



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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November 24, 2010

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 Signed Waste Site Reclassification Form (WSRF) for the Cleanup Verification Package (CVP) for 118-H-2, H-1 Loop Burial Ground 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 WSRF (enclosure 1) for the 118-H-2, H-1 Loop Burial Ground, 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 6*, which identifies WAC 173-340 (1996) cleanup levels. 008380P

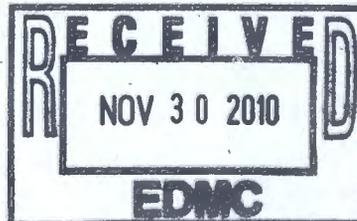
In anticipation of the final Record of Decision (ROD) for the 100-H Area, we now evaluate data for consistency with corrective action requirements that will be updated within the final ROD. Therefore, we compared the data in the CVP for 118-H-2 against WAC 173-340 (2007) standard Method B (modified Method B for hexavalent chromium) requirements (enclosure 2). Ecology will consider this evaluation when the 118-H-2 waste site is evaluated for final reclassification under the final ROD.

If there are any questions, contact Mandy Jones at 509-372-7916 or me at 509-372-7941.

Sincerely,

Nina M. Menard  
Environmental Restoration Project Manager  
Nuclear Waste Program

mj/aa  
Enclosures (2)



cc w/enc:

Dennis Faulk, EPA  
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-H Area  
Environmental Portal  
Hanford Operating Record General File  
USDOE-RL Correspondence Control

100-H2-2



## Attachment ES-1. Waste Site Reclassification Form.

Date Submitted: <u>6/03/10</u> Originator: <u>M. L. Proctor</u> Phone: <u>372-9227</u>	<b>WASTE SITE RECLASSIFICATION FORM</b> Operable Unit(s): <u>100-HR-2</u> Waste Site Code: <u>118-H-2</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"/>	Control Number: <u>2010-023</u>
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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 118-H-2, H-1 Loop Burial Ground operated between 1955 and 1965 to receive an irradiated test loop and contaminated piping from the 105-H Reactor. Remedial actions at this waste site have been performed in accordance with remedial action objectives established by the *Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-2, 100-HR-2, and 100-KR-2 Operable Units, Hanford Site, Benton County, Washington*, U.S. Environmental Protection Agency, Region 10, Seattle, Washington (100 Area Burial Grounds ROD). The selected remedial action involved (1) excavating the site to the extent required to meet specified soil cleanup levels and (2) disposing of contaminated excavation material at the Environmental Restoration Disposal Facility in the 200 Area of the Hanford Site.

Basis for reclassification:

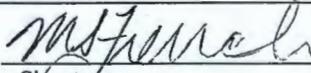
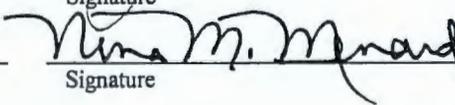
In accordance with this evaluation, the verification sampling results support a reclassification of this waste site to Interim Closed Out. The current site conditions achieve the remedial action objectives and the corresponding remedial action goals established in the 100 Area Burial Grounds ROD. The results of verification sampling show that remedial actions were performed to allow unrestricted land use and to protect groundwater and the Columbia River. The 118-H-2 excavation extended to a maximum depth of approximately 5 m (16.4 ft) and consisted of a single decision unit, the excavation footprint. The entire excavation area is closed out using the more restrictive shallow zone cleanup criteria. Therefore, institutional controls to prevent uncontrolled drilling or excavation into the deep zone are not required. The basis for reclassification is described in detail in the *Cleanup Verification Package for the 118-H-2, H-1 Loop Burial Ground (CVP-2010-00002)*, Washington Closure Hanford, Richland, Washington.

Regulator Comments:

Approval of this WSRF documents regulator agreement that the 118-H-2 waste site qualifies for "Interim Closed Out" under this 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 the 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 DOE Federal Project Director (printed)	 Signature	4/3/10 Date
N. Menard Ecology Project Manager (printed)	 Signature	11/15/10 Date
NA EPA Project Manager (printed)	Signature	Date

## Enclosure 2

### The Department of Ecology's Comparison of Supporting Data for the 118-H-2, H-1 Loop Burial Ground with WAC 173-340 (2007) Requirements

**Overall summary:** Samples taken from the excavation exceed Washington Administrative Code (WAC) 173-340 Table 749-3 screening levels for ecological protection for boron. This should be evaluated further with consideration of background values that will be established for the final Record of Decision.

#### Summary of Exceedances for the Excavation

(Yes = concentration exceeds cleanup/screening level)

Contaminant	WAC 173-340-740 (1996) Groundwater Protection	WAC 173-340-730 & -740 (1996) River Protection	RESRAD <sup>a</sup> (Kd, ml/g)	WAC 173-340, Table 749-3 Ecological Protection	WAC 173-340-730 & 740(7)(d) (2007) <sup>b</sup>	WAC 173-340-740(7)(e) Human Health (2007) <sup>b</sup>
Boron	No	No	--	Yes	No	Pass
Lead	Yes	Yes	Pass (30)	No	No	Pass

**Note:** This table does not include contaminants with soil concentrations below background or the practical quantitation limit (PQL). When soil concentrations are less than background or the PQL, cleanup levels default to background or the PQL. Ecology considers non-detected metals at half of their PQL.

<sup>a</sup> As shown in CVP Attachment to Waste Site Reclassification Form 2010-00002

<sup>b</sup> The specific clean up level exceeded is denoted in parentheses (direct contact = dc, groundwater protection = gw, and surface water protection = sw)

#### Outstanding Issues:

- State ecological risk screening values (WAC 173-340 Table 749-3) are exceeded for boron, and vanadium (<background).
- EPA screening levels are exceeded for lead, manganese (< background), and vanadium (<background).
- All of the samples exceed the WAC 173-340- Table 749-3 value for soil for protection of plants for boron, below, at or above their PQL. Many are flagged for blank contamination. Several exceed the plant protection value by a factor of two or more.