	Inactive Waste Sites	3	09/27/96
7.0	Solid Waste Management CHANGE 1 (32, 34)	2	02/27/96 04/10/96
8.0	Water Quality CHANGE 1 (23, 23a, 24) CHANGE 2 (12)	2	09/07/95 12/20/95 03/12/96
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12.0	Preservation of Cultural and Natural Resources	2	06/30/95
13.0	Environmental Issue Identification, Review, and Interface Requirements CHANGE 1 (all)	1	10/04/95 09/27/96
14.0	Pollution Prevention CHANGE 1 (1) CHANGE 2 (all)	0	08/15/95 07/03/96 09/27/96
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I	Central Environmental Committee Charter	1	09/27/96
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Records, Reporting and Response Activities**5.1 PURPOSE**

This section contains the response actions to be taken in the event of a spill or release of a solid, liquid or airborne radioactive material or hazardous substance. This section also details the requirements for reporting chemical information pursuant to the Emergency Planning and Community Right-To-Know (EPCRA) and for developing and maintaining an environmental monitoring program to include effluent monitoring and environmental surveillance. This sections identifies numerous records and reports required by federal, state and local environmental regulations. U.S. Department of Energy, Richland Operations Office (RL) environmental compliance support service and information channels are also given and provide a method for coordinating environmental compliance issues with DOE.

5.2 SCOPE

This section is applicable to all Westinghouse Hanford Company (WHC), ICF Kaiser Hanford Company (ICF KH), Boeing Computer Services Richland, Inc. (BCSR) activities on the Hanford Site, involving the handling and management of radioactive, hazardous or dangerous wastes, hazardous or extremely hazardous substances, polychlorinated biphenyls (PCBs), oil and petroleum products. The Release Reporting and Recordkeeping requirements can be found in Table 5-1 and Table 5-2, respectively.

5.3 SPILLS AND RELEASE REPORTING

This section identifies organizational responsibilities and response actions to be taken in the event of an accidental, routine or non-routine release of a solid, liquid or airborne substance, which includes, radioactive, hazardous or dangerous wastes, hazardous or extremely hazardous substances, polychlorinated biphenyls (PCBs), oil or petroleum products. Implementation of response actions will ensure compliance with release clean-up, recordkeeping and notification requirements per applicable environmental regulations.

5.3.1 Responsibilities

1. All WHC and BCS employees shall immediately report all releases covered in Section 5.3, except for small drips that can be immediately wiped up, to either their immediate manager, building emergency director, and or Sitewide Reports (SR). Reference Flow Chart Figure 5.0.

ICF KH releases shall be reported in accordance with their "Spill Prevention and Countermeasures Procedure, Number ENV 8."

2. The facility manager, or building emergency director, shall report releases and implement response actions in accordance with the requirements contained in 5.3.2 of this section.
3. Sitewide Reports (SR) shall:
 - a. Provide notifications in accordance with the provisions of 5.3.2 of this section.

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- b. Provide the facility management or designee with information on the reportability of the spill.
4. The WHC Generator/Waste Acceptance Services (GWAS) will provide the following information to the facility management, if necessary:
 - a. Specify the proper packaging, and disposal requirements (including waste disposal packaging) for the wastes generated during cleanup activities.
 - b. Perform spill designations in accordance with WHC procedures.
 - c. Provide SR with an evaluation of the spill designations upon request.
 5. Radiological Control (RC) and Industrial Safety and Fire Protection (IS&FP) shall specify to the facility management what employee protection and site monitoring requirements are necessary during monitoring and cleanup activities associated with the spill.
 6. Transportation shall specify to the facility management, as required, the proper transportation requirements for wastes generated during cleanup.

5.3.2 Requirements

1. If a release of a hazardous substance, dangerous waste, mixed waste, radionuclides, PCB, oil or petroleum product (regardless of the quantity), except for small drips that can be immediately wiped up, is discovered:
 - a. The responsible organization, facility manager, area manager, building emergency director (BED), or building warden (BW) shall:
 - (1) Immediately report any situations affecting the facility and/or personnel safety requiring emergency assistance by notifying Patrol Operations Center (POC) 911, then implement the actions specified in the appropriate facility/site emergency procedures and plans as required, then notify SR.

BASIS: WAC 173-303-350 and the Hanford Facility Contingency Plan, 29 CFR 1910.120(q)

- (2) Report any release that exceeds a Washington Administration Code emission limit, Prevention of Significant Deterioration (PSD) permit or the discharge limits in a National Pollutant Discharge Elimination System (NPDES) permit to SR.

BASIS: Any release in excess of a permit emission limit is to be reported to SR, to determine if reporting to offsite regulatory authorities is required. WAC 173-400-107, NPDES.

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- (3) Immediately report any spills or releases, covered by Section 5.3, regardless of the quantity, except for small drips that can be immediately wiped up, to SR. In case of an emergency the Hanford Fire Department (HFD) shall be notified through the POC. The HFD can also be contacted for assistance in spill control or designation of material released, if requested.

BASIS: DOE has designated the HFD as the "hazardous materials incident command agency" for spills and releases that require emergency assistance, in accordance with RCW 70.136.030.

NOTE: SR should be contacted prior to any routine use of a hazardous substances if there is any question whether such use could result in a discharge that exceeds a CERCLA or EPCRA RQ.

SR points-of-contact can be found in the following way: 1) See: "Spill/Release contact personnel for the Hanford Site" on the Hanford Information Network. 2) Call the Patrol Operations Center (POC). 3) Look under "Spills and Unplanned releases" in the General Phone Classification Directory (F2).

NOTE: SR points-of-contact are available on a 24 hr. basis. Continue to call until someone is directly contacted, leaving a "Voice Mail, CC:Mail" or home answering machine message does not constitute proper notification to SR. If no contact can be made by phone, refer to the Pager Number in the references above.

- (4) Immediately determine from SR if the release will warrant notifying an offsite regulatory agency, review the occurrence, and assess its significance as soon as possible (within two hours of identification) and categorize the event or condition in accordance with WHC-CM-1-5, Section 7.1, DOE Work Order 232.1 and the Hanford Facility Contingency Plan,(DOE-RL-93-75) requirements. Then immediately notify the Occurrence Notification Center (ONC) (376-2900) and the RL facility representative if the facility manager or area manager determines that the release is categorized as an emergency, unusual occurrence, or off-normal. In general, WHC-CM-1-5, Section 7.1 requires submittal of written notification as soon as practical for events categorized as emergencies and within 24 hours for events categorized as unusual occurrences or off-normal events.

BASIS: WHC-CM-1-5, Section 7.1, DOE 232.1, and DOE 5400.1.

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- (5) To prevent any future threat or potential threat to human health or the environment, the responsible organization shall see that all releases covered by Section 5.3 are cleaned up per statutory time limits and as soon as practicable, then disposed of per state and federal regulatory requirements.

BASIS: WAC 173-303-145, Best Management Practice.

- (6) If spills or releases cannot be immediately cleaned up and will be left for future cleanup as part of the Operable Unit, the site will be required to be entered into the Environmental Sites Database (ESD) as a new waste site or an update to an existing waste site.

BASIS: WHC CM-7-5, Section 5.4, and Tri-Party Agreement.

- (7) Inform personnel responsible for facility sampling and monitoring programs of releases that have the potential to affect sampling and monitoring data.

BASIS: WHC conducts routine sampling and monitoring for various facilities. Item (5) is intended to alert appropriate personnel of releases that could cause sampling and monitoring data to deviate from normal results.

b. SR shall:

- (1) Collect and retain all pertinent information on the release from the person reporting the incident.
- (2) Contact AS to obtain an approved designation of the release when the substance is not on the CERCLA 302.4 list. Table 5-1 provides a summary of non-permit release reporting requirements.

BASIS: WAC 173-303-145

- (3) Evaluate the spill/release information furnished and notify the appropriate off site environmental regulatory agency(s), if a release exceeds a CERCLA or EPCRA threshold RQ, Department of Ecology hazardous waste tank or underground storage tank (UST) reporting limits; Resource Conservation and Recovery Act (RCRA) underground storage tank reporting limit; National Pollutant Discharge Elimination System (NPDES) permit limit; Prevention of Significant Deterioration (PSD) permit limit, DOE Order limit; or any other applicable local, state, or federal air, water, or land pollution control standards.
- (4) Any spills or releases from the 200 Area Tank Farm high-level radioactive waste tanks and connected tank farm piping systems that meet any of the reporting requirements, listed below, SR shall direct the ONC

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to send the "Preliminary Notification Report" to the Heart of America representative within one day (24 hrs) after this same written report is sent to any offsite environmental agency.

- a. A reportable quantity (RQ) exceed under CERCLA 103(a) including continuous release reporting under 40 CFR 302.8.
- b. Notice to potential injured parties under 40 CFR 111(g).
- c. Notice of release under WAC 173-303-145.
- d. Notice of implementation of a contingency plan under WAC-173-303-360.

NOTE: See Heart of America Northwest et. al., vs Westinghouse et.al., requirements in Appendix A.

- (5) Notify WHC Corporate Environmental Affairs, Public Involvement Services and the WHC environmental counsel of any releases that necessitates reporting to an outside environmental regulatory agency.
- (6) Report any spills or releases that may require notification to the news media to WHC Project Communications.

BASIS: CERCLA Section 111(g)

- (7) Prepare and distribute a monthly report to WHC, ICF KH Management and RL summarizing all WHC, ICF KH, and BCSR spills and releases.

BASIS: Fiscal Year FY 1995 Multi-Year Work Program Plan/Fiscal Year Work Plan, WBS 1.5.2/7.4.11; WHC-SP-1112.

c. Hanford Fire Department shall:

- (1) Evaluate spills and releases, if requested, to determine if immediate response by the HFD Hazardous Material (HazMat) team is warranted.

d. Solid Waste Disposal (SWD) shall:

- (1) Assist the Hanford Fire Department, upon request, to determine the emergency actions to be performed.
- (2) Specify the appropriate action to clean up the spill site in conjunction with the responsible area manager, IS&FP and RC personnel.

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- e. Transportation and Packaging shall:
 - (1) Identify appropriate transportation and packaging requirements for waste generated during cleanup.

5.4 ENVIRONMENTAL MONITORING**5.4.1 Responsibilities**

- 1. Near Field Monitoring (NFM) shall:
 - a. Investigate and document suspect or known waste sites for in the Environmental Sites Database/Waste Information Data System (ESD/WIDS).
 - b. Coordinate with the ESD/WIDS administrator regarding database use and development.
 - c. Manage, operate, and maintain an environmental radioactivity and chemical emission monitoring program at WHC facilities and associated active and inactive waste sites, as required to demonstrate compliance to environmental regulations.
 - d. Maintain Washington State and federal permits for the collection and/or research of Hanford Site flora and fauna in accordance with Section 12 of this manual.
 - e. Manage, operate, and maintain an environmental radioactivity and chemical diffuse/fugitive emission monitoring program of WHC facilities and operations for diffuse sources and report.
- 2. Effluent Monitoring shall manage, operate, and maintain an environmental radioactivity and chemical emission monitoring program of WHC facilities and operations for point and diffuse sources.
- 3. All WHC Employees and subcontractors shall:
 - a. Report suspect waste sites to NFM upon discovery.
 - b. Provide information for waste site investigation and documentation.
 - c. Upon discovery, report changes or modifications of existing waste sites to NFM for inclusion into WIDS.
- 4. Site planning shall:
 - a. Designate sites as waste sites or appoint managers for suspect waste sites in accordance with WHC Building Structure List (Report HFCR, Design Document Master Index [Report RBR001]), or on approved/released engineering

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documents (blueprints) for existing facilities or waste sites that have an established name/number.

- b. Assign building and other structure numbers in accordance with WHC-CM-8-7, Section 907.
5. Radiological Control Organization shall conduct the radiological surveillances, as directed by NFM, for environmental contamination.
6. Quality Assurance shall perform reviews to ensure compliance with applicable WHC and DOE environmental quality assurance requirements.
7. Facility, Area, and Managers shall ensure waste sites under their purview are entered into the WIDS.

BASIS: RCRA 3004(u) and Tri-Party Agreement Section 3.5.

5.4.2 Requirements1. General

- a. Effluent monitoring shall be performed as required by DOE 5400.1. The effluent monitoring requirements of the Order are considered to be met if compliance is maintained with the specific monitoring requirements in this manual.

BASIS: DOE 5400.1

- b. Operational or nonoperational, radioactive or nonradioactive, hazardous or nonhazardous waste treatment, storage, and disposal facilities shall be monitored by an environmental monitoring program that complies with the requirements of DOE 5820.2A and 5400.1.
- c. The environmental monitoring program shall be designed to measure:
 - (1) Migration of radionuclides.
 - (2) Disposal unit subsidence.
 - (3) Changes in disposal facility and disposal site parameters that may affect long-term site performance.
 - (4) Biota with the potential to become contaminated.

BASIS: Identifies requirements established in DOE 5820.2A, Chapter III, 3.k.(2).

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- d. The environmental monitoring program may include, but not necessarily be limited to, monitoring surface soil, air, surface water, and (in the subsurface) both soil and water in the saturated and the unsaturated zones.

BASIS: Identifies requirements established in DOE 5820.2A, Chapter III, 3.k.(3).

- e. Environmental monitoring for nonradioactive pollutants shall be performed if it is not possible to determine compliance with federal, state, or local environmental regulations on the basis of effluent monitoring data. Migration of nonradioactive pollutants can be modeled using monitoring data for radionuclides.

BASIS: DOE 5484.1, Chapter III, 3, states this requirement.

- f. The monitoring program shall be capable of detecting changing trends sufficiently in advance to allow application of any corrective actions prior to exceeding performance objectives, and shall be able to ascertain whether or not effluents from each treatment, storage, or disposal facility/site meet requirements.

BASIS: Identifies requirements established in DOE 5820.2A, Chapter III, 3.k.(4).

- g. Preoperational environmental surveys shall be performed to obtain background and baseline data at least 1 year and preferably 2 years prior to full facility operation.

BASIS: DOE 5400.1, Chapter IV, paragraph 3.

- h. Preoperational environmental surveys shall establish background levels of radioactive and chemical pollutants, characterize pertinent environmental and ecological parameters, and identify potential pathways for human exposure or environmental impact as a basis for determining the nature and extent of the subsequent routine operational effluent and environmental monitoring program.

BASIS: DOE 5484.1, Chapter III, 1, states the requirements for preoperational surveys.

- i. Standard analyses shall be performed on effluent samples to demonstrate compliance with regulations, whenever such methods are required by regulatory programs.

BASIS: DOE 5400.1, Chapter IV, paragraph 5.a.(2)(c).

2. Diffuse Source Monitoring

- a. Diffuse sources shall be monitored in accordance with the provisions of 40 CFR 61 (including radioactive materials).

BASIS: DOE 5484.1, Chapter III, 2.b, requires monitoring to determine whether and to what extent the releases from DOE sites comply with applicable standards.

DOE 5400.1, Chapter IV, 7.a and 8.a, requires airborne emissions to be monitored in accordance with the requirements stated in 40 CFR 61.

- b. Individual diffuse sources shall be monitored when together they have the potential to contribute more than 10 percent of the total dose from site operations to members of the public.

Sources of diffuse or fugitive emission releases due to resuspension of residual radioactive material or from waste storage shall be described. The release rate in Ci/yr and effective dose equivalent to the public shall be described. The method used to determine the values reported shall be described.

The following procedures shall be applied when compiling an assessment of a diffuse source:

- (1) The assessment shall be accomplished by using appropriate computational modes and/or a downwind array of samplers arranged and operated over a sufficient period to characterize the concentrations of radionuclides in any resulting plume.
- (2) Empirical data and sound assumptions shall be used with the computational models to define the source term for a diffuse source.

BASIS: Based on guidance contained in Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance, U. S. Department of Energy, January, 1991, DOE/EH-0173T; used to show compliance to DOE 5400.1.

- c. For other airborne effluent diffuse source guidelines refer to Section 2 of this manual.
- d. For airborne effluent point source guidelines refer to Section 2 of this manual.

Records, Reporting and Response Activities3. Groundwater Monitoring

- a. Groundwater shall be monitored in accordance with 40 CFR 264, Subpart F; 40 CFR 265, Subpart F; WAC 173-303; DOE 5484.1; and applicable requirements identified in DOE 5820.2A.

BASIS: DOE 5484.1, Chapter III, 2.b, requires monitoring to determine whether and to what extent the releases from DOE sites comply with applicable standards.

DOE 5400.1, Chapter IV, 9.c, requires that, where appropriate, groundwater shall be monitored in accordance with 40 CFR 264, Subpart F; 40 CFR 265, Subpart F; and WAC 173-303.

- b. For sites with multiple groundwater pollutant sources, site-specific characteristics shall determine monitoring needs.

BASIS: DOE 5400.1, Chapter IV, 9.c, states that site-specific factors will affect the groundwater monitoring program and that sites with multiple groundwater pollution sources or extensive groundwater pollution may require more extensive information than required by 40 CFR 264 and 40 CFR 265.

4. Reporting

- a. A report shall be prepared annually by NFM to summarize and interpret the monitoring results that assess the effectiveness of environmental controls imposed on operations and waste management practices (DOE 5484.1, Chapter III).

BASIS: DOE 5400.1, Chapter II, 5, and 5400.5, Chapter I, 8(b)(a) and ii, state the requirements for reporting the results from the effluent monitoring programs. WHC is responsible for submitting the annual effluent report.

5. Quality Assurance

- a. Environmental monitoring activities shall be consistent with DOE 5700.6C and shall cover each element of environmental monitoring and surveillance programs commensurate with its nature and complexity.

BASIS: DOE 5400.1, Chapter IV, 10, verbatim requirement.

- b. The environmental monitoring program shall include an established routine quality assurance program to satisfy the requirements of applicable DOE orders.

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BASIS: Based on the Environmental Regulatory Guide for radiological effluent monitoring and environmental surveillance. DOE 5400.1, Chapter IV, 10.a.

- c. Contracted laboratories performing environmental sample analyses shall be appropriately certified by the U.S. Environmental Protection Agency (EPA) regional office or Ecology.

BASIS: DOE 5400.1, Chapter IV, 10.b, states, "Where DOE operations secure the support of outside contractor laboratories, this work shall be conducted by appropriately certified laboratories."

- d. The DOE or contractor-operator laboratories that conduct sample analyses shall be appropriately certified by the EPA regional office or Ecology.

BASIS: DOE 5400.1, Chapter IV, 10.b, states that DOE and DOE contractor laboratories shall confirm the need and apply for any certification requirements with appropriate federal, state, or local agencies.

- e. All laboratories that conduct analytical work in support of DOE environmental radiological monitoring programs for radioactive materials shall participate in the DOE interlaboratory quality assurance program coordinated by the DOE Environmental Measurements Laboratory, New York, New York.

BASIS: DOE 5400.1, Chapter IV, 10.c.

5.4.3 Environmental Monitoring Plan

The Environmental Monitoring Plan (EMP) shall contain the rationale, design, and operational criteria for monitoring and sampling programs; the extent and frequency of monitoring and sampling; procedures for laboratory analysis; quality assurance requirements; and the verification and direction for the preparation and disposition of reports as required by DOE 5400.1 and DOE/EH-0173T.

The EMP shall consist of two major activities:

1. Effluent Monitoring

- a. Near-Facility Monitoring program (NFMP). An NFMP manual shall be administered by NFM.
- b. Environmental surveillance plans, programs, operations, and other activities pertinent to near-facility monitoring are provided by NFM.
- c. Facility Effluent Monitoring Plan (FEMP).

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- (1) Each facility manager shall be responsible for obtaining a FEMP determination for those operations and processes that use, generate, release, or manage regulated substances. If the determination indicates that a FEMP is necessary, the facility manager shall be responsible for ensuring that a FEMP is written. In general, a FEMP will be required for facilities that (1) have a total projected dose from radionuclides in excess of 0.1 mrem effective dose equivalent (EDE) from any one discharge point, or (2) if any one regulated material discharged from the facility exceeds 100 percent of a reportable quantity or a permitted quantity, or (3) if a liquid effluent is regulated by the National Pollutant Discharge Elimination System (NPDES) and contains radionuclides that will cause any person consuming that effluent to receive an EDE greater than 4.0 millirem per year. Additional information on the FEMP process may be found in WHC-EP-0438-1, 11A, "Guide for Preparing Hanford Site Facility Effluent Monitoring Plans."

Facility management is required to obtain the Effluent Monitoring (EM) function's approval for all changes to the FEMPs, including those generated in the annual review and update. In addition, the FEMP shall be reviewed by QA and Environmental Policy.

Contractor management is responsible for assigning appropriate personnel to perform the reviews, assessments, and approvals as required, and for maintaining this documentation. DOE may require additional reviews, as necessary, to ensure program integrity.

- (2) The FEMP should be revised as process or regulatory changes occur. The FEMP shall undergo a formal review by the facility by June 1 of each year and be updated as necessary.
- (3) Management at waste generating units shall obtain EM approval for all changes to monitoring operations. The annual FEMP shall be reviewed and updated when changes are made to the process.

BASIS: DOE 5400.1

2. Environmental Surveillance

- a. Environmental surveillance plans, programs, operations, and other activities pertinent to sitewide activities are maintained by Pacific Northwest National Laboratory (PNNL).

The requirements of this section shall be met before startup of new or modified facilities. Preoperational studies should be conducted for a new site, facility, or process, in accordance with the requirements of Section 9.0 of this manual.

BASIS: DOE order or regulatory requirements.

5.5 EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) REPORTING

There are three separate reporting requirements under Subtitle B of EPCRA:

- Material Safety Data Sheet (MSDS) Listing (EPCRA, Section 311, and 40 CFR 370.21)
- Tier II Emergency and Hazardous Chemical Inventory (EPCRA, Section 312, and 40 CFR 370.25)
- Toxic Chemical Release Inventory (EPCRA, Section 313, and 40 CFR 372)

Each of the periodic reports are prepared for the entire Hanford Site, incorporating information from all RL contractors. This section defines WHC roles and responsibilities in supporting site compliance with the EPCRA reporting requirements.

