



U.S. Department of Energy
Office of River Protection

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

0078819

SEP 12 2008

08-ESQ-155

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

RECEIVED
OCT 01 2008
EDMC

Dear Ms. Hedges:

SUBMITTAL OF HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT MODIFICATION NOTIFICATION FORM 24590-WTP-PCN-ENV-06-005

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 Hanford Facility RCRA Permit Modification Notification Form 24590-WTP-PCN-ENV-06-005, attached, for the Washington State Department of Ecology approval. The form describes a requested Class 1 modification to the Reference.

Modification Notification Form 24590-WTP-PCN-ENV-06-005 updates the Part A Permit Application found in Chapter 1 of the Reference. The permitted version of the Part A is being replaced by the attached. Submittal of the updated Part A also completes Compliance Schedule Item 33 of the Reference.

If you have any questions, please contact me, or your staff may contact Lori A. Huffman, Division Director, Environmental Compliance Division, (509) 376-0104.

Sincerely,

Shirley J. Olinger, Manager
Office of River Protection

ESQ:LAH

Attachment

cc: See page 2

Ms. Jane A. Hedges
08-ESQ-155

-2-

SEP 12 2008

cc w/attach:

J. Colby, 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:

D. C. Becker, Ecology
B. L. Becker-Khaleel, Ecology (1 hard copy)
R. K. Biyani, Ecology
E. A. Fredenburg, Ecology
T. Z. Gao, Ecology
A. A. Hamar, Ecology
J. L. Hensley, Ecology
S. J. Lijek, Ecology
B. Speer, Ecology
T. R. Williams, 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-155

Hanford Facility RCRA Permit Modification Notification
Form 24590-WTP-PCN-ENV-06-005

Quarter Ending September 30,
2008

24590-WTP-PCN-ENV-08-008

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

Index

Page 2 of 2: Hanford Facility RCRA Permit, Part III, Operating Unit 10, Waste Treatment and Immobilization Plant
Update the Part A Permit Application in Chapter 1 of the Dangerous Waste Permit.

Submitted by Co-Operator:

Reviewed by ORP Program Office:

D. A. Klein 9/18/08
D. A. Klein Date

S. J. Olinger 9/30/08
S. J. Olinger Date

Quarter Ending September 30,
2008

24590-WTP-PCN-ENV-08-008

Hanford Facility RCRA Permit Modification Notification Form				
Unit: Waste Treatment and Immobilization Plant	Permit Part & Chapter: Part III, Operating Unit 10			
<p><u>Description of Modification:</u> The purpose of this Class 1 prime modification is to update and replace the existing permitted Part A Permit Application.</p> <p>This modification requests Ecology approval and incorporation into the permit the above mentioned Part A. The following changes have been made to the Part A:</p> <ul style="list-style-type: none"> • Updated Section XII "Process Code Design Capacities" associated with revised glass production rates of 50 metric tons per day of ILAW and 7.5 Mt/day of IHLW • Updated Section XIV "Description of Dangerous Wastes" • Updated photo of the WTP Construction Site • Updated facility map 				
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: 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 ¹ 1 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."				

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 '1, if applicable.

