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15-AMRP-0259

EXPLANATION OF SIGNIFICANT DIFFERENCES

FOR THE HANFORD SITE 300 AREA RECORD OF DECISION FOR 300-FF-2 AND 300-FF-5, AND RECORD OF DECISION AMENDMENT FOR 300-FF-1

EPA #: WA2890090077

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INTRODUCTION TO THE SITE AND STATEMENT OF PURPOSE

This decision document presents an Explanation of Significant Differences (ESD) for the Hanford Site 300 Area Record of Decision for 300-FF-2 and 300-FF-5, and Record of Decision Amendment for 300-FF-1, issued in November of 2013. The U. S. Department of Energy (DOE) 300 Area site is located in Benton County, Washington.

The 300 Area of the Hanford Site contained numerous fuel fabrication and research facilities, as well as ancillary facilities and waste sites. Remediation of the 300 Area is currently being conducted under the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) in accordance with Hanford Site 300 Area Record of Decision for 300-FF-2 and 300-FF-5, and Record of Decision Amendment for 300-FF-1 (EPA 2013), hereafter referred to as the 300 Area Final Action ROD. Previously, many of the waste sites associated with the 300-FF-2 Operable Unit were remediated under the *Interim Action Record of Decision for the 300-FF-2 Operable Unit, Hanford Site, Benton County, Washington* (EPA 2001). The 2013 300 Area Final Action ROD replaced the 300-FF-2 Interim Action ROD. The U.S. Environmental Protection Agency (EPA, the lead regulatory agency), and DOE (the responsible agency), are issuing this ESD to provide notice of changes to the 300 Area Final Action ROD as listed below. The Washington State Department of Ecology (Ecology, the support regulatory agency), concurs with the issuance of this ESD. EPA, DOE and Ecology are hereafter collectively referred to as the "Tri-Parties."

The 300 Area Final Action ROD for 300-FF- 2 is being revised by adding the following two waste sites to the 300 Area Final Action ROD, Table 1:

Technology/Approach	Waste Site
No additional action needed to meet selected remedy requirements for 300-FF-2	600-386
Remove/Treat/Dispose (RTD) to residential cleanup levels	600-393

The description of waste site 600-386 is "Battery Remnant Area 1." The description and official title of waste site 600-393 is "Potential Battery Components Debris Area." The 600-386 and 600-393 waste sites addressed in this ESD are being added to the 300 Area Final ROD pursuant to the CERCLA §117 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) 40 CFR §§300.435(c)(2)(i) and 300.825(a)(2). The Parties have concurred that the changes proposed in this ESD will not fundamentally alter the remedy scope and/or costs of the 300 Area Final Action ROD for 300-FF-2.
The basis for this proposed modification is as follows:

Waste Site 600-386 was added to the 2001 Interim Action ROD by *Fact Sheet: 300 Area "Plug-In" Waste Sites for Fiscal Year 2012*. RTD was performed under the Interim Action ROD and based on post-cleanup sampling the site meets residential cleanup levels of the 300 Area Final Action ROD. Supporting documentation for waste site 600-386 remediation is included in the 300-FF-2 Operable Unit Administrative Record, including "*Waste Site Reclassification Form 2012-061 and Attached Remaining Sites Verification Package for the 600-386, Segment 5 Battery Remnant Area # 1"; DOE Correspondence 12-AMRP-0153; Sept 07, 2012.* http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0091682 This ESD will add the 600-386 waste site to the 300 Area Final Action ROD as a waste site where no additional action is needed to meet selected remedy requirements for 300-FF-2.

The 600-393 waste site was not included in Table 1 for remediation at issuance of the 300 Area Final Action ROD due to its location in the former buffer zone of the Patrol Firing Range. The waste site (battery debris, with suspected lead and other heavy metal contamination) is sufficiently similar to other waste sites in the 300 Area Final Action ROD and poses comparable risks. The remediation work will meet the remedy requirements contained in the 2013 300 Area Final Action ROD for 300-FF-2 for RTD to residential cleanup levels and will be conducted in accordance with the *Remedial Design Report/Remedial Action Work Plan for 300-FF-2 Soils (RDR/RAWP)*, DOE/RL-2014-13-ADD1, as revised to address the 600-393 waste site.

STATUTORY CITATION FOR AN EXPLANATION OF SIGNIFICANT DIFFERENCE

DOE and EPA are issuing this ESD in accordance with Section 117(c) of CERCLA and Section 300.435(c)(2)(i) of the NCP. The purpose of this ESD is to provide public notice that the 600-386 waste site is being added to the 300 Area Final Action ROD in the "no additional action needed to meet selected remedy requirements for 300-FF-2" category and the 600-393 site in the "RTD to residential cleanup levels" category as shown in Table 1 of the 300 Area Final Action ROD. All work associated with the 600-393 waste site will be completed pursuant to the requirements set forth in the RDR/RAWP. In accordance with 40 CFR 300.435(c)(2)(i)(A) and 40 CFR 300.825(a)(2), this ESD and supporting documents for the ESD, will become part of the 300-FF-2 Administrative Record. The ESD and supporting information for the ESD are available at: http://pdw.hanford.gov/arpir/ and at the following locations:

U.S. Department of Energy, Richland Operations Office
Administrative Record
2440 Stevens Center Place, Room 1101
P.O. Box 950, Mail Stop H6-08
Richland, Washington 99352
(509) 376-2530
URL: http://pdw.hanford.gov/arpir/
Hours of operation: Monday through Thursday 7:00 am – 4:40 pm

Public Access Room
2440 Stevens Center, Room 1101
P.O. Box 950, Mail Stop H6-08
Richland, WA 99352
Phone: (509) 376-2530
E-Mail: Heather_M_Childers@pl.gov
Hours: Monday – Thursday, 6:00 am - 4:30 pm

Gonzaga University
Foley Center Library
East 502 Boone Avenue
Spokane, WA 99258
(509) 313-6110
E-Mail: spenceratkins@gonzaga.edu
*Summer Hours (June 29-Aug 7): Monday-Thursday, 8 am-9 pm, Friday, 8am-5pm, Saturday -- Sunday, 1 -5 pm
*Intersession Hours (Aug 8-Aug 30): Monday-Friday, 8 am-4:30pm
http://researchguides.gonzaga.edu/hours

Portland State University Library
Government Information
Branford Price Millar Library-LIBW
PO Box 1151
Portland, Oregon 97207
(509) 725-4542
E-Mail: westonc@pdx.edu
Hours: Monday - Thursday 8 am – 9 pm, Friday 8 am - 6 pm, Saturday 10 am - 6 pm, Sunday, 12 - 6pm

US Department of Energy Public Reading Room
Washington State University
Consolidated Information Center, Room 101-L
2770 University Drive
Richland, WA 99352
(509) 375-7443
Monday – Thursday, 12 pm – 4 pm
E-Mail: doe.reading.room@pnnl.gov

University of Washington
Suzzallo & Allen Libraries
4000 15th Ave NE
Box 352900
Seattle, WA 98185
(206) 543-5597 or (206) 543-4165
*SUMMER Hours (June 22 – August 21, 2015)
Monday – Thursday, 8 am -- 7 pm

Friday, 8 am – 5 pm
Saturday and Sunday, 1 – 5 pm
*Fall Hours (September 30 – December 18. 2015)
Monday – Thursday, 7:30 am – 10 pm
Friday, 7:30 am – 6 pm
Saturday, 1 – 5 pm
Sunday, 1 – 10 pm
E-Mail: govpub@uw.edu
Website: http://www.lib.washington.edu/about/hours/suzzallo

SITE HISTORY, CONTAMINATION, AND SELECTED REMEDY

The 600-386, Segment 5 Battery Remnant Area #1 is part of the 300-FF-2 Operable Unit. The 600-386 waste site consisted of a wet cell battery remnant partially buried in the ground. The 600-386 waste site was included as a "plug-in" site in accordance with the CERCLA Interim Action ROD for the 300-FF-2 Operable Unit, and *the Explanation of Significant Differences for the 300-FF-2 Operable Unit Interim Action Record of Decision* (2009 ESD), U.S. Environmental Protection Agency, Region 10, Seattle, Washington (EPA 2009). The Tri-Party Agreement Administrative Record *Fact Sheet 300 Area "Plug-In" Waste Sites for Fiscal Year 2012,* U.S. Department of Energy, Richland, Washington (DOE-RL 2012) documents the addition of the 600-386 waste site to the 300-FF-2 Interim Action ROD. In accordance with the criteria for "plug-in" to the Interim Action ROD, it was determined that the 600-386 waste site fit the "300-FF-2 site profile" for the 300-FF-2 Operable Unit, and was added for remediation in accordance with the Interim Action ROD. Remediation of the 600-386 waste site achieved the Remedial Action Objectives (RAOs) and Remedial Action Goals (RAGs) established by the 300-FF-2 Interim Action ROD (EPA 2001), as documented in the *Remaining Sites Verification Package for the 600-386, Segment 5 Battery Remnant Area #1* (http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0091682). The work was conducted in accordance with the EPA approved Remedial Design Report/Remedial Action Work Plan for the 300 area, DOE/RL-2001-47, Revision 3 (http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0095130), utilized to implement the Interim ROD. The interim action remediation also met the RTD to residential cleanup standards of the 300 Area Final Action ROD. Contaminants of concern for this waste site were lead, nickel, and cadmium. No waste remains in place and all residual soils meet direct contact clean up levels.

The 600-393 site is a battery debris site with unknown date of discard. Contaminants of concern for this waste are lead, nickel and cadmium. The site will be remediated to meet residential cleanup levels by removing all of the waste and to meet direct contact residential clean up levels for soils per the RTD remedy established in the 300 Area Final Action ROD. The work will be conducted in accordance with the EPA approved *Remedial Design Report/Remedial Action Work Plan for 300-FF-2 Soils (RDR/RAWP),* as revised to address the 600-393 site.

