



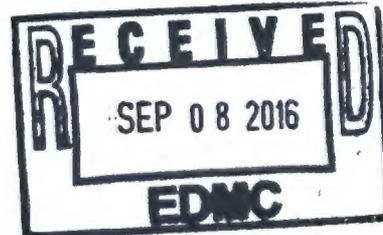
Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

1240090
[0075224H]

16-ESQ-0128

SEP 02 2016

Ms. Alexandra Smith, Program Manager
Nuclear Waste Program
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354



Dear Ms. Smith:

TRANSFER OF OPERATIONAL RESPONSIBILITY OF THE 1301-N LIQUID WASTE DISPOSAL FACILITY, 1324-N SURFACE IMPOUNDMENT AND 1324-NA PERCOLATION POND, AND 1325-N LIQUID WASTE DISPOSAL FACILITY; SUBMITTAL OF ASSOCIATED HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT (HF RCRA) PERMIT CLASS I PERMIT MODIFICATIONS

The purpose of this letter is to notify the Washington State Department of Ecology (Ecology) that the U.S. Department of Energy (DOE) Richland Operations Office (RL) will transfer co-operator responsibilities for the subject facilities from Washington Closure Hanford LLC to CH2M HILL Plateau Remediation Company (CHPRC), effective August 29, 2016. Documentation provided is consistent with documentation provided for the 2015 transfer of co-operator responsibilities for the Liquid Effluent Retention Facility/Effluent Treatment Facility from CHPRC to Washington River Protection Solutions LLC.

As requested by Ecology, a transfer agreement signed by WCH, CHPRC and RL is provided with this letter (Attachment 1).

As allowed under the HF RCRA Permit, Permit Condition I.E.14, "Transfer of Permits," certified Part A applications (Attachment 2) and accompanying permit modification documentation to transfer operational responsibilities for the subject facilities are attached for Ecology's approval (i.e., signature approvals are requested on the Permit Change Notice forms and also on the revised Part A Forms). DOE will maintain owner and operator responsibilities for the facilities, therefore this transfer is exempt from WAC 173-303-620, "Financial Requirements."

DOE and Ecology use permit change notices (PCNs) to help track and process Class 1 permit modifications. This modification package addresses the following PCNs:

D-1-2 T-1-2

Ms. Alexandra Smith
16-ESQ-0128

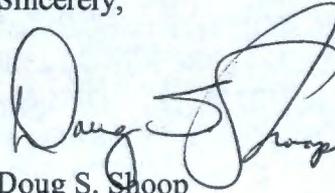
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SEP 02 2016

<u>PCN Identifier:</u>	<u>Affected Permit Section</u>
PCN-1301-2016-01	1301-N Liquid Waste Disposal Facility (CUG-2) Conditions and Chapter 1.0 (Part A Form)
PCN-1324-2016-01	1324-N Impoundment & 1324-NA Percolation Pond (CUG-3) Conditions and Chapter 1.0 (Part A Forms)
PCN-1325-2016-01	1325-N Liquid Waste Disposal Facility (CUG-1) Conditions and Chapter 1.0 (Part A Form)

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,



Doug S. Shoop
Manager

ESQ:ACM

Attachments

cc w/attachments:

Jennifer L. Cantu, Ecology (CD ROM)

Robert G. Hastings, ORP (CD ROM)

Administrative Record, TSD: D-1-2 and T-1-2 (Hard Copy & CD ROM)

Ecology NWP Library (Hardcopy & CD ROM)

Environmental Portal, LMSI, G3-30 (CD ROM)

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

cc w/o attachments:

Debra J. Alexander, Ecology

Annette S. Carlson, Ecology

Lorin N. Clements, CHPRC

Laura J. Cusack, CHPRC

Susanne L. Dahl, Ecology

Karl A. Hadley, WCH

Mandy E. Jones, Ecology

Paul W. Martin, CHPRC

Steven Murdock, BNI

Ron R. Skinnarland, Ecology

Suzette A. Thompson, WRPS

Michael B. Wilson, MSA

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CHAPTER 1.0
PART A FORM

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 WASHINGTON STATE DEPARTMENT OF ECOLOGY		Dangerous Waste Permit Application Part A Form		
Date Received		Reviewed by:		
Month	Day	Year	Date:	
Approved by:		Date:		
I. This form is submitted to: (place an "X" in the appropriate box)				
<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:				
II. EPA/State ID Number				
W	A	7	8	
9	0	0	0	
8	9	6	7	
III. Name of Facility				
US Department of Energy - Hanford Facility				
IV. Facility Location (Physical address not P.O. Box or Route Number)				
A. Street				
825 Jadwin				
City or Town		State	ZIP Code	
Richland		WA	99352	
County Code (if known)	County Name			
0	0	5	Benton	
B. Land Type	C. Geographic Location		D. Facility Existence Date	
	Latitude (degrees, mins, secs)		Longitude (degrees, mins, secs)	
F	S	E	E	T
O	P	O	M	A
P	O	M	A	P
0	3	2	2	1
9	4	3	3	3
V. Facility Mailing Address				
Street or P.O. Box				
P.O. Box 550				
City or Town		State	ZIP Code	
Richland		WA	99352	

1

VI. Facility contact (Person to be contacted regarding waste activities at facility)											
Name (last)						(first)					
Shoop						Doug S					
Job Title						Phone Number (area code and number)					
Manager						(509) 376-7395*					
Contact Address											
Street or P.O. Box											
P.O. Box 550											
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 CH2MHill Plateau Remediation Company** Co-Operator for 1301-N Liquid Waste Disposal Facility						(509) 376-7395* (509) 373-0293**					
Street or P.O. Box											
P.O. Box 550 *											
2420 Stevens Center Place, P.O Box 1600 **											
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)					
Doug S Shoop, Operator/Facility-Property Owner*						(509) 376-7395*					
Street or P.O. Box											
P.O. Box 550											
City or Town						State		ZIP Code			
Richland						WA		99352			
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	
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					

9	9	9	9	9	9	Unclassified Establishments	5	6	2	9	1	0	Remediation Services
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X. Other Environmental Permits (see instructions)

A. Permit Type	B. Permit Number												C. Description	
														None

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

The 1301-N Liquid Waste Disposal Facility (LWDF) was used for the disposal of liquid waste from N reactor. The waste consisted of waste from nonspecific sources and listed waste (F003), toxicity characteristic waste (D006, D007, D008, and D009), characteristic waste (D002), and state-only toxic waste (WT02).

