



U.S. Department of Energy  
**Office of River Protection**

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

0071303

06-ESQ-134

SEP 29 2006

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

RECEIVED  
OCT 20 2006

EDMC

Dear Ms. Hedges:

SUBMITTAL OF HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT MODIFICATION NOTIFICATION FORM 24590-HLW-PCN-ENV-06-011

Reference: WA7890008967, "Dangerous Waste Portion of the Hanford Facility Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Chapter 10 and Attachment 51, 'Waste Treatment and Immobilization Plant.'"

This letter transmits Hanford Facility RCRA Permit Modification Notification Form 24590-HLW-PCN-ENV-06-011 (Attachment 1) for the Washington State Department of Ecology review and approval. The form describes a requested Class 1 modification to the Reference. A Bechtel National, Inc. certification statement is provided in Attachment 2.

Permit Modification Notification Form 24590-HLW-PCN-ENV-06-011 updates two Piping and Instrumentation Diagrams for the High-Level Waste Concentrate Receipt Process System Melter 1 Transfer Piping, 24590-HLW-M6-HCP-P0001; and Melter 2 Transfer Piping, 24590-HLW-M6-HCP-P0002, found in Appendix 10.2 of the Reference.

If you have any questions, please contact me, or your staff may contact Lori A. Huffman, Office of Environmental Safety and Quality, (509) 376-0104.

Sincerely,

Roy J. Schepens, Manager  
Office of River Protection

ESQ:LAH

Attachments: (2)

cc: See page 2

SEP 29 2006

Ms. Jane Hedges  
06-ESQ-134

-2-

cc w/attachs:

Administrative Record  
Environmental Portal, LMSI

cc electronic:

J. M. Atwood, BNI  
B. G. Erlandson, BNI  
D. X. Klein, BNI  
E. Saucedo, BNI  
B. Becker-Khaleel, Ecology  
K. Elsethagen, Ecology  
E. A. Fredenburg, Ecology  
S. A. Thompson, FHI  
A. C. McKarns, RL

cc w/o attachs:

M. Anderson-Moore, Ecology  
L. Cusack, Ecology  
S. L. Dahl, Ecology  
G. P. Davis, Ecology  
A. Hamar, Ecology  
K. Niles, Oregon Energy

Attachment 1  
06-ESQ-134

Hanford Facility RCRA Permit Modification Notification  
Form 24590-HLW-PCN-ENV-06-011

Quarter Ending 09/30/06

24590-HLW-PCN-ENV-06-011

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**Hanford Facility RCRA Permit Modification Notification Form**  
**Part III, Chapter 10 and Attachment 51**  
**Waste Treatment and Immobilization Plant**

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Index

Page 2 of 2: Hanford Facility RCRA Permit, Part III, Chapter 10, and Attachment 51, Appendix 10.2  
Update HLW process and instrumentation diagrams (P&ID) 24590-HLW-M6-HCP-P0001 and 24590-HLW-M6-HCP-P0002 for the Concentrate Receipt Process System (HCP) in Appendix 10.2 of the Dangerous Waste Permit.

Submitted by Co-Operator:

Reviewed by ORP Program Office:

 8/24/06  
D. A. Klein Date

 9/29/06  
R. J. Schepens Date

**Hanford Facility RCRA Permit Modification Notification Form**

Unit: <b>Waste Treatment and Immobilization Plant</b>	Permit Part & Chapter: <b>Part III, Chapter 10 and Attachment 51</b>
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Description of Modification:

This modification addresses changes to HLW HCP P&IDs 24590-HLW-M6-HCP-P0001 and 24590-HLW-M6-HCP-P0002, located in Appendix 10.2 of the Dangerous Waste Permit. Changes to these P&IDs are principally editorial in nature.

The changes are as follows:

- Changed the labels on the PTF side of the feed transfer line identifying the PTF vessels.
- Changed the labels on the HLW side of the feed transfer line regarding the return to PTF.
- Modified, deleted and renumbered notes (for consistency with engineering procedures).
- Identified Spare Penetrations

Please replace the following documents in Appendix 10.2 of the Dangerous Waste Permit.