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24590-WTP-PCN-ENV-08-008

<p>Modification Approved: <input type="checkbox"/> Yes <input type="checkbox"/> No (state reason for denial) <u>Reason for denial:</u></p>	<p>Reviewed by Ecology:</p> <hr/> <p>B. Becker-Khaleel Date</p>
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VI. Facility contact (Person to be contacted regarding waste activities at facility)													
Name (last)						(first)							
Olinger						Shirley							
Job Title						Phone Number (area code and number)							
Manager						(509) 372-3062							
Contact Address													
Street or P.O. Box													
P.O. Box 450													
City or Town						State		ZIP Code					
Richland						WA		99352					
VII. Facility Operator Information													
A. Name						Phone Number (area code and number)							
Department of Energy Owner/Operator Bechtel National, Inc. Co-Operator for WTP*						(509) 372-3062 (509) 371-2335*							
Street or P.O. Box													
P.O. Box 450 2435 Stevens Center Place *													
City or Town						State		ZIP Code					
Richland						WA		99352 99354*					
B. Operator Type		F											
C. Does the name in VII.A reflect a proposed change in operator?						<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
If yes, provide the scheduled date for the change:						Month		Day		Year			
D. Is the name listed in VII.A. also the owner? If yes, skip to Section VIII.C.						<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
VIII. Facility Owner Information													
A. Name						Phone Number (area code and number)							
Shirley J. Olinger, Operator/Facility-Property Owner						(509) 372-3062							
Street or P.O. Box													
P.O. Box 450													
City or Town						State		ZIP Code					
Richland						WA		99352					
B. Owner Type		F											
C. Does the name in VIII.A reflect a proposed change in owner?						<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
If yes, provide the scheduled date for the change:						Month		Day		Year			
IX. NAICS Codes (5/6 digit codes)													
A. First						B. Second							
5	6	2	2	1		Waste Treatment & Disposal	9	2	4	1	1	0	Administration of Air & Water Resource & Solid Waste Management Programs
C. Third						D. Fourth							
5	4	1	7	1		Research & Development in the Physical, Engineering, & Life Sciences							

X. Other Environmental Permits (see instructions)														
A. Permit Type		B. Permit Number										C. Description		
E		A	I	R	-	0	7	-	6	0	1		WAC 246-247, NOC Approval Radioactive Air	
E		A	I	R	-	0	6	-	4	0	1		WAC 246-247, NOC Approval Radioactive Air	
E		A	I	R	-	0	6	-	4	0	2		WAC 246-247, NOC Approval Radioactive Air	
E		A	I	R	-	0	6	-	4	0	4		WAC 246-247, NOC Approval Radioactive Air	
E		A	I	R	-	0	6	-	1	0	3	2	WAC 246-247, NOC Approval Radioactive Air	
E		E	P	A		A	p	p	r	o	v	a	1	40 CFR 61, NOC Approval Radioactive Air
E		D	E	0	1	N	W	P	-	0	0	3		WAC 173-400/-460, Non-Radioactive Air Approval
E		D	E	0	2	N	W	P	-	0	0	2		WAC 173-400/-460, Non-Radioactive Air Approval
E		D	E	0	7	N	W	P	-	0	0	4		WAC 173-400/-460, Non-Radioactive Air Approval
P		P	S	D	-	0	2	-	0	1				WAC 173-400 Prevention of Significant Deterioration
E		W	A	G	-	5	0	-	5	1	8	0		WAC 173-220/-216, Sand and Gravel General Permit
E		W	A	G	-	5	0	-	5	1	8	1		WAC 173-220/-216, Sand and Gravel General Permit
E		H	A	N	0	9	9							WAC 246-272, Large On-Site Sewage Systems

XI. Nature of Business (provide a brief description that includes both dangerous waste and non-dangerous waste areas and activities)

Treatment by vitrification of radioactive dangerous waste.

Process Codes

- S01 = Storage in containers
- S02 = Tank storage
- S06 = Containment building storage
- T01 = Tank treatment
- T04 = Other treatment (vitrification)
- T94 = Containment Building Treatment

Footnotes From Section XIV

*Waste codes for ignitability (D001) and reactivity (D003) apply only to the waste while it is in the pretreatment facility LAW feed receipt FRP vessels and the HLW feed receipt vessel. Downstream of these vessels, the D001 and D003 waste codes are administratively removed from the project's waste streams.

** F039 is a multisource leachate included as a waste derived from non-specific source wastes F001 through F005

EXAMPLE FOR COMPLETING ITEMS XII and XIII (shown in lines numbered X-1, X-2, and X-3 below): A facility has two storage tanks that hold 1200 gallons and 400 gallons respectively. There is also treatment in tanks at 20 gallons/hr. Finally, a one-quarter acre area that is two meters deep will undergo *in situ vitrification*.

