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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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May 2, 2016

16-NWP-072

Mr. Kevin Smith, Manager
Office of River Protection
United States Department of Energy
PO Box 450, MSIN: H6-60
Richland, Washington 99352

Ms. Peggy McCullough, Project Director
Bechtel National, Inc.
2435 Stevens Center Place, MSIN: H4-02
Richland, Washington 99354

Re: Approval of 24590-WTP-PCN-ENV-14-002, Class 1 Modification to the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste*, Part III, Operating Unit 10, Waste Treatment and Immobilization Plant (WTP Permit) WA7890008967

References: See page 2

Dear Mr. Smith and Ms. McCullough:

The Department of Ecology approved the referenced Class 1 Modification through the Agency-Initiated Permit Modification issued on January 28, 2016 (Reference 1). The approved Hanford Facility RCRA Permit Modification Notification Form is enclosed.

This modification approved the final Environmental Risk Assessment Work Plan for the Hanford Tank Waste Treatment and Immobilization Plant in Appendix 6.2 of the WTP Permit (Reference 2).

If there are any questions regarding this letter, please contact Mandy Jones, WTP Permit Writer, at mandy.jones@ecy.wa.gov or (509) 372-7916.

Sincerely,

Suzanne Dahl
Dangerous Waste Permit Manager
Nuclear Waste Program

mj/jt
Enclosure

cc: See page 2



Mr. Smith and Ms. McCullough
May 2, 2016
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Reference 1: Letter 16-NWP-016, dated January 28, 2016, from S. Dahl, Ecology to K. W. Smith, USDOE-ORP, et al, "Final Permit Modification 8c.2016.1F to the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste*, Part III, Operating Unit Group 10, Waste Treatment and Immobilization Plant (WTP Permit), WA7890008967"

Reference 2: Letter 14-ECD-0045, received September 18, 2014, from R. G. Hastings, USDOE-ORP, to J. A. Hedges, Ecology, "Submittal of Hanford Facility Resource Conservation and Recovery Act Permit Modification Notification Form 24590-WTP-PCN-ENV-14-002"

cc electronic w/enc:

Dave Bartus, EPA
Dennis Faulk, EPA
Jan Bovier, USDOE
Mary Beth Burandt, USDOE
Cliff Clark, USDOE
Joanne Grinstaff, USDOE
Bill Hamel, USDOE
Lori Huffman, USDOE
Ed MacAlister, USDOE
Tony McKarns, USDOE
Gae Neath, USDOE
Bryan Trimberger, USDOE
Barry Curn, BNI
Brad Erlandson, BNI
Serena Greagor, BNI
Roger Landon, BNI
John Lesser, BNI
Sandi Murdock, BNI
Dan Robertson, BNI

Jon Perry, MSA
Ken Niles, ODOE
Gail Laws, WDOH
Deborah Alexander, Ecology
Robbie Biyani, Ecology
Jennifer Cantu, Ecology
Annette Carlson, Ecology
Nitya Chandran, Ecology
Suzanne Dahl, Ecology
Tracy Gao, Ecology
Mandy Jones, Ecology
Dan McDonald, Ecology
Stacy Nichols, Ecology
John Richardson, Ecology
Oliver Wang, Ecology
BNI Correspondence Control
Environmental Portal
Hanford Facility Operating Record
USDOE-ORP Correspondence Control

cc w/enc:

Russell Jim, YN
Steve Hudson, HAB
Administrative Record: Waste Treatment Plant (TSD #H-0-8)
NWP Central File

cc w/o enc:

Rod Skeen, CTUIR
Gabriel Bohnee, NPT
NWP Reader File

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Hanford Facility RCRA Permit Modification Notification Form
Part III, Operating Unit 10
Waste Treatment and Immobilization Plant

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Page 2 of 4: Hanford Facility RCRA Permit, Part III, Operating Unit 10, Waste Treatment and Immobilization Plant
Environmental Risk Assessment Work Plan for the Hanford Tank Waste Treatment and Immobilization Plant
in accordance with DWP Condition III.10.C.11.a.

Submitted by Co-Operator:

Roger J. Landon 7/21/14
Roger J. Landon Date

Reviewed by ORP Program Office:

D. L. Noyes 9/17/14
D. L. Noyes Date

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24590-WTP-PCN-ENV-14-002

Hanford Facility RCRA Permit Modification Notification Form			
Unit: Waste Treatment and Immobilization Plant		Permit Part: Part III, Operating Unit 10	
<u>Description of Modification:</u>			
The purpose of this Class 1 prime modification is to provide the final Environmental Risk Assessment Work Plan for the Hanford Tank Waste Treatment and Immobilization Plant in accordance with DWP Condition III.10.C.11.a.			
This permit modification requests that the final risk assessment work plan be updated in the DWP Appendix 6, as follows:			
Appendix 6.1			
Replace:	24590-WTP-RPT-ENS-03-006, Rev 0	With:	Replaced with Appendix 6.2
Appendix 6.1.1			
Replace:	24590-RPT-W375-EN00001, Rev 1	With:	Replaced with Appendix 6.2
Appendix 6.1.2			
Replace:	DOE-01-EQD-021	With:	Replaced with Appendix 6.2
Appendix 6.2			
Replace:	Risk Assessment Work Plan (RESERVED)	With:	Final Risk Assessment Work Plan: 24590-WTP-RPT-ENV-14-002, Rev 0, <i>Environmental Risk Assessment Work Plan for the Hanford Tank Waste Treatment and Immobilization Plant</i>
Appendix 6.2.1			
Add:	Supplement 1	24590-WTP-RPT-ENV-10-001, Rev 0, <i>Constituents of Potential Concern for the WTP Air and Dangerous Waste Permits</i>	
Appendix 6.2.2			
Add:	Supplement 2	24590-WTP-RPT-PO-03-008, Rev 2, <i>Integrated Emissions Baseline Report for the Hanford Tank Waste Treatment and Immobilization Plant</i>	
Appendix 6.2.3			
Add:	Supplement 3	24590-WTP-HAC-50-00001, Rev C, <i>Estimated Organic Emissions from Process Cells</i>	
Appendix 6.2.4			
Add:	Supplement 4	24590-WTP-RPT-ENS-07-002, Rev 0, <i>Chemical Parameters and Toxicological Inputs for the Environmental Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant</i>	
Appendix 6.2.5			
Add:	Supplement 5	24590-WTP-RPT-ENV-08-001, Rev 2, <i>Hanford Tank Waste Treatment and Immobilization Plant Risk Assessment Air Quality Modeling Protocol</i>	
This modification requests Ecology approval and incorporation into the permit the specific changes to the final Environmental Risk Assessment Work Plan that were made to address comments received from Ecology. The comments were addressed and proposed revisions to the final Environmental Risk Assessment Work Plan were made in consultation with Ecology, as required by DWP Condition III.10.C.11.a.			