Appendix 10.2			
Replace:	24590-HLW-M6-HCP-P0001, rev. 1	With:	24590-HLW-M6-HCP-P0001, rev. 2
Replace:	24590-HLW-M6-HCP-P0002, rev. 1	With:	24590-HLW-M6-HCP-P0002, rev. 2

WAC 173-303-830 Modification Class: <sup>1 2</sup>	Class 1	Class <sup>1</sup> 1	Class 2	Class 3
Please mark the Modification Class:	X			

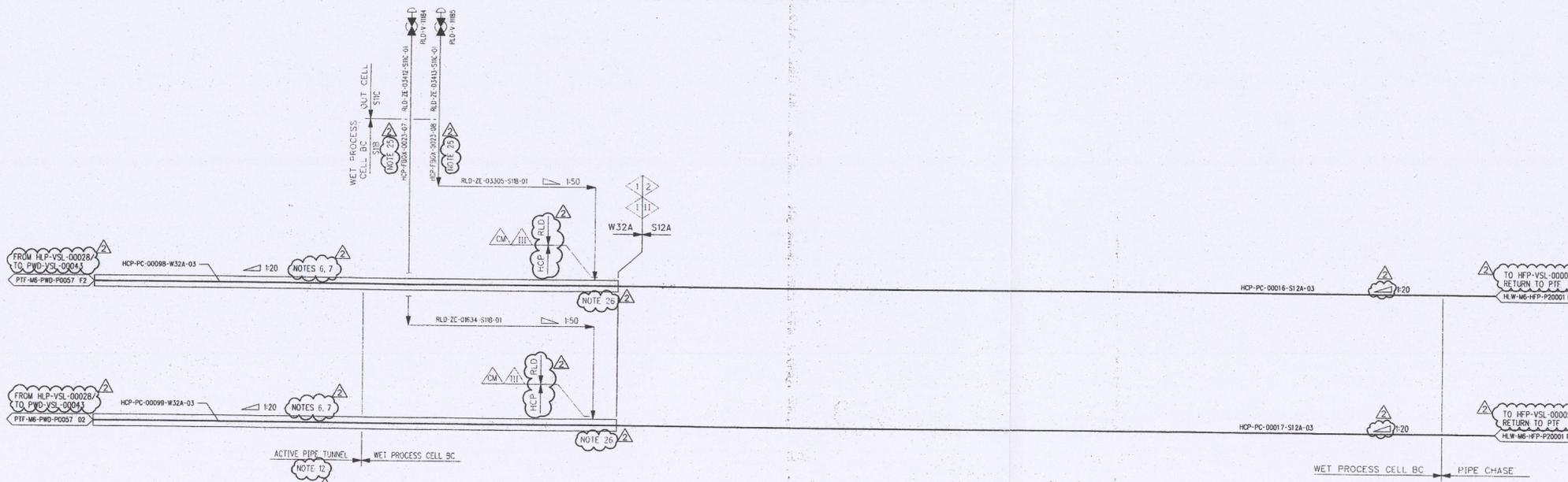
Enter Relevant WAC 173-303-830, Appendix I Modification citation number: N/A  
 Enter wording of WAC 173-303-830, Appendix I Modification citation: N/A

In accordance with WAC 173-303-830(4)(d)(i), this modification notification is requested to be reviewed and approved as a Class 1 modification. WAC 173-303-830(d)(ii) states, "Class 1 modifications apply to minor changes that keep the permit current with routine changes to 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: <input type="checkbox"/> Yes <input type="checkbox"/> No (state reason for denial) <u>Reason for denial:</u>	Reviewed by Ecology:  _____ S. Dahl
	_____ Date

<sup>1</sup> Class 1 modifications requiring prior Agency approval.