5.5.1 Responsibilities

1. Facility managers shall:
 - a. Designate responsible engineering, scientific, or trained technical personnel to function as the EPCRA Reporting Representative(s).
 - b. Support the development of facility hazardous material inventory control practices, to assure all hazardous materials stored at the facility are accounted for, with respect to the reporting requirements of Section 5.5.2.
 - c. Review facility input to the annual Hanford Site Tier II Emergency and Hazardous Chemical Inventory report. Provide written certification that the information is true, accurate, and complete.
 - d. Review facility input to the annual Hanford Site Toxic Chemical Release Inventory report and associated report preparation activities. Provide written certification that the information is true, accurate, and complete.
2. EPCRA reporting representatives shall:
 - a. Develop hazardous material inventory control practices to assure all hazardous materials are accounted for, with respect to the reporting requirements in Section 5.5.2. These practices should be documented in written procedures, desk instructions, or other appropriate form.
 - b. Coordinate with other designated EPCRA reporting representatives assigned to overlapping areas of responsibility to assure that all hazardous materials are properly reported.

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- c. Conduct physical inventories of hazardous materials stored in locations under the control of the applicable organizations. Utilize the Hazardous Material Inventory Database (HMID) to transmit and update required inventory information.
 - d. Prepare facility input to the site Toxic Chemical Release Inventory (TRI) report, according to instructions from WHC Environmental Services (ES).
 - e. Verify accuracy and completeness of facility input to all site reports. Facilitate line management review and certification of the input. Verification and certification shall be performed on an annual basis, at a minimum, to meet established report preparation schedules.
 - f. Determine applicability of EPCRA exemptions at the facility. Document all claimed exemptions in facility files.
 - g. Maintain supporting documentation for all facility input to site EPCRA reports.
3. WHC Environmental Services shall:
- a. Coordinate implementation of EPCRA reporting requirements at the Hanford Site. Review applicable regulations, develop appropriate guidance, and communicate relevant information to Reporting Representatives. Facilitate the resolution of issues regarding interpretation of reporting requirements.
 - b. Administer HMID, including the addition and maintenance of appropriate reference information.
 - c. Review HMID inventory information on a quarterly basis to identify hazardous chemicals present on site in quantities exceeding minimum threshold levels. Prepare an updated Hanford Site MSDS listing, according to the requirements of 40 CFR 370.21. Submit the listing to RL for transmittal to the State emergency response commission, local emergency planning committees, and local fire departments.
 - d. Coordinate the annual verification and certification of HMID inventory information with Reporting Representatives. Prepare the annual Hanford Site Tier II Emergency and Hazardous Chemical Inventory (Tier II) report, according to requirements of 40 CFR 370.25. Schedule report preparation activities to assure submittal by the March 1 regulatory due date.
 - e. Collect toxic chemical use and release information as necessary for compliance with the reporting requirements of 40 CFR 372. If required, prepare the annual Hanford Site Toxic Chemical Release Inventory report to assure submittal by the July 1 regulatory due date. If a TRI report is not required, prepare an EPCRA 313 Compliance Validation Report to document activities leading to that determination.

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- f. Facilitate RL review of the MSDS Listing updates, Tier II report, and TRI report (or EPCRA 313 Compliance Validation Report). Respond appropriately to all comments and prepare final reports for transmittal by RL to external agencies.

5.5.2 Requirements

1. The Hanford Site meets the definition of a single "facility" with respect to EPCRA reporting requirements. Therefore, annual reports must be prepared with consolidated information from all RL contractors, comparing aggregated quantities to applicable reporting thresholds.
2. In order to make compliance determinations relating to EPCRA, Sections 311 and 312, inventory information for all hazardous chemicals stored at the Hanford Site must be considered, including those in mixtures as well as pure forms. The term hazardous chemical means any substance which is a health hazard or a physical hazard, as defined in 29 CFR 1910.1200(c). The following substances are excluded from the definition:
 - a. Foods, additives, drugs, or cosmetics regulated by the FDA.
 - b. Substances present as a solid in any manufactured item, where exposure to the substance does not occur.
 - c. Substances used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.
 - d. Substances used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.
 - e. Substances used in routine agricultural operations, or is a fertilizer held for sale.
 - f. Waste managed under RCRA and/or WAC 173-303.
3. The following inventory information must be provided for each hazardous chemical.
 - a. Material identity.
 - b. Identity and concentration of each known constituent.
 - c. Container type.
 - d. Temperature and pressure conditions of storage (designated as "ambient", "less than ambient", or "greater than ambient", or "cryogenic" for temperature).
 - e. Location of storage (identified by the Hanford Facilities Core official building number and room number, if applicable).

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- f. Quantity of material in inventory and dates present at each storage location, updated when a significant change in quantity occurs. At a minimum, the following quantity information must be provided:
 - i) The quantity present on January 1 of each calendar year. This provides a baseline for calculating average amount and number of days on site, required on the Tier II report.
 - ii) The maximum amount present during each quarter (January-March, April-June, July-September, October-December), provided by the last day of the quarter. This is necessary to identify required updates to the MSDS Listing in a timely manner.
 - iii) Adequate quantities present on dates throughout the calendar year to show normal fluctuation in inventory, required to calculate the average daily amount for the Tier II report. This includes a zero quantity on the date the material is removed from inventory.
4. In order to make compliance determination relating to EPCRA, Section 313, annual usage quantities of all toxic chemicals must be estimated, including those in mixtures at concentrations of 1 percent or greater (0.1 percent or greater if the chemical is an OSHA defined carcinogen). Toxic chemicals are listed in 40 CFR 372.65, and include both specifically listed chemicals and categories of chemicals.
5. The following exemptions apply to Toxic Chemical Release reporting, as described in 40 CFR 372.38.
 - a. If a toxic chemical is present in a mixture below de minimis concentrations (1 percent or 0.1 percent for carcinogens), that use of that mixture does not require consideration.
 - b. If a toxic chemical is present in an article (a solid manufactured item), and no releases of the chemical occur during the use of that article, the use of the article does not have to be considered.
 - c. The use of toxic chemicals for the following activities are exempt:
 - i) Structural component of a facility.
 - ii) Routine janitorial or grounds maintenance activities.
 - iii) Personal use by employees.
 - iv) Maintenance of motor vehicles.
 - v) Process water or air, as drawn from the environment.
 - d. The use of toxic chemicals in a laboratory under the supervision of a technically qualified individual is exempt, except for specialty chemical production or pilot plant scale operations.

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6. The following usage information must be provided for all reportable activities that use toxic chemicals during each calendar year.
 - a. A detailed description of the activity.
 - b. Dates the activity occurred.
 - c. Identity of each material used to perform the activity, including the identity and concentration of each known constituent.
 - d. An estimate of the annual usage quantity for each material.
7. If aggregated annual usage quantities of a specific toxic chemical exceed applicable thresholds, the following information must be provided for inclusion in the site TRI report.
 - a. Quantities of the chemical released to the air as a fugitive or stack air emission, discharged to receiving streams or water bodies, injected underground, and released to the land.
 - b. Information on transfers of the chemical in wastes to off site locations.
 - c. Waste stream types, on site treatment methods, and treatment efficiencies for all waste streams containing the chemical.
 - d. Source reduction and pollution prevention activities involving the chemical.

5.6 ENVIRONMENTAL COMPLIANCE ISSUE COORDINATION

The purpose of this section is to provide RL with the means to coordinate significant WHC-related environmental compliance issues with DOE EH-23 and Program Offices to ensure timely development and consistent application of DOE environmental policy and guidance.

5.6.1 Responsibilities

1. Each facility and project manager shall identify and advise WHC's Environmental Services and the appropriate RL program section, in a timely manner to assure early DOE involvement, of significant environmental compliance issues and related activities needing resolution.
2. Environmental Services shall:
 - a. Advise RL's Office of Assistant Manager for Environmental Management (AME), and the WHC-managed facility or project manager where applicable, in a timely manner to assure early DOE involvement, of significant environmental compliance issues brought to the attention of the WHC Environmental Services.

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- b. Provide RL with information as requested to assist in the resolution and coordination of significant environmental compliance issues and the development of responses to them.
- c. Provide RL's AME information on all existing and anticipated environmental permits and permit applications to support an RL submittal date of October 1 of each year, in accordance with Attachment 2 of DOE 5400.2A.

5.6.2 Requirements

Support RL in identifying significant environmental compliance issues that have the potential of setting precedent or creating controversy, and/or would involve DOE HQ notification, concurrence, or approval. Information provided should include that outlined in Attachment 1 of DOE 5400.2A. "Significant environmental compliance issues" are defined in paragraph 4.a of DOE 5400.2A.

BASIS: DOE 5400.2A.

5.7 RECORD AND REPORTING REQUIREMENTS

Timely environmental recordkeeping and reporting is mandatory in demonstrating regulatory compliance. Accessibility to environmental compliance documentation is required to accommodate regulatory reviews by agency inspectors. To accomplish this goal, specific regulatory files shall be established to demonstrate compliance with applicable environmental regulations.

A regulatory file shall be developed for any facility that must maintain records to demonstrate compliance with environmental regulations. A regulatory file shall contain information such as operating records and supporting documentation which demonstrates compliance with WAC 173-303 and other environmental regulations. Identification of each regulatory file is accomplished by preparing a regulatory file checklist that identifies the required documentation, the location, and the name and telephone number of the record custodian.

A copy of the regulatory file checklist is to be maintained at each waste management unit. All regulatory file documentation must be cleared for regulatory access.

5.7.1 Responsibilities

1. Facility management shall:
 - a. Assign file custodians, as needed, to maintain regulatory file documentation.
 - b. Assign an environmental compliance contact, as needed, to ensure regulatory compliance.
 - c. Ensure that all operating records and supporting documentation have been reviewed for clearance purposes to release to a regulator.

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2. Tank Waste Remediation shall:
 - a. Interface with EM-14 as they develop future guidance related to compliance with DOE 5820.2A, Chapter VI.
 - b. Be prepared to compile and consolidate the information required by the Section. 5.7.2 below at the direction of RL.
3. Environmental Restoration Organization shall be prepared to compile and consolidate information on the Decommissioning of Radioactively Contaminated Facilities according to the Attachment to the Waste Management Plan outline of DOE 5820.2A, Chapter VI, at the direction of RL.
4. Planning and Systems Integration shall compile information provided by waste management organizations and the Environmental Restoration Organization as directed by RL.

5.7.2 Requirements

Compile and consolidate information from radiological, hazardous, or mixed waste constituent management operations, sufficient for an annual report, facility identification, forces acting to change current waste management systems, and plans for the next fiscal year. The information shall be formatted according to the Waste Management Plan outline of DOE 5820.2A, Chapter VI and its Attachment, or as otherwise directed by the DOE.

5.8 REPORTING ENFORCEMENT NOTICES**5.8.1 Informal Notices**

Regulatory agencies issue enforcement actions that are generally either informal or formal. Informal enforcement actions typically relate to matters that do not pose actual or potential, critical or serious threat to human health and/or the environment. Informal actions are usually developed by the regulatory agency without a specific statutory or regulatory requirement other than general enforcement authority. Informal notifications are to be reported in accordance with WHC-CM-1-5.

BASIS: DOE 232.1

5.8.2 Formal notices

Formal enforcement actions are used by the regulatory agencies to compel handlers into compliance with the applicable regulations. The specific types of formal enforcement actions vary depending on the issuing regulatory agency and the applicable statute/regulation.

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The following are examples of formal enforcement actions:

Issued by the State of Washington Department of Ecology:

- **Notice of Violation (NOV)** - A document authorized by Chapters 90.48, 90.58, and/or 70.94 of the Revised Code of Washington that provides formal notice that a specific violation has occurred or is about to occur and requests a report from the violator (typically within 30 days) on the circumstances surrounding the violation and what steps are being taken to correct or prevent the violation.
- **Administrative Order** - An Administrative Order directs the violator to take a specified course of action within a specified time to achieve compliance. It is a unilateral action, issued by the agency pursuant to statutory authorities.
- **Civil Penalty** - A monetary penalty assessed against any violator, as provided by law, up to a maximum level. From the date a violator receives a notice of penalty or the department's response to a request for relief, the violator has 30 days from the date of receipt to appeal.
- **Criminal Prosecution** - A notice or action initiating a criminal proceeding. A criminal proceeding is the most severe enforcement action available to Ecology and may be initiated in cases of willful or intentional violations.

Issued by the State of Washington Department of Health:

- **Notice of Correction** - A written notice served whenever the Department of Health has reason to believe that a provision of the Washington Administrative Code (WAC) 246-47 has been violated. The notice will specify the provision of WAC 246-247 alleged to be violated and the facts alleged to constitute a violation.
- **Compliance Orders** - Compliance Orders are generally issued in conjunction with a Notice of Violation. The Order will require the recipient of the notice of violation either to take necessary corrective action or to submit a plan for corrective action and a date when such action will be initiated.
- **Civil Penalty** - A monetary penalty assessed against any violator, as provided by law, up to a maximum level. From the date a violator receives a notice of penalty or the department's response to a request for relief, the violator has 30 days from the date of receipt to appeal.

Issued by the U.S. Environmental Protection Agency:

- **Compliance Orders** - A notification requiring any person who is not complying with a requirement to take steps to come into compliance. A compliance order may require immediate compliance or may set out a timetable to be followed in moving toward compliance. The order can contain a penalty of up to \$25,000 per day for each day of noncompliance and can suspend or revoke a permit.

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- **Corrective Action Orders** - A notice requiring corrective action in the event there is evidence of a release of hazardous waste or a hazardous constituent into the environment. These orders can be issued to require corrective action activities ranging from investigations to repairing liners or pumping to treat a plume of contamination. Corrective action notices can be received regardless of when waste was placed at the facility.
- **Corrective Action** - A civil action where a court order is used to force any person to correct a problem and take any necessary response measures. A notice from the court will be received.
- **Criminal Action** - A notice or action initiating a criminal proceeding. The EPA can issue criminal actions for serious and often repeated violations.

5.8.2.1 Responsibilities

1. Facility Management shall complete required notifications in a timely manner.
2. Environmental Services shall provide guidance and support to Facility Management as requested.
3. General Counsel shall provide guidance and support to Facility Management as requested.

5.8.2.2 Requirements

1. Facility Management shall contact the manager of Environmental Services upon receiving written or electronic correspondence, and/or verbal notification from a regulatory agency of an alleged compliance deficiency. Environmental Services will provide assistance to Facility Management in determining whether the notification constitutes formal or informal enforcement.
2. All formal enforcement notices from any Governmental, State, or Local regulatory enforcement agency shall be reported to the manager of Environmental Services and to the Occurrence Notification Center (ONC).
3. Within 24 hours or by the close of the next business day (not to exceed 80 hours) of receipt of a formal enforcement notice, an Unusual Occurrence notification shall be prepared by the unit at which the violation is directed. Procedures for Unusual Occurrence notifications are found in Standard Operating Practices (WHC-CM-1-5, 7.1). The Unusual Occurrence notification shall include all information needed to respond to the items below:
 - The nature of the alleged violation and of the environmental threat posed thereby;
 - Whether the alleged violation has been corrected, or is continuing;

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- The basis for the regulatory authority's discovery of the alleged violation (e.g., self-reporting or external regulatory inspection); and
 - Whether fines or penalties are being assessed and, if so, the amount.
4. Copies of the formal enforcement notification and the Unusual Occurrence Notification shall be provided to the RL Contracting Officer within 24 hours or by the close of the next business day (not to exceed 80 hours) of receipt.
 5. Within 10 working days after receipt of a formal enforcement notice, the Unusual Occurrence notice shall be updated. The update shall include:
 - A preliminary assessment of whether the alleged violation resulted from a failure of RL to provide requested guidance, funding, or authorization to correct the conditions leading to the alleged violation;
 - A preliminary assessment of whether WHC disagrees with the legal or factual grounds for the alleged violation;
 - A preliminary recommendation as to whether the issuing authority's proposed resolution should be accepted, or whether an attempt should be made to contest the notice or to negotiate a different settlement; and
 - A description of actions taken, or proposed, to prevent similar alleged violations from occurring in the future.
 6. New information and developments on the resolution of the enforcement action shall be provided in updates to the Unusual Occurrence report. New information and developments includes ultimate resolution and any payment of fines and penalties.

BASIS: Memorandum from Robert D. Larson (RL) to Contractors; Reporting Requirements - Enforcement Actions Related To Violations Of Environmental Requirements; dated November 1, 1993. Based on a memorandum from Hazel R. O'Leary to Secretarial Officers, Managers, DOE Operations Offices; Guidance On Reporting Procedures For Enforcement Actions Related To Violations Of Environmental Requirements; dated August 18, 1993.

Standard Operating Practices (WHC-CM-1-5, 7.1)

5.9 DESIGNATED REVIEWING ORGANIZATIONS

Organizations listed below are responsible for this process. If you have any questions about this procedure, please contact the process owner.

Designated Reviewing OrganizationsCMPOC

Environmental Services (process owner)

WCS/ES

Quality Assurance

SQR/QA

Nuclear Safety Regulatory Compliance

SQR/NSC

Safeguards and Security

SQR/SAS

B Plant

TRP/BP

Fast Flux Test Facility

TRP/FTF

Fuels Fabrication Facility Transition Project

TRP/FFT

Spent Nuclear Fuel Project

SNF

Operations Maintenance Programs Improvements

TWR/OMP

Plutonium Finishing Plant

TRP/PFP

PUREX Plant

TRP/PRX

Liquid Effluent Services

PSS/LES

Tank Waste Remediation System

TWR

5.10 REFERENCES

NOTE: For additional references, see Appendix B of this manual.

DOE/EH-0173T, "Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance."

DOE 5820.2A, "Radioactive Waste Management."

DOE 5480.11, "Radiation Protection for Occupational Workers."

WHC-CM-1-5, *Standard Operating Practices*, Section 7.1, "Report Occurrences and Processing Operations Information."

WHC-CM-4-1, *Emergency Plan*.

WHC-CM-8-7, *Operations Support Services*, 907, "Building Number Assignments and Retirement Requirements."

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Table 5-1. Release Reporting Requirements. (sheet 1 of 3)

Type of Release	Substance	Reporting Criteria	Common Exemptions	Agency to be Notified*	Reporting Time Frame	Regulatory Citation
General hazardous substance or dangerous waste release	Hazardous substance (including dangerous waste) as designated in 40 CFR 302 (includes 40 CFR 116 and 117 standards)	Any release into the environment that, over a 24-hour period, exceeds a Reportable Quantity	Federally permitted releases; continuous releases for which notification has been provided pursuant to 40 CFR 302.8	National Response Center	Immediately; follow-up via newspaper notice required by Section 111(g) of CERCLA	40 CFR 302.6
	Extremely hazardous substance as designated in 40 CFR 355 or hazardous substance as designated in 40 CFR 302	Any release that, over a 24-hour period, exceeds a Reportable Quantity if any portion of the release goes beyond the facility boundary.	Federally permitted releases; continuous releases for which notification has been provided pursuant to 40 CFR 302.8	Community emergency coordinator for the local emergency planning committee; State emergency response commission	Immediately; follow-up notification required per 40 CFR 355.40(b)(3)	40 CFR 355.40(b)
	Dangerous waste or hazardous substance as defined in WAC 173-303-040	Any spill or discharge into the environment in an amount equal to or greater than the reportable quantity listed in the table at 40 CFR 302.4, or in an amount that threatens human health or the environment.	None	Department of Ecology; local authorities in accordance with local emergency plan	Immediately	WAC 173-303-145
	Toxic chemicals as designated in 40 CFR 372	Any release to the environment, including off-site waste shipments to be considered for those chemicals that the site use threshold is exceeded	Janitorial use, lab activities, articles de minimis, structural component of facility	EPA	Annual (July 1)	40 CFR 372

*All notifications to regulatory agencies are made by the Occurrence Notification Center

Records, Reporting and Response Activities

Table 5-1. Release Reporting Requirements. (sheet 2 of 3)

Type of Release	Substance	Reporting Criteria	Common Exemptions	Agency to be Notified*	Reporting Time Frame	Regulatory Citation
General dangerous waste	Dangerous waste	Discharge into the environment from a dangerous waste tank system	Releases of less than 1 pound <u>provided</u> that the waste is immediately contained and cleaned up	Department of Ecology	Within 24 hours of detection; follow-up notification required per WAC 173-303-640(7)(d)(iii)	WAC 173-303-640(7); 40 CFR 265.196(d)
		Any release that requires implementation of the facility emergency plan	N/A	Local authorities if appropriate; Department of Ecology	Immediately if human health or the environment are threatened; follow-up written report required by WAC 173-303-360-(2)(k)	WAC 173-303-360(2)(a), (d), (k)
Release during transportation	Hazardous material (including hazardous waste) designated in 49 CFR 172	UST system spill or overflow that comes in contact with soil, groundwater, or surface water or that exceeds a de minimis amount	Spill or overflow that does not exceed a de minimis amount as defined in WAC 173-360-375	Department of Ecology	Immediately for hazardous substances; immediately for petroleum that comes in contact with soil, groundwater, or surface water, within 24 hours for other petroleum releases	WAC 173-303-375
		Unintentional release of hazardous material from a package or discharge of any quantity of hazardous waste during transportation	Certain specific exemptions as shown in 49 CFR 171.16(c)	Department of Transportation	Within 30 days of discovery	49 CFR 171.16

*All notifications to regulatory agencies are made by the Occurrence Notification Center

Records, Reporting and Response Activities

Table 5-1. Release Reporting Requirements. (sheet 3 of 3)