D83

The 1301-N LWDF was used from 1963 to September 1985. The 1301-N LWDF received mixed waste process and cooling waste water from N Reactor. The 1301-N LWDF also received dangerous waste generated from laboratories, and may have received waste from spills within the N Reactor Building, which were discharged through the mixed waste drain system. The dangerous waste discharges consisted of less than 0.002% of the total volume of the waste discharged to the 1301-N LWDF. The 1301-N LWDF was a percolation unit designed for the disposal of liquid waste through the soil column. The process design capacity for the 1301-N LWDF was 16,352,900 liters (4,320,000 gallons) a day. The process design capacity reflects the maximum volume of water discharged on a daily basis rather than the physical capacity of the unit. The influent pipes up to the face of the 105-N building facility are considered to be included within the treatment, storage, and disposal unit boundary.

Certain closure activities, including excavation, sampling, backfilling, and revegetation where required, have been completed. Unit group closure activities have been integrated with the CERCLA remedial action contained in the 100 NR-1 Operable Unit Interim Action Record of Decision.

Figures 1 and 2 show the current ground surface and relationship of the ground surface to the removed structure via well orientation.

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	D	8	3	4,320,000	U	001	1							
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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	3	6,200	P	D	8	3										Includes Debris
	2	D	0	0	2	20,600	P	D	8	3										Includes Debris
	3	D	0	0	6	100	P	D	8	3										Includes Debris
	4	D	0	0	7	10,000	P	D	8	3										Includes Debris
	5	D	0	0	8	150	P	D	8	3										Includes Debris
	6	D	0	0	9	6,200	P	D	8	3										Includes Debris
	7	W	T	0	2	15,000	P	D	8	3										Includes Debris
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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.

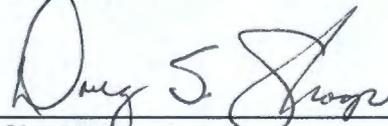
XVI. Facility Drawing
All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

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).

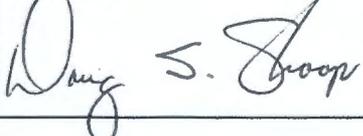
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XVIII. Certifications

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.

Operator*	Signature	Date Signed
Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office		9/2/14
Co-Operator** Name and Official Title (type or print) John A. Ciucci President CH2MHill Plateau Remediation Company	Signature 	Date Signed 8/25/16

Co-Operator – Address and Telephone Number**
2420 Stevens Center Place
Richland, WA 99354
(509) 373-0293

Facility-Property Owner*	Signature	Date Signed
Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office		9/2/14

2

Comments

On December 27, 2000, Ecology granted a contained-in determination for F003 (methanol) contaminated soil and debris for the 1301-N Liquid Waste Disposal Facility.

This document has been revised from Revision 8 to Revision 9 because of a change in the Co-Operator, which necessitated an addition to Section XI, Nature of Business. Figures 1 and 2 were added to show the ground surface as it existed on August 3, 2016.

1301-N Liquid Waste Disposal Facility

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CRIB OUTFALL

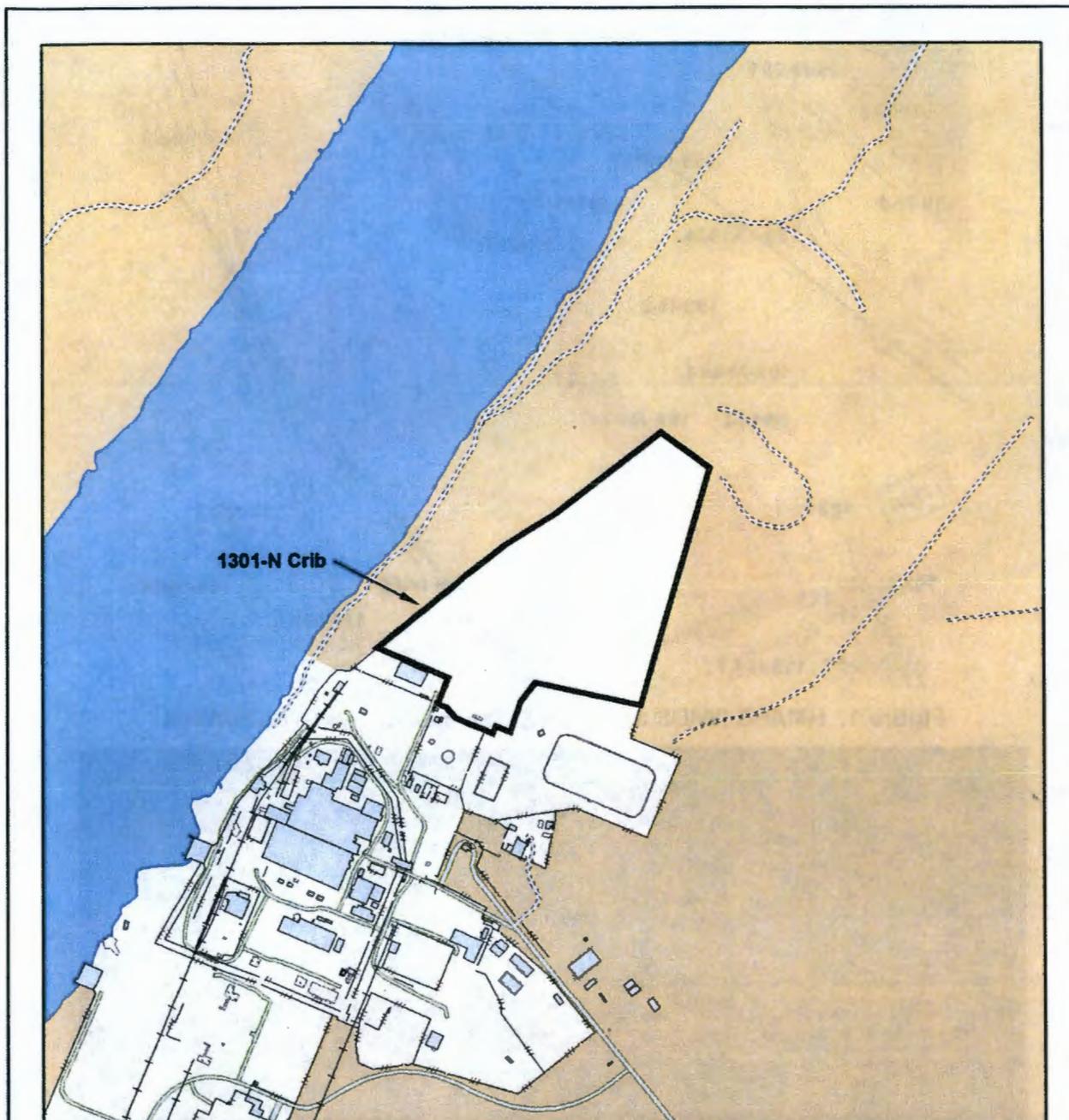
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(PHOTO TAKEN 1986)