<sup>2</sup> This is only an advanced notification of an intended Class <sup>1</sup> 1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

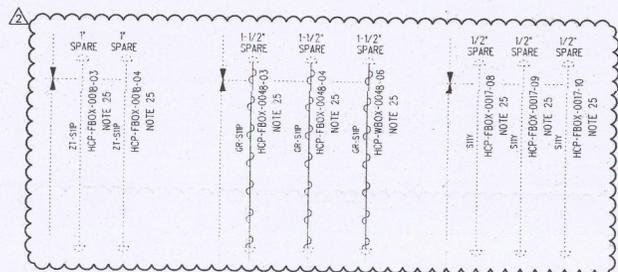


NOTES:

- SEE DRAWINGS 24590-WTP-M6-50-P0001 THROUGH 24590-WTP-M6-50-P0006 FOR GENERAL NOTES, SYMBOLS AND LEGEND, AND GENERAL SLOPE REQUIREMENTS.
- DELETED
- DELETED
- BATTERY LIMITS FOR PIPING IS INSIDE OF HLW FACILITY. BOF IS RESPONSIBLE FOR PIPING BETWEEN PRE-TREATMENT AND HLW. SEE DRAWING 24590-PTF-M6-PWD-P0057.
- PIPING OUTSIDE OF BUILDING IS DIRECT-BURIED COAXIAL PIPE. PRE-TREATMENT IS RESPONSIBLE FOR COAXIAL PIPE LEAK DETECTION. SEE DRAWING 24590-PTF-M6-PWD-P0057.
- DELETED
- DELETED
- A FLANGED SPOOL PIECE IS REQUIRED FOR THE INNER PIPE IN THE ACTIVE PIPE TUNNEL. SPOOL PIECE SHALL BE REMOVED AND PIPING IS TO BE RESTORED TO DOUBLE CONTAINED PIPING AFTER THE PLANT STARTUP PHASE IS COMPLETE.
- DELETED
- DELETED
- CONTENTS OF THIS DOCUMENT ARE DANGEROUS WASTE PERMIT AFFECTING.
- MODIFIED/RENUMBERED NOTES, ADDED NOTE 25, CHANGED SEISMIC CATEGORY AND QUALITY LEVEL DESIGNATION OF FLUSH LINE. UPDATED REFERENCE, REMOVED HOLD, DELETED CONCENTRATE RECEIPT VESSEL, AND UPDATED CONNECTING FLAGS.
- JOGGLED PIPE IS QUALITY LEVEL 2 AND HAS THE SAME SEISMIC DESIGNATION AS ATTACHED PIPE. SPARE JOGGLES HAVE NO SEISMIC DESIGNATION.
- FLUSH LINE CONNECTION OF ENCASUREMENT PIPE SHALL BE AT THE HIGHEST POINT (ON TOP) OF OUTER PIPE. THE SAFETY CLASS OF THE FLUSH LINE IS NON-ITS.
- THE PORTIONS OF THIS DRAWING SHOWN IN PHANTOM ARE CONSIDERED NON-PERMIT AFFECTING AND ARE NOT SUBJECT TO THE REGULATORY REQUIREMENTS OF THE WAC CODE FOR THE DANGEROUS WASTE PERMIT TO THE EXTENT THAT THOSE PORTIONS DO NOT IMPACT DANGEROUS WASTE AREAS/OPERATIONS.
- INCORPORATED EDITORIAL CHANGES TO OFFSHEET CONNECTOR TEXT, MODIFIED/RENUMBERED NOTES, ADDED SPARE PENETRATIONS.

REFERENCES

- 24590-HLW-M5-V17T-P0001 "PROCESS FLOW DIAGRAM HLW RECEIPT & FEED PREPARATION (SYSTEM HCP, GFR & HFP)"
- 24590-HLW-3YD-HCP-00001 "SYSTEM DESCRIPTION FOR HLW CONCENTRATE RECEIPT AND MELTER FEED PROCESS SYSTEMS (HCP AND HFP)"