Type of Release	Substance	Reporting Criteria	Common Exemptions	Agency to be Notified*	Reporting Time Frame	Regulatory Citation
Polychlorinated biphenyl (PCB) spill	PCBs	Spill involving PCBs in concentration that exceeds 50 ppm and that (1) directly contaminates surface water, sewers, or drinking water supplies; (2) grazing land or vegetable gardens, or (3) exceeds 1 pound of PCBs by weight. (See also "Dangerous Waste Release")	Spills of less than 1 pound are not required to be reported to the National Response Center, unless it threatens human health or the environment.	EPA Regional Office of Pesticides and Toxic Substances Branch and the National Response Center.	In the shortest possible time after discovery, but in no case more than 24 hours	40 CFR 761.125(a)(1)
Oil discharge to navigable waterway	Oil as defined in 40 CFR 110.1	Any oil discharge to navigable waterways or adjoining shoreline that (1) violates an applicable water quality standard or (2) causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsions to be deposited beneath the surface of the water or adjoining shorelines	Discharges in compliance with an NPDES permit	National Response Center	Immediately	40 CFR 110.1, 33 CFR 153

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*All notifications to regulatory agencies are made by the Occurrence Notification Center

Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping.(sheet 1 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
90-day accumulation areas	Records of inspection for waste containers in 90-day accumulation areas	W	Section 7.8	WAC 173-303-200
Air emissions - emissions of leaking organics from affected TSD equipment	A log pertaining to all affected equipment must be maintained in the management unit record. The log must include: a list of identification numbers for equipment; a list of identification numbers for equipment that is designated as having no detectable emissions; a list of equipment identification numbers for pressure relief devices; a date of each required compliance test, the background level measured during each test, and the maximum instrument reading during each test; a list of identification numbers for equipment in vacuum service; a list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve; the criteria used to detect leaks in compressors and in light liquid service pumps; an analysis determining the design capacity of the hazardous waste management unit; a statement listing the hazardous waste influent and effluent at each unit, and an analysis determining whether these wastes are heavy or light liquids; an up-to-date analysis and supporting information and data used to determine whether or not equipment is subject to the requirements	D	Section 2.5.2.2	40 CFR 264/265, Subpart BB/CC "Air Emission Standards for Equipment Leaks
Air emissions - leaks of leaking organics from affected TSD equipment	Management units which have identified a leak must record the following information in an inspection log and maintain the log in the management unit operating record for a minimum of 3 years: instrument and operator identification numbers and the equipment identification number; date that evidence of a potential leak was found; date the leak was detected and dates of each attempt to repair the leak; the repair methods applied; the date of successful repair; the maximum instrument reading if above 10,000 ppm after any repair attempt; and, if the leak is not repaired within 15 days, documentation supporting the reason for the delay	D	Section 2.5.2.2	40 CFR 264/265, Subpart BB/CC, "Air Emission Standards for Equipment Leaks"

A = Annual

B = Biannual, every 6 months

B1 = Every other year

D = Daily

H = Hourly

M = Monthly

O = Upon Occurrence

P = Periodic

QTR = Quarterly, every 3 months

W = Weekly

Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 2 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Air emissions of leaking organics from affected TSD vents - use of alternative leak detection	WHC EEM shall be notified if (or when) an alternative standard is being considered for leak detection of organic air emissions from affected valves in gas/vapor or "in light liquid service"	O	Section 2.5.2.2	WHC best management practice
Air emissions of leaking organics from affected TSD equipment - maintenance of records	Management units must maintain up-to-date management unit records of the following for each piece of affected equipment on any management unit: equipment identification number and hazardous waste management unit identification; approximate location of the equipment; type of equipment; percent-by-weight total organics in the hazardous waste stream at the equipment; state of waste at equipment (gas/vapor or liquid); and the method of compliance with the standard	O	Section 2.5.2.2	40 CFR 264, Subpart BB, "Air Emission Standards for Equipment Leaks"
Air emissions of leaking organics from affected TSD equipment - documentation of schedule for compliance retrofits	Management units must maintain up-to-date management unit records of the following for each piece of affected equipment on any management unit: an implementation schedule (for management units operating before 12/21/90) for installation of compliant systems or devices	O	Section 2.5.2.2	40 CFR 264, Subpart BB, "Air Emission Standards for Equipment Leaks"
Air emissions of leaking organics from affected TSD equipment - performance test plan to demonstrate organic removal efficiency	Management units must maintain up-to-date management unit records of the following for each piece of affected equipment on any management unit: a performance test plan if test data is used to demonstrate the organic removal efficiency	O	Section 2.5.2.2	40 CFR 264, Subpart BB, "Air Emission Standards for Equipment Leaks"
Air emissions of leaking organics from affected TSD equipment - documentation for management units with closed-vent systems and control devices	Management units must document compliance for each piece of affected equipment, including detailed design documentation or performance test results	O	Section 2.5.2.2	40 CFR 264, Subpart BB, "Air Emission Standards for Equipment Leaks"

A = Annual
B = Biannual, every 6 months
B1 = Every other year
D = Daily
H = Hourly

M = Monthly
O = Upon Occurrence
P = Periodic
QTR = Quarterly, every 3 months
W = Weekly

Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 3 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Air emissions of leaking organics from affected TSD equipment - documentation for management units with closed-vent systems and control devices	Management units must document the monitoring, operating, and inspection information for each affected system and control device	D	Section 2.5.2.2	40 CFR 264, Subpart BB, "Air Emission Standards for Equipment Leaks"
Air emission rates of organics from affected TSD vents.	Current operating emission rates for each affected vent shall be documented in the unit record. All information and data supporting the determination of such rates or any emissions reductions shall be documented. Report the rates to WHC ESA prior to start-up of any affected operation.	O	Section 2.5.2.1	40 CFR 264.1036, Subpart AA, "Air Emission Standards for Process Vents"
Air emission rates of organics from affected TSC vents.	The required control device on each affected vent shall have a flow indicator to allow recording of vent stream flow to the control device.	H	Section 2.5.2.1.	40 CFR 264.1036, Subpart AA, "Air Emission Standards for Process Vents."
Air emissions of organics from affected TSD vents - measurement system anomalies	The waste management unit shall report to WHC EEM the dates that control devices exceeded or operated outside the design specifications.	M	Section 2.5.2.1.	40 CFR 264.1036, Subpart AA, "Air Emission Standards for Process Vents"
Air emissions of organics from affected TSD vents - reporting	WHC EEM shall provide a semiannual report as described in 40 CFR 264.1036	B	Section 2.5.2.1.	40 CFR 264.1036, Subpart AA, "Air Emission Standards for Process Vents"

A = Annual
B = Biannual, every 6 months
B1 = Every other year
D = Daily
H = Hourly

M = Monthly
O = Upon Occurrence
P = Periodic
QTR = Quarterly, every 3 months
W = Weekly

Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 4 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Airborne emissions: excess emissions or loss of measurement capability	If there is a potential for increased airborne emissions, facility operations or activity management shall notify WHC EEM within 4 hours of any belief there has been a noncompliance with Operational Safety Requirements (OSR), Operating Specifications Documents (OSD), permit or approval requirements, technical specifications, or any requirement of Section 2.0 of this manual	O	Section 2.5.6.6	WHC best management practice
Airborne emissions: expected excess emissions or loss of measurement capability	If there is a potential for increased airborne emissions, facility operations or activity management shall notify WHC EEM within 2 working days in advance of any operations that could result in exceeding the OSD, permit or approval requirements or technical specifications	O	Section 2.5.6.6	WHC best management practice
Airborne emissions: expected loss of accurate measurement capability	Facility operations or activity management shall notify WHC EEM within 4 hours of any shutdown of any CEMS outside the allowed downtime for maintenance or any other change that prevents accurate measurement of emissions to the environment	O	Section 2.5.6.4	WHC best management practice
Airborne emissions: failed test of air effluent treatment system	Facility operations or activity management shall notify WHC EEM within 1 working day of any failure of a required air effluent treatment system test	O	Section 2.5.6.4	WHC best management practice
Air emissions	Annual report to EPA and DOH	A	Section 2.6	40 CFR 61, Subpart H WAC 246-247
Air emissions report	WHC EM shall submit a report to Ecology within the first 105 days of each calendar year.	A	Section 2.5.1.3	WAC 173-400-105

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 5 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Air emissions of organics from TSD management units and recycling operations	Record in the unit record the appraisal of all process vents associated with the listed processes to determine if the waste being treated has organic concentrations of 10 parts per million by weight (ppmw) or greater on an average annual basis	O	Section 2.5.2.1.	40 CFR 264.1036, Subpart AA, "Air Emission Standards for Process Vents"
Air emissions - emissions of leaking organics from affected TSD equipment	Management units must maintain up-to-date management unit records. The records must include a schedule for monitoring, and the percent of valves found leaking during each monitoring period, for valves in gas/vapor or in light liquid service for which alternate standards have been elected.	D	Section 2.5.2.2	40 CFR 264, Subpart BB, "Air Emission Standards for Equipment Leaks"
Air emissions - reporting of unrepaired leaks of organics from affected TSD equipment	Management units must report all leaks that are not or cannot be repaired within 15 days to WHC EEM. WHC EEM must receive the report by the end of the 15-day period. The report is to include the equipment identification number for each leaking item.	O	Section 2.5.2.2	40 CFR 264, Subpart BB, "Air Emission Standards for Equipment Leaks"
Air emissions - emissions of leaking organics from affected TSD equipment - reporting of control devices operating outside of design specifications	Management units with closed-vent systems or control devices shall report to WHC EEM whenever any device exceeds or is operated outside of the design specifications and the condition is not corrected within 24 hours. The report must include the duration and cause of each emission that exceeded standards and any corrective measures taken. This report must be received by WHC EEM no later than 3 days after the occurrence.	O	Section 2.5.2.2	40 CFR 264, Subpart BB, "Air Emission Standards for Equipment Leaks"
Air emissions - reporting of leaking organics from affected TSD equipment -	WHC EEM shall complete a semiannual report as described in 40 CFR 264.1065	B	Section 2.5.2.2	40 CFR 264, Subpart BB, "Air Emission Standards for Equipment Leaks"

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 6 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Air emissions - determination of monitoring and alarm requirements	For each source of radioactive air emissions, a determination shall be made as to whether potential offsite impacts require continuous monitoring and alarm capability. The determination shall be documented in the applicable Facility Effluent Monitoring Plan (FEMP).	O	Section 2.5.3.2	DOE/EH-0173T, Chapter 3, Sections 3.5 and 3.6
Air emissions - documentation of alarm settings	Documentation of the air emission alarm settings and the bases for their selection are to be documented in the applicable FEMP	O	Section 2.5.3.2	DOE/EH-0173T, Chapter 3, Section 3.3
Air emissions - continuous monitoring instrument maintenance, calibrations, anomalies, etc.	Each facility maintenance organization shall maintain access to a record of maintenance, calibrations, system anomalies, etc., for each continuous air emission monitoring instrument at that facility for a period of at least 2 years	O	Section 2.5.3.2	WHC best management practice
Air emissions - installation or removal of record sampling capability	All new installation or removal of record sampling capability shall be documented in the applicable FEMP	O	Section 2.5.3	WHC best management practice in support of DOE/EH-0173T, Chapter 3.0, Section 3.3
Air emissions - calibration of record sampling systems	For any radioactive air emissions record sampling system, records of calibration, conditions of calibration, performance checks, and evaluation shall be maintained at the source for a minimum of 2 years	O	Section 2.5.3.2	40 CFR 61, Section 61.14(f)
Air emissions - radioactive particulate filter testing frequencies	Radioactive particulate filter systems exposed to extreme conditions shall be tested on a frequency which takes into account those conditions. The conditions shall be documented in the applicable FEMP	O	Section 2.5.3.4	WHC best management practice
Air emissions - radioactive air filter systems requiring testing	All radioactive air filter systems requiring testing shall be identified as such in the applicable FEMP	O	Section 2.5.3.4	WHC best management practice

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Table 5-2. Reporting and Recordkeeping. (sheet 7 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Air emissions - startup or shutdown of any radioactive air emissions unit	Waste generation management shall notify WHC EEM directly no later than 1 working day after any startup or shutdown of a radioactively contaminated forced ventilation exhaust system. Such notification shall also include any shutdown of stack sampling or monitoring systems or other change that may affect the measurement of airborne emissions	O	Section 2.5.6.3	WAC 246-274-080
Air emissions - new or modified sources or emission units	Any proposed activity identified in Section 2.5.5 as requiring a notification, Notice of Construction (NOC), approval, approved design criteria, or registration according to the Clean Air Act based regulations is required to obtain an NOC pursuant to this section. New activities shall prepare an environmental requirements checklist to identify applicable clean air requirements.	O	Section 2.5.5 Section 9.4	WAC 173-400, WAC 246-247. Best Management Practice.
Air emissions - registration of radioactive air emissions units	Each source of airborne radionuclide emissions shall register the source with the Washington State Department of Health	O	Section 2.5.5.7	WAC 246-247-080.
Air emissions - notice of construction for any new or modified radioactive air source	An application for approval of any new source or modification of any existing source emitting radioactive air pollutants shall be submitted to and approved by the EPA, Region 10 and the Washington State Department of Health before the construction or modification commences	O	Section 2.5.5.1	WAC 246-247 and 40 CFR 61, Subpart H

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 8 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Air emissions - notification of replacement of radioactive emission control equipment or process equipment	For any source which is required to register with the Washington State Department of Health, notification shall be forwarded to that department prior to replacement of radioactive emission control equipment or process equipment other than replacement for routine maintenance and repair	O	Section 2.5.5.1	WAC 246-247-060.
Asbestos	Temperature records when wetting of asbestos is not required	O	Section 3.5	40 CFR 61
Asbestos demolition and renovation	Notification to SFRC	O, A	Section 3.5	40 CFR 61
Asbestos waste disposal	Waste disposal report	A	Section 3.5	40 CFR 61
Burning (open burning)	Obtain permit from WHC Fire Department and concurrence from WHC EES	O	Section 2.5.4.5	WHC best management practice
CERCLA Reportable Quantities Release	Notification to EPA	O	Section 8.3.2	40 CFR 302.6
CERCLA Reportable Quantities Release - Continuous Release	Notification to EPA and other authorities - update at end of first year; notify whenever statistically significant increase occurs. Additional records must be maintained at facility.	O, A, P	Section 5.0	40 CFR 302
Chemical, Physical, Biological treatment	Records of inspection of control and safety equipment	D	Section 7.10	40 CFR 265 Subpart Q

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 9 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Chemical, Physical, Biological treatment	Records of inspection of data from monitoring equipment	D	Section 7.10	40 CFR 265 Subpart Q
Chemical, Physical, Biological treatment	Records of inspection of construction materials of discharge confinement equipment	W	Section 7.10	40 CFR 265 Subpart Q
Closure	Record of notification of closure	O	Section 7.10	WAC 173-303-610
Continuous monitoring of air emissions	Facility managers ensure written procedures are developed with concurrence from WHC EEM for calibration; drift determination; adjustments; preventive maintenance; corrective actions; data recording, calculating, and reporting; and audit procedures.	O	Section 2.5.3.2	WAC 173-400-105; 40 CFR 61; 40 CFR 51, Appendix P, Section 3.4
Continuous emission monitoring system (CEMS) for airborne emissions: documentation of performance	Operations management shall maintain the following records for a minimum of 3 years, or longer if specified in applicable permits or approvals: calibration, maintenance, and repair records; date and time the abatement equipment was out of service; magnitude, date, and time of all violations of the requirements of Section 2.0 of this manual; date and time of each period during which any required CEMS was inoperative and the nature of repairs or adjustments; recorder checks and applicable logs; measurements of emissions performed to demonstrate compliance with Section 2.0 of this manual.	O	Section 2.5.3	40 CFR 51, Appendix P, Section 4.0, "Minimum Data Requirements"

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 10 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Dangerous waste generation data - such as description, quantity, and method	Include in annual report to Ecology	A	Section 7.0	WAC 173-303-220
Dangerous waste - receipt of unmanifested waste from offsite	Report to Ecology within 15 days of occurrence	O	Section 7.0	WAC 173-303-390
Discharges to underground injection wells	Register underground injection control well with Ecology	O	Section 8.3.6	WAC 173-218
Effluent, environmental, and groundwater monitoring data	Annual report to DOE	A	Section 8.3.2	DOE 5400.1
Elementary neutralization	Records of incidents for tanks	O	Section 7.12	WAC 173-303-380 WAC 173-303-802
Elementary neutralization	Record for inclusion to Hanford annual dangerous waste report	A	Section 7.12	WAC 173-303-390
Emergency equipment	Records of testing and maintenance of emergency equipment	P	Section 7.8	WAC 173-303-340

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 11 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Groundwater - change in indicator parameter level at interim status facility	Report to Ecology within 7 days of confirmation	O	Section 7.0	40 CFR 265
Groundwater monitoring	Records of sampling and analysis	P	Section 7.10	40 CFR 265
Groundwater monitoring	Groundwater monitoring annual program		Section 8.5.1	DOE 5400.5 Consent Order No. DE 91NM-177
Hazardous chemicals	Submit Material Safety Data Sheets or list of chemicals in excess of statutory threshold required to have an MSDS to the local emergency planning organizations	QTR	Section 5.5	40 CFR 370
Hazardous chemicals	Submit chemical inventory forms of chemicals in excess of statutory thresholds to local emergency planning organizations	A	Section 5.5	40 CFR 370
Inactive radioactive waste site	Record of survey to ensure radiological conditions are maintained	A	Section 6.3	DOE 5400.1
Inactive waste site	Record of documentation of process line isolation	O	Section 6.3	WHC best management practice
Inactive waste site	Record of surveillances	QTR	Section 6.3	40 CFR 264.90
LDR wastes	Records of notification or certification	O	Section 7.11	40 CFR 268
Landfill	Records of waste location in cell	O	Section 7.10	40 CFR 265 Subpart N
Lead	Inventory of lead in unit	A	Section 7.7	WHC best management practice
Liquid discharges from new or modified facilities	Notification of EPA and Ecology prior to discharge		Section 8.6.1	NPDES Permit No. WA000374-3, Consent Order No. 91NM-177
Manifest (Waste)	Manifest copies for off-site shipments	O	Section 7.8 Section 7.9	WAC 173-303-370

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 12 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
New suspect waste site or modification to existing waste site	Notify EMI, provide necessary information, and ensure waste site is properly documented (e.g. entered into WIDS)	O		RCRA 3004 (u) of HSWA
Non-routine releases	Various reports will be required depending on circumstances	O		
Non-hazardous, non-radioactive waste disposal facility	Operating log	D	Section 7.3	WAC 173-304-405
Non-hazardous, non-radioactive waste disposal facility	Facility activity report	A	Section 7.3	WAC 173-304-405
Non-hazardous, non-radioactive waste disposal site	Records of general inspections	W,QTR	Section 7.3	WAC 173-304-405
Non-hazardous, non-radioactive waste disposal site	Records of groundwater monitoring results	QTR	Section 7.3	WAC 173-304-490
Non-hazardous, non-radioactive waste disposal site	Statement on land deed recorded at closure	O	Section 7.3	WAC 173-304-405
Oil Procurement	Certification from vendor that oil is PCB free	O	Section 3.6	40 CFR 761 WAC 173-303-071(3)(k)
Operation of public water system	Sampling and analysis reporting		Section 8.7	WAC 246-290
Pesticide application	Records of applications	O	Section 3.4	WAC 16-228
Pesticide storage	Storage inventory	O	Section 3.4	40 CFR 165.10
pH of potentially corrosive waste streams	Recording, measuring, reporting pH of all potentially corrosive waste streams		Section 8.3.7	WAC 173-303

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Table 5-2. Reporting and Recordkeeping. (sheet 13 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Piping	Records of written performance claims for release detection systems and results of sampling, testing, or monitoring.	O	Section 3.8	WAC 173-360-350
PCB	Inventory of PCB items	O	Section 3.6	40 CFR 761
PCB	Inspection of PCB transformers	M,QTR,A	Section 3.6	40 CFR 761
PCB	Inspection of PCB-contaminated transformers	A	Section 3.6	WHC best management practice
PCB	Inspection of PCB-contaminated transformers in storage for disposal	M	Section 3.6	40 CFR 761
PCB	Inspection of PCB-contaminated electrical equipment in storage for disposal	M	Section 3.6	40 CFR 761
PCB	Inspection of large PCB capacitors and electromagnets	M	Section 3.6	40 CFR 761
PCB	Inspection of PCB and PCB-contaminated items outside of approved storage facility awaiting disposal	W	Section 3.6	40 CFR 761
PCB	Inspection of leaking PCB transformers	D	Section 3.6	40 CFR 761
PCB	Inspection of PCB storage facility, floors and curbs	M	Section 3.6	WHC best management practice
PCB	Spill response records	O	Section 3.6	40 CFR 761
PCB	Registration record for PCB transformers. Filed with Fire Department and Area or Building Administrator	O	Section 3.6	40 CFR 761
PCB	Sampling and refilling records	O	Section 3.6	40 CFR 761
PCB	Records of manifests and receipt verification for off-site shipments	O	Section 3.6	40 CFR 761
PCB	Certificates of disposal for PCB wastes	O	Section 3.6	40 CFR 761
PCB	Records of exception reports for late PCB shipments or disposal dates	O	Section 3.6	40 CFR 761

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 14 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
PCB	Annual document log for PCB activity	A	Section 3.6	40 CFR 761
R&D activity with chemical not on TSCA Inventory	Documentation and notification	O	Section 3.3	40 CFR 720.36 and 761.78(b)(1)
Radioactive effluent waste stream monitoring	Documentation in FEMP		Section 8.4.2.8	DOE/EH-0173T, Section 2.0, DOE 5400.5, Chapter 4
Radioactive non air - effluent, onsite discharge, and unplanned release data	Report to EG&G, Idaho	A	Section 2.6.2	DOE 5400.1
Release of waste in excess of applicable limits to an underground injection well	Notification to Ecology	O	Section 8.3.6	WAC 173-218
Routine discharge of listed or characteristic hazardous waste to a POTW	Notification to EPA, Ecology and the POTW	O	Section 8.3.4	City of Richland Ordinance No. 35-84
Sampling	Annual inventory of nonradioactive pollutants in liquid discharges to the environment	A	Section 8.3.8	DOE 5400.1, Chapter 4
Sampling - nonradioactive waste streams	Sampling program		Section 8.3.8	WAC 173-303 40 CFR 141 40 CFR 143 RL commitment to Ecology 7-19-90
Sampling - radioactive waste streams	Sampling program		Section 8.4.2.8	DOE 5400.5 DOE/EH-0173T

