

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-1-1.2	Rev No.: 6	Author: M. E. Lewis	Date: 6/29/2012
Procedure Title: Waste identification			
<p>I. Summary of Changes:</p> <p>This revision changes prepared by to Millard E. Lewis. Changed all internal procedure references from Waste Management & Transportation to Waste Services. Changed Section 5.4.6 (BASIS: and text) from DOE O 435.1 to DOE Manual 435.1-1. Added DOE Manual 435.1-1 to Section 5.4.5. Expounded upon the definition of LLW. Added State-Only waste and Universal Waste descriptions. This revision satisfies the 2-year periodic review requirement per Section 6.6 of BSC-1-7.2 and Section 6.5.10 of PAS-2-1.1.</p>			
<p>II. Primary Steps Affected:</p> <ol style="list-style-type: none"> 1. Prepared By is now M. E. Lewis 2. Section 5.3.3 3. Section 5.3.7 4. Section 5.4.6 			
<p>III. Rationale for Changes:</p> <p>Two-year periodic review per BSC-1-7.2 and PAS-2-1.1</p>			

WMT-1, Waste Management and Transportation

Waste Identification

Prepared By: Millard E. Lewis

1.0 PURPOSE

The purpose of this procedure is to identify the types of waste streams encountered during work activities performed by Washington Closure Hanford (WCH) and to provide associated descriptions or regulatory references for these streams to ensure proper management and compliance with Federal, state, and local regulations, as well as approved regulatory documents.

2.0 SCOPE

The scope of this procedure is to identify the types of waste streams, provide a general description of the waste streams or regulatory references, and assist WCH in proper identification and management of waste.

This procedure also describes special situations where requirements may differ depending on the regulatory jurisdiction generating the waste (e.g., *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* [CERCLA] or *Resource Conservation and Recovery Act of 1976* [RCRA]).

3.0 DEFINITIONS

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

4.0 RESPONSIBILITIES

Project Manager

- Identify activities within the project that generate waste and plan for managing various types of waste streams based on regulatory drivers and documents.
- Adjust plans as necessary based on unexpected changes in types of waste, obtain input as required, and ensure that documentation is adjusted to maintain compliance with waste management requirements.
- Ensure that regulatory documentation is approved for managing specific types of waste (e.g., investigation-derived waste [IDW], CERCLA).

Waste Services

- Provide technical support to projects and functions to identify the types of waste streams expected during work activities.

- Prepare necessary waste projection reports and other reports as required for various types of wastes.
- Identify potential waste treatment and disposal options.

Environmental Project Lead (EPL)

- Assist the project in obtaining regulatory approvals as necessary for managing various types of wastes.

Information & Administrative Services (I&AS)

- Provides document control and records management services for the Waste Services program.

5.0 REQUIREMENTS

Waste streams that may be generated by projects or may be encountered are identified in the following subsections.

Typical WCH activities that generate waste include the following:

- Sampling and investigations
- Soil remediation
- Remediation of old structures and burial grounds
- Deactivation and demolition of structures
- Surveillance and maintenance of structures, equipment, and areas
- Closure of treatment, storage, and disposal (TSD) units

5.1 Investigation-Derived Waste

As defined by the strategy for management of IDW (CCN 067483, "Environmental Restoration Program Strategy for Management of Investigation-Derived Waste"), IDW is waste generated as a result of conducting a CERCLA Investigation, or RCRA Past-Practice Investigation; treatability study, and, with Project Manager approval, waste from investigations at inactive RCRA TSD units. This waste may be contaminated material from field investigation and characterization activities and may pose a risk to human health and the environment. Examples of IDW include soil and other materials from the collection of samples, excavation of test pits, residues from the testing of treatment technologies, and contaminated personal protective equipment (PPE), decontamination fluids, and disposable sampling equipment.

To consider waste to be identified as IDW, regulatory approval must be obtained using a Waste Control Plan (WCP). The IDW can be a combination of multiple types of waste (e.g., radioactive, dangerous, and *Toxic Substances Control Act of 1976* (TSCA)).

Waste generated within the fence line of TSD units is excluded from being managed as IDW unless explicitly authorized by the U.S. Environmental Protection Agency (EPA) and the Washington Department of Ecology (Ecology) and documented in the WCP (form WCH-EE-241). A complete list of Hanford's TSD units is identified in Appendix B of the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) (Ecology et al. 1998), and includes single-shell and double-shell tanks. Exceptions may be negotiated on a case-by-case basis and shall be documented in the WCP.

