

REQUIRED READING SYNOPSIS

Complete this form and submit with procedure revisions when Required Reading is selected as the level of training on the WCH-DC-002 form.

Procedure No.: WMT-1-1.6	Rev No.: 5	Author: I. L. Siddoway	Date: 04/14/2011
Procedure Title: Waste Disposal			
<p>I. Summary of Changes:</p> <p>This revision changes the issuing organization title to Waste Management and Transportation, adds the acronym ROD for record of decision, adds a new section for Material to Excess, and administrative changes.</p>			
<p>II. Primary Steps Affected:</p> <ol style="list-style-type: none"> 1. Section 2.0, last sentence; changed the the title of the issuing organization to Waste Management and Transportation (WM&T) here and remainder of the procedure. 2. Section 4.0; standardized the initial action verb for each responsibility. 3. Section 5.2.4, first paragraph, second sentence; Added the definition of ROD for record of decision. 4. Section 6.1.8, New section for Material to Excess which reads; "1. Shipments to Excess shall be facilitated through the subcontractor technical representative for that contract. 2. The customer shall complete a Declaration of Excess, Site Form A-6002-881, and A-6002-882, and A6002-881i which is required to accompany the shipment to the 1100 Area warehouse. NOTE: The site forms are available in UCM, Browse Content, Contribution folders, WM&T folder, or using Content ID #s 1909327, 1909328, 1909329 and 1909330 (Declaration of Excess Instruction to Complete). 3. The customer will schedule a Qualified Shipper (WTS). 4. The WTS ensures that the excess material is properly packaged, marked, and labeled for transportation. 5. The WTS prepares a Radiological Release Certification Form (WCH-EE-250) in accordance with WMT-1-1.8, "Release of Waste Not Controlled as Radioactive" and submits the form with other waste documentation. NOTE: Alternative Radiological Release Certification form may be specified by the receiving facility which would be sufficient for the waste package. 6. The WTS ensures that the shipping paperwork is prepared in accordance with WMT-1-2.2. 7. The WI/TS transmits a copy of the radiological certification form and all other shipping paperwork to I&AS Records Management once the shipment is complete and received from the WTS." 6. Section 11.0; Added the following Site forms, A-6002-881, Declaration of Excess, A-6002-882, Declaration of Excess continuation sheet, and A-6002-881i, Declaration of Excess instructions. 			
<p>III. Rationale for Changes:</p> <p>This procedure revision addresses the need to change the title of the issuing organization and incorporates another material found when demolishing legacy Department of Energy facilities, Materials to Excess.</p>			

WMT-1, Waste Management and Transportation

Waste Disposal

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1.0 PURPOSE

The purpose of this procedure is to identify disposal options and general disposal processes for waste streams generated by Washington Closure Hanford (WCH).

2.0 SCOPE

The scope of this procedure is to provide information to WCH waste generating projects on possible disposal options for waste generated by the WCH. This document also provides general disposal processes to assist Waste Services in the disposal process. Disposal options are summarized in Table 1. Disposal options are not limited to those contained in Table 1. Contact Waste Management and Transportation (WM&T) for additional or alternate disposal options.

3.0 DEFINITIONS

See WMT-1, *Waste Management and Transportation*, WMT-1-APA "Glossary of Terms"

4.0 RESPONSIBILITIES

Waste Management and Transportation Manager

- Assign a Waste Transportation Specialist (WTS) to WCH projects as needed to assist in disposal.
- Provide technical assistance to WCH projects.

Project Engineer

- Determine if waste meets the receiving facilities waste acceptance criteria and the waste profile requirements.
- Determine if dangerous waste needs treatment and where treatment is to be performed. This is not applicable to the centralized consolidation/recycling center (CCRC) and *Resource Conservation and Recovery Act of 1976 (RCRA)* waste shipped offsite.

Environmental Restoration Disposal Facility (ERDF) subcontractor

- Review and approve ERDF waste profile datasheets for waste streams to be treated/disposed of at ERDF.