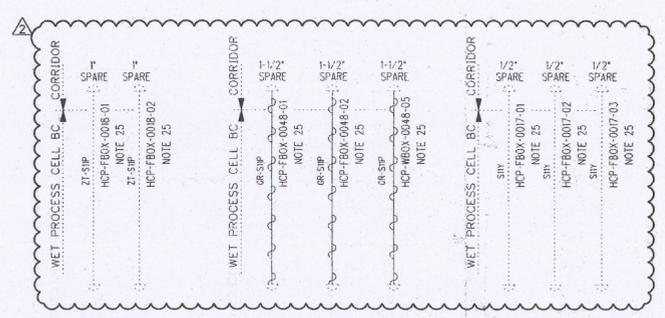


PLEASE NOTE THAT SOURCE, SPECIAL NUCLEAR AND BYPRODUCT MATERIALS, AS DEFINED IN THE ATOMIC ENERGY ACT OF 1954 (AEA), ARE REGULATED AT THE U.S. DEPARTMENT OF ENERGY (DOE) FACILITIES EXCLUSIVELY BY DOE ACTING PURSUANT TO ITS AEA AUTHORITY. DOE ASSERTS THAT PURSUANT TO THE AEA, IT HAS SOLE AND EXCLUSIVE RESPONSIBILITY AND AUTHORITY TO REGULATE SOURCE, SPECIAL NUCLEAR, AND BYPRODUCT MATERIAL AT DOE-OWNED NUCLEAR FACILITIES. INFORMATION CONTAINED HEREIN ON RADIONUCLIDES IS PROVIDED FOR PROCESS DESCRIPTION PURPOSES ONLY.

REV	DESCRIPTION	ORG	CHKD	RVWD	APVD	DATE
2	REVISED PER NOTE 28 ISSUED FOR PERMITTING USE	SC	EL	JP	OFF	8/1/06
1	MAJOR REVISION SEE NOTE 24 ISSUED FOR PERMITTING USE	SC	RR	ET	TV	5/17/05
0	ISSUED FOR PERMITTING USE	SC	LOF	DMY	DNF	3/16/03

<b>Q</b> QUALITY DESIGNATION		<b>REVISION HISTORY</b>	
PROJECT No. 24590 SITE HANFORD AREA 200C BUILDING No. 30	RIVER PROTECTION PROJECT WASTE TREATMENT PLANT 24335 STEVENS CENTER PL RICHLAND, WA 99354	CONTRACT No. DE-AC27-01RW14136	
ORIGINATOR STEVEN J. CROSS 3/13/03 CHECKER L. PONG 3/13/03 APPROVER D. PATEL 3/16/03 REVIEWER D. YARBROUGH 3/13/03	<b>P&amp;ID - HLW          CONCENTRATE RECEIPT          PROCESS SYSTEM          MELTER 2 TRANSFER PIPING</b>		
CONTENT APPLICABLE TO ALARA? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO ADR NO. 14.4 SAFETY SCREEN REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SAFETY TYPES IDENTIFIED IN 24590-WTP-HCP-SPEC-002	SCALE: NONE 24590-HLW-M6-HCP-P0002	REV: 2	REV: 2





- NOTES:**
- SEE DRAWINGS 24590-WTP-M6-50-P0001 THROUGH 24590-WTP-M6-50-P0008 FOR GENERAL NOTES, SYMBOLS AND LEGEND AND GENERAL SLOPE REQUIREMENTS.
  - DELETED
  - BATTERY LIMITS FOR PIPING IS INSIDE OF HLW FACILITY. BOF IS RESPONSIBLE FOR PIPING BETWEEN PRE-TREATMENT AND HLW. SEE DRAWING 24590-PTF-M6-PWD-P0057.
  - PIPING OUTSIDE OF BUILDING IS DIRECT-BURIED COAXIAL PIPE. PRE-TREATMENT IS RESPONSIBLE FOR COAXIAL PIPE LEAK DETECTION. SEE DRAWING 24590-PTF-M6-PWD-P0057.
  - DELETED
  - DELETED
  - A FLANGED SPOOL PIECE IS REQUIRED FOR THE INNER PIPE IN THE ACTIVE PIPE TUNNEL. SPOOL PIECE SHALL BE REMOVED AND PIPING IS TO BE RESTORED TO DOUBLE CONTAINED PIPING AFTER THE PLANT STARTUP PHASE IS COMPLETE.
  - DELETED
  - DELETED
  - CONTENTS OF THIS DOCUMENT ARE DANGEROUS WASTE PERMIT AFFECTING.
  - MODIFIED/RENUMBERED NOTES. ADDED NOTE 25. CHANGED SEISMIC CATEGORY AND QUALITY LEVEL DESIGNATION OF FLUSH LINE. UPDATED REFERENCE. REMOVED HOLD, DELETED CONCENTRATE RECEIPT VESSEL, AND UPDATED CONNECTING FLAHS.
  - JOGGLED PIPE IS QUALITY LEVEL 2 AND HAS THE SAME SEISMIC DESIGNATION AS ATTACHED PIPE. SPARE JOGGLES HAVE NO SEISMIC DESIGNATION.
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  - THE PORTIONS OF THIS DRAWING SHOWN IN PHANTOM ARE CONSIDERED NON-PERMIT AFFECTING AND ARE NOT SUBJECT TO THE REGULATORY REQUIREMENTS OF THE WAC CODE FOR THE DANGEROUS WASTE PERMIT TO THE EXTENT THAT THOSE PORTIONS DO NOT IMPACT DANGEROUS WASTE AREAS/OPERATIONS.
  - INCORPORATED EDITORIAL CHANGES TO OFFSHEET CONNECTOR TEXT, MODIFIED/RENUMBERED NOTES, ADDED SPARE PENETRATIONS.