TRENCH CONCRETE COVER

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(PHOTO TAKEN 1986)

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1301-N Crib

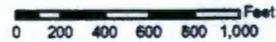
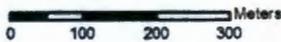
Prepared for:
 US DEPARTMENT OF ENERGY
 RICHLAND OPERATIONS OFFICE



Created and Published by: Central Mapping Services
 Fluor Hanford, Richland, WA (509) 376-8759

INTENDED USE: REFERENCE ONLY

- | | |
|---------------------|-----------------------|
| TSD Unit Boundary | Buildings and Mobiles |
| DOE Operating Areas | Major Hanford Routes |
| Hanford Facility | Local Hanford Roads |
| Columbia River | Minor Roads |
| Structures | Railroads |
| Concrete | Fences |



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**CHAPTER 1.0
PART A FORM**

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		WASHINGTON STATE DEPARTMENT OF E C O L O G Y		Dangerous Waste Permit Application Part A Form																							
Date Received				Reviewed by:								Date:															
Month	Day	Year		Approved by:								Date:															
				Please refer to instructions for completing this form.																							
I. This form is submitted to: (place an "X" in the appropriate box)																											
<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:																											
II. EPA/State ID Number																											
W	A	7	8	9	0	0	0	8	9	6	7																
III. Name of Facility																											
US Department of Energy - Hanford Facility																											
IV. Facility Location (Physical address not P.O. Box or Route Number)																											
A. Street																											
825 Jadwin																											
City or Town												State				ZIP Code											
Richland												WA				99352											
County Code (if known)			County Name																								
0	0	5	Benton																								
B. Land Type		C. Geographic Location								D. Facility Existence Date																	
		Latitude (degrees, mins, secs)								Longitude (degrees, mins, secs)								Month		Day		Year					
F	S	E	E	T	O	P	O	M	A	P							0	3	2	2	1	9	4	3			
V. Facility Mailing Address																											
Street or P.O. Box																											
P.O. Box 550																											
City or Town												State				ZIP Code											
Richland												WA				99352											

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VI. Facility contact (Person to be contacted regarding waste activities at facility)												
Name (last)						(first)						
Shoop						Doug S						
Job Title						Phone Number (area code and number)						
Manager						(509) 376-7395*						
Contact Address												
Street or P.O. Box												
P.O. Box 550												
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 CH2MHill Plateau Remediation Company ** Co-Operator for 1324-N Surface Impoundment						(509) 376-7395* (509) 370-0293**						
Street or P.O. Box												
P.O. Box 550*												
2420 Stevens Center Place, P.O. Box 1600**												
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)						
Doug S Shoop, Operator/Facility-Property Owner*						(509) 376-7395*						
Street or P.O. Box												
P.O. Box 550												
City or Town						State		ZIP Code				
Richland						WA		99352				
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		
IX. NAICS Codes (5/6 digit codes)												
A. First						B. Second						
5	6	2	2	1		9	2	4	1	1	0	Administration of Air & Water Resource & Solid Waste Management Programs
C. Third						D. Fourth						
9	9	9	9	9	9	5	6	2	9	1	0	Remediation Services

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

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

The 1324-N Surface Impoundment was used to treat corrosive dangerous waste (D002) from the 163-N Demineralization Plant. The waste consisted of acidic and caustic backwashes from the regeneration of demineralizer columns. Approximately 1,500,000,000 pounds (680,338,600 kilograms) of waste were treated each year.

T02

The 1324-N Surface Impoundment is a lined pond with a treatment design capacity of 400,000 gallons (1,514,160 liters) per day. The impoundment was used to treat waste from the regeneration of demineralized columns. The waste exhibited the characteristics of corrosivity (D002). Successive additions to the pond of acidic and caustic waste served to neutralize the waste. The nonregulated neutralized waste was transferred to the 1324-NA Percolation Pond. The 1324-N Surface Impoundment no longer receives waste and will be closed under final status regulations (WAC 173-303-610).

Certain closure activities, including excavation, sampling, backfilling, and revegetation where required, have been completed. Unit group closure activities have been integrated with the CERCLA remedial action contained in the 100-NR-1 Operable Unit Interim Action Record of Decision.

Figures 1 and 2 show the current ground contour and relationship of the current ground contour to the removed structure via well orientation.

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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	T	0	2	400,000	U	001	1	D	8	3	400,000	U	001	
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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 2	1,500,000,000	P	T	0	2	D	8	3						Includes Debris
	2														
	3														
	4														
	5														
	6														
	7														
	8														
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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.

XVI. Facility Drawing

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

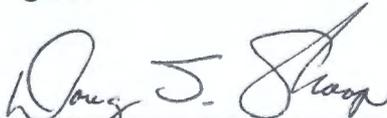
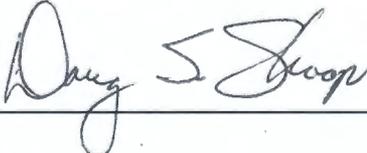
XVII. Photographs

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).

1

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) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office</p>	<p>Signature </p>	<p>Date Signed 9/2/16</p>
<p>Co-Operator** Name and Official Title (type or print) John A. Ciucci President. CH2MHill Plateau Remediation Company</p>	<p>Signature </p>	<p>Date Signed 8/25/16</p>
<p>Co-Operator** – Address and Telephone Number 2420 Stevens Center Place Richland, WA 99354 (509) 373-0293</p>		
<p>Facility-Property Owner* Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office</p>	<p>Signature </p>	<p>Date Signed 9/2/16</p>