Section XII. Process Codes and Design Capacities							Section XIII. Other Process Codes							
Line Number	A. Process Codes (enter code)			B. Process Design Capacity		C. Process Total Number of Units	Line Number	A. Process Codes (enter code)			B. Process Design Capacity		C. Process Total Number of Units	D. Process Description
				1. Amount	2. Unit of Measure (enter code)						1. Amount	2. Unit of Measure (enter code)		
X 1	S	0	2	1,600	G	002	X 1	T	0	4	700	C	001	In situ vitrification
X 2	T	0	3	20	E	001								
X 3	T	0	4	700	C	001								
1	S	0	1	1,089,000	G		1							
2	S	0	2	5,276,000	G		2							
3	T	0	1	9,000	U		3							
4	T	0	4	21,000	U		4							
5	T	9	4	1,000	U		5							
6	S	0	6	712	C		6							
7							7							
8							8							
9							9							
1 0							1 0							
1 1							1 1							
1 2							1 2							
1 3							1 3							
1 4							1 4							
1 5							1 5							
1 6							1 6							
1 7							1 7							
1 8							1 8							
1 9							1 9							
2 0							2 0							
2 1							2 1							
2 2							2 2							
2 3							2 3							
2 4							2 4							
2 5							2 5							
2 6							2 6							

XIV. Description of Dangerous Wastes

Example for completing this section: A facility will receive three non-listed wastes, then store and treat them on-site. Two wastes are corrosive only, with the facility receiving and storing the wastes in containers. There will be about 200 pounds per year of each of these two wastes, which will be neutralized in a tank. The other waste is corrosive and ignitable and will be neutralized then blended into hazardous waste fuel. There will be about 100 pounds per year of that waste, which will be received in bulk and put into tanks.

Line Number	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes												
	(1) Process Codes (enter)		(2) Process Description [If a code is not entered in D (1)]																
X 1	D	0	0	2	400	P	S	0	1	T	0	1							
X 2	D	0	0	1	100	P	S	0	2	T	0	1							
X 3	D	0	0	2															Included with above
	1	D	0	0	1*	16,300	T	S	0	2									
	2	D	0	0	2		T	S	0	2	T	0	1						
	3	D	0	0	3*		T	S	0	2									
	4	D	0	0	4		T	S	0	2	T	0	1						
	5	D	0	0	5		T												Included with above
	6	D	0	0	6		T												Included with above
	7	D	0	0	7		T												Included with above
	8	D	0	0	8		T												Included with above
	9	D	0	0	9		T												Included with above
	1 0	D	0	1	0		T												Included with above
	1 1	D	0	1	1		T												Included with above
	1 2	D	0	1	8		T												Included with above
	1 3	D	0	1	9		T												Included with above
	1 4	D	0	2	2		T												Included with above
	1 5	D	0	2	8		T												Included with above
	1 6	D	0	2	9		T												Included with above
	1 7	D	0	3	0		T												Included with above
	1 8	D	0	3	3		T												Included with above
	1 9	D	0	3	4		T												Included with above
	2 0	D	0	3	5		T												Included with above
	2 1	D	0	3	6		T												Included with above
	2 2	D	0	3	8		T												Included with above
	2 3	D	0	3	9		T												Included with above
	2 4	D	0	4	0		T												Included with above
	2 5	D	0	4	1		T												Included with above

EPA/State ID Number	W	A	7	8	9	0	0	0	8	9	6	7
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Continuation of Section XIV. Description of Dangerous Waste

