



**Department of Energy**  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

16-ESQ-0029

JAN 28 2016

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

Dear Ms. Hedges:

RESPONSE TO WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOLOGY)  
REQUEST FOR A REVISED AND CERTIFIED DANGEROUS WASTE PERMIT  
APPLICATION PART A FORM FOR THE 207-A SOUTH RETENTION BASIN

Enclosed is the certified Dangerous Waste Permit Application Part A for the 207-A South Retention Basin, Revision 5 that was requested by Debra Alexander of your staff on January 5, 2016. It is our understanding the changes were requested to support Ecology's public review of the draft permit conditions for incorporating the unit into Part V (Closure Units) of the Hanford Site Resource Conservation and Recovery Act of 1976 Permit. If you have any questions, please contact me, or your staff may contact Jeffrey A. Frey, Assistant Manager for Safety and Environment, on (509) 376-7727.

Sincerely,

A handwritten signature in cursive script that reads "Stacy Charboneau".

Stacy Charboneau  
Manager

ESQ:ACM

Enclosure

cc: See page 2

Ms. J. A. Hedges  
16-ESQ-0029

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cc w/encl:

D. J. Alexander, Ecology

J. W. Cammann, MSA

J. L. Cantu, Ecology

J. A. Ciucci, CHPRC

D. A. Faulk, EPA

M. N. Jaraysi, CHPRC

J. B. Price, Ecology

D. G. Singleton, Ecology

R. R. Skinnerland, Ecology

J. F. Williams Jr, CHPRC

Ecology Environmental Portal Hanford

Ecology NWP Library

Environmental Portal, LMSI, A3-95

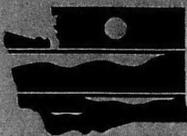
Administrative Record, S-2-7

HF Operating Record (J. K. Perry, MSA A3-01)

ENCLOSURE

207-A SOUTH RETENTION BASIN  
DANGEROUS WASTE PERMIT APPLICATION PART A FORM

Consisting of 11 pages,  
Including this cover page

 <b>WASHINGTON STATE DEPARTMENT OF E C O L O G Y</b>		<b>Dangerous Waste Permit Application Part A Form</b>											
		Date Received		Reviewed by:				Date:					
Month		Day		Year		Approved by:				Date:			
<b>I. This form is submitted to: (place an "X" in the appropriate box)</b>													
<input checked="" type="checkbox"/>	Request modification to a final status permit (commonly called a "Part B" permit)												
<input type="checkbox"/>	Request a change under interim status												
<input type="checkbox"/>	Apply for a final status permit. This includes the application for the initial final status permit for a site or for a permit renewal (i.e., a new permit to replace an expiring permit).												
<input type="checkbox"/>	Establish interim status because of the wastes newly regulated on:									(Date)			
List waste codes:													
<b>II. EPA/State ID Number</b>													
W	A	7	8	9	0	0	0	8	9	6	7		
<b>III. Name of Facility</b>													
US Department of Energy - Hanford Facility													
<b>IV. Facility Location (Physical address not P.O. Box or Route Number)</b>													
<b>A. Street</b>													
825 Jadwin													
City or Town						State		ZIP Code					
Richland						WA		99352					
County Code (if known)			County Name										
0 0 5			Benton										
<b>B. Land Type</b>	<b>C. Geographic Location</b>					<b>D. Facility Existence Date</b>							
	Latitude (degrees, mins, secs)					Longitude (degrees, mins, secs)			Month		Day	Year	
F	Refer to TOPO Map (Section XV.)					1	1	1	9	1	9	8	0
<b>V. Facility Mailing Address</b>													
<b>Street or P.O. Box</b>													
P.O. Box 550													
City or Town						State		ZIP Code					
Richland						WA		99352					