BASIS: *Environmental Restoration Program Strategy for Management of Investigation-Derived Waste* (Ecology et al. 1999) and best management practice (BMP)

5.2 Nondangerous/No Radiation Added Solid Waste

Nondangerous/no radiation added solid waste is defined as articles, materials, and substances that are no longer of practical use, have no commercial value, do not meet the definition of a dangerous or radioactive waste, and are commonly disposed in dumpsters, solid waste landfills, office trash cans, or demolition landfills. Examples of nondangerous/no radiation added waste is discussed in the following sections 5.2.1, 5.2.2 and 5.2.3.

BASIS: WAC 173-304, WAC 173-351, and BMP

5.2.1 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.

BASIS: WAC 173-304, WAC 173-351, and BMP.

5.2.2 Inert Waste

Inert waste, as defined in WAC 173-350-990, is noncombustible, nondangerous solid waste that is likely to retain its physical and chemical structure under expected conditions of disposal, including resistance to biological and chemical degradation. Inert waste must have sufficient structural integrity and strength to prevent settling and unstable situations under expected conditions of disposal.

The following wastes are considered to be inert: cured concrete (including embedded steel or wood), brick and masonry, ceramic materials, glass, stainless steel, and aluminum. Other materials may be considered inert if they can be shown to have comparable physical characteristics and risks to human health and the environment as listed items.

BASIS: WAC 173-350-410 and WAC 173-350-990

5.2.3 Other Miscellaneous Solid Waste

Other miscellaneous solid waste includes the following: segregated industrial solid waste; construction, demolition and land-clearing debris; wood waste; ash (other than special incinerator ash); and dredged material.

BASIS: WAC 173-350-400

5.3 Dangerous Waste

Washington State has been delegated the authority by EPA to manage the core RCRA hazardous waste program. Washington State has elected to add additional waste streams and requirements to the program. Waste that is regulated under the dangerous waste regulations of Washington State is “dangerous waste” and includes federally regulated waste, hazardous waste and waste regulated as a matter of state law as “state-only waste.”

BASIS: WAC 173-303.

5.3.1 Listed Waste

A solid waste is regulated as dangerous waste if it is identified on one of three lists developed by EPA. Ecology has also added state-only sources to this list. Waste that is designated as dangerous waste because it is on a list is referred to as “listed waste.”

- Commercial chemical products (WAC 173-303-9903, “Discarded Chemical Products List”) are also referred to as the “P” and “U” listed wastes.
- Nonspecific source waste (WAC 173-303-9904, “Dangerous Waste Sources List, Nonspecific Sources”) is generic waste commonly produced by manufacturing and industrial process and are referred of as “F-listed” waste.
- Specific source waste (WAC 173-303-9904, “Dangerous Waste Sources List, Specific Sources”) consist of waste from specifically identified industries and are referred to as “K-listed” waste. “K-Listed” waste is not generated at the Hanford Site.

BASIS: WAC 173-303-080.

5.3.2 Characteristic Waste

A solid waste is regulated as a dangerous waste if it exhibits one or more of the following characteristics:

- Ignitability (WAC 173-303-090[5])
- Corrosivity (WAC 173-303-090[6])
- Reactivity (WAC 173-303-090[7])
- Toxicity (WAC 173-303-090[8])

BASIS: WAC 173-303-090.

5.3.3 State - Only Dangerous Waste

State-only dangerous waste is defined in WAC 173-303-040 as: "...means a waste designated only by this chapter, chapter 173-303 WAC, and is not regulated as a hazardous waste under 40 CFR 261." The following are State-only wastes and the associated waste criteria / description:

1. Toxicity criteria (WAC 173-303-100[5], "Dangerous Waste Criteria") designation is initiated by either following the "book designation" instructions using the sources listed below or by testing the waste using a biological testing method to determine the toxic category for each constituent in the waste, as described in WAC 173-303-110(3).

RTECS (National Institute for Occupational Safety and Health, Registry of Toxic Effects of Chemical Substances).

HSDB (United States National Library of Medicine Toxicology Data Network Hazardous Substance Data Bank),

EcoTox-Aquatic Report (United States Environmental Protection Agency, Office of Research and Development and the National Health and Environmental Effects Research Laboratory Mid-Continent Ecology Division, (Ecotoxicology Database),

Other available data (i.e. Material Safety Data Sheets)

NOTE: The HSDB and EcoTox – Acquire databases are only to be used for non-CERCLA or CERCLA waste with a decision document signed after July 31, 2009. See UCM# 876186.

