



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950

October 23, 2009

Mr. Mark S. French, Program Manager  
Richland Operations Office  
United States Department of Energy  
P.O. Box 550, MSIN: A3-04  
Richland, Washington 99352

Re: Transmittal of the Waste Site Reclassification Form for the Remaining Sites Verification Package (RSVP) for 100-D-31:5, and Documentation of the Department of Ecology's (Ecology) Comparison of Site Data with Washington Administrative Code (WAC) 173-340 (2007) Requirements

Dear Mr. French:

Enclosed is the signed TPA-MP-14 Waste Site Reclassification Form (enclosure 1) for the 100-D-31:5, 188-D Ash Disposal Pipeline for interim reclassification to "Interim Closed Out." Ecology's approval of this interim reclassification is based on the requirements for waste site reclassification identified in the *Remedial Design Report/Remedial Action Work Plan for the 100-Area*, DOE/RL-96-17, Revision 5, which identifies WAC 173-340 (1996) cleanup levels.

In anticipation of the final Record of Decision (ROD) for the 100-D Area, we evaluate data for consistency with corrective action requirements that will be updated within the final ROD. Therefore, we compared the data in the RSVP for 100-D-31:5 against WAC 173-340 (2007) requirements (enclosure 2). Ecology will consider this evaluation when the 100-D-31:5 waste site is evaluated for final reclassification under the final ROD.

If there are any questions, contact Jacqueline Seiple at 509-372-7925 or me at 509-372-7916.

Sincerely,

Mandy Jones  
Acting Environmental Restoration Project Manager  
Nuclear Waste Program

js/aa  
Enclosures (2)

cc: See page 2

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cc w/enc:

- Joanne Chance, USDOE
- John Neath, USDOE
- Megan Proctor, WCH
- Stuart Harris, CTUIR
- Gabriel Bohnee, NPT
- Russell Jim, YN
- Susan Leckband, HAB
- Ken Niles, ODOE
- Administrative Record: 100-D Area
- Environmental Portal
- Hanford Operating Record General File
- USDOE-RL Correspondence Control

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Date Submitted: <u>09/01/09</u> Originator: <u>M.L. Proctor</u> Phone: <u>372-9227</u>	<b>WASTE SITE RECLASSIFICATION FORM</b>		Control Number: 2008-058
	Operable Unit(s): <u>100-DR-1</u> Waste Site Code: <u>100-D-31:5</u> Type of Reclassification Action: Closed Out <input type="checkbox"/> Interim Closed Out <input checked="" type="checkbox"/> No Action <input type="checkbox"/> RCRA Postclosure <input type="checkbox"/> Rejected <input type="checkbox"/> Consolidated <input type="checkbox"/>		

This form documents agreement among parties listed authorizing classification of the subject unit as Closed Out, Interim Closed Out, No Action, RCRA Postclosure, Rejected, or Consolidated. This form also authorizes backfill of the waste management unit, if appropriate, for Closed Out and Interim Closed Out units. Final removal from the NPL of No Action and Closed Out waste management units will occur at a future date.

Description of Current Waste Site Condition:

The 100-D-31 waste site is identified as a remaining site for remediation in the *Interim Action Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 100-KR-1, 100-KR-2, 100-IU-2, 100-IU-6, and 200-CW-3 Operable Units, Hanford Site, Benton County, Washington* (Remaining Sites ROD). The 100-D-31:5 pipeline subsite is an ashcolite pipeline located in a north-south orientation between the former 184-D Powerhouse and the 188-D Ash Disposal Basin. Coal ash from the powerhouse was sluiced with raw Columbia River water and transported to the 188-D Ash Disposal Basin through the pipeline.

Remedial action at the 100-D-31:5 site was performed between October 29, 2007, and January 9, 2008. There were no anomalies or stained soil discovered during remediation. Approximately 94 BCM (123 BCY) of material disposed at the Environmental Restoration Disposal Facility, including removal of the pipeline.

Basis for Reclassification:

Verification sampling of the 100-D-31:5 waste subsite was conducted on August 26, October 13, and December 30, 2008. The results demonstrate that residual contaminant concentrations are protective of groundwater and the Columbia River.

