



1240963
[0074318H]

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

November 4, 2016

16-NWP-188

Mr. Kevin W. 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-LAW-PCN-ENV-14-001, Class ¹1 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 Group 10, Waste Treatment and Immobilization Plant (WTP Permit), WA7890008967

Reference: See page 2

Dear Mr. Smith and Ms. McCullough:

The Department of Ecology approves the referenced Class ¹1 Modification. The approved Hanford Facility RCRA Permit Modification Notification Form is enclosed.

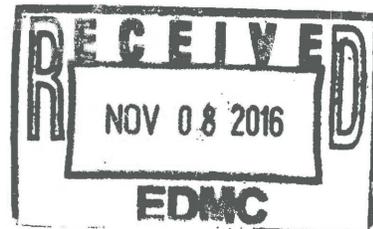
This modification provides the updated Piping and Instrumentation Diagrams (P&IDs) for the Low-Activity Waste Primary Offgas Process (LOP) System and Mechanical Data Sheets for the Submerged Bed Scrubber (SBS) Condensate Vessels.

These changes are listed on the enclosure and replace the corresponding permit P&IDs for the LOP System in Appendix 9.2 and the Mechanical Data Sheets for SBS Condensate Vessels in Appendix 9.6 of the WTP Permit.

If there are any questions regarding this letter, please contact Yoana Lucatero, WTP Permit Writer, at yoana.lucatero@ecy.wa.gov or (509) 372-7917.

Sincerely,

Suzanne Dahl
Dangerous Waste Permit Manager
Nuclear Waste Program



yl/aa
Enclosure

cc: See page 2



Mr. Smith and Ms. McCullough
 November 4, 2016
 Page 2 of 2

16-NWP-188

Reference: Letter 16-ECD-0036, dated August 3, 2016, "Submittal of Hanford Facility Resource Conservation and Recovery Act Permit Modification Notification Form 24590-LAW-PCN-ENV-14-001 Replace Piping and Instrumentation Diagrams for Low-Activity Waste Primary Offgas Process System and Mechanical Data Sheets for the Submerged Bed Scrubber Condensate Vessels" **1239691**

cc electronic w/enc:

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

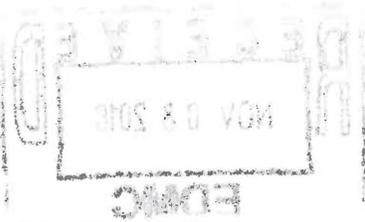
Jon Perry, MSA
 Ken Niles, ODOE
 Gail Laws, WDOH
 Robbie Biyani, Ecology
 Jennifer Cantu, Ecology
 Annette Carlson, Ecology
 Nitya Chandran, Ecology
 Tracy Gao, Ecology
 Mandy Jones, Ecology
 Yoana Lucatero, Ecology
 Dan McDonald, Ecology
 John Richardson, Ecology
 Oliver Wang, Ecology
 Nancy Ware, Ecology
 BNI Correspondence Control
 Environmental Portal
 Hanford Operating Record General File
 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
 NWP Library

cc w/o enc:

Rod Skeen, CTUIR
 Gabriel Bohnee, NPT



Quarter Ending Sept 30, 2016

24590-LAW-PCN-ENV-14-001

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

Index

Page 2 of 3: Hanford Facility RCRA Permit, Part III, Operating Unit 10, Waste Treatment and Immobilization Plant
Replace Piping and Instrumentation Diagrams (P&IDs) for the LAW Primary Offgas Process System (LOP) in
Appendix 9.2 of the Dangerous Waste Permit (DWP).
Replace Mechanical Data Sheets for SBS Condensate Vessels in Appendix 9.6 of the DWP.

Submitted by Co-Operator:

Roger J. Landon 7/6/16
Roger J. Landon Date

Reviewed by ORP Program Office:

