



Department of Energy  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

0073734

07-AMRC-0272

AUG 16 2007

Mr. Nicholas Ceto, Program Manager  
Office of Environmental Cleanup  
Hanford Project Office  
U.S. Environmental Protection Agency  
309 Bradley Blvd, Suite 115  
Richland, Washington 99352

Dear Mr. Ceto:

UPDATE OF THE WELL SERVICES WASTE MANAGEMENT PLAN (WSMP) FOR THE ENVIRONMENTAL RESTORATION DISPOSAL FACILITY (ERDF)

In preparation for the upcoming expansion of ERDF, the two existing wells (699-37-68 and 699-36-67) will be replaced by two new wells (699-36-66 and 699-37-66). This is necessary because the two existing wells are in the path of Cells 7 & 8. Consequently, attached for your review and approval is a revision of the Well Services Waste Management Plan for the Environmental Restoration Disposal Facility (DOE/RL-2000-52, Revision 1) that reflects this change.

If there are any questions regarding this document, you may contact me or Owen Robertson, of my staff, on (509) 373-6295.

Sincerely,

Joe R. Franco, Assistant Manager  
for the River Corridor

AMRC:OCR

Enclosures

cc w/ encl:

D. R. Einan, EPA  
J. A. Hedges, Ecology  
Administrative Record, H6-08

TS-6-1  
T-2-8  
TS-2-4

cc w/o encl:

B. C. Covert, WCH  
K. A. Hadley, WCH

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AUG 20 2007

EDMC

DOE/RL-2000-52  
Rev. 1 Draft A

# **Well Services Waste Management Plan for the Environmental Restoration Disposal Facility**



United States  
Department of Energy

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# **Well Services Waste Management Plan for the Environmental Restoration Disposal Facility**

July 2007



**United States Department of Energy**

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P.O. Box 550, Richland, Washington 99352

OU: N/A  
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**CONCURRENCE PAGE**

**Title:** Well Services Waste Management Plan for the Environmental Restoration Disposal Facility

**Concurrence:** Owen C. Robertson  
U.S. Department of Energy, Richland Operations Office

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

David R. Einan  
U.S. Environmental Protection Agency

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

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## ACRONYMS

DOT	U.S. Department of Transportation
ERDF	Environmental Restoration Disposal Facility
ETF	Effluent Treatment Facility
PSTF	Purgewater Storage and Treatment Facility
WAC	<i>Washington Administrative Code</i>

## 1.0 PURPOSE

This waste management plan establishes the requirements for the management and disposal of waste generated from the existing groundwater wells that are used to monitor the Environmental Restoration Disposal Facility (ERDF). These wells are 699-37-68, 699-36-70A, 699-36-67, and 699-3566A. Wells 699-37-68 and 699-36-67 will be replaced by wells 699-36-66 and 699-37-66 during calendar year 2007.

The requirements for groundwater well sampling are identified in the ERDF Record of Decision (EPA 1995) and the Groundwater Protection Plan for the Environmental Restoration Disposal Facility (currently BHI 1996, but will be replaced by WCH 2007, when issued).

The groundwater well-related activities that will generate waste include the following:

- Groundwater well sampling and maintenance
- Water-level and other in situ groundwater measurements
- Decontamination of equipment and material.

This plan will be revised if additional groundwater well-related activities not described above are required. Installation of new groundwater wells or decommissioning of existing groundwater wells will be considered as covered by this plan without revision.

## 2.0 PROJECTED WASTE STREAMS

Expected waste streams include the following:

- Purgewater generated during groundwater well monitoring and maintenance
- Decontamination fluids
- Miscellaneous solid waste such as filters, wipes, gloves and other personal protective equipment, cloth, sampling and measuring equipment, pumps, pipe, wire, plastic sheeting, tools, and materials generated from cleanup of unplanned releases.

### **3.0 WASTE DESIGNATION AND DISPOSAL**

Waste will be designated in accordance with *Washington Administrative Code* (WAC) 173-303 using a combination of process knowledge, historical analytical data, and analyses of samples required by the documents referenced in Section 1.0, as appropriate.

Contaminated solid waste that meets the ERDF waste acceptance criteria will be disposed at the ERDF. Contaminated liquids may be sent to the Purgewater Storage and Treatment Facility (PSTF) or the Effluent Treatment Facility (ETF). Small volumes of stabilized liquids may be disposed at the ERDF provided that the waste acceptance criteria can be met. If the acceptance criteria of these three facilities cannot be met, then the waste will be shipped to an appropriate treatment and/or disposal facility as authorized by the U.S. Environmental Protection Agency.