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- Prepare Waste Treatment Plan for dangerous waste to be treated at ERDF (when required)
 - Approve the shipment of waste streams needing treatment to ERDF.
- Effluent Treatment Facility Manager (ETF)**
- Review and approve Profiles to Mission Support Alliance Contractor (MSA) ETF facility.
- Mission Support Alliance Contractor**
- Approve waste profiles and waste shipments to MSA storage, treatment and/or disposal facilities.
- Waste Designation Specialist (WDS)**
- Identify required treatment, if needed, prior to disposal.
 - Evaluate waste data against existing profiles to determine if disposal is allowed under existing documentation. (i.e. waste profiles) This is not applicable to the CCRC and RCRA waste shipped offsite.
- Waste Transportation Specialist (WTS)**
- Prepare documentation needed for waste disposal/treatment.
 - Maintain a working knowledge of the project's waste streams and applicable waste disposal options. An email identifying the onsite waste tracking form (OWTF) is acceptable.
 - Provide disposal/treatment documentation to the Waste Information/Tracking Specialist (WI/TS).
 - Provide technical assistance to WCH projects regarding disposal options and applicable disposal requirements.
 - Coordinate waste shipments to other Hanford Contractors treatment/disposal facilities.
 - Provide technical assistance to treatment/disposal facilities on waste being shipped to them.
- Waste Information Tracking Specialist**
- Input data into the Waste Management Information System (WMIS).
- Information and Administrative Services (I&AS)**
- Provide document and records management services for the WM&T program.

5.0 REQUIREMENTS

5.1 General Requirements

The requirements in this section identify the disposal and treatment options available for various WCH waste streams. Table 1 provides additional information for identifying potential treatment and disposal options for various waste streams. Disposal options are not limited to those contained in Table 1 or discussed in this procedure. Contact WM&T for additional or alternate disposal options.

5.2 Specific Requirements

5.2.1 CERCLA Waste

The U.S. Environmental Protection Agency (EPA), Region 10 determines the acceptability of any facility selected for treatment, storage, or disposal of *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) waste. Therefore, facilities receiving CERCLA waste must be included in a CERCLA decision document or must otherwise be confirmed as acceptable by EPA.

CERCLA wastes sent to a facility other than those listed in the CERCLA decision document (even if the receiving facility is on the Hanford Site) must receive an EPA offsite acceptability determination pursuant to 40 CFR 300.440 before sending the waste. Contact the Environmental Project Lead for CERCLA determination.

5.2.2 Investigation-derived Waste

Investigation-derived waste (IDW) soil that is nondangerous, no radiation added, and has no contaminants above established cleanup levels in *Washington Administrative Code* (WAC) 173-340-740 "Unrestricted Land Use Soil Cleanup Standards", may be disposed to the ground at the point of generation or at an uncontaminated location within the remediation area, consistent with CCN 067483, "Environmental Restoration Program Strategy for Management of Investigation-Derived Waste" and waste control plan. Soil that is radioactive or exceeds established cleanup levels and is managed in a centralized waste container storage area shall be incorporated into the remedial action, or disposed as specified in the approved waste control plan.

Liquid IDW shall be disposed in accordance with the approved waste control plan.

The IDW that consists of noncontaminated, disposable personal protective equipment (PPE), foil, paper, and gloves shall be disposed as nondangerous (no radiation added) trash, provided that a radiological release is performed and the PPE did not contact listed waste. Contact the WTS for concurrence.

5.2.3 Nondangerous/No Radiation Added Solid Waste

Nondangerous/no radiation added solid waste that is being generated and disposed by a project or field activity (where dangerous waste is also being generated and disposed) should have a Radiological Release Certification Form (WCH-EE-250) attached to the outside of the waste

package. See WMT-1, *Waste Management and Transportation*, WMT-1-1.1, "Waste Minimization and Recycling," regarding the recycling of solid waste.

Sanitary waste subcontractors will accept the following types of waste within dumpsters:

- Paper and cardboard
- Wood and miscellaneous debris
- Construction debris
- Metals
- Plastic
- Grounds maintenance waste
- Food waste
- Textiles
- Glass
- Rubber and leather waste
- Personal hygiene, medical diagnostic, first aid, and similar wastes that are not medical waste, as defined by Washington State law.