J. F. Grindstaff 8/1/16
J. F. Grindstaff Date

Quarter Ending Sept 30, 2016

24590-LAW-PCN-ENV-14-001

Hanford Facility RCRA Permit Modification Notification Form			
Unit:		Permit Part:	
Waste Treatment and Immobilization Plant		Part III, Operating Unit 10	
Description of Modification:			
The purpose of this Class 1 prime modification is to update and replace the following P&IDs and mechanical data sheets in Appendices 9.2 and 9.6 of the DWP:			
Appendix 9.2			
Replace:	24590-LAW-M6-LOP-00001004, Rev. 0	With:	24590-LAW-M6-LOP-00001004, Rev. 1
	24590-LAW-M6-LOP-00002004, Rev. 0		24590-LAW-M6-LOP-00002004, Rev. 1
Appendix 9.6			
Replace:	24590-LAW-MVD-LOP-P0004, Rev. 1	With:	24590-LAW-MVD-LOP-00004, Rev. 6
	24590-LAW-MVD-LOP-P0005, Rev. 1		24590-LAW-MVD-LOP-00005, Rev. 6
<p>This modification requests Ecology approval and incorporation into the permit the specific changes to the P&IDs and mechanical data sheets indicated by revision notes, clouds and bars. These documents include changes provided in applicable document change forms (e.g., DCN, SCN, SDDR, FCN, FCR, etc.). In addition, the P&IDs and mechanical data sheets include changes associated with the resolution to comments on change documents since the issuance of the last revision of the permitted documents.</p>			
<p>Significant changes to the P&IDs are summarized below:</p> <ul style="list-style-type: none"> • Modified and added notes. • Incorporated changes from change documentation identified in the Notes section on each drawing. • Removed call-outs of pipe diameters under flow valves FV-1050 and FV-2050 in Grid E6. • Revised flow valves FV-1050 and FV-2050 in Grid E6 to close on loss of power or melter plenum high pressure to isolate air flow to the wet electrostatic precipitators. Designation of failure position for these flow valves was changed from fail-open (FO) to fail-closed (FC). • Modified and added valve position switches to flow valves FV-1140 and FV-2140 in Grid F3. • Added high-high alarms to liquid level indicators LI-1060 and LI-2060 in Grid E3. • Revised instrumentation to indicate density correction for flow control loops in Grid E6. • Updated symbols for radar level transmitters LT-1060 and LT-2060 in Grid E3 to show that these are foundation fieldbus devices. • Provided safety interlock signals PDSHH-1410A and PDSHH-1528/1529 to FC-1050 and PDSHH-2410A and PDSHH-2528/2529 to FC-2050 in Grids F6, F7 and F8. • Revised manual valves LOP-V-10052 and LOP-V-10068 to a position of normally opened (NO) / locked opened (LO) in Grid F4. • Changed isolation valves from a gate valve to a ball valve for ISA-V-40187 and ISA-V-69659 in Grid E6; ISA-V-68968 and ISA-V-69438 in Grid G6; ISA-V-68969 and ISA-V-69439 in Grid E5; ISA-V-68970 and ISA-V-69437 in Grid D7. • Revised the line number for nozzle N31 in Grids E4 and E5. • Updated references to off-sheet P&IDs. 			
<p>Significant changes to the mechanical data sheets are summarized below:</p> <ul style="list-style-type: none"> • Updated reference document numbers for the P&IDs. • Revised the tag numbers of the eductors (mixers). • Updated Design Data such as quality levels, volumes (maximum operating and total), internal pressures (vessel operating), external pressures (vessel operating, vessel design, and coil/jacket design), and temperatures (vessel operating). Added Design Data for the average dose rates, actual weights (empty, operating, and test), seismic base moments, hydrostatic test pressures and fabrication specs. 			

Quarter Ending Sept 30, 2016

24590-LAW-PCN-ENV-14-001

- Updated Materials of Construction Data for the pipes and forgings. Added data for the eductors.
- Revised Remarks section.
- It should be noted that mechanical data sheets currently included in the DWP are 24590-LAW-MVD-LOP-P0004 and -P0005, Rev. 1 (dated 3/14/05). These "P" permit version of the data sheets were the most current version at the time when these sheets were submitted for incorporation into the DWP. The source documents for these data sheets were 24590-LAW-MVD-LOP-00004 and -00005, Rev. 5 (dated 2/06/05). The version of the mechanical data sheets being submitted in this PCN is Rev. 6 (dated 10/20/14). See approval page (last page) of the data sheets for the history of versions and dates.

This PCN updates information in Appendices 9.2 and 9.6 to reflect current design. This DWP component may be re-evaluated to confirm design adequacy. If the re-evaluation results in future design changes, the changes will be reviewed by Ecology in subsequent permit modifications.

The following outstanding change documents have been submitted to Ecology pursuant to Permit Condition III.10.C.9.h and are maintained in the WTP Operating Record:

24590-LAW-M6-LOP-00001004, Rev. 1 and 24590-LAW-M6-LOP-00002004, Rev. 1

- 24590-LAW-M6N-LOP-00099 – provided to Ecology in milk run (CCN 275855)
- 24590-LAW-M6N-M80T-00033 – provided to Ecology in milk run (CCN 275837)
- 24590-LAW-M6N-LOP-00102 – provided to Ecology in milk run (CCN 287548)
- 24590-LAW-M6N-LOP-00104 – provided to Ecology in milk run (CCN 287545)

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 11	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 11/4/16 Date
--	--