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 15 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Satellite accumulation areas	Records of inspection for waste containers in satellite accumulation areas	W	Section 7.8	WAC 173-303-200
Stack flow rate measurements	Applicable flow rate measurement requirements shall be included in the Facility Effluent Monitoring Plan (FEMP)	O	Section 2.5.1.2	WHC best management practice
Storage areas (permitted)	Records of inspection for waste containers in permitted storage areas	W	Section 7.10	WAC-173-303-370
Surface impoundments	Records of inspection of freeboard	D	Section 7.10	40 CFR 265 Subpart K
Surface impoundments	Records of inspection of dikes and covers	W	Section 7.10	40 CFR 265 Subpart K
Tank repair	Record of certification	O	Section 7.12	40 CFR 265.196 WAC 173-303-400
Tanks	Leak and deterioration inspection records for above ground oil and storage tanks	W	Section 3.8	40 CFR 112 WHC best management practice

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 16 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Tanks	Inventory monitoring of oil product storage tanks	D	Section 3.7	WHC best management practice
Tanks	Notification for underground tanks	O	Section 3.7	WAC 173-360-200
Tanks	Notification of proper installation	O	Section 3.7 Section 7.12	WAC 173-303-305 40 CFR 265.192
Tanks	Release monitoring records for petroleum underground storage tanks	M	Section 3.7	WAC 173-360-340
Tanks	Record of report of conditions that a release occurred and the monitoring results	O	Section 3.7	WAC 173-360-360
Tanks	Report of release from underground storage tank	O	Section 3.7	WAC 173-340-450
Tanks	Integrity testing records	P	Section 3.7 Section 7.12	40 CFR 112 WHC best management practice, 40 CFR 265.191-193 40 CFR 270.11 WAC 173-303-400
Tanks	Free product removal report at underground tank cleanup site where investigation determines that free product is present	O	Section 3.7	WAC 173-340-450
Tanks	Site characterization report for underground storage tank system release	O	Section 3.7	WAC 173-340-450
Tanks	Records of inspection	D	Section 7.12	40 CFR 265.195
Tanks	Report results of cleanup action for release from underground storage tank	O	Section 3.7	WAC 173-340-450
Thermal treatment	Records of inspection of thermal process	D	Section 7.10	40 CFR 265 Subpart P
Toxic chemical release	Submit report to EPA for any toxic chemicals produced or used	A	Section 5.5	40 CFR 372
Training	Records of personnel training for generators of dangerous waste	P	Section 7.8 Section 7.10	WAC 173-303-330

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Records, Reporting and Response Activities

Table 5-2. Reporting and Recordkeeping. (sheet 17 of 17)

Material or Activity	Required Action	Frequency	ECM Cross-Reference	Basis
Treatability studies	Records of samples for treatability studies	O	Section 7.10	WAC 173-303-071
TSDf	Records of site inspections	P	Section 7.10	WAC 173-303-320
TSDf	Operating record	D	Section 7.10	WAC 173-303-380
TSDf	Annual report submitted to ecology (Hanford Site)	A	Section 7	WAC 173-303-390
Underground injection wells - data on waste constituents and volume	Use of well for nonhazardous nonradioactive waste disposal	O	Section 7.10	WAC 173-218
Underground piping	Record of line tightness testing for piping under pressure	A	Section 3.7	WAC 173-360-350
Underground piping	Record of line tightness testing or piping under suction	P	Section 3.7	WAC 173-360-350
Waste	Record of dangerous waste designation	O	Section 7.6 Section 7.8	WAC 173-303-070
Waste containers	Records of inspection for waste containers in satellite accumulation areas	W	Section 7.8	WAC 173-303-200
Waste containers	Records of inspection for waste containers in 90-day accumulation areas	W	Section 7.8	Wac 173-303-200
Waste containers	Records of inspection for waste containers in permitted storage areas	W	Section 7.10	WAC 173-303-630
Waste manifesting	Manifest copies for off-site shipments	O	Section 7.8 Section 7.9	WAC 173-303-370
Waste minimization - efforts to reduce the volume and toxicity of waste generated	Report to regulatory authorities and DOE	B1	Section 7.0	40 CFR 265; DOE 5400.1
Wastewater treatment	Records of incidents for tanks	O	Section 7.12	WAC 173-303-380 WAC 173-303-802

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Records, Reporting and Response Activities

Table 5-3. Existing Facility Environmental Data Submittal and Recordkeeping Requirements (Records).

Requirement (Records)	Source	Compliance Criteria	Data Submitter	Due Date	Interim Record-Keeper
1. Groundwater monitoring	RCRA SDWA	TSD facility	NA	NA	Facility
2. Waste stream monitoring	RCRA CAA CWA	Hazardous waste generator	NA	NA	Facility
3. Instrumentation maintenance and calibration	RCRA CAA CWA	Hazardous waste generator, TSD facility	NA	NA	Facility
4. Waste shipment manifests	RCRA	Hazardous waste generator, TSD facility	NA	NA	Facility
5. Injection well monitoring	RCRA SDWA	Existence and use	NA	NA	Facility
6. Microbiological, inorganic and organic chemical sampling	SDWA	Operator of water system	NA	NA	Facility
7. Radioactivity/effluent monitoring	DOE 5484.1	Presence of radioactive material	NA	NA	Facility
8. HLW monitoring	DOE 5820.2A	HLW in interim storage tanks	NA	NA	Facility
9. Pesticide spray usage	WAC 16-228 FIFRA	Pesticide Use	NA	NA	Environmental Engineering
10. Test results, waste analyses, operating records, annual reports	WAC 173-303 RCRA	Hazardous waste generator, TSD facility	NA	NA	Facility
11. Personnel hazardous waste training records	WAC 173-303 RCRA	Hazardous waste generator, TSC facility	NA	NA	Facility
12. Statement as to existence of a waste minimization program	RCRA	Hazardous waste generator	NA	NA	Facility
13. Plan of operation for nonhazardous, solid waste disposal site	WAC 173-304	Owner/operator of nonhazardous, solid waste disposal site	NA	NA	Facility
14. Operating records for nonhazardous, solid waste disposal site	WAC 173-304	Owner/operator of nonhazardous, solid waste disposal site	NA	NA	Facility
15. PCB	TSCA	Presence of PCBs	NA	NA	Facility
16. Inventory Records	EPCRA Section 312	Presence of hazardous materials	NA	NA	Facility
17. Use and release data and supporting documentation	EPCRA Section 313	Use and/or release of toxic chemicals	NA	NA	Facility

Records, Reporting and Response Activities

Table 5-4. Surplus/Inactive Environmental Data Submittal and Recordkeeping Requirements (Records).

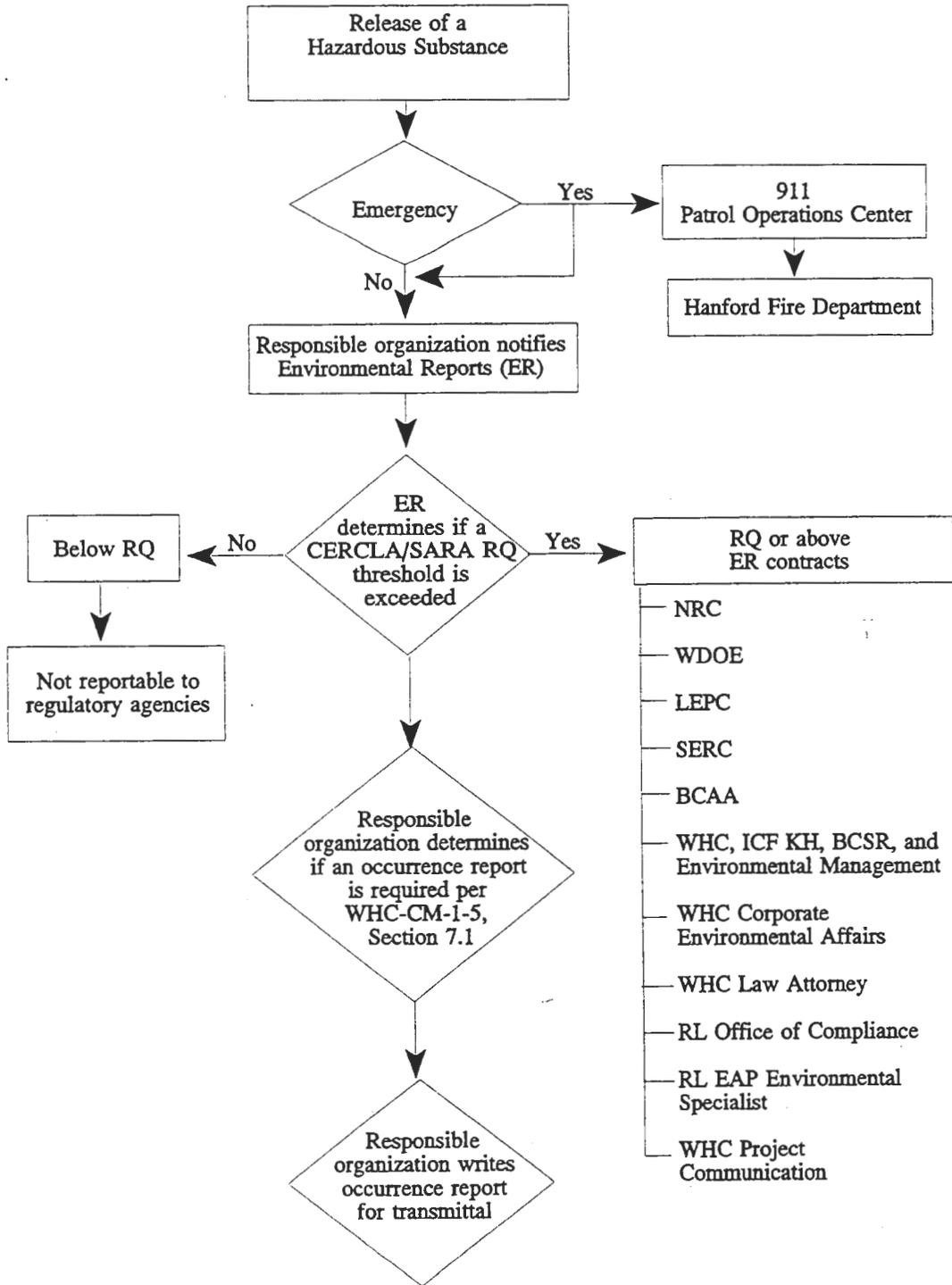
Requirement (Records)	Source	Compliance Criteria	Data Submitter	Due Date	Interim Recordkeeper
1. Groundwater monitoring	DOE 5820.2A	Radioactive wastes disposed of prior to 1984	NA	NA	Facility
2. Quarterly inspection log	WHC-CM-7-5	Inactive dangerous waste sites	NA	NA	Facility
3. Survey data	WHC-CM-7-5	Inactive dangerous waste sites	NA	NA	Environmental Protection

Table 5-5. Regulatory Basis/Drivers

40 CFR 302.8, 40 CFR 111(g), 29 CFR 1910.120	WAC 173-303-350, WAC 173-400-107, WAC 173-303-145, WAC 173-303-360, RCW 70.136.030	WHC-CM-1-5, Section 7.1, Tri-Party Agreement, DOE 5000.3B, DOE 5400.1	5.3.2	Requirements for Spills and Release Reporting
N/A	N/A	WHC-CM-9-7, Section 907	5.4.1	Environmental Monitoring Site Planning
40 CFR 264, 40 CFR 265, 40 CFR 61	WAC 173-303	DOE 5400.1, DOE 5820.2A, DOE 5484.1, DOE/EH-0173T, DOE 5700.6C, DOE 5400.5	5.4.2	Requirements for Environmental Monitoring
N/A	N/A	DOE 5400.1, DOE/EH-0173T	5.4.3	Environmental Monitoring Plan
40 CFR 370	N/A	N/A	5.5	Annual and Quarterly Inventory Reporting
40 CFR 372	N/A	N/A	5.5	Annual Release Reporting
N/A	N/A	DOE 5400.2A	5.6.2	Significant Environmental Compliance Issues
N/A	WAC 173-303	DOE 5820.2A	5.7	Tank Waste Remediation Responsibilities
N/A	WAC 246-247, RCW 70.94, RCW 90.48, RCW 90.58	DOE 5000.3B, WHC-CM-1-5, Section 7.1	5.8	Notifications

Records, Reporting and Response Activities

Figure 5.0 Spill/Release Reporting Flow Chart



Appendix A

Heart of America Settlement Agreement

This Settlement Agreement is made an entered into by and between the following parties who shall be referred to collectively as the "Settling Parties:"

1. Heart of America Northwest, a nonprofit corporation;
2. Legal Advocates for Washington, a nonprofit corporation;
3. Westinghouse Hanford Company, a corporation (WHC); and
4. the United States Department of Energy, an agency of the United States ("DOE").

DOE is the owner of the Hanford Site (the "Site") located in Benton County, Washington. WHC is a DOE prime contractor responsible for the management of a major portion of the Site. Heart of America and Legal Advocates for Washington shall be referred to collectively as "Plaintiffs." DOE and WHC shall be referred to collectively as "Defendants."

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth in this Agreement, and for other good and valuable consideration, the Settling Parties agree as follows:

1. Reporting Procedures. Defendants, or one Defendant, as appropriate, agree to notify Plaintiffs as set forth in paragraphs A through D below with respect to releases of hazardous substances and hazardous wastes from tank farm high-level radioactive waste tanks and connected tank farm piping systems located in the 200 Area of the Site that are reported by either or both of the Defendants to regulatory agencies under section 103(a), 103(c) and 111(g) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended ("CERCLA"), 42 U.S.C. § § 9603(a), 9603(c) and 9611(g); amended ("RCRA"), 40 U.S.C. § 6903(a); and Washington Administrative Code 173-303-145.
 - A. For releases where immediate written notification is provided to regulatory agencies, Defendants, or one Defendant as appropriate, shall provide a copy of any written notification provided under the statutes and regulation cited above to Plaintiffs by facsimile within one business day following such notification.
 - B. For all other releases reported in writing by Defendants to agencies under the statutes and regulation cited above, Defendants, or one Defendant, as appropriate, shall provide to Plaintiffs copies of any written release reports which are provided to regulatory agencies. Defendants shall transmit such copies by facsimile or by deposit in the First Class Mail

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within one business day following expiration of the reporting period under the applicable statute.

- C. Defendants, or one Defendant, as appropriate, shall make available to the public copies of each written notification provided under paragraphs A and B above at the information repositories and reading rooms established pursuant to the Hanford Federal Facility Agreement and Consent Order ("Tri-Party Agreement") within seven calendar days of filing of the notification with a regulatory agency.
- D. Defendants, or one Defendant, as appropriate, shall submit for publication in the "Hanford Update" a written summary of releases that were reported during the prior publication period in accordance with paragraphs A and B above. Such written summary shall direct interested persons to the information repositories and reading rooms established pursuant to the Tri-Party Agreement for additional information.

For purposes of this paragraph, the term "regulatory agency" includes the National Response Center.

- 2. Access to Data. DOE currently provides to the Washington State Department of Ecology ("Ecology") and the United States Environmental Protection Agency ("EPA") access to data upon which Defendants rely in making recommendations and determination concerning potential releases from the single-shell tanks ("SSTs") located in the 200 Area of the Site. The information includes data describing SST construction, contents, measurements, reference material and related issues. Computer access is provided through Tank Waste Information Network System. Defendants hereby confirm to the Plaintiffs that such data is provided to Ecology and the EPA in accordance with the Tri-Party Agreement. Defendants shall make a formal request to Ecology to make the information available to the Plaintiffs.
- 3. Monitoring and Reporting Procedures. Under the Tri-Party Agreement Milestone M-05-18A, DOE has provided to Ecology and EPA data sheets and administrative procedures relevant to monitoring SST liquid level detection instruments and identifying and reporting out-of-specification readings. These procedures require all operators to report out-of-specification liquid level readings to supervision, and to make initial notification to Ecology within 24 hours, which Ecology may then share with Plaintiffs. Under Tri-Party Agreement Milestone M-05-18B, DOE has provided to Ecology and EPA procedures to accomplish controlling and tracking of Discrepancy Reports which are generated to document adverse trends or data anomalies concerning SST operations. Defendants, or one Defendant, as appropriate, shall provide copies of the monitoring and reporting procedures which were provided to Ecology and EPA pursuant to Tri-Party Agreement Milestones M-05-18A and M-05-18B to the Plaintiffs.

Records, Reporting and Response Activities

4. Recommendations to Improve SST Liquid Level Monitoring. DOE has submitted to Ecology and EPA a Tri-Party Agreement change request regarding technical changes to improve the ability to monitor SST levels. A copy of any approved change request shall be provided to Plaintiffs.
5. Liquid Effluent Discharges. The Settling Parties acknowledge and affirm that significant reductions of liquid effluent discharges at the Site have occurred and that further reductions are anticipated under Tri-Party Agreement Action Plan § 13.0 and the Milestones referenced therein.
6. Enforceability of Tri-Party Agreement. The Settling Parties acknowledge and affirm that the Tri-Party Agreement is enforceable in accordance with all its terms, reservations and applicable law.
7. Notification of Other Contractors. DOE shall notify its current and future contractors at the Site of the existence of this settlement and the obligations thereunder and shall provide them with copies of this Agreement.
8. Payment. To avoid the expense, inconvenience and uncertainty of further litigation, Defendants agree to pay Heart of America Northwest the sum of Fifty Four Thousand Six Hundred Ninety Nine dollars and eighty two cents (\$54,699.82). Such payment shall be made within 120 days of the Effective Date, as that term is determined in paragraph 19 of this Agreement. No provision of this Settlement Agreement shall be interpreted as constituting a commitment or requirement that the United States obligate funds in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341.
9. Dismissal of Appeal. The Settling Parties are all parties to an appeal before the United States Court of Appeals for the Ninth Circuit, Heart of America Northwest, et al. v. Westinghouse Hanford Company, et al., Cause Number CS-92-144-AAM (the "Lawsuit"). The Settling Parties agree to enter, pursuant to Fed. R. App. P. 42(b), a stipulation to dismiss the appeal, with each party to bear its own costs. Said stipulation shall be presented to the court no later than thirty (30) days from the Effective Date of the Settlement Agreement, as determined by paragraph 19 herein.
10. No Vacation of District Court Order. On April 15, 1993, the United States District Court for the Eastern District of Washington entered an Order Granting in Part, and Denying in Part Motion to Dismiss, holding that Plaintiffs' causes of action are barred by Section 113(h) of CERCLA, 42 U.S.C. § 9613(h). The Settling Parties agree that none of them will seek vacation of the District Court Order, either directly or indirectly.
11. Release of All Claims by the Plaintiffs. The Plaintiffs hereby release, waive, discharge, abandon, settle and forever give up any and all claims, rights, actions or causes of action, including claims for attorney's fees and costs, asserted or which could have been asserted, in the Lawsuit and Appeal, or arising out of the facts that are the subject of the Lawsuit and Appeal, including but not limited to

claims relating to violations of the Federal Clean Water Act, 33 U.S.C. §§ 1251-1387, and claims under CERCLA and RCRA for alleged failure to report releases of hazardous substances and hazardous wastes, that Plaintiffs had, now have or may have in the future against Defendants, and each of them, and their respective officials, officers, directors, shareholder, insurers, agents, attorneys, employees, predecessors, successors, and assigns, and each of them, both past and present, whether known or unknown; provided, that this paragraph is subject to any right which the Plaintiffs may have to enforce this Settlement Agreement and shall not apply to spills, discharges or other releases of hazardous substances or hazardous wastes that may commence after the Effective Date of this Agreement, as determined by paragraph 19 herein. Plaintiffs agree that the procedures in paragraph 1 satisfy any obligation Defendants may have to report any such releases to Plaintiffs or the public.

12. Release of All Claims by the Defendants. Defendants hereby release, waive, discharge, abandon, settle and forever give up any and all claims, rights, actions or causes of action, including counterclaims and claims for attorney's fees and costs, asserted or which could have been asserted, in the Lawsuit and Appeal, or arising out of the facts that are the subject of the Lawsuit and Appeal, that Defendants had, now have or may have in the future against the Plaintiffs, and each of them, and their respective officer, directors, shareholders, insurers, agents, attorneys, employees, predecessors, successors and assigns, and each of them, both past and present, whether known or unknown; provided, that this paragraph is subject to any right which the Defendants may have to enforce this Settlement Agreement and shall not apply to spills, discharges or other releases of hazardous substances or hazardous wastes that may commence after the Effective Date of this Agreement, as determined by paragraph 19 herein.
13. Disclaimer of Liability. Defendants, and each of them, disclaim any liability in the Lawsuit, and specifically disclaim that they are liable under the Federal Clean Water Act, CERCLA or RCRA for the alleged acts, or failure to act, set forth in Plaintiffs' causes of action. The Settling Parties agree that all actions taken by Plaintiffs and Defendants pursuant to this Settlement Agreement are strictly for the purpose of settlement and compromise, and do not constitute and shall not be construed as admissions of any kind, including admissions regarding court jurisdiction over the Lawsuit and Appeal. The Settling Parties agree that this Settlement Agreement shall not be admitted as evidence of an admission or a declaration against interest in any proceeding.
14. Venue. Venue for any action seeking to enforce this Settlement Agreement shall be in the United States District Court for the Eastern District of Washington.
15. Complete Agreement. This Settlement Agreement is fully integrated and constitutes the complete and final agreement among the Settling Parties with respect to the settlement of matters described herein. All previous agreements, offers, counteroffers and negotiations are merged herein.