Sanitary waste subcontractors will not accept any hazardous materials, dangerous waste, free liquid, asbestos-containing materials, radioactive waste, *Toxic Substances Control Act of 1976* (TSCA)-regulated waste, or medical waste.

Sanitary waste subcontractors reserve the right to refuse any waste that is prohibited by regulatory agencies for disposal at the landfill.

Waste generator shall be responsible for assuring there are no chemical or hazardous materials being released for offsite shipment.

5.2.3.1 Inert Waste. Contact the WM&T Manager, Waste Subject Matter Expert, Waste Services Lead (WSL), or their designee along with the Project Environmental Lead to discuss disposal options if the project has generated inert waste, meeting the criteria in WAC 173-350-990 that needs to be disposed.

5.2.3.2 Office Waste. Office waste is trash generated from offices that is nondangerous/no radiation added and disposed in dumpsters, trash bins, or office waste cans. To minimize potential confusion, radioactive material stickers and logos, trefoil symbols, hazardous waste labels, or similar markings should be made unrecognizable before disposal in an office waste receptacle.

Office waste may be disposed at a RCRA Subtitle D sanitary waste landfill. Medical waste, asbestos, or free liquids shall not be disposed without prior approval of the landfill.

5.2.3.3 Soil. No radiation added and nondangerous soil that is below WAC 173-340-740 unrestricted use, cleanup level standards does not require disposal.

5.2.4 Dangerous Waste

Before dangerous waste can be land disposed, the waste must meet requirements known as land disposal restrictions (LDRs), as specified in 40 CFR 268 and WAC 173-303-140 or a

treatability variance must be obtained. For CERCLA activities, a variance may be described in the record of decision (ROD). As a general rule, dangerous wastes from CERCLA activities will be disposed at the ERDF and liquid aqueous waste streams will be sent to the ETF.

Dangerous waste must meet treatment standards specified in 40 CFR 268 and WAC 173-303-140, as applicable, or be subject to an approved treatability variance. This is not applicable to the CCRC.

NOTE: The waste profile includes the information shown in WCH-EE-312, "One-Time LDR Notification" other than the Manifest Number. If the waste has received a variance/waiver from the treatment standard, it may be supplied to ERDF with the shipment or separately while referenced on shipment documentation.

When shipping a federal LDR waste (including wastes treated to meet LDR) to ERDF for the first time, a one-time written notice must be sent with the shipping paperwork to meet the requirements of 40 CFR 268.7. Use of WCH-EE-312, "One-Time LDR Notification" is required to be fill-out by the WTS. Instruction on how to fill out WCH-EE-312 is provided in Attachment 1. Example waste designation information is shown in Attachment 2, "Waste Designation Information (Example)." Similar information may be attached to WCH-EE-312 to supply the required information.

Most TSD facilities other than ERDF furnish a form to meet the requirements of 40 CFR 268.7. If an alternative form is not provided, WCH-EE-312 may be used to meet the one-time notification requirement of 40 CFR 268.7 for CERCLA waste. Supplemental information will be needed for RCRA wastes.

Waste requiring treatment at ERDF shall not be shipped until authorization from the management and operations team at ERDF is received. In addition, remediation waste treatment requirements including the specific treatment to be performed must be documented in the regulator-approved decision document for the operable unit or waste site of origination. Waste treated at ERDF unless previously approved requires the ERDF subcontractor to prepare a Waste Treatment Plan. This plan must be approved by the Lead Regulatory Agency prior to commencing treatment of the waste stream at ERDF.

No radiation added, extremely hazardous (state-only) waste is banned from land disposal in Washington State.

Radioactive mixed extremely hazardous (state-only) waste is allowed to be land disposed in Washington State if it can be demonstrated that all reasonable methods of treatment, detoxification, neutralization, or other waste management methodologies designed to mitigate hazards associated with these wastes are employed (*Revised Code of Washington [RCW] 70.105*).

Solid acid waste is banned from land disposal in Washington State. Solid acid waste must be treated to a pH greater than 2 prior to disposal with regulatory approval.