2

Comments

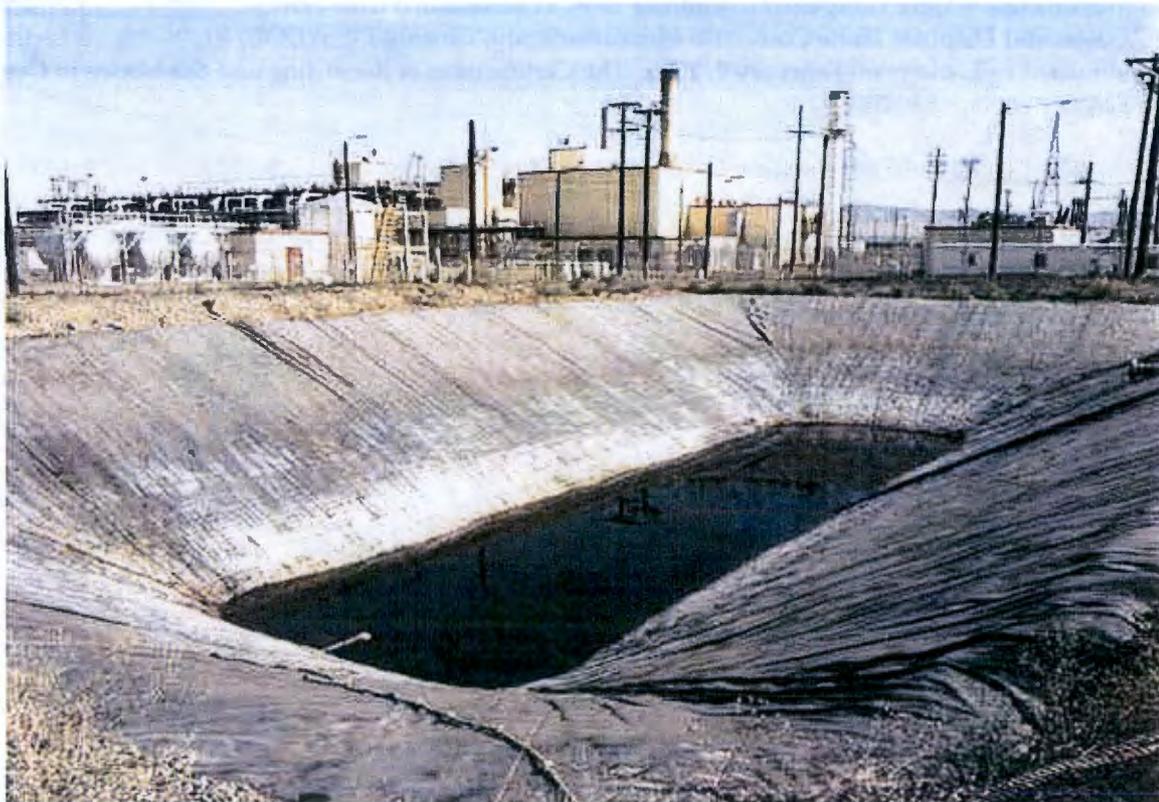
Closure activities at 1324-N were completed in January 2003, in accordance with WAC 173-303-610 and the approved Treatment, Storage, and Disposal Units Corrective Measures Study/Closure Plan (DOE/RL-96-39). A certification of closure was submitted to Ecology on February 7, 2003. The Certification of Recording and the Notice in Deed were submitted to Ecology on April 8, 2003.

The path forward for Ecology to approve the closure certification is specified in 16-NWP-122, dated July 15, 2016.

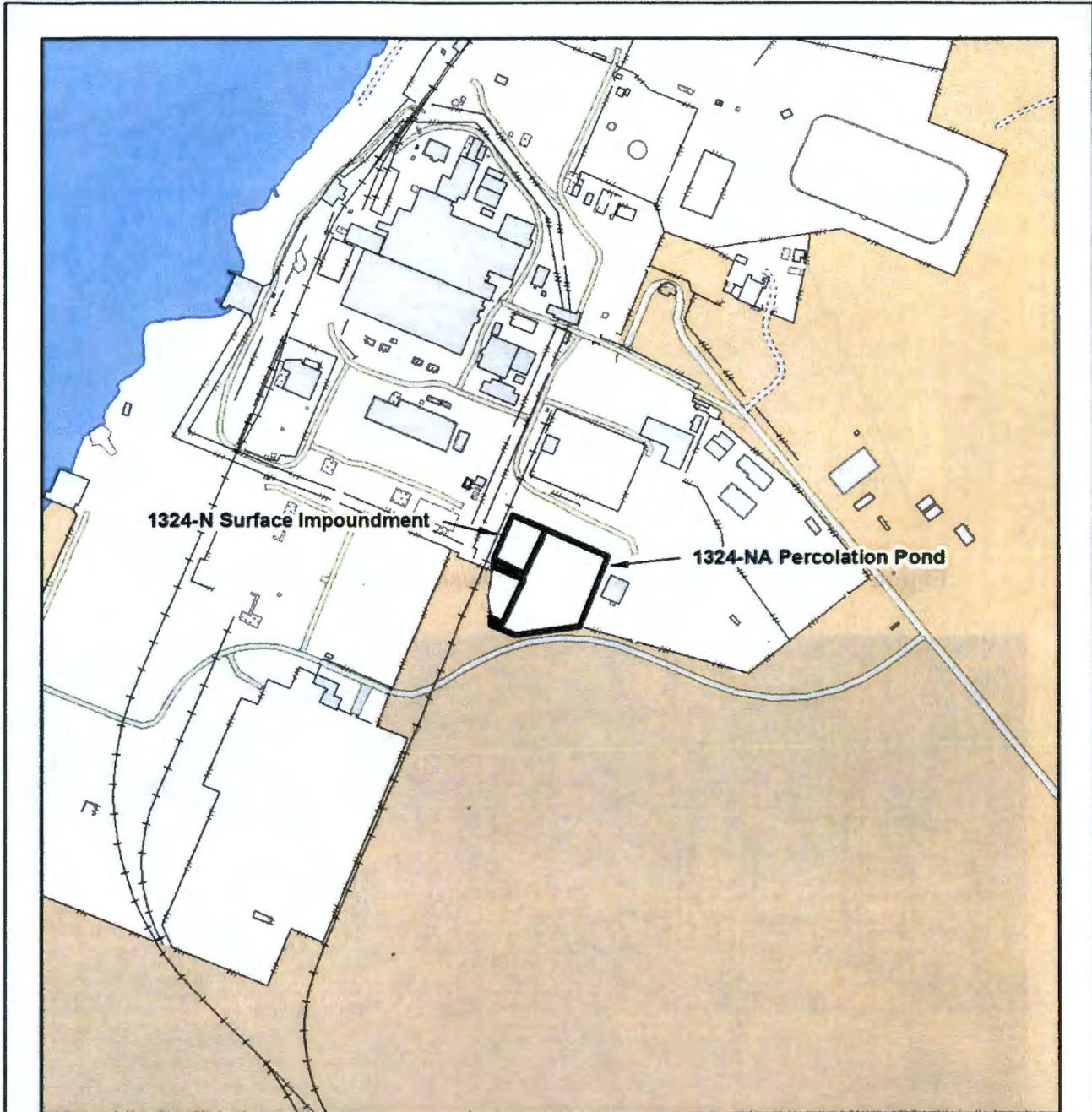
This document has been revised from Revision 4 to Revision 5 because of a change in the Co-Operator, which necessitated an addition to Section XI, Nature of Business. Figures 1 and 2 were added to show the ground contour as it existed on August 3, 2016.