DESCRIPTION OF SIGNIFICANT DIFFERENCES

Waste Site 600-386 was remediated as a "plug-in" site in accordance with the 300-FF-2 Interim Action ROD (EPA 2001). The site remediation meets residential cleanup levels identified in the 300 Area Final Action ROD (EPA 2013). This ESD adds the 600-386 waste site to Table 1 of the 300 Area Final Action ROD in the category of "no additional action needed to meet selected remedy requirements for 300-FF-2."

This ESD also adds the 600-393 waste site to Table 1 of the 300 Area Final Action ROD in the category of "RTD to residential cleanup levels."

The costs associated with these two sites are within the estimates of the 300 Area Final Action ROD selected remedy. No additional action is required for waste site 600-386 and the waste volume and contaminated soil above cleanup levels associated with the 600-393 waste site is expected to be less than 0.5 cubic yards and 1.0 cubic yard.

SUPPORT AGENCY COMMENTS

Ecology, as the support agency concurs with this ESD to the Hanford Site 300 Area Record of Decision for 300-FF-2 and 300-FF-5, and Record of Decision Amendment for 300-FF-1 (EPA 2013).

STATUTORY DETERMINATIONS

Adding the 600-393 waste site to Table 1 of the 300 Area Final Action ROD for RTD remediation to residential cleanup levels and the 600-386 site as a "no additional action needed to meet selected remedy requirements for 300-FF-2" of the 300 Area Final Action ROD satisfies CERCLA Section 121. The remedy, as revised to include these 2 waste sites, is protective of human health and the environment, complies with federal and state requirements identified in the 300 Area Final Action ROD that are applicable or relevant and appropriate to remedial action, is cost-effective, and uses permanent solutions and alternative treatment technologies to the maximum extent practicable. In addition, the remedy employs treatment as necessary to meet waste acceptance criteria of the disposal facility and as necessary to reduce air releases and worker exposure during excavation and waste management.

PUBLIC PARTICIPATION

The public participation requirements set forth in 40 CFR 300.435(c)(2)(i) of the National Contingency Plan are met through the issuance of this ESD and through notification to the public via newspaper publication in the Tri-City Herald. The ESD and 300-FF-2 Operable Unit Administrative Record are also available in the public repositories listed above. Individual documents can be electronically retrieved by clicking on the link in the reference section.

REFERENCES

1. 40 CFR 300, "National Oil and Hazardous Substances Pollution Contingency Plan," *Code of Federal Regulations,* as amended.

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

3. EPA 2001 - *Interim Action Record of Decision for the 300-FF-2 Operable Unit, Hanford Site, Benton County, Washington* (300-FF-2 ROD), U.S. Environmental Protection Agency, Region 10, Seattle, Washington. http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=D8686316

4. EPA 2013 - Hanford Site 300 Area Record of Decision for 300-FF-2 and 300-FF-5, and Record of Decision Amendment for 300-FF-1. http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0087180

5. *Waste Site Reclassification Form 2012-061 and attached Remaining Sites Verification Package for the 600-386, Segment 5 Battery Remnant Area # 1; DOE Correspondence 12-AMRP-0153; Sept 07, 2012.* *http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0091682*

6. EPA 2009 - *Explanation of Significant Differences for the 300-FF-2 Operable Unit Interim Action Record of Decision* (2009 ESD), U.S. Environmental Protection Agency, Region 10, Seattle, Washington http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0908240151

7. DOE-RL 2009 – *Remedial Design Report/Remedial Action Work Plan for the 300 Area*, DOE/RL-2001-47, Rev 3 http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0095130

8. DOE-RL 2012 - Administrative Record *Fact Sheet 300 Area "Plug-In" Waste Sites for Fiscal Year 2012,* U.S. Department of Energy, Richland, Washington http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=1301070488

9. DOE-RL 2015 *Remedial Design Report/Remedial Action Work Plan for 300-FF-2 Soils (RDR/RAWP),* DOE/RL-2014-13-ADD1, Revision 0; http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0081152H

September 2015

Signature sheet for the *Explanation of Significant Differences for the Hanford Site 300 Area Record of Decision for 300-FF-2 and 300-FF-5, and Record of Decision Amendment for 300-FF-1* between the U.S. Department of Energy and the U.S. Environmental Protection Agency, with concurrence by the Washington State Department of Ecology.

Doug S. Shoop
Deputy Manager
Richland Operations Office
U.S. Department of Energy

9/24/15
Date

September 2015

Signature sheet for the *Explanation of Significant Differences for the Hanford Site 300 Area Record of Decision for 300-FF-2 and 300-FF-5, and Record of Decision Amendment for 300-FF-1* between the U.S. Department of Energy and the U.S. Environmental Protection Agency, with concurrence by the Washington State Department of Ecology.

Richard Albright
Director, Office of Environmental Cleanup
U. S. Environmental Protection Agency, Region 10

9/21/15
Date

September 2015

Signature sheet for the *Explanation of Significant Differences for the Hanford Site 300 Area Record of Decision for 300-FF-2 and 300-FF-5, and Record of Decision Amendment for 300-FF-1* between the U.S. Department of Energy and the U.S. Environmental Protection Agency, with concurrence by the Washington State Department of Ecology.

Jane A. Hedges
Program Manager, Nuclear Waste Program
Washington State Department of Ecology

9/25/2015
Date