Organic/carbonaceous waste consists of waste that contains combined concentrations of greater than 10% organic/carbonaceous constituents (i.e., wastes that contain carbon-hydrogen, carbon-halogen, or carbon-carbon chemical bonding). WAC 173-303-140

prohibits the land disposal of dangerous organic/carbonaceous wastes in Washington State. However, the Washington State Department of Ecology has approved that this prohibition is not applicable to Hanford mixed waste at the present time. Jarayssi, M. N., 1999, *Land Disposal of Hanford Organic/Carbonaceous Mixed Waste*, CCN 065100, Washington State Department of Ecology, Kennewick, Washington.

5.2.5 Radioactive Waste

The options for radioactive waste disposal, including environmentally controlled material, include the ERDF and the MSA Low-Level Burial Grounds (LLBG) for solid materials, and the tank farms and the ETF for liquid materials. Contact the WM&T Manager or Waste Subject Matter Expert, WSL, or their designee for disposal options for mixed waste that does not meet waste acceptance criteria these disposal facilities/areas.

5.2.5.1 Solid Radioactive Waste. ERDF is designed to be an engineered disposal facility for low-level and mixed waste produced during environmental remediation of CERCLA past-practice units at the Hanford Site. The CWC was established as a storage location for mixed waste that cannot be treated or disposed due to a current lack of technology or disposal capacity. Transuranic waste as defined by DOE O 435.1, "Radioactive Waste Management" may be temporarily stored at the Central Waste Complex (CWC). Mixed waste and transuranic waste shipped to the CWC must meet acceptance and packaging criteria outlined in HNF-EP-0063, *Hanford Site Solid Waste Acceptance Criteria*.

The LLBG are located in the 200 West Area. The burial grounds accept nondangerous, low-level radioactive waste solids and can also accept radioactive asbestos.

5.2.5.2 Liquid Radioactive Waste. The tank farm facility (located in the 200 Areas) accepts radioactive liquid waste (high-level) that does not meet acceptance criteria for other Hanford Site liquid waste-receiving facilities. The ETF can be used for the treatment and disposal of aqueous liquid radioactive waste.

5.2.6 Polychlorinated Biphenyls

Regulations at 40 CFR 761 allow for a self-implementing disposal option, a performance-based disposal option, and a risk-based disposal option for polychlorinated biphenyl (PCB) remediation waste. The self-implementing and performance-based options may be used without prior approval from EPA. The risk-based option requires notification to and an approval from EPA, Region 10. For CERCLA actions, an appropriate method to obtain this approval is to place all information into the CERCLA ROD (or other decision document approved by EPA, Region 10).

The ERDF can receive nonliquid PCB waste of any concentration from CERCLA remediation activities for disposal. Liquid PCBs greater than 50 ppm cannot be disposed at the ERDF.

5.2.7 Asbestos

Asbestos-containing waste shall be disposed in an asbestos waste management facility that is recognized by the Benton Clean Air Authority (BCAA) BCAA Regulation 1, Article 8, Benton Clean Authority, Richland, Washington. Disposal shall be in accordance with the requirements stated in 40 CFR 61.145 and the Memorandum of *Agreement Relating to Removal of Asbestos Materials and Demolitions on the Hanford Site* (BCAA 2003).

Asbestos-containing waste from CERCLA remediation can be disposed at the ERDF. Asbestos containing waste from non-CERCLA activities may be shipped offsite for disposal. Radioactive asbestos-containing waste can be disposed at the LLBG.

5.2.8 Ion-Exchange Resins and Granular Activated Carbon

For disposal at ERDF ion-exchange resins and granular activated carbon shall be thoroughly drained and stable before they are transported for disposal to prevent reaction with their surroundings and the generation of excessive heat. Containers shall be vented and/or a catalyst pack may be required if the material is capable of generating gas. Ion-exchange resins and granular activated carbon may be subject to restrictions associated with organic carbonaceous compounds, as specified in the ERDF Waste Acceptance Criteria.