<b>VI. Facility contact (Person to be contacted regarding waste activities at facility)</b>												
<b>Name (last)</b>						<b>(first)</b>						
Charboneau						Stacy						
<b>Job Title</b>						<b>Phone Number (area code and number)</b>						
Manager						(509) 376-7395						
<b>Contact Address</b>												
<b>Street or P.O. Box</b>												
P.O. Box 550												
<b>City or Town</b>						<b>State</b>			<b>ZIP Code</b>			
Richland						WA			99352			
<b>VII. Facility Operator Information</b>												
<b>A. Name</b>									<b>Phone Number</b>			
Department of Energy Owner/Operator									(509) 376-7395			
<b>Street or P.O. Box</b>												
P.O. Box 550												
<b>City or Town</b>						<b>State</b>			<b>ZIP Code</b>			
Richland						WA			99352			
<b>B. Operator Type</b>		F										
<b>C. Does the name in VII.A reflect a proposed change in operator?</b>							<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
If yes, provide the scheduled date for the change:							<b>Month</b>		<b>Day</b>		<b>Year</b>	
<b>D. Is the name listed in VII.A. also the owner? If yes, skip to Section VIII.C.</b>									<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>VIII. Facility Owner Information</b>												
<b>A. Name</b>						<b>Phone Number (area code and number)</b>						
Department of Energy, Operator/Facility-Property Owner						(509) 376-7395						
<b>Street or P.O. Box</b>												
P.O. Box 550												
<b>City or Town</b>						<b>State</b>			<b>ZIP Code</b>			
Richland						WA			99352			
<b>B. Owner Type</b>		F										
<b>C. Does the name in VII.A reflect a proposed change in operator?</b>							<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
If yes, provide the scheduled date for the change:							<b>Month</b>		<b>Day</b>		<b>Year</b>	
<b>IX. NAICS Codes (5/6 digit codes)</b>												
<b>A. First</b>						<b>B. Second</b>						
5	6	2	2	1	1	9	2	4	1	1	0	Administration of Air & Water Resource & Solid Waste Management Programs
<b>C. Third</b>						<b>D. Fourth</b>						
5	4	1	7	1	2							Research & Development in the Physical, Engineering, & Life Sciences

<b>X. Other Environmental Permits (see instructions)</b>												
<b>A. Permit Type</b>			<b>B. Permit Number</b>							<b>C. Description</b>		
												None

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

The 207-A South Retention Basin (SRB), also known as the Process Condensate (PC) Basins 1, 2, and 3 (i.e., PC-1, PC-2, and PC-3), began operation in March 1977. The 207-A SRB consists of three concrete cells (S04), each with a 264,979 liters (L) (70,000 gal) design capacity for a total capacity of 794,937 L (210,000 gal). All three cells were coated to prevent constituents from penetrating the concrete. The 207-A SRB was used for interim storage of the 242-A Evaporator PC to allow for sampling and analysis before the condensate was discharged to the 216-A-37-1 Crib for final disposition. Discharge of 242-A Evaporator PC to the 207-A SRB was terminated on April 12, 1989, when it was determined that the 242-A Evaporator PC contained mixed waste regulated under WAC 173-303, "Dangerous Waste Regulations." The 207-A SRB no longer receives or stores mixed waste. The Treatment, Storage, and/or Disposal unit boundary was established as the exterior wall of the concrete basin structure.

The 242-A Evaporator PC is regulated as mixed waste because it is derived from a waste containing spent halogenated and nonhalogenated solvents (F001, F002, F003, F004, and F005), and for the toxicity of ammonia (WT02, state only toxic dangerous waste). The estimated total quantity of dangerous waste received by the 207-A SRB was 377,000,000 L (99,590,000 gal). The PC had a specific gravity of 1.0.

**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.	2.	3.	1. Amount	2. Unit of Measure (enter code)			1.	2.	3.	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	4	794,937	L	003	1							
2							2							
3							3							
4							4							
5							5							
6							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							

**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 F 0 0 1	31,200,000	L	S	0	4									
	2 F 0 0 2		L	S	0	4									
	3 F 0 0 3		L	S	0	4									
	4 F 0 0 4		L	S	0	4									
	5 F 0 0 5		L	S	0	4									
	6 W T 0 2		L	S	0	4									
	7														
	8														
	9														
	1 0														
	1 1														
	1 2														
	1 3														
	1 4														
	1 5														
	1 6														
	1 7														
	1 8														
	1 9														
	2 0														
	2 1														
	2 2														
	2 3														
	2 4														
	2 5														

**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**

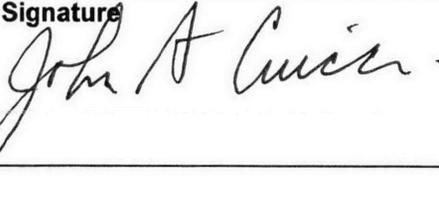
All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

**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><b>Operator</b> Name and Official Title (type or print) Stacy L. Charboneau, Manager U.S. Department of Energy Richland Operations Office</p>	<p><b>Signature</b> </p>	<p><b>Date Signed</b> 1/28/16</p>
<p><b>Co-Operator</b> Name and Official Title (type or print) John A. Ciucci President and Chief Executive Officer CH2M HILL Plateau Remediation Company</p>	<p><b>Signature</b> </p>	<p><b>Date Signed</b> 1/7/16</p>
<p><b>Co-Operator – Address and Telephone Number</b> P.O. Box 1600 Richland, WA 99352 (509) 376-0556</p>		
<p><b>Facility-Property Owner</b> Name and Official Title (type or print) Stacy L. Charboneau, Manager U.S. Department of Energy Richland Operations Office</p>	<p><b>Signature</b> </p>	<p><b>Date Signed</b> 1/28/16</p>

**Comments**

In Section XIV.B., the total volume of waste for the 242-A Evaporator PC (inclusive of all waste codes), which was temporarily stored at the 207-A SRB, was 377,000,000 L (99,590,000 gal). The specific gravity of the waste was 1.0. The 207-A SRB received waste from March 1977 through April 1989, a duration of 12.084 years. The waste volume listed is the total amount stored by the 207-A SRB divided by the number of years that the 207-A SRB operated. The presumption is that the same amount of waste was stored temporarily at the 207-A SRB for each year of operation.