2. Persistence criteria (WAC 173-303-100[6], "Dangerous Waste Criteria") include persistent constituents of chemical compounds that are either halogenated organic compounds or polycyclic aromatic hydrocarbons.
3. WSC2 (WAC 173-303-090,(6)(b),(ii) waste is solid or semisolid which, upon testing using Method 9045D in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*" (SW 846), results in a pH less than or equal to 2, or greater than or equal to 12.5
4. WPCB Wastes: Discarded transformers, capacitors or bushings containing polychlorinated biphenyls (PCB) at concentrations of 2 parts per million or greater (except when drained of all free flowing liquid) and the following wastes generated from the salvaging, rebuilding or discarding of transformers, capacitors, or bushings containing PCB at concentrations of 2 parts per million or greater: Cooling and insulating fluids and cores, including core papers. (Note-Certain PCB waste are excluded from this listing under WAC 173-303-071 (3)(k).
5. State Only Hazardous Waste Number (HWN) D003 is assigned when the waste meets the definition of 49 CFR 173.50 Explosive Division 1.5.

6. Waste listed solely because it exhibits a Federal Characteristic (F003). 40 CFR 261.3(g) provides an exclusion for listed wastes that are listed solely because they exhibit a characteristic and are mixed with a solid waste. Federal HWNs eligible for this exclusion include F003, K044, K045, K047, P009, P081, P112, U001, U002, U008, U031, U055, U056, U057, U092, U096, U110, U112, U113, U117, U124, U125, U154, U161, U186, U213, and U239 (Note: K-listed wastes are not present at the Hanford site). The most common listed wastes at Hanford under this exclusion will be F003 wastes. The WA State Department of Ecology has *partially* adopted this exclusion in WAC 173-303-070(2)(c). A State-Only DW will result if a final waste matrix no longer displays the ignitable, corrosive, or reactive characteristics. The waste will be designated a State-Only F003 because it is no longer regulated by the EPA. Ecology's exclusion can only be applied for waste matrices that, as generated for the first time, do not display the ignitable, corrosive, or reactive characteristic (e.g., rags).
7. Listed Waste Clean Water Act (CWA) Discharges: 40 CFR 261.3 provides a mixture rule exclusion for certain listed wastes that are discharged to Clean Water Act systems. State-only wastes can result if these listed wastes are discharged to CWA facilities in Washington State because Ecology has not adopted this exclusion in WAC 173-303.
8. D008 Lead for De-Fueled Reactor Components: Based on an agreement between the US Navy and Ecology, de-fueled reactor components are disposed of at Hanford and designated as State-only D008.

BASIS: WAC 173-303-100, WAC 173-303-9904, WAC 173-303-090, WAC 173-303-110, WAC 173-303-070, 40 CFR 261.3, Department of Ecology, State of Washington, Publication # 97-415, "Polychlorinated Biphenyl Dangerous Waste" Discussion Paper, WA7890008967, Part III, Operating Unit Group 18 Low-Level Burial Grounds Trench 94 - Addendum B, Waste Analysis Plan

5.3.4 Mixtures

In summary the mixture rule contains three elements

1. Mixtures of a characteristic waste with a solid waste are designated as a dangerous waste only if the mixture continues to exhibit a characteristic.
2. Waste that is listed solely because it exhibits a characteristic is excluded as a characteristic waste under the mixture rule, only if the mixture no longer exhibits the characteristic.
3. All listed waste, when mixed with a solid waste, continues to be listed waste with the same hazardous waste codes (except for debris or environmental media subject to a contained-in-determination).

BASIS: 40 CFR 261.3(a) (2) (iii-iv), 40 CFR 268.45, and WAC 173-303.

5.3.5 Waste Derived from Dangerous Waste

The summary of the criteria for the designation of derived from dangerous waste are as follows:

1. Residues derived from the treatment of characteristic waste continue to be dangerous waste only if they still exhibit a characteristic. However, Land Disposal Restrictions may still apply.
2. Residues derived from the treatment of listed waste continue to be dangerous waste with the same codes as the original waste.

BASIS: 40 CFR 261.3(c) (2), 40 CFR 268.45, and WAC 173-303.