6.0 PROCEDURE

6.1 Disposal/Storage/Recycle

This section describes the general process for disposal/storage of wastes at the various facilities. Table 1 of this procedure identifies potential disposal options and is not meant to exclude other options.

6.1.1 Environmental Restoration Disposal Facility

1. WTS ensures that a waste profile and waste designation are developed and approved in accordance with WMT-1-1.3, "Waste Characterization and Designation (Certification)" before the shipment of any waste to ERDF.
2. The waste generating project ensures that treatment is performed, or will be performed at ERDF, if required, to meet LDRs for the waste.
3. The waste generating project or designee schedules the waste on the three week rolling schedule including the projected need for ERDF cans. If the waste needs treatment also schedule it in 90 day look-ahead.
4. The waste generation facilities Project Engineer determines if the waste meets the ERDF waste acceptance criteria and the waste profile requirements for each shipment.
5. For special handled waste the waste generating project prepares a Waste Shipping and Receiving Plan if required.
6. The WTS verifies that the waste is properly packaged, marked, and labeled for transportation.
7. The WTS ensures that the shipping documents required by WMT-1-2.2, "Classifying, Packaging and Communication of Hazardous Materials for Transportation" are prepared.
8. The waste is transported to the ERDF on a WCH Onsite Waste Tracking Form (WCH-EE-286).

9. For the first shipment of a federal LDR waste (including wastes treated to meet LDR), the WTS completes WCH-EE-312 and sends it with the shipment.
10. WMIS closeout is to be completed in accordance with WMT-1-1.7, "Waste Tracking, Traceability, and Closeout."

6.1.2 Centralized Consolidation/Recycling Center (CCRC)

1. Shipments to the CCRC shall be facilitated through the subcontractor technical representative for that contract.
2. The WTS ensures that the waste is properly packaged, marked, and labeled for transportation.
3. The WTS prepares a Radiological Release Certification Form (WCH-EE-250) in accordance with WMT-1-1.8, "Release of Waste Not Controlled as Radioactive" and submits the form with other waste documentation.

NOTE: Alternative Radiological Release Certification form may be specified by the receiving facility which would be sufficient for the waste package.

4. The WTS ensures that the shipping paperwork is prepared in accordance with WMT-1-2.2 and follows the requirements identified in the CCRC Management Plan for Recyclable Material administered by Hanford's CCRC.
5. The WI/TS transmits a copy of the radiological certification form and all other shipping paperwork to I&AS Records Management and updates the WMIS as necessary.

6.1.3 PermaFix Northwest

1. The WTS ensures that the waste is characterized and designated prior to submittal for shipment to the Treatment, Storage and Disposal facility.
2. The WTS ensures that the waste is properly packaged, marked, and labeled for transportation and completes and submits WCH-EE-312 with the first of the shipments.
3. The WTS ensures that the shipping paperwork is prepared in accordance with WMT-1-2.2.
4. The receiving contractor provides a pick-up time and date.
5. The WTS arranges for loading of containers (if applicable).
6. The receiving contractor coordinates waste shipment to the offsite disposal facility.
7. WMIS and solid waste information and tracking system (SWITS) closeouts are to be completed in accordance with WMT-1-1.7.

6.1.4 Effluent Treatment Facility

1. The WTS ensures that the ETF liquid Waste Profile Sheet (WPS) or equivalent is prepared in accordance with the ETF waste acceptance criteria, and submitted to the ETF Manager for approval.
2. The ETF Manager authorizes acceptance of the waste.
3. The WTS verifies that the waste is properly packaged, marked, and labeled for transportation and that shipping paperwork is prepared as required by ETS and in accordance with WMT-1-2.2.
4. WTS schedules the shipment and arranges the transfer of the waste to ETF.
5. The waste is then shipped to the ETF, and copies of paperwork are provided to the WI/TS. The WI/TS updates the WMIS for containers shipped to the ETF.

6.1.5 Sanitary Landfill

1. The WTS prepares the Radiological Release Certification Form (WCH-EE-250) as required by WMT-1-1.8.
2. The WTS attaches a copy of the radiological certification form to the trash that is being sent for landfill disposal. A copy of the form is transmitted to the WI/TS.
3. WMIS closeout is to be completed in accordance with WMT-1-1.7.
4. Shipments of sanitary waste for disposal shall be facilitated through the subcontractor technical representative for that contract.