Line Number	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Process									
	(1) Process Codes (enter)						(2) Process Description [If a code is not entered in D (1)]									
6 0	D	0	4	3		T									Included with above	
6 1	W	T	0	1		T									Included with above	
6 2	W	T	0	2		T									Included with above	
6 3	W	P	0	1		T									Included with above	
6 4	W	P	0	2		T									Included with above	
6 5	F	0	0	1		T									Included with above	
6 6	F	0	0	2		T									Included with above	
6 7	F	0	0	3		T									Included with above	
6 8	F	0	0	4		T									Included with above	
6 9	F	0	0	5		T									Included with above	
7 0	F	0	3	9**		T									Included with above	
7 1	D	0	0	2	5,100	T	S	0	1	T	9	4	S	0	6	Treatment & storage of secondary waste other than ILAW containers and IHLW canisters
7 2	D	0	0	4		T										Included with above
7 3	D	0	0	5		T										Included with above
7 4	D	0	0	6		T										Included with above
7 5	D	0	0	7		T										Included with above
7 6	D	0	0	8		T										Included with above
7 7	D	0	0	9		T										Included with above
7 8	D	0	1	0		T										Included with above
7 9	D	0	1	1		T										Included with above
8 0	D	0	1	8		T										Included with above
8 1	D	0	1	9		T										Included with above
8 2	D	0	2	2		T										Included with above
8 3	D	0	2	8		T										Included with above
8 4	D	0	2	9		T										Included with above
8 5	D	0	3	0		T										Included with above
8 6	D	0	3	3		T										Included with above
8 7	D	0	3	4		T										Included with above
8 8	D	0	3	5		T										Included with above
8 9	D	0	3	6		T										Included with above
9 0	D	0	3	8		T										Included with above
9 1	D	0	3	9**		T										Included with above
9 2	D	0	4	0		T										Included with above
9 3	D	0	4	1		T										Included with above

XV. Map

Attach to this application a topographic map of the area extending to at least one (1) mile beyond property boundaries. The map must show the outline of the facility; the location of each of its existing and proposed intake and discharge structures; each of its dangerous waste treatment, storage, recycling, or disposal units; and each well where fluids are injected underground. Include all springs, rivers, and other surface water bodies in this map area, plus drinking water wells listed in public records or otherwise known to the applicant within ¼ mile of the facility property boundary. The instructions provide additional information on meeting these requirements.

Topographic map is located in the Ecology Library.

XVI. Facility Drawing

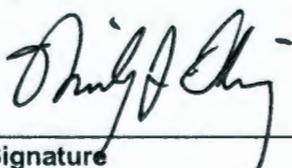
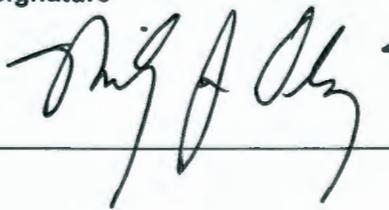
All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, recycling, and disposal areas; and sites of future storage, treatment, recycling, or disposal areas (refer to Instructions for more detail).

XVIII. Certifications

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.