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The following identifies the significant changes that have been made on the attached final Environmental Risk Assessment Work Plan:

- The document was renumbered and revised to incorporate changes that address Ecology comments.
- The American Indian scenarios were modified to incorporate the U.S. Department of Energy scenario in the document and to discuss the scenarios of Confederated Tribes of the Umatilla Indian Reservation and the Yakama Nation in the uncertainty section of the document.
- The process to identify the Constituents of Potential Concern, 24590-WTP-RPT-ENV-10-001, *Constituents of Potential Concern for the WTP Air and Dangerous Waste Permits*, was added as Supplement 1.
- Supplement 2 includes 24590-WTP-RPT-PO-03-008, *Integrated Emissions Baseline Report for the Hanford Tank Waste Treatment and Immobilization Plant*. Supplement 2 will be updated in accordance with DWP Condition III.10.C.11.b.
- Supplement 3 includes 24590-WTP-HAC-50-00001, *Estimated Organic Emissions from Process Cells*. Supplement 3 will be updated in accordance with DWP Condition III.10.C.11.b.
- The physical property and toxicity data were moved to Supplement 4, 24590-WTP-RPT-ENS-07-002, *Chemical Parameters and Toxicological Inputs for the Environmental Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant*. Supplement 4 will be updated in accordance with DWP Condition III.10.C.11.b.
- Supplement 5 includes 24590-WTP-RPT-ENV-08-001, *Hanford Tank Waste Treatment and Immobilization Plant Risk Assessment Air Quality Modeling Protocol*.

As required by DWP Condition III.10.C.11.a., the final Environmental Risk Assessment Work Plan addresses the following:

DWP Condition III.10.C.11.a.:	Appendix 6.2 Environmental Risk Assessment Work Plan:
III.10.C.11.a.i EPA guidance for performance of Human Health and Ecological Risk Assessments for Hazardous Waste Combustion Facilities current at the time of the submittal, assuming both residential and non-residential use scenarios;	24590-WTP-RPT-ENV-14-002; incorporated by reference: <ul style="list-style-type: none"> • EPA. 2005. <i>Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities</i>, Final, EPA/530/R-05/006. US Environmental Protection Agency, Washington, DC. • EPA. 1999. <i>Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities</i>, Peer Review Draft, EPA 530-D-99-001A. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, DC.
III.10.C.11.a.ii Toxicity data current at the time of the submittal;	Supplement 4, 24590-WTP-RPT-ENS-07-002
III.10.C.11.a.iii Compounds newly identified or updated emissions data from current waste characterization and emission testing;	Supplement 1, 24590-WTP-RPT-ENV-10-001
III.10.C.11.a.iv Air modeling updated to include stack gas parameters based on most current emissions testing and WTP Unit design;	Supplement 5, 24590-WTP-RPT-ENV-08-001

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III.10.C.11.a.v Physical/transport properties of constituents, current at the time of the submittal;	Supplement 4, 24590-WTP-RPT-ENS-07-002
III.10.C.11.a.vi Process Description based on most current WTP Unit design;	DWP Chapter 4, Section 4.1, Process Description
III.10.C.11.a.vii Emissions data and all supporting calculations based on most current WTP Unit;	Supplement 2, 24590-WTP-RPT-PO-03-008, and Supplement 3, 24590-WTP-HAC-50-00001
III.10.C.11.a.viii Update of receptor locations based on land use or land use zoning changes, if any.	24590-WTP-RPT-ENV-14-002, Section 6

In accordance with Permit Condition III.10.C.2.e, this permit modification sent to Ecology may include page changes to the Permit, attachments, and permit application supporting documentation.

WAC 173-303-830 Modification Class:	Class 1	Class ¹ 1	Class 2	Class 3
Please mark the Modification Class:		X		

Enter relevant WAC 173-303-830, Appendix I Modification citation number: N/A
Enter wording of WAC 173-303-830, Appendix I Modification citation:

In accordance with WAC 173-303-830(4)(d)(i), this modification notification is requested to be reviewed and approved as a Class ¹1 modification. WAC 173-303-830(4)(d)(ii)(A) states, "Class 1 modifications apply to minor changes that keep the permit current with routine changes to the facility or its operation. These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment. In the case of Class 1 modifications, the director may require prior approval."

Modification Approved/Concur: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Denied (state reason below) Reason for denial:	Reviewed by Ecology:  S. Dahl Date: 5.2.16
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