5.3.6 Contained-In Waste

Environmental media that contain listed hazardous wastes must be managed as hazardous wastes because and only as long as they contain listed waste(s). EPA regions and authorized states may apply the “contained-in” policy to determine site-, media- and contaminant-specific levels, constituents in the environmental media fall below these levels, the environmental media may be determined to no longer contain hazardous waste. Such “contained-in determinations” may be made before or after treatment of the contaminated environmental media and may include consideration of site-specific exposure pathways.

BASIS: 40 CFR 260

5.3.7 Universal Waste

Some common dangerous wastes created by a wide variety of generators are called Universal Wastes (UW). These wastes can be managed safely under less stringent regulatory requirements. The Environmental Protection Agency (EPA) adopted the federal Universal Waste Rule (UWR) in 1995 to encourage environmentally sound disposal and recycling.

Washington State has adopted four categories of Universal Waste including:

Batteries: Alkaline, Button cell mercuric oxide, Mercuric-oxide, Silver oxide, Alkaline-manganese, Lithium, Zinc-carbon, Nickel-cadmium (Ni-Cd), Zinc air. Spent lead-acid batteries (typically automotive type batteries) can also be managed as UW. However, they are most often managed under the optional lead-acid battery exemption at WAC 173-303-520.

Lamps: Any type of high or low pressure bulb or tube portion of an electric lighting device that generates light through the discharge of electricity either directly or indirectly as radiant energy. Include, but are not limited to, fluorescent, mercury vapor, metal halide, high-pressure sodium and neon.

Mercury-containing thermostats: A temperature control device containing mercury in an ampule. Ampules removed from these thermostats can also be managed under the UW requirements.

Mercury-containing equipment: Mercury-containing equipment is defined as a device or part of a device that contains elemental mercury necessary for its operation. This includes thermometers, barometers, manometers, relay and tilt switches, and flame sensors.

BASIS: Washington State Department of Ecology Publication 98-407; WAC 173-303-573, 40 CFR 273, WAC 173-303-520

5.4 Radioactive Waste

5.4.1 High-level Waste

The *Nuclear Waste Policy Act of 1982* defines high-level radioactive waste as highly radioactive material resulting from the processing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentration; and of the highly radioactive material that the Nuclear Regulatory Commission (NRC) determines by rule requires permanent isolation. Subsequently, the NRC made minor modifications to rule 10 CFR 60, adding "irradiated reactor fuel" to the definition of high-level radioactive waste.

5.4.2 Spent Nuclear Fuel

The *Nuclear Waste Policy Act of 1982* defines spent nuclear fuel as fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing.

5.4.3 Extraction/Precipitation Wastes

Waste generated from the first-cycle solvent extraction phase of spent fuel processing is high-level waste. The solids generated by any precipitation activities directly associated with the separation of uranium, plutonium, or fission products are also high-level waste.

5.4.4 Waste Incidental to Reprocessing

Excluded from the definition of high-level waste are wastes incidental to reprocessing. Waste resulting from reprocessing spent nuclear fuel that is determined to be incidental to reprocessing is not high-level waste, and shall be managed under DOE's regulatory authority in accordance with the requirements for transuranic or low-level waste, as appropriate. When determining whether spent nuclear fuel reprocessing plant wastes shall be managed as another waste type or as high-level waste, either the citation or evaluation process as identified in DOE 435.1.1 shall be used.

BASIS: DOE M 435.1-1, Chapter II, High-Level Waste

5.4.5 Transuranic Waste (TRU)

TRU waste is defined by the promulgated U.S. Environmental Protection Agency regulation 40 CFR 191 and DOE Order 435.1 (DOE Manual 435.1-1) *Radioactive Waste Management*. TRU waste is wastes contaminated with alpha-emitting radionuclides of atomic number greater than 92 (e.g., the radioactive isotopes of plutonium), half-lives greater than 20 years, and present in concentrations greater than 100 nanocuries per gram of waste.

5.4.6 Low-level Waste

As defined in DOE M 435.1-1 and the *Nuclear Waste Policy Act of 1982*, low-level waste is radioactive waste that is not high-level waste, spent nuclear fuel, TRU waste, or 11e(2) byproduct material. Byproduct material, as defined by Section 11e (2) of the *Atomic Energy Act*

of 1954, is (1) Any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material, and (2) the tailings or waste that is produced from the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

BASIS: DOE M 435.1-1 and DOE/RL-2000-25

5.4.7 Environmentally Controlled Material

Environmentally controlled material is defined as containerized waste that may contain trace amounts of radionuclides, which may or may not be releasable from the Hanford Site but pose no occupational hazard. These materials may include resins and miscellaneous solid waste (including PPE) that contain radionuclides at levels less than one-tenth of the values identified in 10 CFR 835, Appendix E.