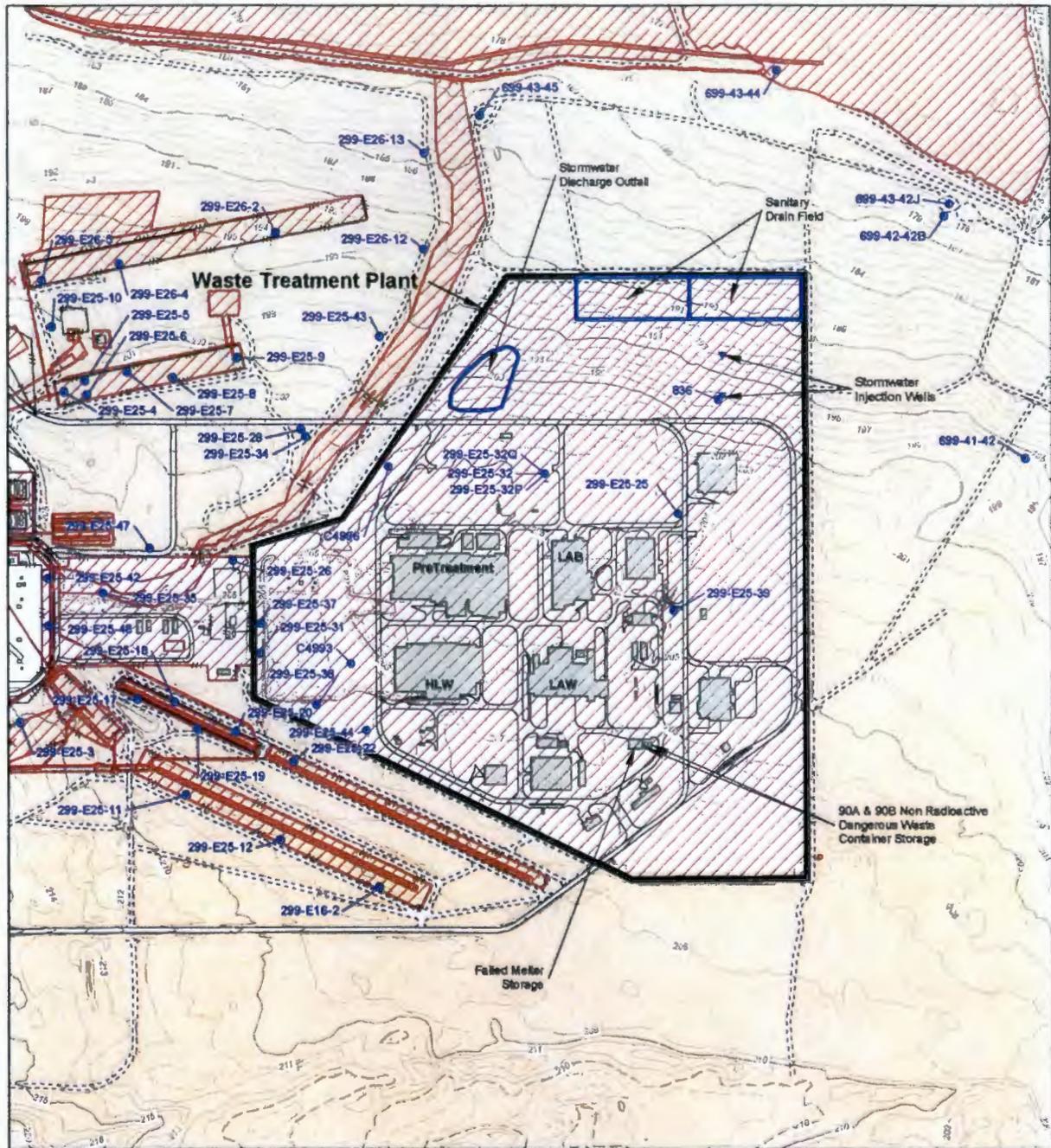
<p>Operator Name and Official Title (type or print) Shirley J. Olinger, Manager U.S. Department of Energy Office of River Protection</p>	<p>Signature </p>	<p>Date Signed 9/30/08</p>
<p>Co-Operator* Name and Official Title (type or print) W.S. Elkins Project Director Bechtel National, Inc.</p>	<p>Signature </p>	<p>Date Signed 9/23/08</p>
<p>Co-Operator* – Address and Telephone Number 2435 Stevens Center Place Richland, WA 99352 (509) 371-2335</p>		
<p>Facility-Property Owner Name and Official Title (type or print) Shirley J. Olinger, Manager U.S. Department of Energy Office of River Protection</p>	<p>Signature </p>	<p>Date Signed 9/30/08</p>

Comments

[Empty comment box]

Waste Treatment and Immobilization Plant





Waste Treatment Plant

Hanford Site



Unit Location

Prepared for:
 US DEPARTMENT OF ENERGY
 RICHLAND OPERATIONS OFFICE
 Created and Published by:
 Central Mapping Services
 Fluor Hanford, Richland, WA
 (509) 373-9076
 Intended Use: REFERENCE ONLY
 Topographic Data:
 1996, Bechtel Hanford, Inc.

- TSD Unit Boundary
- DOE Operating Areas
- Hanford Facility
- Injection and Withdrawal Wells
- Contours at 1 Meter Intervals
- Depression Contours
- SWMUs and Known Releases
- Linear SWMUs and Known Releases
- Spot SWMUs and Known Releases
- Buildings
- Structures
- Concrete
- Major Roads
- Service Roads
- Railroads
- Fences



O:\Projects\2005VRCRA_TSD\050614_2ndPriorityFacilityTops\2005_Thompson\Maps\060531_WTP_LineDwg_85x11_Rev8.mxd - 8/28/2008 @ 3:49:42 PM