6.1.6 Central Waste Complex

1. The WTS ensures that the WPS (or equivalent) is prepared in accordance with the CWC waste acceptance criteria and is submitted to receiving contractor for approval.
2. The receiving contractor reviews the WPS. Any discrepancies identified by the receiving contractor will be discussed and resolved through the WSL or designee.
3. Receiving contractor approves the WPS.
4. The WTS prepares the appropriate waste shipment documentation and shipping paperwork as required by CWC and in accordance with WMT-1-2.2.
5. The WI/TS inputs each container into the SWITS database and places them in "Request to Ship" status by completing the U201 "Batch Shipment" screen in SWITS as applicable.
6. The WTS transmits the waste shipment documentation to the receiving contractor for review and approval (if required).
7. The receiving contractor reviews the waste shipment documentation. Any discrepancies identified by the receiving contractor will be discussed and resolved through the WTS.

8. The receiving contractor approves the waste shipment documentation and provides a receipt report.
9. The WTS ensures that the waste is properly packaged, marked, and labeled for transportation.
10. The WTS coordinate the waste shipment to the CWC and verifies that waste is accepted upon receipt.
11. WMIS closeout is to be completed in accordance with WMT-1-1.7.

6.1.7 Offsite RCRA Treatment, Storage, and Disposal Facility

1. The WTS ensures that the waste is characterized and designated prior to submittal for shipment to the Treatment, Storage and Disposal facility.
2. The WTS ensures that the shipping paperwork is prepared in accordance with WMT-1-2.2, if applicable.
3. The WTS ensures that the waste is properly packaged, marked, and labeled for transportation and completes and submits WCH-EE-312 with the first of the shipments.

NOTE: Alternative LDR form may be specified by the Treatment, Storage and Disposal facility or receiving contractor.

4. The WTS prepares a Radiological Release Certification Form (WCH-EE-250) in accordance with WMT-1-1.8 and submits it with other waste documentation.

NOTE: Alternative Radiological Release Certification form may be specified by the receiving facility which would be sufficient for the waste package.

5. The WI/TS enters all container information into SWITS (as applicable) and places containers in "Request to Ship" status by completing the U201 "Batch Shipment" screen in SWITS as applicable.
6. The WTS schedules a waste package inspection with the receiving contractor.
7. The receiving contractor performs waste package inspection.
8. The receiving contractor provides a pick-up time and date.
9. The WTS arranges for loading of containers (if applicable).
10. The receiving contractor coordinates waste shipment to the offsite disposal facility.
11. WMIS and SWITS closeouts are to be completed in accordance with WMT-1-1.7.

6.1.8 Material to Excess

1. Shipments to Excess shall be facilitated through the subcontractor technical representative for that contract.
2. The customer shall complete a Declaration of Excess, Site Form A-6002-881, A-6002-882, and A-6002-881i which is required to accompany the shipment to the 1100 Area warehouse.

NOTE: The site forms are available in UCM, Browse Content, Contribution Folders, WM&T folder, or using Content ID #s 1909327, 1909328, 1909329, and 1909330 (Declaration of Excess Instructions to Complete).

3. The customer will schedule a Qualified Shipper (WTS).
4. The WTS ensures that the excess material is properly packaged, marked, and labeled for transportation.
5. The WTS prepares a Radiological Release Certification Form (WCH-EE-250) in accordance with WMT-1-1.8, "Release of Waste Not Controlled as Radioactive" and submits the form with other waste documentation.

NOTE: Alternative Radiological Release Certification form may be specified by the receiving facility which would be sufficient for the waste package.

6. The WTS ensures that the shipping paperwork is prepared in accordance with WMT-1-2.2.
7. The WI/TS transmits a copy of the radiological certification form and all other shipping paperwork to I&AS Records Management once the shipment is complete and received from the WTS.