BASIS: WCH BMP

5.4.8 Mixed Waste

Waste that contains both source, special nuclear, or byproduct material subject to the *Atomic Energy Act of 1954*, as amended, and a hazardous component subject to RCRA.

5.5 Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are defined as toxic substances regulated by the TSCA. The *Toxic Substance Control Act Polychlorinated Biphenyls Hanford Site Users Guide* (DOE-RL 2001) provides an integrated and consistent approach to managing PCBs on the Hanford Site.

5.5.1 PCB Oil-filled Electrical Equipment

In the past, PCBs were used in the dielectric fluid of electric generators and transformers. Many of these older generators and transformers still exist at Hanford. PCB-Contaminated Electrical Equipment means any electrical equipment including, but not limited to, transformers (including those used in railway locomotives and self-propelled cars), capacitors, circuit breakers, reclosers, voltage regulators, switches (including sectionalizers and motor starters), electromagnets, and cable, that contains PCBs at concentrations of ≥ 50 ppm and < 500 ppm in the contaminating fluid.

Basis: 40 CFR 761.3

5.5.2 PCB Spill/Release Response

See 40 CFR 761. Also see ENV-1, *Environmental Monitoring and Management*, ENV-1-1.7, "Environmental Reporting" and ENV-1-17, "Spill Prevention, Response, and Reporting Protocol."

5.5.3 Polychlorinated Biphenyl Remediation Waste

PCB remediation waste contains PCBs as a result of a spill, release, or other unauthorized disposal. PCB remediation waste includes soil, rags, and other debris generated as a result of any PCB spill cleanup including, but not limited to, the following:

- Environmental media containing PCBs (e.g., soil and gravel)
- Sewage sludge containing < 50 ppm PCBs
- Buildings and other manufactured structures (e.g., concrete or wood floors or walls contaminated from a leaking PCB or PCB-contaminated transformer), porous surfaces, and nonporous surfaces.

BASIS: 40CFR761.3

5.5.4 Polychlorinated Biphenyl Bulk Product

PCB bulk product waste means waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal was ≥ 50 ppm PCBs.

PCB bulk product waste includes, but is not limited to, the following:

- Non-liquid bulk wastes or debris from the demolition of buildings and other man-made structures manufactured, coated, or serviced with PCBs. The PCB bulk product waste does not include debris from the demolition of buildings or other man-made structures that is contaminated by spills from regulated PCBs, which have not been disposed, decontaminated, or otherwise cleaned up in accordance with Subpart D of 40 CFR 761.
- Plastics (e.g., plastic insulation from wire or cable, radio, television and computer casings, vehicle parts, or furniture laminates), pre-formed or molded rubber parts and components, applied dried paints, varnishes, waxes or other similar coatings or sealants, caulking, adhesives, paper, Galbestos, sound-deadening or other types of insulation, and felt or fabric products (e.g., gaskets).
- Fluorescent light ballasts containing PCBs in the potting material.

BASIS: 40CFR761.3

5.5.5 Polychlorinated Biphenyl Capacitor

PCB capacitor refers to any capacitor that contains ≥ 500 ppm PCB. Concentration assumptions applicable to capacitors appear under 40 CFR 761.2.

BASIS: 40CFR761.3

5.6 Asbestos

Asbestos is considered a toxic substance under the TSCA and is a hazardous substance under CERCLA. Asbestos waste is regulated if it contains more than 1% asbestos by weight, as defined in 40 CFR 61, Subpart M, and 40 CFR 763, Subpart F.

5.7 Waste Generated Under the CERCLA Program

The CERCLA activities shall be conducted in accordance with appropriate decision documents. The CERCLA onsite WCH activities performed pursuant to CERCLA authority (i.e., ROD, action memorandum, or other CERCLA decision document) are exempt from the administrative requirements of environmental laws and regulations. CERCLA processes and administrative requirements are contained in ENV-1-1.9, "Cleanup Activities."

5.8 Unknown Waste

Unknown waste is waste that the generator cannot designate because there is no knowledge of the process that produced the waste or of the constituents or characteristics of the waste.