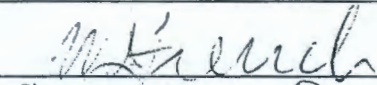
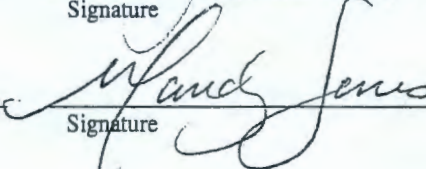
In accordance with this evaluation, the verification sampling supports a reclassification of the 100-D-31:5 subsite to Interim Closed Out. The current site conditions achieve the remedial action goals established by the *Interim Action Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 100-KR-1, 100-KR-2, 100-IU-2, 100-IU-6, and 200-CW-3 Operable Units, Hanford Site, Benton County, Washington* (Remaining Sites ROD), U.S. Environmental Protection Agency, Region 10, Seattle, Washington. The results of verification sampling do not preclude any future uses (as bounded by the rural-residential scenario) and allow for unrestricted use of shallow zone soils (i.e., surface to 4.6 m [15 ft] deep). The analytical results and rationale presented in the attached RSVP also demonstrate that 100-D-31:5 site is protective of groundwater and the Columbia River. The site does not have a deep zone or residual contaminant concentrations that would require any institutional controls to prevent uncontrolled drilling or excavation. The basis for reclassification is described in detail in the *Remaining Sites Verification Package for the 100-D-31:5, 188-D Ash Disposal Pipeline* (attached).

Regulator Comments:

Approval of the WSRF documents regulator agreement that the 100-D-31:5 waste site qualifies for "Interim Closed Out" under the Interim Action ROD. In addition, Ecology has evaluated the data for this site against WAC 173-340 (2007) clean-up levels for direct contact, groundwater protection, and river protection. This evaluation is documented in the letter transmitting Ecology's approval of this site's interim reclassification to "Interim Closed Out."

Waste Site Controls:

Engineered Controls: Yes  No  Institutional Controls: Yes  No  O&M requirements: Yes  No   
 If any of the Waste Site Controls are checked Yes specify control requirements including reference to the Record of Decision, TSD Closure Letter, or other relevant documents.

M. S. French		10/21/09
DOE Federal Project Director (printed)	Signature	Date
M. E. Jones		10/22/09
Ecology Project Manager (printed)	Signature	Date
N/A		
EPA Project Manager (printed)	Signature	Date



## Enclosure 2

### The Department of Ecology's Comparison of Supporting Data for the 100-D-31:5 Remaining Sites Verification Package with Washington Administrative Code (WAC) 173-340 (2007) Requirements

**Overall summary:** WAC 173-340 (2007) soil cleanup levels are exceeded for one contaminant, selenium. Ecological risk is exceeded for several contaminants. Additional evaluation of contaminants exceeding ecological risk screening values is necessary for final action

#### Excavation Area

##### Summary of Exceedences (Yes = concentration exceeds cleanup/screening level)

Contaminant	Groundwater Protection (1996)	River Protection (1996)	RESRAD (Kd ml/g)	WAC 173-340 Ecological Protection	WAC 173-340 Human Health (2007)
<b>Barium</b>	No	No	--	Yes	No
<b>Boron</b>	No	No	--	Yes	No
<b>Selenium</b>	No	Yes	Pass (5)	Yes	Yes
<b>Zinc</b>	No	Yes	Pass (30)	Yes	No

Note: This table does not include contaminants with soil concentrations below background or the Practical Quantitation Limits (PQL). When soil concentrations are less than background or the PQL, cleanup levels default to background or the PQL.

#### Overburden Area

##### Summary of Exceedences (Yes = concentration exceeds cleanup/screening level)

Contaminant	Groundwater Protection (1996)	River Protection (1996)	RESRAD (Kd ml/g)	WAC 173-340 Ecological Protection	WAC 173-340 Human Health (2007)
<b>Barium</b>	Yes	Yes	Pass (25)	Yes	No
<b>Boron</b>	No	No	--	Yes	No
<b>Selenium</b>	No	Yes	Pass (5)	Yes	Yes

Note: This table does not include contaminants with soil concentrations below background or the PQL. When soil concentrations are less than background or the PQL, cleanup levels default to background or the PQL.

## **Outstanding Issues:**

### **Excavation:**

- State eco-risk screening levels are exceeded for barium, boron, manganese (<background), mercury (<background), vanadium (<background), and zinc.
- River protection (1996) concentrations are exceeded for selenium and zinc; however, zinc does not exceed WAC 173-340 (2007) cleanup levels. WAC 173-340 (2007) cleanup levels are exceeded for selenium.
- Like many sites, this site also exceeds the boron concentration for protection of plants (0.5 mg/kg).

### **Overburden:**

- State eco-risk screening levels are exceeded for barium, boron, manganese (<background), mercury (<background), and vanadium (<background).
- River protection (1996) concentrations are exceeded for selenium. WAC 173-340 (2007) cleanup levels are exceeded for selenium.