1324-N Surface Impoundment

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94051304-3CN
(PHOTO TAKEN 1994)



**1324-N Surface Impoundment and
1324-NA Percolation Pond**

Prepared for:
US DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE



Created and Published by: Central Mapping Services
Fluor Hanford, Richland, WA (509) 376-8759

INTENDED USE: REFERENCE ONLY

- | | |
|---------------------|-----------------------|
| TSD Unit Boundary | Buildings and Mobiles |
| DOE Operating Areas | Major Hanford Routes |
| Hanford Facility | Local Hanford Roads |
| Columbia River | Minor Roads |
| Structures | Railroads |
| Concrete | Fences |



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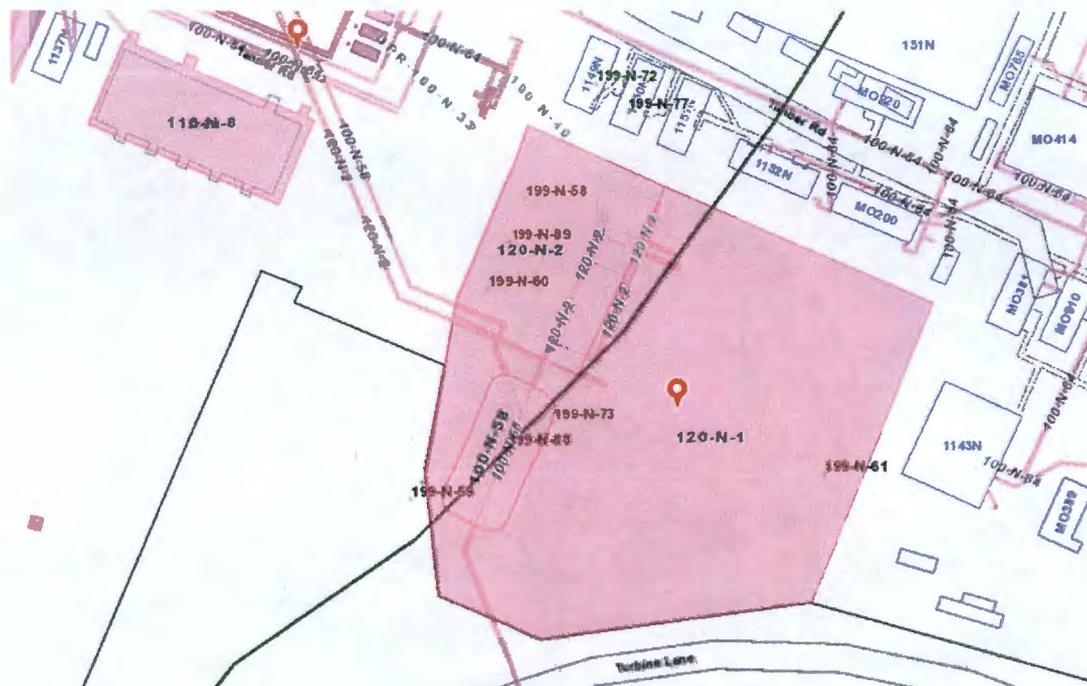


Figure 1. HMAPS (WIDS and Wells) Download: 1324-N and 1324-NA

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Figure 2. Looking East from Well A4704 (199-N-60)

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 WASHINGTON STATE DEPARTMENT OF E C O L O G Y		Dangerous Waste Permit Application Part A Form																
Date Received				Reviewed by:						Date:								
Month	Day	Year		Approved by:						Date:								
				Please refer to instructions for completing this form.														
I. This form is submitted to: (place an "X" in the appropriate box)																		
<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:																		
II. EPA/State ID Number																		
W	A	7	8	9	0	0	0	8	9	6	7							
III. Name of Facility																		
US Department of Energy - Hanford Facility																		
IV. Facility Location (Physical address not P.O. Box or Route Number)																		
A. Street																		
825 Jadwin																		
City or Town								State		ZIP Code								
Richland								WA		99352								
County Code (if known)		County Name																
0	0	5	Benton															
B. Land Type	C. Geographic Location						D. Facility Existence Date											
	Latitude (degrees, mins, secs)						Longitude (degrees, mins, secs)				Month		Day		Year			
F	S	E	E	T	O	P	O	M	A	P	0	3	2	2	1	9	4	3
V. Facility Mailing Address																		
Street or P.O. Box																		
P.O. Box 550																		
City or Town								State		ZIP Code								
Richland								WA		99352								

1

VI. Facility contact (Person to be contacted regarding waste activities at facility)											
Name (last)						(first)					
Shoop						Doug S					
Job Title						Phone Number (area code and number)					
Manager						(509) 376-7395*					
Contact Address											
Street or P.O. Box											
P.O. Box 550											
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 CH2MHill Plateau Remediation Company ** Co-Operator for 1324-NA Percolation Pond						(509) 376-7395* (509) 370-0293**					
Street or P.O. Box											
P.O. Box 550 * 2420 Stevens Center Place, P.O Box 1600 **											
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)					
Doug S Shoop, Operator / Facility-Property Owner*						(509) 376-7395*					
Street or P.O. Box											
P.O. Box 550											
City or Town						State		ZIP Code			
Richland						WA		99352			
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	
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					

9	9	9	9	9	9	Unclassified Establishments	5	6	2	9	1	0	Remediation Services
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X. Other Environmental Permits (see instructions)													
A. Permit Type			B. Permit Number								C. Description		
													None

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

The 1324-NA Percolation Pond received waste from the 163-N Demineralization Plant. The waste consisted of acid and caustic backwashes from the regeneration of demineralization columns. Approximately 1,500,000,000 pounds (680,338,600 kilograms) of corrosive waste (D002) were managed each year.

T04, D83

The 1324-NA Percolation Pond received corrosive dangerous waste (D002) from the regeneration of demineralizer columns in the 163-N Demineralizer Plant. Acidic and caustic waste was discharged to the pond in series, which served to neutralize the waste in the pond. Any acidic or caustic waste that reached the soil was neutralized further by the calcareous nature of the soil. Discharge of dangerous waste to this pond was discontinued in April 1986. The pond also received nonregulated neutralized waste from the 1324-N Surface Impoundment and nonregulated process and cooling water from the 163-N Plant. The process design capacity reflects the maximum volume of water discharged daily rather than the physical capacity of the unit. The 1324-NA Percolation Pond no longer receives waste and will be closed under final status regulations (WAC 173-303-610).