7.0 RECORDS

Records generated from the activities outlined in this procedure shall be maintained and submitted to I&AS Records Management in accordance with approved Records Inventory and Disposition Schedules (RIDS) and BSC-1, *Business Services and Communications*, BSC-1-7.8, "Records Management".

8.0 JUSTIFICATION SUMMARY

Revision	Reason for Revision
5	Revised title of Waste Services to Waste Management and Transportation and added acronym record of decision (ROD) and how to dispose of material going to excess to the procedure.
4	Revision 4 is updated to include the new Prepared by (Waste Services Manager), 40 CFR 268.7 requirements utilizing WCH-EE-312, "One-Time LDR Notification", and editorial changes.

9.0 REFERENCES

40 CFR 61, "National Emission Standards for Hazardous Air Pollutants," *Code of Federal Regulations*, as amended.

40 CFR 268, "Land Disposal Restrictions," *Code of Federal Regulations*, as amended.

40 CFR 300, "National Oil and Hazardous Substances Pollution Contingency Plan," *Code of Federal Regulations*, as amended.

40 CFR 761, "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions," *Code of Federal Regulations*, as amended.

BCAA, 2003, *Memorandum of Agreement Relating to Removal of asbestos Materials and Demolitions on the Hanford Site*, CCN 107905, dated April 8, 2003, Benton Clean Air Authority, Richland, Washington.

BCAA Regulation 1, Article 8, Benton Clean Authority, Richland, Washington.

BSC-1, *Business Services and Communications*, BSC-1-7.8, "Records Management, Washington Closure Hanford, Richland, Washington."

Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9601, et seq.

DOE O 435.1, *Radioactive Waste Management*, as amended, U.S. Department of Energy, Washington, D.C.

Ecology, EPA, and DOE, 1999, *Environmental Restoration Program Strategy for Management of Investigation-Derived Waste*, CCN 067483 Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Olympia, Washington.

HNF-EP-0063, *Hanford Site Solid Waste Acceptance Criteria*, current revision, Fluor Hanford, Inc., Richland, Washington.

Jarayssi, M. N., 1999, *Land Disposal of Hanford Organic/Carbonaceous Mixed Waste*, CCN 065100, Washington State Department of Ecology, Kennewick, Washington.

RCW 70.105, "Hazardous Waste Management," *Revised Code of Washington*, as amended.

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

Toxic Substances Control Act of 1976, 15 U.S.C. 2601, et seq.

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

WAC 173-340, "Model Toxics Control Act – Cleanup," *Washington Administrative Code*, as amended.

WAC 173-350, "Solid Waste Handling Standards," *Washington Administrative Code*, as amended.

WMT-1, *Waste Management and Transportation*, Washington Closure Hanford, Richland, Washington.

WMT-1-1.1, "Waste Minimization and Recycling"

WMT-1-1.2, "Waste Handling and Storage"

WMT-1-1.3, "Waste Characterization and Designation (Certification)"

WMT-1-1.4, "Waste Storage and Handling"

WMT-1-1.7, "Waste Tracking, Traceability, and Closeout"

WMT-1-1.8, "Release of Waste Not Controlled As Radioactive"

WMT-1-2.2, "Classifying, Packaging and Communication of Hazardous Materials for Transportation"

10.0 BIBLIOGRAPHY

WCH-138, *Waste Management Information System User Guide*.

WAC 246-290, "Public Water Supplies," *Washington Administrative Code*, as amended.

WMH-370, *Generator Services Procedures*, Section 1.7, "Radioactive Waste Acceptance Review," Fluor Hanford, Inc., Richland, Washington.

WMP-370, *Fluor Hanford Waste Management Project Generator Services Procedures*, Fluor Hanford, Inc., Richland, Washington.

Section 1.6, "Waste Stream Approval Process"

Section 7.1, "Solid Waste Engineering Analysis Database"

11.0 FORMS (See WCH Intranet for Current Version of Forms)

WCH-EE-250, Radiological Release Certification Form

WCH-EE-286, WCH Onsite Waste Tracking Form

WCH-EE-312, One-Time LDR Notification

Site Form A-6002-881, Declaration of Excess

Site Form A-6002-882, Declaration of Excess continuation sheet

Site Form A-6002-881i, Declaration of Excess instructions

12.0 ATTACHMENTS

Attachment 1- WCH-EE-312 Instructions

Attachment 2- Waste Designation Information (Example)

Table 1. Waste Treatment, Storage, and Disposal Options for WCH-Managed Waste.