Records, Reporting and Response Activities

16. Amendments. This Settlement Agreement may be amended, modified or terminated by a writing signed by all of the Settling Parties. Any Settling Party may move to terminate this Settlement Agreement in accordance with applicable principles of law.
17. Authority to Sign. Each of the Settling Parties hereby represents and warrants that the person signing this Settlement Agreement on behalf of the Party is duly authorized to do so.
18. Duplicate Originals. This Settlement Agreement may be executed in any number of duplicate originals, each of which may have the signature of only one Settling Party, but each of which shall be deemed an original, and all of which, when taken together, shall be deemed to be a single Agreement among all the Settling Parties.
19. Effective Date. This Settlement Agreement is effective on the date that it is duly executed by all Settling Parties.

HEART OF AMERICA NORTHWEST

LEGAL ADVOCATES FOR WASHINGTON

By (Original signed)
Its _____
Date _____By (Original signed)
Its _____
Date _____UNITED STATES OF AMERICA
Assistant Attorney General
Environment and Natural Resources
Division

WESTINGHOUSE HANFORD COMPANY

By (Original signed)
Its _____
Date _____By (Original signed by)
Robin L. Juni
Trial Attorney
Environmental Defense Section
Date _____

Inactive Waste Sites

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Inactive Waste Sites**6.1 PURPOSE**

The purpose of this section is to establish the requirements for activities conducted within inactive waste sites (radioactive, nonradioactive, hazardous, and nonhazardous) including those designated as surplus facilities. This includes activities leading to the discovery of undocumented waste sites.

6.2 SCOPE

This section applies to all activities occurring within inactive waste sites and surplus facilities that are identified for restoration and remediation, interim stability, or decommissioning. The requirements of this section do not apply to the operations of active burial grounds or active treatment, storage, and disposal units. Section 6.5, however, applies to the entire Hanford site.

6.3 INACTIVE WASTE SITES

Inactive waste sites include burial grounds, unplanned release sites, cribs, ditches, ponds, trenches and basins, abandoned storage areas, drains, single-shell tank piping, transfer pits, and jumper boxes. The criteria and standards in this section are based upon standards established in the federal and state laws, U.S. Department of Energy (DOE) Orders, Westinghouse Hanford Company (WHC) policies and procedures, and the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement). The requirements of this section do not apply to the operations of active burial grounds and active treatment, storage, and disposal units or to transition facilities which have received a shut down notice from DOE, but have not been fully deactivated (e.g., PUREX, B-Plant, FFTF, etc.).

6.3.1 Responsibilities

1. Facility managers and landlords shall:
 - a. When applicable, provide a barrier over the disposal site contamination source to inhibit radionuclide transport to the surface (i.e., as defined in 6.5, soil contamination limits).
 - b. Accurately and permanently mark inactive radioactive site boundaries with Hanford plan standard (AC-5-40) approved concrete marker posts. Never used sites and those that are no longer contaminated do not require marker posts.
 - c. Isolate, cap, or seal off facility effluent lines which are potential discharge points to prevent accidental releases to inactive sites. This shall be verified and documented.
 - d. Ensure compliance with requirements in Section 5.0 of this manual for all inactive waste management units within their facility or area.

Inactive Waste Sites

- e. Ensure waste site modifications are documented in the Waste Information Data System (WIDS), for any occurrence. IF an undocumented suspect waste site is discovered, THEN investigate and document (e.g. WIDS entry).
 - f. Obtain written approval from Near Field Monitoring (NFM) and the operable unit manager (as applicable) prior to any use of an inactive waste site for any waste disposal purpose or activity that may adversely impact such a site (e.g., disposal of construction debris).
 - g. Ensure the overall safe and secure operation/status of inactive waste sites. keep all waste sites free of tumbleweeds. IF radionuclide uptake is detected or probable, THEN remove other deep-rooted vegetation such as rabbitbrush and sagebrush. Perform required maintenance, housekeeping, and control site access.
 - h. Maintain appropriate information, copies of survey reports, and maintenance activities.
2. Radiological Control:
- a. Perform routine radiological surveys of radioactive waste sites to detect transport of contamination to the surface, as directed by NFM.
 - b. Issue radiological survey reports for all inactive waste sites surveyed. This includes issuing and tracking Radiation Problem Reports (RPRs) when in violation of Hanford Site Radiological Control Manual (HSRCM-1).
 - c. Maintain and forward to NFM and the appropriate activity and/or landlord managers information copies of all radiological reports and RPRs concerning status of inactive waste sites.
3. Near Field Monitoring (NFM) shall:
- a. Investigate, and evaluate suspect waste sites and modifications to existing waste sites and document them through the WIDS.
 - b. Interface with BHI WIDS custodian concerning suspect waste sites and modifications to existing waste sites.
 - c. Establish radiological survey schedules of inactive radioactive waste sites.
 - d. Conduct compliance assessments of active and inactive waste sites to determine compliance with the physical and radiological requirements established in this section.
 - e. Compile and maintain copies of historical records, including radiological survey reports, compliance assessment report (CAR)s, compliance assessments, and other information for each inactive radioactive waste site.

Inactive Waste Sites

- f. Trend radiological data, and issue reports on the status of radiological surveys and surveillance/compliance inspections and compliance assessments for active and inactive radioactive waste sites.
 - g. Review any proposed activity, other than routine inspections, that may impact or may be impacted by any inactive waste site.
 - h. When violations of this section occur, issue compliance assessment reports to appropriate facility manager or area landlord for corrective actions.
4. Hanford Technical Services (HTS) shall:
- a. Review groundwater monitoring results.
 - b. Establish, conduct, maintain, and interpret data for a vadose zone (unsaturated zone) monitoring program.
 - c. Coordinate with BHI to add the suspect or unplanned waste site into an existing operable unit.
5. Employees shall report suspect and modifications to existing waste sites to NFM, landlord personnel, and their manager.

6.3.2 Requirements**6.3.2.1 General**

1. The facility manager or landlord shall isolate process lines of active facilities to preclude an accidental release to an inactive site. Isolation of process lines shall be documented at the facility. The NFM shall verify the documentation of process line isolation and maintain information copies of the verification record. For sites in which isolation has not yet been accomplished, a compliance plan (see Controlled Manual Waiver Request) or an administrative control plan to reduce the possibility of discharges to the site shall be prepared and submitted to NFM.
2. There shall be no liquid discharges, including nonradioactive discharges, to inactive radioactive waste sites unless the discharge is part of an interim or final cleanup response. This requirement avoids the movement of previously contaminated material in the soil column. Water spray is allowed during earth moving operations as required for dust control.

BASIS: DOE 5400.5 (II.3.c.[2]) prohibits the discharge of liquids, even though uncontaminated, in inactive release areas to prevent the further spread of radionuclides previously deposited.

3. Inactive radioactive waste sites shall be surveyed at least annually by Radiological Control and inspected by NFM to ensure that the radiological and physical conditions are compliant with appropriate standards. Deficiencies such as subsidence, erosion, and vegetation control housekeeping (as noted from surveillances) shall be corrected by

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the facility manager or landlord. Radiological Control shall be responsible for notifying the facility manager or landlord and NFM of any deficiencies.

BASIS: DOE 5400.1 (IV.5.b[1]) requires that an environmental surveillance shall be conducted to monitor the effects of DOE activities on onsite and offsite environmental and natural resources. Periodic surveillance is needed to verify that barriers and other controls to prevent transport of radioactive contamination to the surface are working as planned.

4. The facility manager or area landlord shall periodically survey all inactive waste sites and maintain appropriate information copies of survey reports.

BASIS: 40 CFR 264.90, Subpart F, "Releases from Solid Waste Management Units."

5. All suspect waste sites shall be reported immediately to NFM upon discovery.

BASIS: RCRA 3004(u), Comprehensive Environmental Response Compensation and Liability Act 40 CFR 300.400, DOE 5400.4, for the management and inventory of all types of inactive waste management sites, including surplus facilities and all unplanned releases and spills.

6. Inactive waste sites shall not be used for any other purpose (e.g., disposal of construction debris) without prior written approval from NFM and the operable unit manager.

BASIS: RCRA 3004(u), and 40 CFR 300.400, Subpart E.

7. All inactive waste sites shall be isolated (i.e. locked) and posted, as necessary and appropriate, to prevent any unauthorized entry, to protect personnel from hazards and to prevent the potential spread of contamination.

BASIS: RCRA 3004(u), and 40 CFR 300.400, Subpart E.

8. Work activities (construction or performance of other work) that are below the ordinary high water line of the state waters, or are within one quarter mile of the Columbia River, shall be in accordance with requirements in Section 10.0 of this manual.

6.3.2.2 Routine activities

1. The facility manager or landlord shall perform any one or more actions from the following list when contamination of any type is detected (either new or in excess of action limits) to prevent the migration of the contamination:

- Small-scale stabilization (<5 acres)
- Vegetation removal
- Radioactive hot-spot removal
- Fencing
- Posting (posting is used in conjunction with remedial action)

Inactive Waste Sites

- Herbicide spraying
- Immediate spill response
- Other corrective measures.

BASIS: The goal and objective of the As Low As Reasonably Achievable (ALARA) Program is to minimize human and environmental exposures to radiation and hazardous substances and conditions, commensurate with sound economics and operating practices and verbatim requirements from HSRCM-1, *Hanford Site Radiological Control Manual*.

2. Information regarding routine activities shall be provided for documentation into the WIDS database.
3. Facility operations management shall accurately and permanently mark inactive radioactive waste site boundaries, including unplanned release areas that have become disposal sites, with concrete posts as specified in AC-5-40. Post areas in accordance with HSRCM-1, *Hanford Site Radiological Control Manual*, and keep records in accordance with 6.3.3 of this section.

BASIS: DOE 5820.2A (III.3.i.[9][b]), as invoked by 5400.5, requires permanent markers be placed for disposal excavations. HSRCM-1, *Hanford Site Radiological Control Manual*, specifies the applicable WHC posting requirements.

4. Maintenance of the inactive sites shall include control of deep-rooted vegetation that could provide transport of contamination to the surface through plant uptake. The application of herbicides or pesticides may be required and shall conform to the requirements of Section 3.6 of this manual.

BASIS: 10 CFR 835 Subpart C. The continued use of herbicides or equivalent techniques to prevent the growth of deep-rooted plants is necessary to reduce radiation exposures of occupational workers and the environment to ALARA. Such control of plants and wildlife is also essential to prevent the loss of control/containment and to prevent the spread of contamination.

6.3.2.3 Nonroutine activities

1. Prior to initiating a nonroutine activity which includes actions on an area greater than 5 acres, such as stabilization, soil removal, fixative, or sealant application in an inactive waste site, the facility manager or landlord shall notify and obtain concurrence from NFM.

BASIS: Executive Order 12580, *Superfund Implementation*, the Tri-Party Agreement, 40 CFR 300, 40 CFR 264, and DOE 5400.

2. The facility manager or landlord shall provide a barrier over any contamination source to inhibit radionuclide transport to the surface, fix the surface contamination in place through the use of sealants, or fixatives, or other wise prevent further intrusion by

animals and or vegetation. The barrier design shall be based on proven techniques that are appropriate for the type of disposal. The adequacy of the barrier shall be verified by demonstrating, through routine surveillance, that surface contamination levels do not exceed the limits established in 6.5.3 of this manual. Such barriers or methods used to inhibit radionuclide transport should not, to the extent practical, diminish the cost-effectiveness of or preclude any future cleanup alternatives that may be associated with the waste site.

3. Inactive radioactive waste sites shall comply with the performance objectives of Section 7.4 of this manual. Engineered barriers or other effective measures shall also be used to limit biotransport of contamination and personnel exposure.

BASIS: DOE 5820.2A, as invoked by 5400.5, specifies the performance objectives for DOE low-level radioactive waste sites (III.3.a.).

4. Documentation of nonroutine activities shall be supplied to NFM for inclusion in the WIDS database.

6.3.2.4 CERCLA and RCRA past practice site activities

Remediation and restoration activities are the responsibility of BHI and are undertaken for CERCLA or RCRA past practice authorities. They shall be done in accordance with 40 CFR 300 or 40 CFR 264.101 requirements, as applicable. In addition, RCRA and CERCLA past practice unit remediation and restoration activities shall be done in accordance with the processes and requirements established in the Tri-Party Agreement and DOE 5400.4.

BASIS: 40 CFR 300 establishes requirements for actions undertaken for CERCLA. The 40 CFR 264.101 delineates requirements for corrective actions undertaken at permitted RCRA past practice sites. The Tri-Party Agreement establishes additional requirements for past practice activities, including specific requirements regarding implementation of the CERCLA/RCRA past practice processes. The DOE 5400.4 establishes requirements, policies, and procedures as prescribed by the National Contingency Plan and CERCLA.

6.3.3 Records

1. NFM shall maintain information copies of permanent records of the radiological conditions, status, and characteristics of the surfaces of each site. Other traceable records of historical, radiological, surveillance, and environmental characterization data for each site shall be maintained using the WIDS. Record copies will be kept in accordance with Records Inventory and Disposition Schedules (RIDS).

BASIS: Monitoring data recordkeeping is addressed in DOE 5400.1 (IV.5.b.[2][c]). Records of surveillances are needed for reporting purposes and to provide bases for future cleanup activities. Section 3.5 ("Waste Information Data System and Hanford Site Waste Management Units Report") of the Tri-Party Agreement requires that data on the current status of waste management units will be maintained on the WIDS.

2. NFM shall investigate and document suspect waste sites and/or unplanned radioactive release sites.

BASIS: DOE 5820.2A (V.3.a.[1]), as invoked by 5400.5, states that each field organization shall prepare and maintain a complete list of contaminated facilities, both operational and excess, under its jurisdiction. Section 3.5 of the Tri-Party Agreement identifies the WIDS as the database for documenting all waste management units on the Hanford Site.

3. The facility managers or landlords shall maintain documentation of process line isolation (capping off, sealing off, etc.) as specified in paragraphs 4.1.c and 5.1.7 of this section.
4. Waste site information in the WIDS shall be current. The addition of newly identified units to WIDS shall be initiated upon occurrence or discovery and completed within 90 days.

BASIS: Section 3.5 of the Tri-Party Agreement requires that data on the current status of waste management units be maintained on the WIDS.

6.4 SURPLUS FACILITIES

A surplus facility is a facility or site (including equipment) that has no identified programmatic use by the operating phase Program Secretarial Officer.

The management, decontamination, and decommissioning of radioactive/hazardous waste contaminated facilities at the Hanford Site is the responsibility of BHI.

6.4.1 Transferring administrative responsibility

When administrative responsibility for a contaminated facility is transferred from one program organization to another, the program organization to which the facility is transferred shall accept full responsibility for surveillance, maintenance, and decommissioning of the facility according to the requirements of DOE 5820.2A. When the transfer of facilities is for specific functional purposes, these shall be in writing and shall identify explicitly the concurrent transfer of specific responsibility for surveillance, maintenance, and decommissioning.

BASIS: DOE 5820.2A V.3.a.(5)

6.4.2 Transferring of facilities for decommissioning

The transfer of a facility to BHI for Decommissioning shall be done per the appropriate provisions of the *Surplus Facilities Program Plan*, WHC-EP-0231 and Section 8 of the Hanford Facility Agreement.

6.4.3 Managing contaminated facilities

Radioactively contaminated facilities for which WHC is responsible shall be managed in a safe, cost-effective manner to assure that release of, and exposure to, radioactivity and hazardous/dangerous materials comply with federal and state standards.

Pending final disposition, all excess/surplus facilities under EM-40 shall have a formalized Surveillance and Maintenance Program (SMP) with documented evidence that checks and inspections are being conducted and the required maintenance is being performed.

Organizations with excess/surplus facilities not accepted into the Decommissioning and RCRA Closure Program shall also ensure that these facilities have an auditable SMP.

BASIS: RL 5820.2A, Chapter V, paragraph 3.c.

6.5 STANDARDS FOR RADIOACTIVE SOIL CONTAMINATION

Radioactive soil contamination limits for WHC are established to ensure that individual public effective dose equivalents (EDE) do not exceed the established limits for any reasonable scenario (such as direct exposure, inadvertent ingestion, inhalation and ingestion of food crops, including animal products). Conservatism inherent to pathway programming ensure that required degrees of protection are in place. The concentration limits specified apply to the Hanford Site with respect to onsite disposal operations, stabilization and cleanup, decontamination and decommissioning operations, and certification of soils. Limits to minimize occupational exposures and the release of material from the Hanford Site, are controlled by Radiological Control, delineated in *Hanford Site Radiological Control Manual*, and are not covered in this section.

6.5.1 Responsibilities

1. Managers of projects, facilities, and waste generators shall ensure that the applicable requirements of this section are met.
2. Facility and project managers ensure that the calculations needed for compliance with 6.5 are made and that the appropriate sampling and analyses are performed.
3. Management shall take measures to prevent the migration of contaminated soil.

6.5.2 Threshold concentrations

Dose limits and pathway calculations define the radiological soil concentrations below which soil and included rubble do not require controls as site radioactive materials. Soil concentrations below the Table 6.1 and 6.2 values may be left in situ. Table values depend on location, access, mobility, transfer factors, and associated pathway considerations. Therefore, the soil values may not be suitable for other purposes or locations. When there is more than one radionuclide in the soil, the sum of the concentration fractions, known or postulated to table values, must be equal to one or less. (See the the last page of Appendix C for an example of the sum-of-the-concentration fractions calculation.) In all cases, ALARA program procedures shall be observed.

BASIS: Dose limits of DOE 5400.5, Chapter II, paragraph 1.b.

Definitions

unrestricted release

Values, below which unrestricted release of soils will occur, will be defined in an applicable record of decision.

accessible soils

Hanford soils that are not behind security fences must meet the Table 6.2 values. The values reflect a 10 mrem/yr EDE limit from Hanford operations to the most exposed member of the public.

inaccessible soils

Areas from which the general public is excluded (by fences, posting, patrols, or distance) but which are still subject to meteorological effects, are subject to a 10 mrem/yr operational EDE limit, as reflected in Table 6.1.

BASIS: The values in Tables 6.1 and 6.2 are generated using the GENII software system. This method and the use of Table 6.1 are consistent with DOE 5400.5, paragraphs II.6.(b)(1), IV.2.a.(1), and IV.4.a. Tables 6.1 and 6.2 are constructed to be consistent with the dose constraints of paragraphs II. 1. a, b, and d and 40 CFR 61.92. The "Surface Contamination Guidelines" of the U.S. Nuclear Regulatory Commission Regulatory Guide 1.86 are not used here, as they are inappropriate as soil limits.

Except for unrestricted released areas, other soil and operational sources of public exposure must also be taken into account when considering the total allowable doses to the public.

BASIS: DOE 5400.5, paragraph II.1.a.(2), requires that doses to members of the public from all exposure modes that can contribute significantly to the total dose shall be considered. The DOE 5400.5, paragraph IV.3.a, limits released real property to 100 mrem/year EDE. However, once released, the property will no longer be under the jurisdiction of the DOE, but rather the State of Washington.

Compliance with the tables shall be determined by a combination of statistically supported surface scans and surveys, augmented by sampling within the area. Field surveys and sampling shall follow a documented plan implementing the requirements in this section.

6.5.3 Posting soils

Irrespective of the values in Tables 6.1 and 6.2, soils may require posting for occupational protection purposes. Posting for occupational purposes shall be in accordance with HSRCM-1, *Hanford Site Radiological Control Manual*.

BASIS: HSRCM-1, *Hanford Site Radiological Control Manual*, requires posting and thereby control of occupational dose rates and, in turn, maintains control of total annual doses as required by 10 CFR 835.

6.5.4 Criteria for disposal of contaminated soils

Any Hanford soils containing concentrations of radionuclides in excess of the table values (see Tables 6.1 and 6.2) applicable to the location and condition of the soil in question shall be documented and managed as radioactive waste or remediated to below the applicable table values. Where mixtures of radionuclides exist, an area shall be managed as radioactive waste or remediated unless the sum of each radionuclide's concentration divided by its appropriate table value is equal to, or less than, one. (Unity rule as defined in Appendix A of this manual with an example found at the end of Appendix C.)

Movement of these soils in excess of CERCLA reportable quantities constitutes a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) reportable action where such action causes offsite radiological dose limits to be exceeded or where they are not part of a planned, programmatic activity (see Sections 5.3 and Section 5.2.a.[4]). The original spill, and changes to it, should be entered into the Waste Information Database System (WIDS) through ECS, as required by Section 5.4 of this manual.

BASIS: DOE 5400.5, paragraph 6.b.

The dose from Hanford Site operations to any offsite individual resulting from all release pathways (including the liquid and airborne release pathways and those involving groundwater or surface water used for drinking, irrigation, or recreation) shall not exceed a committed EDE of 100 mrem/yr. All public exposures from the management and storage of radiological waste shall not exceed an EDE of 25 mrem/yr or more than 75 mrem/yr committed EDE for any organ. Public airborne and drinking water doses are limited to 10 mrem and 4 mrem EDE per year respectively. Any doses exceeding any DOE limits of 10 mrem EDE in a year require reporting through WHC Environmental Services to the Deputy Assistant Secretary of the Environment at DOE and EPA.

BASIS: DOE 5400.5, Chapter II, paragraphs 1.a., 1.c., 1.d., and II.7; DOE 5820.2A, Chapter III, as invoked by 5400.5, paragraph 3.a.(2).

Excavated soil (e.g., for pipe installation), though containing radionuclides, may be returned to its original location if the action is consistent with this section and ALARA policy principles, and if the soil is not otherwise regulated as a dangerous waste. IF the excavation of soil containing radioactive material constitutes a modification to an existing waste site, THEN complete a revision to WIDS. IF the excavation is not part of an existing waste site, THEN initiate a suspect waste site investigation and WIDS entry.

6.5.5 Naturally occurring radioactive materials

1. Soils containing wastes of naturally occurring radionuclides whose specific activity is below 2 nCi/g shall be exempt from the requirements of this section.
2. Small quantities of soils containing wastes of naturally occurring radioactive materials whose specific activity is above 2 nCi/g shall be disposed of as low-level waste (LLW) in accordance with Section 7.2 this manual, except for the following:
 - a. smoke detectors
 - b. watches and clocks using radioluminescent paint.