Certain closure activities, including excavation, sampling, backfilling, and revegetation where required, have been completed. Unit group closure activities have been integrated with the CERCLA remedial action contained in the 100-NR-1 Operable Unit Interim Action Record of Decision.

Figures 3 and 4 show the current ground contour and relationship of the current ground contour to the removed structure via well orientation.

1 **EXAMPLE FOR COMPLETING ITEMS XII and XIII (shown in lines numbered X-1, X-2, and X-3 below):** A facility has
 2 two storage tanks that hold 1200 gallons and 400 gallons respectively. There is also treatment in tanks at 20 gallons/hr.
 3 Finally, a one-quarter acre area that is two meters deep will undergo *in situ vitrification*.
 4

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)			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								
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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	2	1,500,000,000	P	T	0	4	D	8	3					Includes Debris
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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.

XVI. Facility Drawing

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

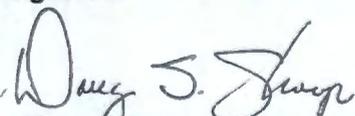
XVII. Photographs

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).

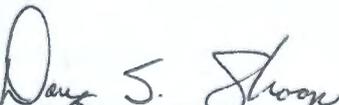
1

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.

Operator*	Signature	Date Signed
Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office		9/2/14
Co-Operator** Name and Official Title (type or print) John A Ciucci President CH2MHill Plateau Remediation Company	Signature 	Date Signed 8/20/14

Co-Operator – Address and Telephone Number**
 2420 Stevens Center Place
 Richland, WA 99354
 (509) 373-0293**

Facility-Property Owner*	Signature	Date Signed
Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office		9/2/14

2

Comments

Closure activities at 1324-NA were completed in January 2003, in accordance with WAC 173-303-610 and the approved Treatment, Storage, and Disposal Units Corrective Measures Study/Closure Plan (DOE/RL-96-39). A certification of closure was submitted to Ecology on February 7, 2003. The Certification of Recording and the Notice in Deed were submitted to Ecology on April 8, 2003.

The path forward for Ecology to approve the closure certification is specified in 16-NWP-122, dated July 15, 2016.

This document has been revised from Revision 4 to Revision 5 because of a change in the Co-Operator, which necessitated an addition to Section XI, Nature of Business. Figures 3 and 4 were added to show the ground contour as it existed on August 3, 2016.