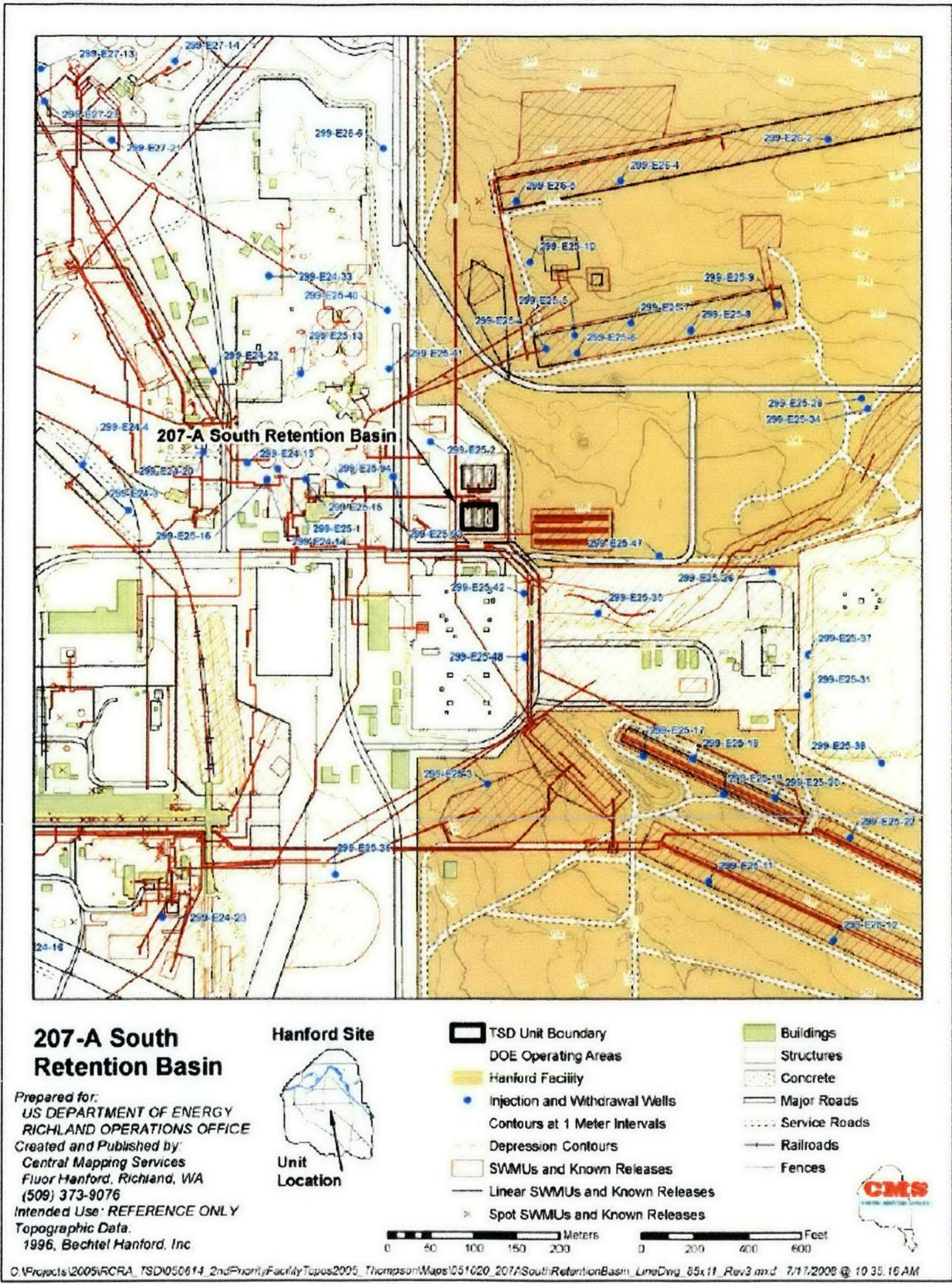
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207-A South Retention Basin (200 East Area)

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(July 2015 Photo)



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