Facilities off the Hanford Site and the Central Waste Complex must be deemed acceptable by the U.S. Environmental Protection Agency in accordance with 40 *Code of Federal Regulations* 300.440. The exception is miscellaneous solid waste that has not contacted contaminated media.

Nondangerous liquids below purgewater collection criteria as identified in the "Strategy for Handling and Disposing of Purgewater at the Hanford Site, Washington" (Purgewater Strategy) (Izatt 1990) may be discharged to the ground near the point of generation. Miscellaneous solid waste that has not contacted contaminated materials may be disposed to an offsite solid waste landfill.

### **4.0 WASTE STREAM-SPECIFIC MANAGEMENT**

#### **4.1 PURGEWATER**

All purgewater will be managed in compliance with the Purgewater Strategy (Izatt 1990). Carbon tetrachloride ("F001" listed waste) is present in the ERDF groundwater wells. Therefore, the purgewater from these wells will be collected and contained at the well head, if necessary, until transported to the PSTF or the ETF.

#### **4.2 DECONTAMINATION FLUIDS**

Decontamination fluids (water and/or nondangerous cleaning solutions) generated from cleaning equipment and tools will be discharged to the ground if they are nondangerous and below the purgewater collection criteria contained in the Purgewater Strategy (Izatt 1990). Decontamination fluids that designate as a dangerous waste and/or that are above this collection criteria will be contained and transported to the PSTF, ETF (if the waste acceptance criteria can be met), or other facility as authorized by the regulatory agency. Small volumes of

decontamination fluids may be stabilized to eliminate free liquids and then disposed to ERDF provided the waste acceptance criteria can be met.

Decontamination of some equipment may be conducted at either the 600 Area centralized location and/or the Waste Sampling and Characterization Facility because decontamination and containment systems are already established at these locations. The waste generated at these facilities will be managed in accordance with applicable regulations and the facilities' waste management procedures.

#### **4.3 MISCELLANEOUS SOLID WASTE**

Miscellaneous solid waste that has contacted potentially contaminated materials will be segregated from other materials and will be disposed to ERDF. Waste that has not contacted potentially contaminated materials may be disposed offsite to a solid waste landfill.

Waste could also be generated during an unplanned release, such as a spill of groundwater or hydraulic fluids. Spills will be cleaned up as appropriate and taken to ERDF. In the case of a petroleum product spill, the material will be cleaned up and taken to ERDF and a temporary storage area established until the material can be designated and a profile generated for disposal to ERDF.

### **5.0 PACKAGING AND LABELING**

Materials requiring collection will be placed in containers appropriate for the material and the receiving facility. The packaging shall provide insurance against migration of contaminants and protection from environmental degradation.

Low-volume miscellaneous materials associated with the groundwater well sampling, water level measurements, and groundwater well maintenance may be bagged, taped, and labeled with the well number at the well head. The bagged material will be transported in a protective manner (i.e., containment of the material is maintained) with the workers while proceeding from well to well.

Packaging and labeling must meet WAC 173-303 and U.S. Department of Transportation (DOT) requirements, as appropriate. Packaging exceptions to DOT requirements that are documented and provide an equivalent degree of safety during transportation may be used for onsite waste shipments.

## 6.0 STORAGE/TRANSPORTATION

Waste generated from the groundwater well sampling, groundwater well maintenance, and water level measurements will be taken directly to ERDF. Therefore, a storage location will not be established for this waste. A temporary storage location may be established if a waste is generated that cannot be directly disposed to ERDF without further designation, such as material from an unplanned release described in Section 4.3. Waste will be transported in accordance with WAC 173-303 and DOT requirements, as appropriate.

## 7.0 REFERENCES

- BHI, 1996, *Groundwater Protection Plan for the Environmental Restoration Disposal Facility*, BHI-00079, Rev. 0, Bechtel Hanford Inc., Richland Washington.
- EPA, 1995, *Record of Decision U.S. DOE Hanford Environmental Restoration Disposal Facility, Hanford Site, Benton County, Washington*, U.S. Environmental Protection Agency, Washington, D.C.
- Izatt, R. D., 1990, *Strategy for Handling and Disposing of Purgewater at the Hanford Site, Washington*, letter 90-ERB-040, to P. T. Day, U.S. Environmental Protection Agency, and T. L. Nord, Washington State Department of Ecology, dated July 19, 1990, U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- WAC 173-303, "Dangerous Waste Regulations," *Washington Administrative Code*, as amended.
- WCH, 2007, *Groundwater Protection Plan for the Environmental Restoration Disposal Facility*, WCH-198, Rev. 0, Washington Closure Hanford, Richland Washington.

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