	ERDF	CCRC	PermaFix NW	ETF	Sanitary Landfill	CWC	Offsite CERCLA/RCRA TSDf
<i>No Radiation Added</i>							
IDW	X			X	X		X
Nondangerous		X		X	X		
Dangerous solid	X	X					X
Dangerous liquid		X		X			X
PCB	X	X					X
Asbestos	X				X		
<i>Radioactive</i>							
IDW	X		X	X		X	
Dangerous solid (mixed)	X		X			X	
Dangerous liquid (mixed)				X		X	
Nondangerous solid	X						
Nondangerous liquid				X			
PCB	X			X		X	
Asbestos	X						
Low-level waste	X		X				
High-level waste							
Transuranic waste						X	

Attachment 1: WCH-EE-312 Instructions

1. List all EPA hazardous waste number(s) found in shipment or reference the Waste Designation information if attached.
2. List the manifest number of the first shipment of this waste.
3. List the constituents of concern for F001-F005, and F039, and underlying hazardous constituents or reference the Waste Designation information if attached.
4. Identify if the waste is wastewater or nonwastewater.
5. List any subcategories or reference the Waste Designation information if attached.
6. List the constituents subject to treatment or reference the Waste Designation information if attached.
7. List the treatment standards to be or are met or reference the Waste Designation information if attached.
8. List the waste analysis data if available or reference the Waste Designation information if attached.

Attachment 2: Waste Designation Information (Example)

Waste Designation

Land Disposal Restrictions:

This waste may be land disposed following treatment. This is nonwastewater waste that is subject to the land disposal restrictions (LDR) and does not meet the LDR treatment standards for the D008 waste code as shown below:

Waste Code	Waste description and treatment/regulatory subcategory	Regulated Hazardous Constituent	Treatment Standard mg/kg	Highest reported value or detection limit for ND (not detected) mg/L	Sample Number
D008	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for lead based on the TCLP in SW846.	Lead (7439-92-1)	0.75 mg/l TCLP and meet 268.48 standards*	300,000 mg/kg	NA

***268.48 Standards**

CAS#	Regulated Constituent	Treatment Standard mg/kg	Highest reported value or detection limit for ND (not detected) mg/kg	Sample Number
72-54-8	4,4'-DDD	0.087	0.3	NA
7440-36-0	Antimony	1.15 TCLP	27.8	NA
7440-39-3	Barium	21 TCLP	45000 (<100 TCLP)	NA
7440-41-7	Beryllium	1.22 TCLP	1000	NA
7440-43-9	Cadmium	0.11 TCLP	7/1 (<1 TCLP)	NA
7440-47-3	Chromium	0.6 TCLP	1630 (<5 TCLP)	NA
959-98-8	Endosulfan I	0.066	0.077	NA
1031-07-8	Endosulfan sulfate	0.13	0.19	NA
7421-93-4	Endrin aldehyde	0.13	0.2	NA
100-41-4	Ethyl benzene	10	21	NA
7439-97-6	Mercury	0.025 TCLP	5.9 (<0.2 TCLP)	NA
87-86-5	Pentachlorophenol	7.4	8.2	NA
7440-22-4	Silver	0.14 TCLP	24.5 (<5 TCLP)	NA
127-18-4	Tetrachloroethylene	6	13	NA
79-01-6	Trichloroethylene	6	6.5	NA
1330-20-7	Xylenes	30	140	NA

Note: This waste may be treated via alternative treatment standards for soils under 40 CFR 268.49. Sample numbers listed above are listed as not applicable as no sample has been taken of this waste, but rather similar types of waste. Waste will be treated per WCH-252 Table 1, Row 1. Waste may not be treated that exceeds 53 mg/L TCLP lead.