



U.S. Department of Energy
Office of River Protection

0078549

P.O. Box 450, MSIN H6-60
Richland, Washington 99352

JUL 31 2008

08-ESQ-182

Ms. Jane A. Hedges, Program Manager
Nuclear Waste Program
Washington State
Department of Ecology
3100 Port of Benton Blvd.
Richland, Washington 99354

RECEIVED
JUL 31 2008
EDMC

Dear Ms. Hedges:

SUBMITTAL OF HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT MODIFICATION NOTIFICATION FORM 24590-PTF-PCN-ENV-07-013

Reference: WA7890008967, "Dangerous Waste Portion of the Hanford Facility Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Part III, Operating Unit 10, 'Waste Treatment and Immobilization Plant.'"

This letter transmits the Hanford Facility RCRA Permit Modification Notification Form 24590-PTF-PCN-ENV-07-013 attached, for the Washington State Department of Ecology (Ecology) review and approval. The form describes a requested Class 1 modification to the Reference.

Modification Notification Form 24590-PTF-PCN-ENV-07-013 updates the Mechanical Systems Data Sheet (24590-PTF-MVD-TLP-00004) for the Pretreatment Facility Treated Low-Activity Waste Evaporator Condensate Vessel (TLP-VSL-00002) found in Appendix 8.6 of the Reference. The permit version of the specification is being replaced by the attached engineering source document. Permit version and source documents are not identical. Many aspects of the permit document (e.g., ghosting, certain notes, references, holds, etc.) have no counterpart or equivalent on the source document. Potential permit affecting changes between the current and previous versions of the source document are summarized on the permit change notice form.

If you have any questions, please contact me, or your staff may contact Gae M. Neath, Office of Environmental Safety and Quality, (509) 376-7828.

Sincerely,

Shirley J. Olinger, Manager
Office of River Protection

ESQ:GMN

Attachment

cc: See page 2

Ms. Jane A. Hedges
08-ESQ-182

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JUL 31 2008

cc w/attach:

J. Brown, BNI
W. S. Elkins, BNI
B. G. Erlandson, BNI
P. A. Fisher, BNI
J. S. Hill, BNI
S. K. Murdock, BNI
P. E. Peistrup, BNI
Administrative Record
BNI Correspondence
Environmental Portal, LMSI

cc electronic:

B. L. Becker-Khaleel, Ecology (1 hard copy)
R. K. Biyani, Ecology
E. A. Fredenburg, Ecology
B. Speer, Ecology
S. A. Thompson, FHI
A. C. McKarns, RL
D. J. Sommer, SCS

cc w/o attach:

D. A. Klein, BNI
J. Cox, CTUIR
S. G. Harris, CTUIR
S. L. Dahl, Ecology
G. P. Davis, Ecology
G. P. Bohnee, NPT
K. Niles, Oregon Energy
S. R. Weil, RL
R. Jim, YN

Attachment
08-ESQ-182

Hanford Facility RCRA Permit Modification Notification
Form 24590-PTF-PCN-ENV-07-013

Quarter Ending September 30,
2008

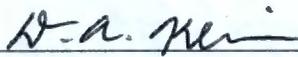
24590-PTF-PCN-ENV-07-013

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 Mechanical Systems Data Sheet 24590-PTF-MVD-TLP-00004, Treated LAW Evaporator
Condensate Vessel TLP-VSL-00002 in Appendix 8.6 of the Dangerous Waste Permit.

Submitted by Co-Operator:



D. A. Klein

7/21/08

Date

Reviewed by ORP Program Office:



S. J. Olinger

7/30/08

Date

Quarter Ending September 30,
2008

24590-PTF-PCN-ENV-07-013

Hanford Facility RCRA Permit Modification Notification Form

Unit:

Waste Treatment and Immobilization Plant

Permit Part & Chapter:

Part III, Operating Unit 10

Description of Modification:

The purpose of this Class 1 modification is to update 24590-PTF-MVD-TLP-00004, mechanical systems data sheet for Pretreatment facility vessel "Treated LAW Evaporator Condensate Vessel TLP-VSL-00002".

The following mechanical systems data sheet is being submitted to replace the data sheet currently in Appendix 8.6.