6.5.6 Determining average sample concentrations

The concentration of radionuclides in a soil sample is influenced by the sampling techniques and the volume of the sample. When using Tables 6.1 and 6.2, the sample dimensions and mass over which concentrations may be averaged should be consistent with the scenario's span in the supporting documentation, WHC-SD-EN-TI-070, Rev. 0. Dilution of a sample with soil from outside the sphere of the radiological influence and scenario boundaries is prohibited.

6.5.7 Area hot-spot criteria

Concentrations of radionuclides in any region having an area (A) no more than 25 m² may exceed the table values (see Tables 6.1 and 6.2), but not by more than a factor of $(100\text{m}^2/\text{Am}^2)^{1/2}$. In addition, ALARA principles shall be applied to hot-spot removal, and in no case shall any source that exceeds 30 times the table value be left in place, irrespective of the average concentration in the soil.

BASIS: DOE 5400.5 [IV.4.a.(1)]; for ALARA, (I.4).

NOTE: Where there is more than one radionuclide or more than one hot-spot in a 100 m² area, the hot spots may remain if the sum of each radionuclide's concentration divided by its table value times $(100\text{m}^2/\text{Am}^2)^{1/2}$ equals one or less.

6.6 DESIGNATED REVIEWING ORGANIZATIONS

Organizations listed below are responsible for this process. If you have any questions about this procedure, please contact the process owner.

Designated Reviewing Organizations

CMPOC

Environmental Services (process owners)
 Safety
 Quality Assurance
 Emergency Preparedness
 Liquid Effluent Services
 Solid Waste Disposal
 B Plant
 Plutonium Finishing Plant
 PUREX Plant
 Tank Waste Remediation System

WCS/ES
 SQR/SFT
 SQR/QA
 PSS/EP
 PSS/LES
 PSS/SWD
 TRP/BP
 TRP/PFP
 TRP/PRX
 TWR

6.7 REFERENCES

NOTE: For additional references, see Appendix B of this manual.

10 CFR 835, "Occupational Radiation Protection."

DOE 4300.1C, "Real Property Management."

DOE 5400.5, "Radiation Protection of the Public and the Environment".

DOE 5820.2A, "Radioactive Waste Management."

DOE-RL 89-05, "Implementation Plan for Hanford Site Compliance with U.S. Department of Energy 5820.2A."

AC-5-40, *Hanford Plant Standard*.

NRC Guide 1.86, "Surface Contamination (Table 6.1) Guidelines."

HSRCM-1, *Hanford Site Radiological Control Manual*.

WHC-CM-1-5, *Standards Operating Practices*, 7.1 "Reporting Occurrences and Processing Operations Information."

WHC-CM-3-5, *Document Control and Record Management Manual*.

WHC-SD-EN-TI-070, *Soil Concentration Limits for Accessible and Inaccessible Areas*.

Table 6-1. Inaccessible Soil Concentration Limits, pCi/g.

	100-BDKN	100-F,H	200-W	200-E	300 Area	400 Area
H 3	1.4 E+08	7.4 E+07	3.7 E+08	2.0 E+08	9.5 E+06	1.4 E+07
C 14	6.2 E+05					
Fe55	9.7 E+06	9.7 E+06	3.6 E+10	1.9 E+10	1.0 E+07	1.4 E+09
Co58	9.8 E+06	9.8 E+06	8.1 E+09	4.3 E+09	1.2 E+07	3.1 E+08
Co60	9.9 E+05	9.9 E+05	5.7 E+08	3.0 E+08	1.0 E+06	9.9 E+06
Ni63	1.5 E+08	1.5 E+08	6.9 E+09	6.9 E+09	1.5 E+08	2.2 E+08
Sr90 *	8.3 E+05	8.3 E+05	2.2 E+08	1.2 E+08	8.3 E+05	8.4 E+06
Tc99	1.3 E+07					
Ru106 *	2.0 E+07	2.0 E+07	5.7 E+08	3.0 E+08	1.5 E+07	2.2 E+07
Sb125 *	9.1 E+06	9.1 E+06	5.7 E+09	3.0 E+09	9.2 E+06	1.1 E+08
I 129	2.8 E+05	2.8 E+05	2.8 E+05	2.8 E+05	2.2 E+05	2.8 E+05
Cs134	1.7 E+04	1.7 E+04	2.5 E+08	1.4 E+08	2.4 E+04	9.7 E+06
Cs137 *	1.7 E+04	1.7 E+04	3.5 E+08	1.8 E+08	1.7 E+04	1.3 E+07
Ce144 *	1.4 E+06	1.4 E+06	7.4 E+08	4.0 E+08	1.9 E+06	2.8 E+07
Pm147	3.4 E+07	3.4 E+07	7.4 E+09	4.0 E+09	3.5 E+07	2.8 E+08
Eu152	4.5 E+06	4.5 E+06	1.2 E+09	6.2 E+08	4.6 E+06	4.5 E+07
Eu154	3.3 E+06	3.3 E+06	8.8 E+08	4.7 E+08	3.3 E+06	3.4 E+07
Eu155	2.3 E+07	2.3 E+07	6.9 E+09	3.7 E+09	2.4 E+07	2.6 E+08
Ra226 *	1.3 E+05	1.3 E+05	2.1 E+05	2.1 E+05	1.3 E+05	1.4 E+05
Ac227 *	2.4 E+03	2.4 E+03	5.4 E+04	2.9 E+04	1.4 E+03	2.1 E+03
Th232 *	2.0 E+04	2.0 E+04	2.0 E+04	2.0 E+04	4.7 E+03	7.1 E+03
U 232 *	5.5 E+04	5.5 E+04	1.4 E+05	1.4 E+05	9.9 E+03	1.5 E+04
U 233	4.5 E+05	4.5 E+05	4.5 E+05	4.5 E+05	6.7 E+04	1.0 E+05
U 234	4.6 E+05	4.6 E+05	4.6 E+05	4.6 E+05	6.9 E+04	1.0 E+05
U 235 *	4.9 E+05	4.9 E+05	4.9 E+05	4.9 E+05	7.3 E+04	1.1 E+05
U 236	4.9 E+05	4.9 E+05	4.9 E+05	4.9 E+05	7.1 E+04	1.1 E+05
U 238 *	4.7 E+05	4.7 E+05	4.7 E+05	4.7 E+05	7.7 E+04	1.2 E+05
Np237 *	8.9 E+02					
Pu238	1.3 E+04	1.3 E+04	8.8 E+05	4.7 E+05	1.3 E+04	3.4 E+04
Pu239	1.2 E+04					
Pu240	1.2 E+04	1.2 E+04	1.4 E+04	1.4 E+04	1.2 E+04	1.2 E+04
Pu241	6.1 E+05	6.1 E+05	4.2 E+07	2.2 E+07	6.1 E+05	1.2 E+06
Am241	2.5 E+04	2.5 E+04	7.4 E+05	4.0 E+05	1.9 E+04	2.8 E+04

NOTE: Asterisks mark nuclides with progeny which are assumed to be present in equilibrium amounts. However, U-234 was not included in the U-238 limits. For supporting references see WHC-SD-EN-TI-070.

Table 6-2. Accessible Soil Concentration Limits, pCi/g.

	100-BDKN	100-F,H	200-W	200-E	300 Area	400 Area
H 3	1.4 E+08	7.4 E+07	3.7 E+08	2.0 E+08	9.5 E+06	1.4 E+07
C 14	6.2 E+05					
Fe55	5.3 E+05					
Co58	1.8 E+01					
Co60	7.1 E+00					
Ni63	2.5 E+07					
Sr90 *	2.8 E+03					
Tc99	1.0 E+06					
Ru106 *	7.7 E+01					
Sb125 *	3.7 E+01					
I 129	1.0 E+04					
Cs134	1.0 E+01					
Cs137 *	3.0 E+01					
Ce144 *	3.3 E+02					
Pm147	1.1 E+06					
Eu152	1.5 E+01					
Eu154	1.4 E+01					
Eu155	6.3 E+02					
Ra226 *	1.0 E+01					
Ac227 *	1.0 E+01					
Th232 *	5.9 E+00					
U 232 *	1.0 E+01					
U 233	6.3 E+02					
U 234	6.3 E+02					
U 235 *	1.7 E+02					
U 236	6.7 E+02					
U 238 *	3.7 E+02					
Np237 *	4.8 E+01					
Pu238	2.1 E+02					
Pu239	1.9 E+02					
Pu240	1.9 E+02					
Pu241	1.0 E+04					
Am241	1.8 E+02					

NOTE: Asterisks mark nuclides with progeny which are assumed to be present in equilibrium amounts. However, U-234 was not included in the U-238 limits. For supporting references see WHC-SD-EN-TI-070.

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13.0 IMPLEMENTATION NOTICE

Summary of Changes: A revision to this section was made to reflect organizational changes, a review of the basis statements, including an assessment of the best management practice requirements. The resulting revision eliminated unnecessary or redundant requirements to streamline and clarify this section.

Impact of Changes:

No additional requirements were added as a result of these changes.

13.1 PURPOSE

This section describes the role of the Central Environmental Committee, provides guidance for Environmental Compliance Officer activities, the mechanism for Environmental Reviews and identification of Environmental Compliance Issues.

13.2 SCOPE

This section applies to all organizations, and its subcontractor(s) engaging in activities regulated by federal, state, or local environmental laws or regulations.

13.3 ENVIRONMENTAL COMPLIANCE OFFICER

Environmental Compliance Officers (ECO) function as his/her facility or organization's point-of-contact (POC) for environmental issues. The position may be full or part-time and may represent one large facility or many small facilities.

13.3.1 Responsibilities

1. Organization managers shall:
 - a. Appoint, fund, and train ECOs (as determined by their own organization) and advise the Center of Expertise (COE) and the Central Environmental Committee of the ECO appointment.
 - b. Elevate environmental compliance issues to management in accordance with Section 13.6. Follow-up to promote prompt resolution.
 - c. Support the COE function, as required.
2. The Environmental Compliance Officer shall:
 - a. Provide support to his/her facility or organization manager to promote environmental compliance.
 - b. Advise the facility management of the facility's environmental compliance status as well as new requirements, their impacts and recommended compliance mechanisms.

13.3.2 Requirements

The Environmental Compliance Officer (ECO)

Ensures that processes exist to:

1. Perform and document periodic facility operation self-assessments per environmental requirements found in WHC-CM-7-5.
2. Report environmental compliance issues in accordance with Section 13.6.
3. Report and trend environmental compliance issues per WHC-CM-1-4, *Corrective Action Management Manual*.
4. Integrate the results of trends, root cause analysis, and lessons learned into environmental planning and project development. Incorporate new legislative requirements and changes to existing requirements into their facilities planning in a timely manner. Share information with other facilities and organizations.
5. Review facility designs and modifications for compliance with Section 13.5.3 of this manual.
6. Review and approve facility specific environmental compliance policies, training courses, and procedures.
7. Provide information requested by regulators.
8. Serve (if appointed) on the COE and/or Central Environmental Committee.

13.4 CENTRAL ENVIRONMENTAL COMMITTEE

NOTE: The CEC is responsible for sharing and resolving site-wide environmental issues, between WHC and other contractors.

The Central Environmental Committee (CEC) is the Hanford Site multicontractor organization that represents major facilities or projects with significant environmental issues. The Committee is a vehicle to:

1. Develop options for sitewide issues,
2. Share and disseminate vital environmental information,
3. Facilitate resolution of environmental compliance-related issues, and
4. Increase each organization's environmental knowledge and skill. The CEC operates in accordance with its charter (Appendix A).

13.5 ENVIRONMENTAL REVIEWS

NOTE: Criteria for other functional reviews (e.g., Safety, Quality Assurance) are presented in WHC-CM-3-05, Section 12.7.

Section 13.5 provides guidance to the cognizant engineer (i.e., technical authority to add a compliance officer (CO) or Environmental Services (ES) superscript to further identify the appropriate reviewing organization in the environmental document's approval designator block. The cognizant engineer shall have assigned an environmental "E" approval designator to the respective document as set forth in WHC-CM-3-5, Section 12.7, as a prerequisite to Section 13.5.

13.5.1 Definitions

E^{CO}

Approval designator requiring Environmental Compliance Officer review of documentation. It is assigned by the cognizant engineer in accordance with the WHC-CM-3-5, Section 12.7, and the process outlined in Section 13.5. (See examples listed in Table 13.1)

E^{ES}

Approval designator requiring Environmental Services review of documentation. It is assigned by the cognizant engineer in accordance with the WHC-CM-3-5, Section 12.7, and the process outlined in Section 13.5. (See examples listed in Table 13.2)

internal document

A document issued internally to WHC and/or its subcontractor(s) which may refer to a specific facility or the Hanford Site.

external document

A document issued externally from WHC and/or its subcontractor(s) for regulatory agencies or RL (e.g., permit application, report, or policy correspondence).

13.5.2 Environmental review responsibilities

13.5.2.1 Cognizant engineer

The cognizant engineer and/or technical authority assigns approval requirements, including a determination of environmental documents requiring ECO and/or ES review, and approves documents per WHC-CM-3-5, Section 12.7, and WHC-CM-7-5, Section 13.5.

13.5.2.2 Cognizant engineering manager

The manager concurs with the approval requirements, including the environmental review determination, and approves the document per WHC-CM-3-5, Section 12.7, and WHC-CM 7-5, Section 13.5.

13.5.2.3 Environmental Compliance Officer

The ECO or designee is responsible for environmental reviews that provide:

1. Technical review of facility-specific documentation affecting the environmental function of the facility,
2. Environmental compliance review of documentation in accordance with approved procedures to ensure compliance with applicable environmental laws, regulations, and DOE orders as well as noncompliant items and issues that have a potential to affect the environment.

Documents under the ECO responsibility will be identified with a review designator, E^{CO}. Section 13.5.3 describes the types of documents which shall be designated for E^{CO} environmental review.

13.5.2.4 Environmental Services

Environmental Services is the responsible environmental assurance organization for the review or delegation of review of all applicable environmental documents not delegated to the ECO in Section 13.5.3. The Environmental Services person:

1. Reviews documents according to procedures maintained in the Environmental Services organization.
2. Identifies and advises others of applicable environmental laws, regulations and DOE orders, in addition to noncompliant environmental items and issues with the potential to affect the environment.

Documents under Environmental Services responsibility will be identified with a review designator, E^{ES}. Section 13.5.3 describes the types of documents which shall be designated for E^{ES} environmental review.

13.5.3 Requirements

The requirements for an ECO and/or ES review are defined in the following sections. A flow path of the environmental document review process is shown in Figure 13.1. When a document might be applicable to both facility-specific and sitewide environmental issues, both ES and the ECOs will review/approve the documentation.

BASIS: Implement the document review process as defined in WHC-CM-3-5, Section 12.7.

13.5.3.1 Environmental Compliance Officer review and/or approval requirements

The Environmental Compliance Officer is responsible for E^{CO} reviews and/or approvals of facility-specific documentation affecting or demonstrating compliance with environmental requirements. Examples of environmental documents under this category are listed in Table 13.1.

13.5.3.2 Environmental Services review and/or approval requirements

Environmental Services is the responsible environmental assurance organization for review and/or approval of:

1. External documentation that establishes requirements, make commitments, or represents compliance for environmental issues.

BASIS: Implement WHC-CM-1-3, MRP 3.8.

2. Internal documents establishing a precedent governing environmental compliance activities for more than one facility or unit.

Examples of documentation under this category are provided in Table 13.2.

13.6 ENVIRONMENTAL NONCOMPLIANCE ISSUE IDENTIFICATION AND RESOLUTION PROTOCOL

DOE has established an environmental noncompliance issue identification and resolution protocol to alert RL of significant environmental compliance issues governed by an applicable federal, state, or local regulation. Environmental Services manages the compliance issue interface between WHC and RL.

13.6.1 Responsibilities of Identifier

1. Within one week of identifying an environmental noncompliant, or a potentially noncompliant situation which cannot be corrected immediately, WHC will notify RL in writing of the situation.
2. Notify Environmental Services' cross-cutting noncompliance coordinator.
3. Supply information, explain conditions, and recommend corrective action(s).

13.6.2 Responsibilities of Environmental Services

1. WHC Environmental Services has the lead for resolving WHC issues affecting more than one RL project/program (cross-cutting).
2. After identifying or being notified of an environmental noncompliance, Environmental Services will evaluate the noncompliance, investigate the scope, identify ownership, and coordinate the preparation of an analysis document. Consult with general counsel's office, if needed.
3. If the condition is cross-cutting:
 - a. Notify RL in a timely manner with an analysis of the noncompliance. Include the elements found on a Significant Environmental Compliance Issue Notification Form. (See Figure 13.2).

- b. Enter and track all cross-cutting noncompliant conditions on the Environmental Services commitment tracking system database.
 - c. Status noncompliance resolution progress to RL quarterly.
 - d. Close out rectified noncompliances and document the resolution to RL.
4. If possible, utilize the Regulatory Integration and Process Improvement (RIPI) Team to resolve cross-cutting conditions not subject to the TPA process.

13.6.3 Responsibilities of Condition Owner

- 1. Communication.
 - a. Request that RL forward notification of the noncompliance(s) to the appropriate regulatory agencies within one week upon notification receipt. RL and WHC will jointly communicate with the regulatory agencies on the noncompliant issues whenever practicable.
 - b. If RL is unable to provide regulator notification, WHC may directly notify the regulatory agency or request that the RL Contracting Officer provide written agreement that any resulting fines, penalties, and/or proceeding costs are allowable under the contract. WHC will notify RL prior to any separate communication or notification to the regulatory agencies, except when so doing will result in a failure to meet a regulatory notification requirement.
 - c. Keep RL informed of the status of environmental corrective actions.
- 2. Initiate actions immediately to resolve noncompliances where funding is available.
- 3. In cases where funds are not available to fulfill environmental compliance requirements, the condition owner will submit an action plan within two weeks of noncompliance identification. This should be documented through the change request process for the MYPPs.
- 4. For those complex issues requiring several months to resolve, the condition owner will propose a compliance agreement or alternative strategy with the regulators.

BASIS: Letter, J. D. Wagoner, RL, to T. M. Anderson, WHC, et al., "Hanford Site Policy Regarding Significant Environmental Compliance Issues," 9303759, May 12, 1993.

Letter, J. D. Wagoner, RL, to Contractors, "Expectations Relative to Environmental Compliance Programs," EAP:FRM, 9501688B, March 25, 1995.

Letter, A. L. Trego, WHC, to J. D. Wagoner, RL, "Achieving Environmental Compliance," 9501688B R2, May 4, 1995.

Letter, J. D. Wagoner, RL, to A. L. Trego, WHC, "Agreement on Regulatory Interactions," 95-PCA-334, August 14, 1995.

13.7 DESIGNATED REVIEWING ORGANIZATIONS

Organizations listed below are responsible for this process. If you have any questions about this procedure, please contact the process owner.

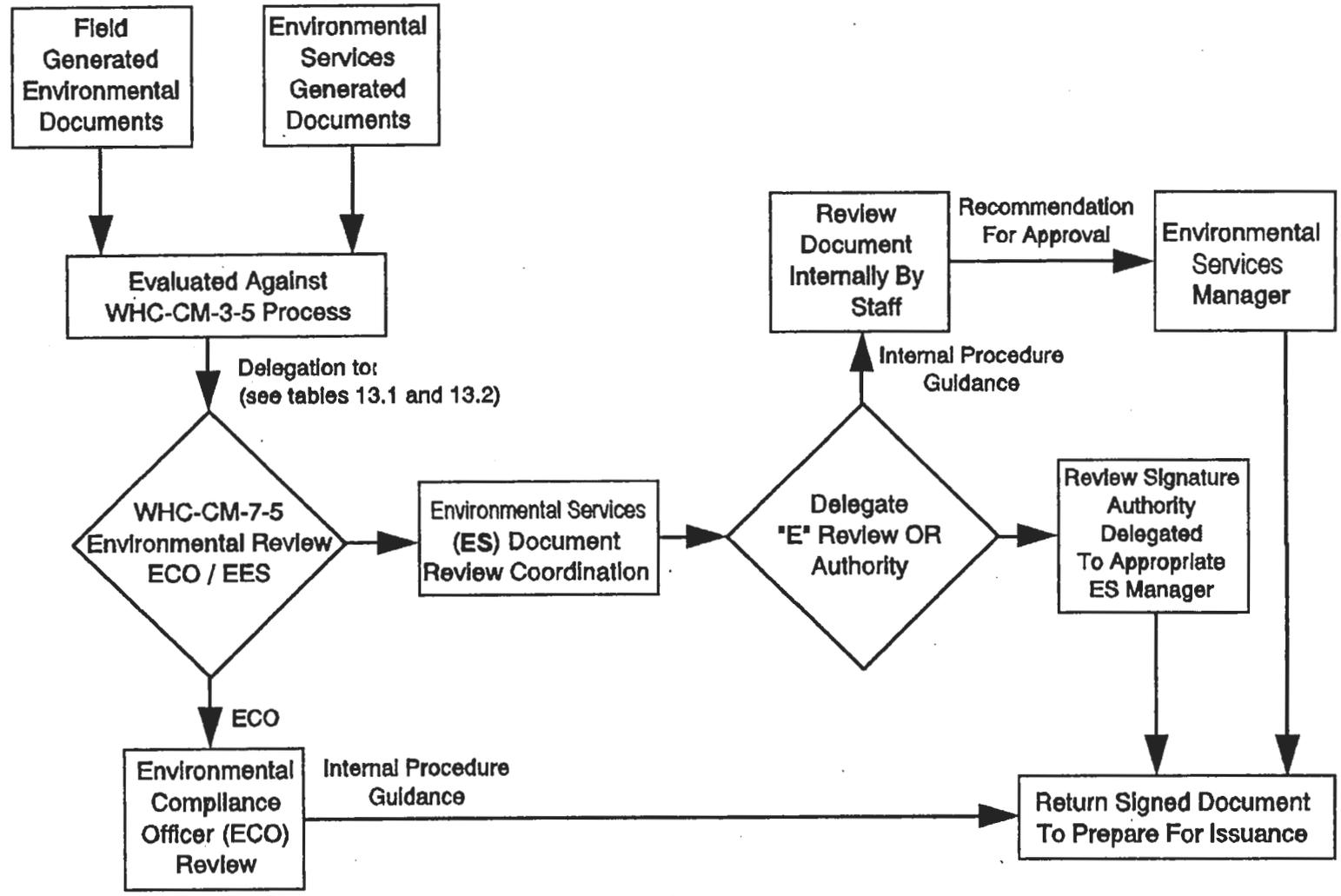
<u>Designated Reviewing Organizations</u>	<u>CMPOC</u>
Environmental Services	WCS/ES

13.8 REFERENCES

WHC-CM-1-3, *Management Requirements and Procedures*, 3.8, "Determining Signature Authority for Official External Correspondence."