- REFERENCES**
- 24590-HLW-M5-V177-P0001, 'PROCESS FLOW DIAGRAM HLW RECEIPT & FEED PREPARATION (SYSTEM HCP, GFR & HFP)'
  - 24590-HLW-31D-HFP-00001, 'SYSTEM DESCRIPTION FOR HLW CONCENTRATE RECEIPT AND MELTER FEED PROCESS SYSTEMS (HCP AND HFP)'

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. DOE ASSERTS, THAT PURSUANT TO THE AEA, IT HAS SOLE AND EXCLUSIVE RESPONSIBILITY AND AUTHORITY TO REGULATE SOURCE, SPECIAL NUCLEAR AND BYPRODUCT MATERIAL AT DOE-OWNED NUCLEAR FACILITIES. INFORMATION CONTAINED HEREIN ON RADIONUCLIDES IS PROVIDED FOR PROCESS DESCRIPTION PURPOSES ONLY.

REV	DESCRIPTION	ORG	CHKD	RWVD	APVD	DATE
2	REVISED PER NOTE 28 ISSUED FOR PERMITTING USE	SC	CA	SP	WCH	5/11/04
1	MAJOR REVISION, SEE NOTE 24 ISSUED FOR PERMITTING USE	SC	RR	EL	TV	5/17/03
0	ISSUED FOR PERMITTING USE	SJC	LOF	DMY	BNP	3/16/03

**REVISION HISTORY**

PROJECT No. 24590  
 SITE HANFORD  
 AREA 200E  
 BUILDING No. 30

CONTRACT No. DE-AC27-D1RV14136

**P&ID - HLW CONCENTRATE RECEIPT PROCESS SYSTEM MELTER 1 TRANSFER PIPING**

ISSUED BY: RPP-WFP-P0001  
 ISSUE STAMP: [Stamp]

ORIGINATOR: STEVEN J. CROSS 3/13/03  
 CHECKER: L. FONG 3/13/03  
 APPROVER: D. PATEL 3/16/03  
 REVIEWER: D. YARBROUGH 3/13/03

CONTENT APPLICABLE TO ALARA?  YES  NO  
 ADR NO. N/A REV: N/A

SAFETY SCREEN REQUIRED?  YES  NO  
 DRAWING TYPES IDENTIFIED BY: [Symbol] E  S  M  C  T  F  P  S  D  A  R  I  T  E

SCALE: NONE  
 24590-HLW-M6-HCP-P0001  
 REV 2

DATE: 08/18/2006 10:51:06 AM  
 C:\Work\unl\p0001\HLW\HCP-P0001.dgn



Attachment 2  
06-ESQ-134

Bechtel National, Inc. Certification Statement

# Bechtel National, Inc. Certification

The following certification statement is provided consistent with Contract No. DE-AC27-01RV14136, Section H.26, Environmental Permits, paragraph (g) for the submittal of the Hanford Facility Resource Conservation and Recovery Act Permit Modification Notification Form 24590-HLW-PCN-ENV-06-011.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



W. S. Elkins  
Project Director

WSE      3/29 AUG 2006  
Date