Appendix 8.6	
Replace:	24590-PTF-MVD-TLP-P0004, Rev. 0
With:	24590-PTF-MVD-TLP-00004, Rev. 1

This modification requests Ecology approve and incorporate into the permit changes to the referenced mechanical systems data sheet as highlighted below. Revisions are the result of ongoing design (changes from vendor preliminary data to vendor detailed design) and incorporates general criteria from a design verification review.

Informational Changes:

- Updated vessel drawing and seismic references
- Verified and finalized Seller data for vessel capacity and specifications
- Updated data sheet notes for forgings and bar stock

Vessel Material Composition Changes:

- Top head changed from SA-240 TP 304L with 1/4" thickness, maximum carbon content of 0.030% for welded components to SA-240 340 with 5/8" thickness, maximum carbon content of 0.030% for welded components
- Shell changed from SA-240 TP 304L with 1/4" thickness, maximum carbon content of 0.030% for welded components to SA-240 TP 304 5/8" (upper), 3/8" (lower) thickness, maximum carbon content of 0.030% for welded components
- Bottom head changed from SA-240 TP 304L with 1/4" thickness, maximum carbon content of 0.030% for welded components to SA-240 TP 304 with 1/2" thickness, maximum carbon content of 0.030%
- Vessel support changed from stainless steel to SA-240 304
- Pipe changed from SA-312 TP 316 to SA-312 TP 304
- Gaskets changed from flex spiral wound / flexitallic spiral wound to N/A / N/A
- Bolting changed from A193 or B7 with 2 hex nuts to N/A / N/A
- Wash ring consisting of SA-312 TP 304 with a maximum carbon content of 0.030% added
- Support type changed from support legs to stainless steel legs 304 SS with a maximum carbon content of 0.030%

The following is a list of outstanding change documents that have not been incorporated into this modification:

- None.

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24590-PTF-PCN-ENV-07-013

WAC 173-303-830 Modification Class: ^{1 2}	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: A.1. and A.3 Enter wording of WAC 173-303-830, Appendix I Modification citation: A. General Permit Provisions 1. Administrative and informational changes 3. Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls.)				
Modification Approved: <input type="checkbox"/> Yes <input type="checkbox"/> No (state reason for denial) <u>Reason for denial:</u>		Reviewed by Ecology:		
		B. Becker-Khaleel _____ Date		

¹ Class 1 modifications requiring prior Agency approval.

² If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to a Class ¹1, if applicable.



Mechanical Data Sheet: Vessel

Plant Item No. 24590-PTF-MV-TLP-VSL-00002
Data Sheet No. 24590-PTF-MVD-TLP-00004

R10315852

Table with Project, Project No, Project Site, System No, Building, and Description fields.

ISSUED BY RPP-WTP PDC INT DATE

Reference Data

Table with Charge Vessels, Pulse Jet Mixers / Agitators, RFDs/Pumps fields.

Service Data

Table with Quality Level, Seismic Category, Service/Contents, Design Specific Gravity, Max Operating Volume, Total Volume, Postweld Heat Treat, Seismic Base Moment fields.

Design Data

Table with Inside Diameter, Length/Height, Internal Pressure, External Pressure, Temperature, Min Design Metal Temp fields.

Materials of Construction

Table with Component, Material, Containment, Notes fields.

Miscellaneous Data

Table with Orientation, Support Type, Insulation Function, Insulation Thickness, Insulation Material, External Finish, Internal Finish fields.

Please note that source, special nuclear, and byproduct materials, as defined in the Atomic Energy Act of 1954 (AEA) are regulated at the U. S. Department of Energy (DOE) facilities exclusively by DOE acting pursuant to its AEA authority.

Notes

- Notes: (1) Nozzles located below the top of the overflow nozzle are primary containment. See 24590-WTP-3PS-MV00-T0001 for NDE requirements. (2) Nozzle tolerance +/- 1/4" (3) 40 years design life (4) NDE for this vessel must meet requirements per para. 6.1, 6.4, and 7.2 of specification 24590-WTP-3PS-MV00-T0001

Revision History

Table with Rev, Description, By, Checked, Reviewed, Approved, Date fields.