WHC-CM-1-4, *Corrective Action Management Manual*.

WHC-CM-3-5, *Document Control and Records Management Manual*, 12.7, "Approval of Environmental, Safety, and Quality Affecting Documents."



Key: ECO - Approval designator requiring Environmental Compliance Officer Review of Documentation
EES - Approval designator requiring Environmental Services review of Documentation

Figure 13.1. WHC Environmental Review Process.

Figure 13.2. Significant Environmental Compliance Issue Form.

ISSUE:

(Short statement and significance of specific issue raised.)

INITIATING CONTRACTOR:

(Identify appropriate source of issue: contractor; point of contact.)

STATUTES/REGULATIONS:

(Identify appropriate regulations, including citations.)

REGULATORY AGENCIES:

(Any federal, state, or local regulatory agencies that may have involvement.)

SUMMARY INFORMATION:

(Statement of appropriate factual information concerning the issue and appropriate regulatory background information.)

ACTIONS TAKEN TO DATE AND CURRENT STATUS:

(Describe any action taken to resolve issue and if appropriate, describe status of issue resolution.)

ACTIONS PLANNED:

(List schedules and planned actions to be taken to resolve issue.)

ISSUE RECOMMENDATION/ADDITIONAL COMMENTS:

(Provide recommendations, alternatives, or additional comments.)

Table 13.1. Example: Facility-Specific Environmental Documents,
Requiring Environmental Compliance Officer Review - E^{CO}.**DETAILED TECHNICAL/DETAILED DESIGN:**

Chemical Transfer
 30% & 60% Design Review/Drawings (e.g., P&ID's)/Equipment Modification
 Job Control System (JCS) Documents (e.g., J-4s and J-7s)
 Letter of Instruction/Operating Specifications
 Operations and Maintenance Manual
 Engineering Study/Functional and Operational Requirements (F&OR)
 Packaging Design Criteria/Functional Design Criteria (FDC)
 Purchase Requisition/Procurement Specifications & Design Specifications
 Waste Feed Projection

SAMPLING/TESTING/PROCEDURES/PLANS:

Assessment of ventilation and filtration needs
 Certification/Certification Plan (e.g., of rail car, LLW)
 Determinations of stack velocity and effluent flow rate
 Leak Testing
 Requalification of DOT drums
 Data Packages (and applicable ECNs)
 (Plant) Operating Procedure(s) Development/Revision
 Effluent Sampling Plan; Vapor Characterization Plan
 Facility Effluent Monitoring Plan (FEMP) Revisions
 Sample Schedules/Sampling and Analysis Procedures
 Test Plan, Procedure, Instruction, or Report
 Waste Handling Plan/5-Year Plan Summary

SAFETY DOCUMENTS:

Design Description-Interim Safety Basis
 Emergency Response/Safety Equipment List
 New Building Emergency Plan
 Operational Safety Requirements
 Preliminary Safety Evaluation/Preliminary Safety Analysis Report (PSAR)
 Preliminary Fire Hazards Analysis
 Risk Assessment
 Final Safety Analysis Report (FSAR), SAR or SAR Revision, or Addendum
 Safety Class Assignment Report/Hazard Classification Documentation
 Safety Analysis Report - Packaging (SARP)
 Seismic Qualification

QUALITY ASSURANCE/QUALITY CONTROL DOCUMENTS:

Component-Based Recall System (calibration system) (CBRS)
 Facility Compliance Assessment to DOE Orders
 Quality Assurance Program Plan (QAPP)
 Scheduled HEPA Filter Aerosol Testing
 Surveillance/Inspection Report
 System Calibration and Functional Testing

ENVIRONMENTAL DOCUMENTS/READINESS REVIEWS:

Effluent Release Report
 Operational Environmental Monitoring Program (OEMP) Reports
 Self-Assessment (e.g. Operational Environmental Monitoring/Surveillance)
 Facility Effluent Monitoring Plan (FEMP)
 Notice of Deficiency (Operating TSD Units)
 Notice of Intent
 RCRA Part A (Operating TSD Units)
 RCRA Part B Application
 TSD Waste Analysis/Training/Inspection Contingency Plans
 Plant Readiness Plan for Startups/Restarts/Shutdowns
 Pre-Operational Review Documentation
 Readiness Checklist/Review Report

Table 13.2. Example: Environmental Documents,
Requiring Environmental Services Review - E^{ES}.

EXTERNAL DOCUMENTS:

216 and Miscellaneous Stream Application (surface discharge)
 218 Registration Package
 240 Engineering Reports, Plans, & Specifications
 Annual Ground Water Monitoring Reports
 BACT/TBACT/BARCT Assessment
 BAT/AKART Document
 Clean Water Act Application (NPDES)
 Clean Air Act Applications (i.e. RAEP, PSD, NESHAPs & NSR)
 Delisting Petition Application
 Department Natural Resources Application
 Documentation associated with the Tri-Party Agreement
 Dredge & Fill Application
 Drinking Water System Documents
 ECNs to Drawings Originally Submitted with a Permit
 Effluent Release Report
 E^{ES} ORR Member for Review/Approval Support of RRB Activities
 Groundwater Impact Assessment/Plan
 Leak/Spill/Release Documentation
 National Marine Fisheries Notification
 National Park Service Notification
 NEPA Action Description Memorandums (ADM)
 NEPA Information Bulletins (IB)/Supplement Analysis (SA)
 NEPA Strategies/Procedures
 NEPA Environmental Assessments (EA)
 Operations & Maintenance Manual
 Petroleum Underground Storage Tank Documentation
 RCRA Part A (Operating TSD Units/Closure)
 RCRA Post-closure Permit Applications
 RCRA Part B Application
 RCRA Notice of Deficiency (Closure Units)
 RCRA Closure and Post-closure Plans
 RCRA Notice of Intent
 RCRA Notice of Deficiency (Operating TSD Units)
 Regulatory Compliance Letters
 Response to Regulatory Notices of Non-compliance (Formal/informal)
 Sampling and Analysis Plan (SAP)
 Septic System Application
 Shoreline Permit Application
 Solid Waste Landfill Application
 State Hydraulic Projects Application
 Treatability Test Report (Supports Delisting)
 Water Quality Modification Application

Table 13.2. Example: Environmental Documents,
Requiring Environmental Services Review - E^{ES}. (cont.)**PROJECT DESIGN AND PLANNING DOCUMENTS:**

Conceptual Design Report (CDR)
Decommissioning Conceptual Study
90% Design Review/Project Design Criteria (PDC)
Project Management Plan
Project Plan/Description
Shutdown/Standby Plan

INTERNAL DOCUMENTS:

Air Emissions Estimates (for proposed project/activity)
Environmental Review Plan
Environmental Work Plan
Excavation Permits
Implementation Plan (e.g., TEDF BAT)
Leak/Spill/Release Notification
Operable Unit Work Plan
Permitting Plan
Plan for Operational Readiness
POC Checklist of Applicable Regulations
QAPP
Site Selection Documentation
Site Evaluation/Selection Documentation
Systems Engineering Management Plan
WHC-CM-7-5 Required Signatures
TSD Waste Analysis Plans
TSD Contingency Plans
TSD Inspection Plans
TSD Training Plans
Facility Effluent Monitoring Plan (FEMP)
Facility-prepared external documents re compliance
Facility-prepared Air Emissions Estimates (for proposed project)

Pollution Prevention

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Pollution Prevention**1.0 PURPOSE**

The purpose of this section is to establish requirements and guidelines for WHC to comply with federal, state, and Department of Energy (DOE) pollution prevention and waste minimization requirements.

2.0 SCOPE

This section describes the WHC Pollution Prevention (includes waste minimization) Program to be implemented to comply with pollution prevention and waste minimization requirements contained in WAC 173-303, 173-307; 40 CFR 262, 264, and 265; 10 CFR 835; Executive Orders (E.O.) 12843, 12856, 12873, and 12902; and DOE 5400.1 and 5820.2A. The requirements of this section apply to organizations with responsibility for implementing the WHC Pollution Prevention program, including all dangerous, radioactive, mixed, and sanitary waste generators; and treatment, storage, and disposal (TSD) unit operators on the Hanford Site.

3.0 DEFINITIONS

See Appendix A for complete listing of definitions.

4.0 RESPONSIBILITIES**4.1 Facility/Project Managers**

1. Establish and track against pollution prevention goals
2. Establish resource requirements and activity schedules for pollution prevention
3. Prioritize pollutants and waste streams for reduction
4. Conduct pollution prevention opportunity assessments (PPOA) on priority waste streams and identify cost-effective pollution prevention opportunities
5. Implement cost-effective pollution prevention opportunities
6. Incorporate pollution prevention into the design of new projects or activities
7. Implement corrective actions resulting from program evaluation
8. Documenting programs by maintaining: goals; budget, activities, and schedule; pollution prevention opportunity assessments; and pollution prevention reporting and opportunity implementation information (see WHC-SD-WM-EV-014).
9. Report annually on program progress and accomplishments.
10. Verify that pollution prevention practices have been considered for all operations and new projects.

Pollution Prevention**4.2 Site Wide Pollution Prevention Program Office**

Pollution Prevention Group organizes the WHC Pollution Prevention Program and has been assigned the role of lead coordinator among site contractors to support RL in the development and implementation of the sitewide program.

1. Develop a pollution prevention program that complies with waste minimization regulations, and applicable federal, state, and DOE pollution prevention requirements.
2. Integrate pollution prevention concepts into requirement documents.
3. Develop incentive and awareness programs.
4. Collect information for reporting summary pollution prevention and waste minimization efforts to DOE and regulatory agencies.
5. Assist generator groups in meeting the requirements for the following activities:
 - Setting quantitative and qualitative goals
 - Determining waste generation baselines
 - Assessing and implementing pollution prevention opportunities
 - Preparing input to regulatory required reports
 - Development and implementation of their pollution prevention programs
6. Lead the development and implementation of sitewide initiatives except for material exchange, recycling, and affirmative procurement.
7. Implement legislative and DOE pollution prevention program requirements
8. Evaluate program annually through comparing changes in waste quantity, volume, and toxicity that are achieved with quantities generated in previous year (DOE 5400.1).

4.3 WHC Recycling

1. Develop, implement, and maintain programs to recycle, reuse, and excess materials, commodities, and recoverable scrap with onsite and offsite end users
2. Assisting and advising procurement organizations in the purchasing of recycled and recyclable products.

4.4 WHC Procurement

1. Implementing practices that minimize the procurement of ozone-depleting substances.
2. Providing support to activities that reduce procurement of hazardous materials.
3. Implementing an affirmative procurement program for products that have a post-consumer recycled content. Provide annual reports of affirmative procurement of products with post-consumer recycled content.

Pollution Prevention

4.5 WHC Technical Training

1. Provide pollution prevention awareness training through Hanford General Employee Training.
2. Ensure training meets state and regulatory requirements.

4.6 ICF KH Environmental Programs and Integration

1. Develop and implement the ICF KH pollution prevention program and the associated affirmative procurement and ozone depleting substance reduction program.
2. Collect and consolidate ICF KH pollution prevention information and data for reporting and tracking purposes.
3. Ensure pollution prevention activities and approaches satisfy regulatory and other requirements.

4.7 ICF KH Energy Management

1. Develop and implement new energy conservation measures and initiatives at the Hanford Site to ensure cost effective operations.
2. Track and analyze energy usage data to identify new energy savings opportunities.
3. Cultivate employee and community energy awareness.
4. Function in accordance with the Hanford Ten Year Energy Management Plan (EMP).
The EMP:
 - Outlines the strategy, organization, and activities that will assist the Hanford Site with reducing energy and water consumption from FY 1995 through FY 2005 according to established baselines while meeting Hanford's mission.
 - Designates that facilities will be designed, built and operated using either Washington State Non-Residential Energy Code WAC 51-11 or 10 CFR 435, as applicable.

4.8 BCSR Network Performance Management

1. Maintain the BCSR pollution prevention program and the associated affirmative procurement and ozone depleting substance reduction program.
2. Collect and consolidate BCSR pollution prevention information and data for reporting and tracking purposes.
3. Ensure pollution prevention activities and approaches satisfy regulators and site requirements.

5.0 REQUIREMENTS

NOTE: Italicized references within parentheses are Basis.

5.1 Waste Generator Group (Facility/Project) Pollution Prevention Program

5.1.1 Program documentation

Develop and maintain pollution prevention program documentation: goals; budget, activities, and schedule; pollution prevention opportunity assessments; and pollution prevention reporting and opportunity implementation information (see WHC-SD-WM-EV-014 and DOE/RL-95-103). This requirement replaces a previous requirement for facility waste minimization plans and still meets planning and implementation requirements. (*WAC 173-307-30, DOE 5400.1 Chapter III.4.b and 4.c, and EPA Guidance to Hazardous Waste Generators on the Elements of a Waste Minimization Program 58 FR 31114-31120*).

5.1.2 Goals

Establish goals for minimizing the volume and toxicity of all wastes that are generated (*WAC 173-307-030, DOE 5820.2A Chapter VI.3.d, 10 CFR 835 and EPA Guidance to Hazardous Waste Generators on the Elements of a Waste Minimization Program 58 FR 31113*).

5.1.3 Funding

Identify and request direct funding (i.e not funded through overhead) for waste minimization and pollution prevention activities through activity data sheets (ADS) and report activities and percent of funding in the A-106 section of ADS (*Executive Orders 12856 and 12088, and Office of Management and Budget (OMB) Circular A-106 requirements*).

5.1.4 Procedures

Integrate waste minimization practices into operating procedures (*DOE 5820.2A Chapter III-3. (c)(1)*).

5.1.5 Tracking and reporting

Track material use, waste generation rates, and recycling rates (*EPCRA 313; WAC 173-303 and 173-307; and 40 CFR 264*).

Report on material usage, waste generation, recycling, and progress made due to implementing pollution prevention practices (*EPCRA 313, RCRA Sec. 2016, WAC 173-307, and 40 CFR 264*).

Certify on hazardous waste manifest a program is in place to minimize the volume and toxicity of waste (*WAC 173-303-180*).

Pollution Prevention**5.1.6 Pollution prevention opportunity assessments**

Conduct pollution prevention opportunity assessments (PPOA) on hazardous chemicals/products and waste generating activities (*WAC 173-307-030*).

5.1.7 Pollution prevention opportunity implementation

Implement source reduction opportunities for hazardous products/chemicals. Implement source reduction, recycling, and treatment opportunities for all waste streams including sanitary, dangerous, radioactive and mixed. The following are some of the methods for meeting this requirement:

- Modify processes to reduce dangerous and radioactive waste generation
- Substitute materials to reduce toxic chemical use and release
- Substitute materials to reduce dangerous and radioactive waste generation
- Procure capital equipment to implement pollution prevention opportunities
- Reuse or recycle dangerous and radioactive wastes
- Use affirmative procurement practices to encourage the purchase and use of recovered materials
- Reuse or recycle sanitary wastes

(*40 CFR 264, WAC 173-307-030, Executive Orders 12843, 12856, and 12873, DOE 5820.2A*).

5.1.8 Design

Design pollution prevention principles and practices into new facilities, and incorporate pollution prevention into facility upgrades and process modifications (*1994 Washington State Non-Residential Energy Code, Washington Administrative Code WAC 51-11; and DOE 5820.2a Chapter III.3.c and DOE 6430.1A*).

5.1.9 Program evaluation

Evaluate program annually through comparing changes in waste quantity, volume, and toxicity that are achieved with quantities generated in previous year (*DOE 5400.1*).

5.2 WHC Sitewide Program**5.2.1 Planning**

Develop and update the Hanford Site Waste Minimization and Pollution Prevention Awareness Program Plan and the WHC Pollution Prevention Program Implementation Plan at least every three years (*DOE 5400.1 Chapter III.4.b*).

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Develop Hanford site and WHC pollution prevention policy statement (*WAC 173-307-030, DOE 5400.1 Chapter III.4.b, and EPA Guidance to Hazardous Waste Generators on the Elements of a Waste Minimization Program 58 FR 31113*).

5.2.2 Goals

Establish site and company goals for minimizing the volume and toxicity of all wastes that are generated (*WAC 173-307-030, DOE 5820.2A Chapter VI.3.d, and EPA Guidance to Hazardous Waste Generators on the Elements of a Waste Minimization Program 58 FR 31113*).

5.2.3 Funding

For direct funded activities (i.e., not funded through overhead), identify and request funding for waste minimization and pollution prevention activities through activity data sheets (ADS) and report activities and percent of funding in the A-106 section of activity data sheets (ADS) (*Executive Orders 12856 and 12088, and Office of Management and Budget (OMB) Circular A-106 requirements*).

5.2.4 Awareness

Establish a pollution prevention employee awareness program, including elements for employee awareness through specific training, special awareness campaigns, and incentives and award programs (*DOE 5400.1 Chapter III.4.c*).

5.2.5 Tracking and reporting

Enhance site material inventory and waste tracking for pollution prevention purposes as a best management practice.

Determine and report waste generation baseline in DOE Annual Report on Waste Generation and Waste Minimization Progress (*DOE 5400.1*).

Collect information and prepare all regulatory required pollution prevention reports and plans for the Hanford Site (*40 CFR 262, 264, and 265; WAC 173-307-040 and 080*).

5.2.6 Source reduction and recycling programs

Establish site-wide source reduction and recycling programs for dangerous, radioactive, mixed, and sanitary waste streams (*40 CFR 264; WAC 173-307-030; Executive Orders 12843, 12856, and 12873; DOE 5820.2A*).

Meet the federally mandated requirements of the Energy Policy Act of 1992 and the assigned goals on energy reduction. Develop and implement energy conservation requirements identified in the Hanford Energy Management Ten Year Plan (WHC-SP-0156) (*Executive Orders 12759 and 12902, 10 and 10 CFR 435 and 436*).

Pollution Prevention**6.0 DESIGNATED REVIEWING ORGANIZATIONS**

Organizations listed below are responsible for this process. If you have any questions about this procedure, please contact the process owner.

Designated Reviewing OrganizationsCMPOC

Environmental Services (process owner)
 Reengineering Program Office
 Procurement & Materials Management
 Engineering Technical Support Services
 Infrastructure Programs
 Network Operations

PSO/ES
 STS
 CFO/PMM
 ICF KH
 ICF KH
 BCS

7.0 REFERENCES

NOTE: For additional references, see Appendix B of this manual.

173-307 WAC, Publication 91-2, *Pollution Prevention Planning: Guidance Manual for Chapter 173-307 WAC.*

42 U.S.C. 11001 et seq., *Superfund Amendments and Reauthorization Act of 1986.*

42 U.S.C 11013, 11028, et seq., *Emergency Planning and Community Right-to-Know Act.*

42 U.S.C. 13101 et seq., *Pollution Prevention Act of 1990.*

42 U.S.C. 6901 et seq., *Resource Conservation and Recovery Act of 1976.*

DOE 5400.1, *General Environmental Protection Program.*

DOE 5820.2A, *Radioactive Waste Management.*

DOE/RL-91-31, Rev. 1, *Hanford Site Waste Minimization and Pollution Prevention Awareness Program Plan.*

EPA/625/7-88/003, *Waste Minimization Opportunity Assessment Manual.*

Executive Order 12843, *Procurement Requirements and Policies for Ozone-Depleting Substances.*

Executive Order 12856, *Federal Agency Compliance with Right-to-Know Laws and Pollution Prevention Requirements.*

Executive Order 12873, *Federal Acquisition, Recycling and Waste Prevention.*

Executive Order 12902, *Energy Efficiency and Water Conservation at Federal Facilities.*

Federal Facility Compliance Act of 1992, as amended, Public Law 102, 386.

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DOE/S-0118, *Pollution Prevention Program Plan*

SEN-37-92, *Waste Minimization Crosscut Plan Implementation*, Secretary of Energy Notice.

WAC 173-303, "Dangerous Waste Regulations," *Washington Administrative Code*.

WAC 173-307, "Plans," *Washington Administrative Code*.

WHC-SD-WM-EV-014, Rev. 2, *Guide for Preparing and Maintaining Generator Group Pollution Prevention Program Documentation*.

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Table 14.6. Section 14.0 Bases/Drivers.

REGULATORY DRIVERS		OTHER DRIVERS	WHC-CM-7-5 IMPLEMENTING SUBSECTION	COMMENTS
Federal	State/Local			
10 CFR 435 40 CFR 262 40 CFR 264 40 CFR 265 EPCRA 313 RCRA Sec. 2016	WAC 173-307 WAC 173-303	DOE 5400.1 DOE 5820.2A DOE 6430.1A EO 12088 EO 12843 EO 12856 EO 12873	5.1	Waste generator group pollution prevention requirements.
40 CFR 262 40 CFR 264 40 CFR 265 10 CFR 835	WAC 173-307	DOE 5400.1 EO 12088 EO 12843 EO 12856 EO 12873	5.2	Sitewide program pollution prevention and waste minimization requirements.