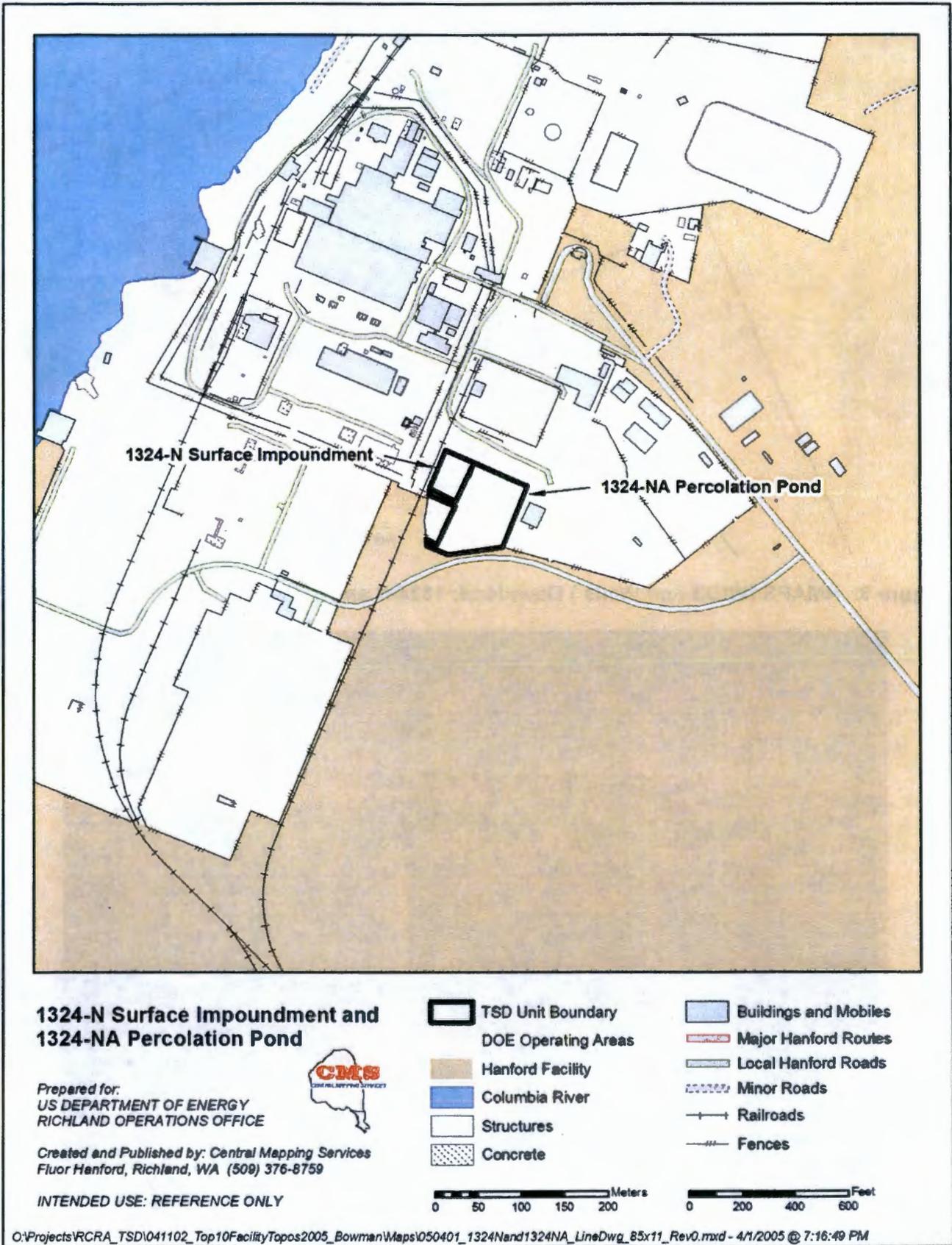
1324-NA Percolation Pond

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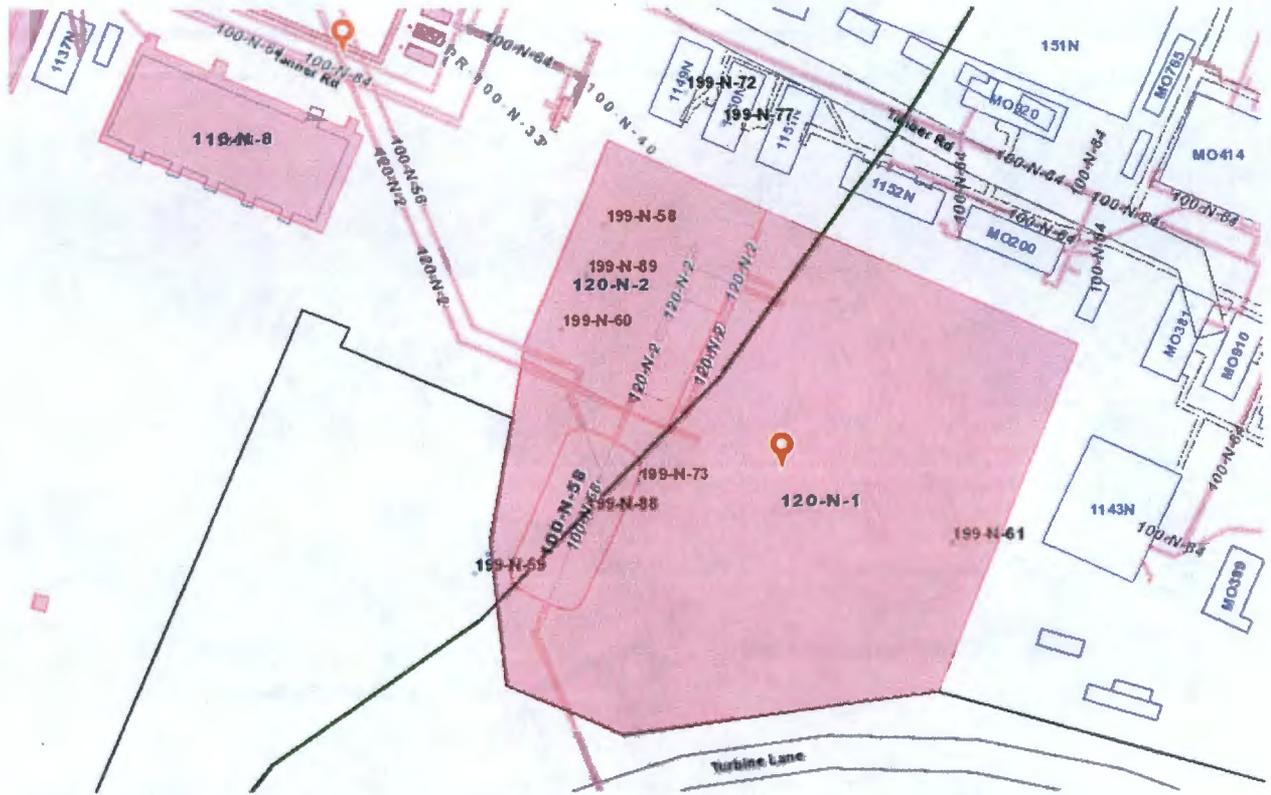


94051304-3CN
(PHOTO TAKEN 1994)

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Figure 3. HMAPS (WIDS and Wells) Download: 1324-N and 1324-NA (120-N-1 and 120-N-2)



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Figure 4. Looking South from Well A4704 (199-N-60)

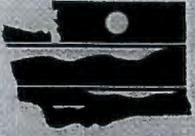
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CHAPTER 1.0
PART A FORM

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	WASHINGTON STATE DEPARTMENT OF E C O L O G Y	<h2 style="margin:0;">Dangerous Waste Permit Application</h2> <h3 style="margin:0;">Part A Form</h3>
--	---	--

Date Received	Reviewed by:	Date:							
Month Day Year	Approved by:	Date:							

I. This form is submitted to: (place an "X" in the appropriate box)

<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: _____	

II. EPA/State ID Number

W	A	7	8	9	0	0	0	8	9	6	7
---	---	---	---	---	---	---	---	---	---	---	---

III. Name of Facility

US Department of Energy - Hanford Facility

IV. Facility Location (Physical address not P.O. Box or Route Number)

A. Street

825 Jadwin

City or Town	State	ZIP Code
Richland	WA	99352

County Code (if known)	County Name
0 0 5	Benton

B. Land Type	C. Geographic Location	D. Facility Existence Date
	Latitude (degrees, mins, secs) Longitude (degrees, mins, secs)	Month Day Year
F	S E E T O P O M A P	0 3 2 2 1 9 4 3

V. Facility Mailing Address

Street or P.O. Box

P.O. Box 550

City or Town	State	ZIP Code
Richland	WA	99352

1

VI. Facility contact (Person to be contacted regarding waste activities at facility)											
Name (last)						(first)					
Shoop						Doug S					
Job Title						Phone Number (area code and number)					
Manager						(509) 376-7395*					
Contact Address											
Street or P.O. Box											
P.O. Box 550											
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 CH2MHill Plateau Remediation Company.** Co-Operator for 1325-N Liquid Waste Disposal Facility						(509) 376-7395* (509) 373-0293**					
Street or P.O. Box											
P.O. Box 550 *											
P.O. Box 1600, 2420 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? If yes, provide the scheduled date for the change:						<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No			
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)					
Doug S Shoop, Operator/Facility-Property Owner*						(509) 376-7395*					
Street or P.O. Box											
P.O. Box 550											
City or Town						State		ZIP Code			
Richland						WA		99352			
B. Operator Type		F									
C. Does the name in VII.A reflect a proposed change in operator? If yes, provide the scheduled date for the change:						<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No			
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					

9	9	9	9	9	9	Unclassified Establishments	5	6	2	9	1	0	Remediation Services
---	---	---	---	---	---	-----------------------------	---	---	---	---	---	---	----------------------

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

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

The 1325-N Liquid Waste Disposal Facility (LWDF) was used for the disposal of liquid waste from N reactor. The waste consisted of waste from nonspecific sources and listed waste (F003), toxicity characteristic waste (D006, D008, and D009), characteristic waste (D002), and state-only toxic waste (WT02).

D83

The 1325-N LWDF was used from 1985 to April 1991. The 1325-N LWDF received nonregulated mixed process and cooling waters from N Reactor. The 1325-N LWDF also received dangerous waste generated from laboratories and may have received waste from spills from within the N Reactor Building, which was discharged through the mixed waste drain system. The dangerous waste discharges consisted of less than 0.002% of the total volume of the waste discharged to the 1325-N LWDF. The 1325-N LWDF was a percolation unit designed for the disposal of liquid waste through the soil column. The process design capacity for the 1325-N LWDF was 16,353,000 liters (4,320,000 gallons) per day. The process design capacity reflects the maximum volume of water discharged daily basis rather than the physical capacity of the 1325-N LWDF. The influent pipes between the 1325-N and the 1301-N LWDFs are considered to be included within the treatment, storage, and disposal unit boundary.