6.0 RECORDS

None

7.0 JUSTIFICATION SUMMARY

Revision	Reason for Revision
6	Changed Prepared By: to Millard E. Lewis. Changed Section 5.4.6 (BASIS: and text) from DOE O 435.1 to DOE Manual 435.1-1. Added DOE Manual 435.1-1 to Section 5.4.5. Expounded upon the definition of LLW. Added State-Only waste and Universal Waste descriptions. This revision satisfies the 2-year periodic review requirement per Section 6.6 of BSC-1-7.2 and Section 6.5.10 of PAS-2-1.1.
5	Corrected a definition of waste incidental to reprocessing.
4	This revision corrects the name of the preparer and editorial corrections.

8.0 REFERENCES

10 CFR 60, "Disposal of High-Level Radioactive Wastes in Geologic Repositories," *Code of Federal Regulations*, as amended.

10 CFR 61, "Licensing Requirements for Land Disposal of Radioactive Waste," *Code of Federal Regulations*, as amended.

10 CFR 835, "Occupational Radiation Protection," *Code of Federal Regulations*, as amended.

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

40 CFR 191, "Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High Level and Transuranic Radioactive Wastes," *Code of Federal Regulations*, as amended.

40 CFR 260, "Hazardous Remediation Waste Management Requirements. (HWIR-Media)," *Code of Federal Regulations*, as amended.

40 CFR 261, "Identification and Listing of Hazardous Waste," *Code of Federal Regulations*, as amended.

40 CFR 268, "Land Disposal Restrictions," *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.

40 CFR 763, "Asbestos," *Code of Federal Regulations*, as amended.

BSC-1, *Business Services and Communications*, Procedure 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-RL, 2001, *Toxic Substances Control Act Polychlorinated Biphenyls Hanford Site Users Guide*, DOE/RL-2001-50, Rev. 0, U.S. Department of Energy, Richland, Washington.

DOE M 435.1-1, *Radioactive Waste Management Manual*, as amended, U.S. Department of Energy, Washington, D.C.

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

DOE/RL-2000-25 "Richland Operations Office Implementation Plan for DOE Order 435.1", U. S. Department of Energy, Richland, Washington.

DOE-RL, 2002, *Hanford Sitewide Transportation Safety Document*, DOE/RL-2001-36, current revision, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

Ecology, EPA, and DOE, 1998, *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement), 2 vols., as amended, Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Olympia, Washington.

Ecology, EPA, and RL, 1999, *Environmental Restoration Program Strategy for Management of Investigation Derived Waste*, CCN 067483, State of Washington Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Richland Operations Office, Richland, Washington.

ECOTOX, U.S. Environmental Protection Agency, 1996, Washington, D.C.

Feaster, S. L., 2009, *Washington Closure Hanford Implementation of Dangerous Waste Regulation* revisions, UCM# 676186, to U.S. Department of Energy, J. J. Short, dated August 13, 2009, Washington Closure Hanford, LLC., Richland, Washington.

Hazardous Substances Data Bank (HSDB), 1994, United States National Library of Medicine, Bethesda, MD

The National Institute for Occupational Safety and Health's (NIOSH) Registry of Toxic Effects of Chemical Substances (RTECS), Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402

Atomic Energy Act of 1954, 42 U.S.C. 2011 et seq.

Nuclear Waste Policy Act of 1982, 42 U.S.C. 10101, et seq.

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 173-304, "Minimum Functional Standards for Solid Waste Handling," *Washington Administrative Code*, as amended.

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

WAC 173-351, "Criteria for Municipal Solid Waste Landfills," *Washington Administrative Code*, as amended.

Department of Ecology, State of Washington Publication 98-407, "*The Universal Waste Rule*" December 2005

Department of Ecology, State of Washington, Publication #. 97-415, "*Polychlorinated Biphenyl Dangerous Waste*" Discussion Paper

WA7890008967, Part III, Operating Unit Group 18 Low-Level Burial Grounds Trench 94 - Addendum B, Waste Analysis Plan ENV-1, *Environmental Monitoring and Management*, Washington Closure Hanford, Richland, Washington.

ENV-1-1.7, "Environmental Reporting"

ENV-1-1.9, "Cleanup Activities"

ENV-1-1.17, "Spill Prevention, Response, and Reporting Protocol"

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

None

10.0 ATTACHMENTS

None