High-Level Waste

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High-Level Waste**15.1 PURPOSE**

The purpose of this section is to define the waste management requirements for DOE high-level waste (HLW).

15.2 SCOPE

The provisions of this section apply to all WHC elements and all WHC contractors and subcontractors performing work that involves management of waste containing HLW and/or HLW contaminated facilities. HLW containing, or considered to have, a hazardous/dangerous waste component is also subject to the applicable requirements of Section 7.0.

15.3 RESPONSIBILITIES

1. Facility Managers of HLW facilities and systems shall:
 - a. Perform the facility functions stated in this section associated with any treatment, storage, and disposal of received waste.
 - b. Assure that facility generators perform correct designations, waste packaging information, and shipping instructions for the handling of HLW and high-level mixed waste.
 - c. Coordinate waste disposal with contracted offsite disposal facilities.
 - d. Ensure that all tanks, sumps, and associated piping and pumping systems within their jurisdiction are in compliance with the applicable requirements of this section.
 - e. Obtain appropriate samples and analyses of generated waste in order to obtain proper designations, and approve analytical requests for all unknown wastes.
 - f. Conduct inspections; maintain required records and reports; track deficiencies, document corrective actions on inspection records and develop inspection schedules, waste analysis plans, contingency plans, and emergency procedures; ensure personnel are trained; operate unit closure plans as required by Section 7.0.
 - g. Promptly report to Environmental Services all spills or releases from a tank system containing a radioactive material, in accordance with Section 5.0 of this manual.
 - h. Ensure that groundwater monitoring activities are conducted in accordance with this section and that appropriate information is available in the TSD unit operating record.
 - i. Obtain the data and calculations necessary to demonstrate compliance with this Section and maintain the associated documentation.

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2. Geosciences shall be responsible for conducting groundwater monitoring.
3. Pollution Prevention Program shall develop, coordinate, and implement a program to minimize the generation of HLW and associated wastes to the extent economically practical and in compliance with subsection 14.6.9.
4. Environmental Services shall:
 - a. Provide guidance on waste designation issues, as requested.
 - b. Conduct assessments to ensure compliance with Section 7.0 as requested.
5. Hanford Technical Services (HTS) shall:
 - a. Provide guidance regarding the number of samples and types of analyses required.
 - b. Provide guidance regarding sample type and quantity.
 - c. Review sample and analysis plans received from the waste owners for consistency with requests for laboratory services and capabilities.
 - d. Provide data validation and verification.
 - e. Coordinate laboratory support for HLW samples.
6. Each employee is responsible for promptly notifying management of events and conditions that could have adverse environmental implications, including releases specified in Section 5.0. *

15.4 REQUIREMENTS**15.4.1. Design requirements for new facilities**

1. Design objectives for new facilities will assure protection of the public and operating personnel from hazards associated with high-level waste from normal operations, accident conditions, and the effects of natural phenomena.

BASIS: DOE 5820.2A, paragraph I.3.a.(1)(a).

2. Designs for new storage and treatment facilities shall meet the requirements of DOE 6430.1, DOE Orders and shall incorporate features to facilitate retrieval capability. Facility design requirements of 40 CFR 265 and WAC 173-303-640, as identified in Section 7.0, are applicable. The specifics of new tank design are designated in Section 7.0.

BASIS: DOE 5820.2A, paragraphs I.1., I.3.a.(1)

High-Level Waste**15.4.2 Design review for existing facilities**

Requirements for the preparation of safety analysis reports for high-level waste operations include the review of existing operational facilities based on current technical criteria. When hazards are identified that should be eliminated, controlled, or mitigated, appropriate upgrading, actions in accordance with paragraph 14.4.1 above, shall be identified and implemented according to the requirements of WHC-CM-4-46, Chapter I, Section 3.

BASIS: DOE 5820.2A, paragraph I.3.a.(2)

15.4.3 Characterizing waste

1. All high-level waste shall be considered to be radioactive mixed waste and subject to the requirements of the Atomic Energy Act, as amended, and the Resource Conservation and Recovery Act (RCRA).

BASIS: DOE 5820.2A, paragraph I.1.

2. Liquid and solidified high-level waste shall be characterized, consistent with ALARA and other applicable radiation protection requirements, to determine the hazardous components according to Section 7.0 their compatibilities, and its radiological components. Characterization shall reflect knowledge of waste generating processes and/or sampling and analysis.

BASIS: DOE 5820.2A, paragraphs I.3.b.(1)(a), RL 5820.2A, paragraphs I.3.b.(1)(a), and Section 7.0.

3. Waste characteristics and compatibility information shall be documented in a safety analysis report (see DOE 5481.1B) and be used as a basis for designing new facilities.

BASIS: DOE 5820.2A, paragraphs I.3.b.(1)(b).

15.4.4 Storage and transfer operations

1. All new HLW handling, transfer and storage facilities and equipment shall be doubly contained and all underground tanks used for the storage of newly-generated HLW shall be doubly contained. Where high-level waste has a total radioactivity concentration below 0.05Ci/gal, existing singly contained tank and transfer systems may be used routinely. At higher concentrations single containment may be used temporarily with RL approval if appropriate design and administrative controls are in place to mitigate adverse effects from a pipeline failure (e.g., pressure-checks prior to use and visual checks during use); and for Mixed HLW as authorized by the WA State Department of Ecology (Ecology).

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(a),(b), and RL 5820.2A, paragraph I.3.b.(2).

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2. Leaking waste storage systems shall not be used to receive HLW, but will be repaired or closed as required by Section 7.0.

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(c) and the Basis in Section 7.0.
3. Single contained storage and transfer operations shall be conducted within the limits defined in the Safety Analysis Reports according to DOE 5481.1B.

BASIS: DOE 5820.2A, paragraph I.3.c.(2)(b).
4. Secondary containment of storage and transfer systems shall be equipped with transfer capability to retrieve the leaked liquid. Secondary containment systems for solidified high-level waste shall provide for physical isolation of the waste from the environment. The tank shall also comply with Section 7.0 for secondary containment.

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(d)
5. To the extent practical, waste in the double-shelled tanks (DSTs) shall be segregated by HLW, TRU waste, and LLW types and HLW shall be segregated by type (sludge, salt, high activity, and low activity) to make accessibility for future processing easier.

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(e) and RL 5820.2A, paragraph I.3.b.(2)(c).
6. Ventilation systems shall be provided where the possibility exists for generating flammable or explosive mixtures of gases. The systems shall be filtered, where required, to maintain radionuclide releases within the off-site requirements specified in DOE 5400.5 and 40 CFR 61 and, for single contained systems, on-site dose commitment requirements of DOE 5480.1B and the *Hanford Site Radiological Control Manual*, HSRCM-1.

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(f) and I.3.c.(2)(e).
7. Where cathodic corrosion protection systems are used, they shall be protected by engineered features against abnormal conditions such as stray currents or system failure. The cathodic protection systems shall be calibrated annually, and all sources of impressed current shall be inspected and/or tested at least every other month.

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(g) and WAC 173-303-640(3)(g).
8. Engineered controls shall be incorporated to provide liquid volume inventory data and to prevent spills, leaks, and overflows from tanks or containment systems. The high-level waste shall be stored at pressures lower than those of ancillary systems (e.g., cooling water).

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(h), I.3.c.(2)(c), and 40 CFR Part 265.192-4.

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9. Current and proposed changes in operations shall be evaluated for criticality safety considerations and controls as required by WHC-CM-4-29, Section 4, paragraph 4.

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(i) and RL 5820.2A paragraph I.3.b.(2)(d).
10. Each facility shall utilize remote maintenance features and other appropriate techniques to maintain personnel radiation exposure as low as reasonably achievable.

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(j) and I.3.c.(2)(g).
11. Upon loss and subsequent recovery of normal electrical power, high-level waste transfer equipment shall not have the capability to restart without active operator action.

BASIS: DOE 5820.2A, paragraph I.3.b.(2)(k).

15.4.5 Monitoring, Surveillance, and Leak Detection

1. All liquid high-level mixed waste tanks, sumps, and associated piping and pumping systems shall comply, as a minimum, with the requirements of Section 7.0, "Containment and detection of releases."

BASIS: Federal Code of Regulation 40 CFR 265.193(a)-(f) and WAC 173-303-640(4).
2. HLW tank system monitoring and surveillance capability shall exist to provide liquid volume, waste inventory data, temperatures and identification of failed containment. For double contained systems, monitoring and leak detection capability shall be engineered and operated to rapidly indicate the status of primary containment integrity, temperatures and pressures, radioactivity in ventilation exhaust, and liquid effluent streams. Liquid levels (alarmed), sludge volume, tank chemistry, condensate, and cooling water should be monitored from a central location with a frequency based on process changes and needs. Generated flammable and explosive mixtures of gases shall be monitored.

BASIS: DOE 5820.2A, paragraphs I.3.b.(3)(a)-(b) and I.3.c.(3)(a) and RL 5820.2A, paragraphs I.3.c.(3).
3. A schedule and procedure shall be developed and documented for monitoring, surveillance, and calibration checks, the frequency of which shall be based on equipment deterioration rates and malfunction durations before unacceptable environmental or human health consequences result.

BASIS: DOE 5820.2A, paragraph I.3.b.(4)(e).
4. A method for periodically assessing waste storage tank integrity (e.g., coupons, photographic inspections, leak detectors, liquid level devices (and inspections by

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periscope in double containments)) shall be established and documented and, for mixed waste tanks, the assessments obtained and filed according to Section 7.0.

BASIS: DOE 5820.2A, paragraphs I.3.b.(3)(c) and I.3.c.(3)(b). This item also reflects the requirements specified in 40 CFR 265.191, 40 CFR 265.192(a) and (g), and 40 CFR 265.193(i), with the exception that the date for completing the initial assessment has been modified to comply with WAC 173-303-400(3)(c)(viii).

5. A system of ground water or vadose zone monitoring wells shall be installed around clusters of HLW tanks where and as required by the Resource Conservation and Recovery Act or Tri-Party Agreement. Groundwater monitoring shall be carried out as required by Section 5.0 in this manual.

BASIS: DOE 5820.2A, paragraph I.3.b.(3)(f).

6. Electrical monitoring and leak detection devices essential to safe operations shall be provided with backup power, as appropriate, to ensure operability under emergency conditions.

BASIS: DOE 5820.2A, paragraph I.3.b.(3)(d).

15.4.6 Spill Contingencies and Actions

The following contingencies and actions address HLW in singly contained (#s 1-2) and doubly contained (#s 2-7) tanks and their associated systems separately. The contingency requirements of Section 7.0 shall also be followed for mixed waste.

1. A contingency action plan shall be maintained for singly contained tanks to respond to spills or leaks and other credible emergencies as defined in the SAR. Appropriate equipment shall be maintained readily available to provide removal of pumpable liquids. A plan of action shall be maintained to remove pumpable liquids from non-interim stabilized tanks when they are identified as assumed leakers.

BASIS: DOE 5820.2A, paragraphs I.3.c.(4)(a) and (c) and RL 5820.2A, paragraphs I.3.c.(4).

2. Upon detection of released radioactive materials as defined by Section 5.3.2.2 of this manual, the appropriate actions of Section 5.0 shall be initiated. Steps shall be taken to prevent further migration of the release to soil or surface water. Major contamination in the soil shall be removed or stabilized unless compliance with this requirement would cause greater harm to human health or the environment.

BASIS: DOE 5820.2A, paragraphs I.3.b.(4)(b) and I.3.c.(4)(b).

3. Spare capacity with adequate heat dissipation capability shall be maintained to receive the largest volume of liquid contained in any one tank. Interconnected tank farms with adequate transfer capabilities, in operational condition, and spare capacity may be considered as a single tank farm for purposes of this requirement.

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BASIS: DOE 5820.2A, paragraph I.3.b.(4)(d).

4. Each high-level waste facility shall have response procedures for credible emergencies, as addressed by the "Safety Analysis Manual".

BASIS: DOE 5820.2A, paragraph I.3.b.(4)(f) and WHC-CM-4-46.

5. If a release is due to a system failure, but the system is not damaged, the system may be returned to service as soon as action to correct the condition is completed; otherwise the system shall be removed from service until conditions can be evaluated fully.

BASIS: DOE 5820.2A, paragraphs I.3.b.(4)(a) and (c).

15.4.7 Training

Worker safety training must comply with the following:

1. General and Specific training requirements of DOE 5480.20, "Personnel Selection, Qualification, Training and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities," Chapter I, Section 7 and Chapter IV, Section 5 as implemented through WHC-CM-2-15.
2. The radiological training for applicable workers of as specified in Hanford Site Radiological Control Manual.
3. Performance Based training (exclusive of accreditation) of DOE 5480.18A, "Accreditation of Performance-Based Training for Category A Reactors and Nuclear Facilities."

BASIS: DOE 5820.2A, paragraphs I.3.b.(5)(b).

4. Applicable requirements of Section 7.0 and 11.0.

BASIS: WAC-173-303-330.

15.4.8 Quality Assurance

All HLW operations shall be conducted in accordance with applicable requirements of the WHC Quality Assurance Manual, WHC-CM-4-2.

15.4.9 Waste Minimization

The generation of radioactive wastes at WHC will be minimized to the maximum extent economically practicable and consistent with the safe operation of all facilities. While volume or toxicity reduction activities at treatment or storage facilities do not qualify as waste minimization by WHC, they do qualify and are required by DOE 5820.2A.

Treatment technologies to reduce waste (e.g., evaporation) can not be strictly applied to radionuclides, including HLW, as, once produced, radionuclides are reduced only by their

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inherent decay. Waste reduction treatment can only reduce the substances accompanying the HLW which may be either hazardous/dangerous or non-hazardous/non-dangerous.

1. Each WHC facility that generates, treats, or stores HLW shall prepare a facility-specific waste minimization plan to identify waste minimization opportunities, set minimization goals, implement minimization opportunities, and report successes and failures. Documented certification stating that a waste minimization plan is in place must be completed annually and inserted into the facility operating record.

BASIS: WHC-EP-0496, "Westinghouse Hanford Company Waste Minimization and Pollution Prevention Awareness Program Plan," July, 1991, paragraphs IV, A, and V.

2. Process waste assessments will be conducted as part of an ongoing program to identify, screen, and analyze options to reduce waste generation. Processes will be reviewed and documented to determine whether significant reduction of waste at the source can be achieved by improvements in process efficiency.

BASIS: WHC-EP-0496, paragraphs VII, VIII.B and RL 5820.2A, paragraphs I.3.b.(7).

3. Potential waste that cannot be eliminated or minimized will be evaluated for recycle (i.e., used, reused, or reclaimed). All HLW waste that is nevertheless generated or has been previously generated will be treated to reduce its volume, toxicity, or mobility before storage or disposal. Generators must minimize the hazardous/dangerous waste where it is potentially mixed with the HLW.

BASIS: WHC-EP-0496, paragraph VIII.F. and WHC-7-5, Section 7.0.

15.4.10 Waste Treatment

The following requirements pertain to HLW associated with non-hazardous/non-dangerous substances. Where dangerous waste is also mixed with the HLW, the following shall only be implemented with the application of the requirements stated in Section 7.0 and 10.0.

1. The chemistry of liquid high-level waste shall be adjusted to control corrosion within design limits for the storage system.
2. Treatment reagents shall not be placed in a tank system without proven effective mitigative action if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, or otherwise fail.
3. Waste generation and waste management systems that significantly change the chemical and physical forms of the waste shall be technically assessed to assure compatibility and retrievability.

BASIS: DOE 5820.2A, paragraph I.3.b.(7).

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4. Programs shall be developed to treat double-shelled tank wastes such as Neutralized Current Acid Waste (NCAW), complexant concentrate (CC), Neutralized Cladding Removal Waste (NCRW) and Plutonium Finishing Plant (PFP) waste to provide appropriate feed to the treatment processes required for final disposal.

BASIS: RL 5820.2A, paragraph I.3.b.(7)(c).

15.4.11 Disposal

1. New and Readily Retrievable HLW

New and readily retrievable existing HLW shall be processed to a final immobilized form which meets the acceptance criteria for permanent disposal in a deep geologic repository.

BASIS: Nuclear Waste Policy Act of 1982 as amended in 1987 in accord with Public Law 100-203, 40 CFR 191, 10 CFR 60, and DOE 5820.2A, paragraph I.3.d.0

- a. Waste acceptance specifications and criteria based upon the requirements outlined in 10 CFR 60.113, 10 CFR 60.131(b)(7), 10 CFR 60.135, 10 CFR 71.87, and 40 CFR 191 shall be developed for high-level waste forms for approval by RW-20 and DP-12 prior to startup of facilities that generate the disposal waste form.
 - NRC Code 10 CFR 60.113 requires a 300 to 1000 year package containment, to be determined by the NRC.
 - NRC Code 10 CFR 60.131(b)(7) requires criticality prevention under normal and accident conditions, except by specified extraordinary coincidence, and limits on multiplication factors.
 - NRC Code 10 CFR 60.135 requires package design, content, and form such that the identified physical, chemical and nuclear properties and their interaction with the environment do not result in the compromise of the waste package, the facility, or the geologic setting.
 - NRC Code 10 CFR 71.87 requires that the package and content is proper for shipment.
 - For the EPA Code 40 CFR 191 dose limits to the public from management and storage of HLW refer to Section 7.0 of the ECM (based on DOE 5400.5 [II.1.c]).

BASIS: DOE 5820.2A, paragraph I.3.d.(1)(a).

- b. Interim storage for solidified high-level waste awaiting transport to the designated geologic repository shall comply with applicable requirements in paragraph 14.4.4.

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BASIS: DOE 5820.2A, paragraph I.3.d.(1)(b).

- c. Hanford's DST and its strontium and cesium encapsulated wastes shall be managed for disposal as indicated in the DOE/EIS-0113, "Final Environmental Impact Statement: Disposal of Hanford Defense High-Level, Transuranic and Tank Wastes," December 1987 and as in the Preferred Alternative in the associated "Record of Decision."

BASIS: RL 5820.2A, paragraph I.3.d.(1) and "Disposal of Hanford Defense High-Level, Transuranic, and Tank Wastes, Hanford Site, Richland, Washington; Record of Decision (ROD)," April 14, 1988.

2. Other Waste.

- a. High-level waste that is not readily retrievable shall be monitored periodically in situ and the safety of such waste shall be reevaluated as necessary to determine the need for corrective measures. Evaluations will be performed (and needed improvements made) as follows:

- Waste constituents will be characterized.
- Barrier performance will be demonstrated by instrumented field tests and modeling.
- The methods to improve the stability of the waste form where needed (and destruction or stabilization alternative for hazardous constituents) will be evaluated.
- Methods for retrieving, processing, and disposing of the waste will be evaluated.

BASIS: DOE 5820.2A, paragraph I.3.d.(2) and the "Disposal of Hanford Defense High-Level, Transuranic, and Tank Wastes, Hanford Site, Richland, Washington; Record of Decision (ROD)," April 14, 1988.

- b. A plan shall be prepared and updated at least biennially to evaluate Hanford's options for permanent disposal of singly contained tank waste. Final alternatives for disposal will be analyzed in a draft supplement to DOE/EIS-0113 for public review and comment before the final disposal decision(s) are made. The decision will be reflected in an ROD to the EIS.

BASIS: RL 5820.2A, paragraph I.3.d.(2) and the "Disposal of Hanford Defense High-Level, Transuranic, and Tank Wastes, Hanford Site, Richland, Washington; Record of Decision (ROD)," April 14, 1988.

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15.5 DESIGNATED REVIEWING ORGANIZATIONS

Organizations listed below are responsible for this process. If you have any questions about this procedure, please contact the process owner.

Designated Reviewing Organizations

Environmental Services
Tank Waste Remediation System

CMPOC

WCS/ES
TWR

Central Environmental Committee Charter

The Hanford Site contractors recognize the need to coordinate their activities while implementing a large number of environmental laws and regulations. The Central Environmental Committee (CEC) is created to:

1. Evaluate sitewide environmental issues within contractor's authority by involving affected programs and projects,
2. When unanimous agreement has been reached on an issue, make sitewide environmental policy recommendations to Department of Energy, Richland (RL) and/or regulators.
3. Communicate and facilitate the sitewide implementation of environmental policies in a coordinated, consistent, and cost-effective way, and
4. Facilitate sitewide interactions and mutual problem solving on specific environmental issues.

The Central Environmental Committee is the Hanford Site multicontractor organization that represents major facilities or projects with significant environmental issues. The Committee is a vehicle to:

1. Develop options for sitewide issues,
2. Share and disseminate vital environmental information,
3. Facilitate resolution of environmental compliance-related issues, and
4. Increase each organization's environmental knowledge and skill.

CEC Executive Committee

The CEC Executive Committee (EC) is comprised of Hanford prime contractor representatives who reflect a top-level, global view of Hanford Site environmental issues. This committee has the authority to:

1. Select issues for CEC study,
2. Evaluate and decide on options for sitewide issues developed by the CEC,
3. Communicate the options and the CEC's recommendations to the respective companies for implementation, as appropriate, and
4. Develop and present unanimous recommendations to RL and/or the regulators for decisions.

When unanimous agreement has been reached on an issue, the Executive Committee may opt to provide its recommendation to the Regulatory Integration and Process Improvement Team (RIPI) for resolution. This team is made up of representatives from RL, the regulators, and Hanford's prime contractors.

Central Environmental Committee Charter

MEMBERSHIP

The Central Environmental Committee is comprised of:

1. A representative from each prime contractor's major Hanford site facility or major project with facilities having significant environmental issues. The representative is selected by the project senior manager or director.
2. A representative from each prime contractor's environmental office, selected by that office's senior manager or director. The Executive Committee will consist of:
3. A senior representative from each prime contractor's top-level organization(s) that has facilities or projects with significant environmental issues,
4. A general counsel representative from each prime contractor, and
5. The senior manager or director from each prime contractor's environmental office.

WHC Environmental Services will provide a staff person to administer, facilitate, and promote CEC and EC activities.