Certain closure activities, including excavation, sampling, backfilling, and revegetation where required, have been completed. Unit group closure activities have been integrated with the CERCLA remedial action contained in the 100 NR-1 Operable Unit Interim Action Record of Decision.

Figures 1 and 2 show the current ground surface and relationship of the current ground surface to the removed structure via well orientation.

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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	D	8	3	4,320,000	U	001	1							
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XV. Map

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XVI. Facility Drawing

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

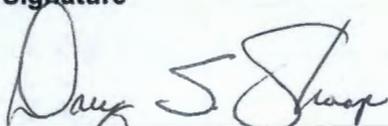
XVII. Photographs

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).

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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) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office</p>	<p>Signature </p>	<p>Date Signed 9/25/16</p>
<p>Co-Operator** Name and Official Title (type or print) John A Ciucci President CH2MHill Plateau Remediation Company</p>	<p>Signature </p>	<p>Date Signed 8/25/16</p>

Co-Operator – Address and Telephone Number**

2420 Stevens Center Place
Richland, WA 99354
(509) 373-0293

<p>Facility-Property Owner* Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office</p>	<p>Signature </p>	<p>Date Signed 9/12/16</p>
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Comments

On December 27, 2000, Ecology granted a contained-in determination for F003 (methanol) contaminated soil and debris for the 1325-N Liquid Waste Disposal Facility.

This document has been revised from Revision 8 to Revision 9 because of a change in the Co-Operator, which necessitated an addition to Section XI, Nature of Business. Figures 1 and 2 were added to show the ground surface as it existed on August 3, 2016.

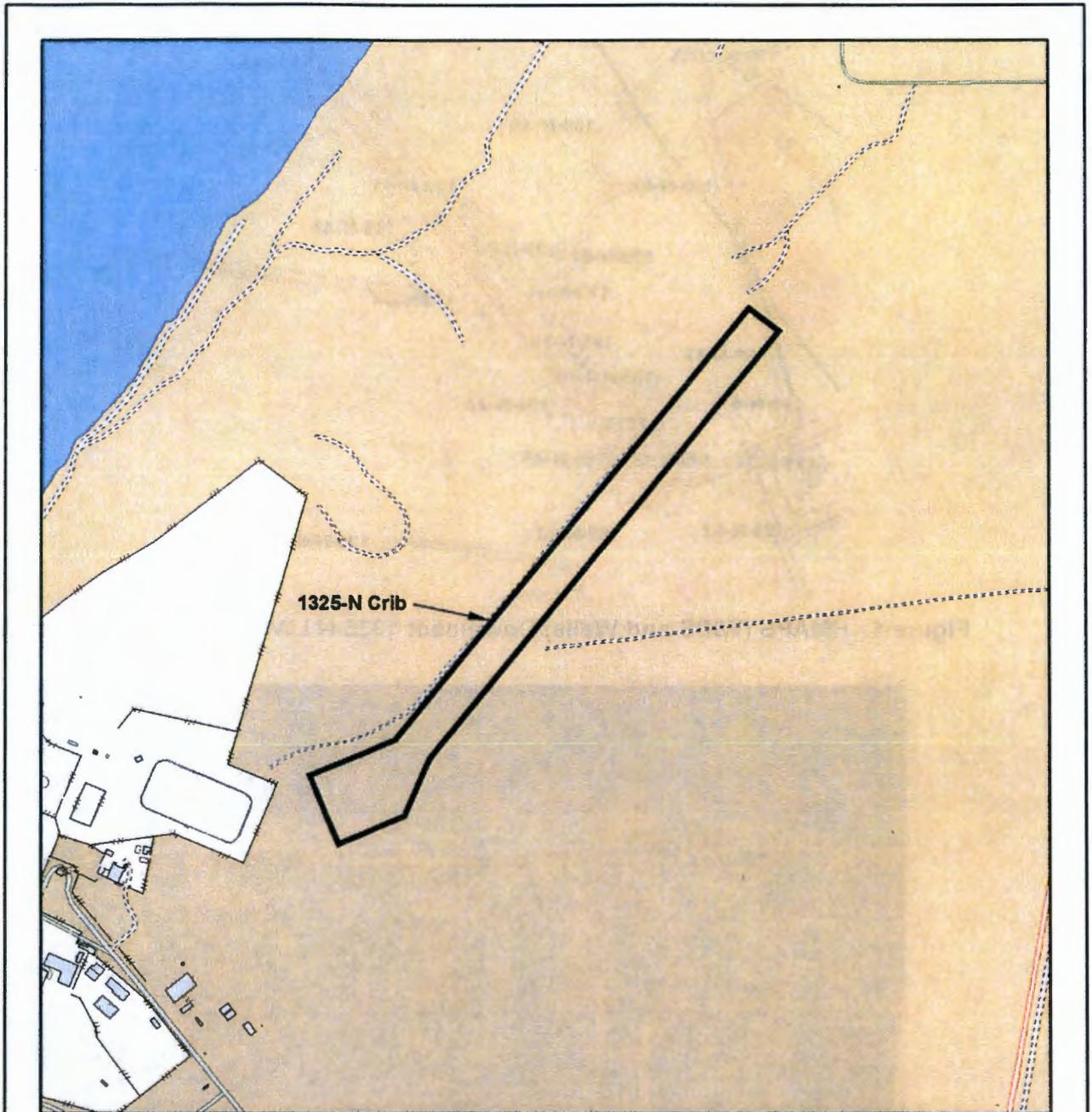
1325-N Liquid Waste Disposal Facility

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(PHOTO TAKEN 1986)

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1325-N Crib

Prepared for:
 US DEPARTMENT OF ENERGY
 RICHLAND OPERATIONS OFFICE



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- | | |
|---------------------|-----------------------|
| TSD Unit Boundary | Buildings and Mobiles |
| DOE Operating Areas | Major Hanford Routes |
| Hanford Facility | Local Hanford Roads |
| Columbia River | Minor Roads |
| Structures | Railroads |
| Concrete | Fences |





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Figure 1. HMAPS (WIDS and Wells) Download: 1325-N LWDF and 116-N-3 with Wells



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Figure 2. 116-N-3 Southeast from Well 199-N-188 (August 3, 2016)