



1241075  
[00693224]

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950  
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

October 25, 2016

16-NWP-183 – Reissue

Mr. Doug S. Shoop, Manager  
Richland Operations Office  
United States Department of Energy  
PO Box 550, MSIN: A7-50  
Richland, Washington 99352

Mr. John A. Ciucci, President and CEO  
CH2M HILL Plateau Remediation Company  
PO Box 1600, MSIN: H7-30  
Richland, Washington 99352

Re: Part A Forms to Transfer Co-Operator Responsibilities for the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste*, Part V, Closing Unit Groups (CUG) 1, 2, and 3, WA7890008967

Reference: See page 2

Dear Mr. Shoop and Mr. Ciucci:

This letter is being reissued to transmit a signed copy of the Part A form for the 1324-NA Percolation Pond. An unsigned copy was enclosed in the original letter. Copies of all the Part A documents are enclosed in this reissued letter.

The Department of Ecology (Ecology) received the Part A forms to transfer co-operational responsibilities for 1325-N Liquid Waste Disposal Facility (CUG-1), 1301-N Liquid Waste Disposal Facility (CUG-2), and 1324-N Surface Impoundment & 1324-NA Percolation Pond (CUG-3) (Reference).

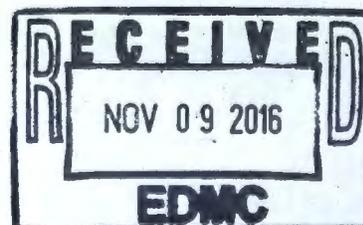
Ecology signed the enclosed Part A forms to transfer co-operator responsibilities from Washington Closure Hanford to CH2M HILL Plateau Remediation Company. The effective date for this transfer is August 29, 2016.

Ecology signed the Hanford Facility RCRA Permit Modification Notification Forms (PCN-1325-2016-01, PCN-1301-2016-01, and PCN-1324-2016-01) on August 24, 2016.

If there are any questions regarding this letter, please contact Debra Alexander, Site-wide Revision 8C Dangerous Waste Permit Coordinator, at [debra.alexander@ecy.wa.gov](mailto:debra.alexander@ecy.wa.gov) or (509) 372-7896.

Sincerely,

Suzanne Dahl  
Dangerous Waste Permit Manager  
Nuclear Waste Program



da/lkd  
Enclosures (3)  
cc: See page 2



Mr. Shoop and Mr. Ciucci  
 October 25, 2016  
 Page 2 of 2

16-NWP-183

Reference: Letter 16-ESQ-0128, dated September 2, 2016, from D.S. Shoop, USDOE-RL, to A. Smith, Ecology, "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 1 Permit Modifications" 1240090

cc electronic w/enc:

- Dave Bartus, EPA
- Cliff Clark, USDOE
- Rob Hastings, USDOE
- Tony McKarns, USDOE
- Sandi Murdock, BNI
- Lorin Clements, CHPRC
- Laura Cusack, CHPRC
- Moses Jaraysi, CHPRC
- Paul Martin, CHPRC
- Deborah Singleton, CHPRC
- Jon Perry, MSA
- Michael Wilson, MSA
- Karl Hadley, WCH
- Suzette Thompson, WRPS
- Ken Niles, ODOE
- Debra Alexander, Ecology
- Jennifer Cantu, Ecology
- Annette Carlson, Ecology
- Kelly Elsethagen, Ecology
- Brian Johnson, Ecology
- Mandy Jones, Ecology
- Nina Menard, Ecology
- Ron Skinnarland, Ecology
- Cheryl Whalen, Ecology
- CHPRC Correspondence Control
- Environmental Portal
- Hanford Facility Operating Record
- USDOE-RL Correspondence Control

cc w/enc:

- Steve Hudson, HAB
- Administrative Record: TSD D-1-2, T-1-2
- NWP Central File
- NWP Library

cc w/o enc:

- Rod Skeen, CTUIR
- Gabriel Bohnee, NPT
- Russel Jim, YN

1  
2  
3  
4  
5  
6

**CHAPTER 1.0**  
**PART A FORM**

1  
2  
3  
4  
5

This page intentionally left blank.

1  
2

	WASHINGTON STATE DEPARTMENT OF <b>E C O L O G Y</b>	<b>Dangerous Waste Permit Application Part A Form</b>
--	---	---

Date Received	Reviewed by: <i>Debra J. Alexander</i>	Date: 10 25 2016
Month Day Year	Approved by: <i>[Signature]</i>	Date: 10 25 2016

**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	Longitude (degrees, mins, secs)	D. Facility Existence Date
F	Latitude (degrees, mins, secs)	Month Day Year	Month Day Year
	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

<b>VI. Facility contact (Person to be contacted regarding waste activities at facility)</b>												
<b>Name (last)</b>						<b>(first)</b>						
Shoop						Doug S						
<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 (area code and number)</b>						
Department of Energy* Owner/Operator CH2MHill Plateau Remediation Company** Co-Operator for 1301-N Liquid Waste Disposal Facility						(509) 376-7395* (509) 373-0293**						
<b>Street or P.O. Box</b>												
P.O. Box 550 * 2420 Stevens Center Place, P.O Box 1600 **												
<b>City or Town</b>						<b>State</b>		<b>ZIP Code</b>				
Richland						WA		99352* (99354**)				
<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>						
Doug S Shoop, 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. 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>IX. NAICS Codes (5/6 digit codes)</b>												
<b>A. First</b>						<b>B. Second</b>						
5	6	2	2	1	Waste Treatment & Disposal	9	2	4	1	1	0	Administration of Air & Water Resource & Solid Waste Management Programs
<b>C. Third</b>						<b>D. Fourth</b>						



**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. 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							
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							



**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**

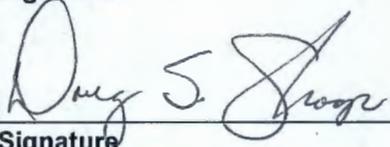
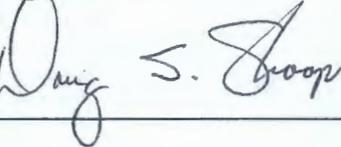
All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

**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).

**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) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office</p>	<p><b>Signature</b> </p>	<p><b>Date Signed</b> 9/2/14</p>
<p><b>Co-Operator**</b> Name and Official Title (type or print) John A. Ciucci President CH2MHill Plateau Remediation Company</p>	<p><b>Signature</b> </p>	<p><b>Date Signed</b> 8/25/16</p>
<p><b>Co-Operator** – Address and Telephone Number</b> 2420 Stevens Center Place Richland, WA 99354 (509) 373-0293</p>		
<p><b>Facility-Property Owner*</b> Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office</p>	<p><b>Signature</b> </p>	<p><b>Date Signed</b> 9/2/14</p>

**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



CRIB OUTFALL

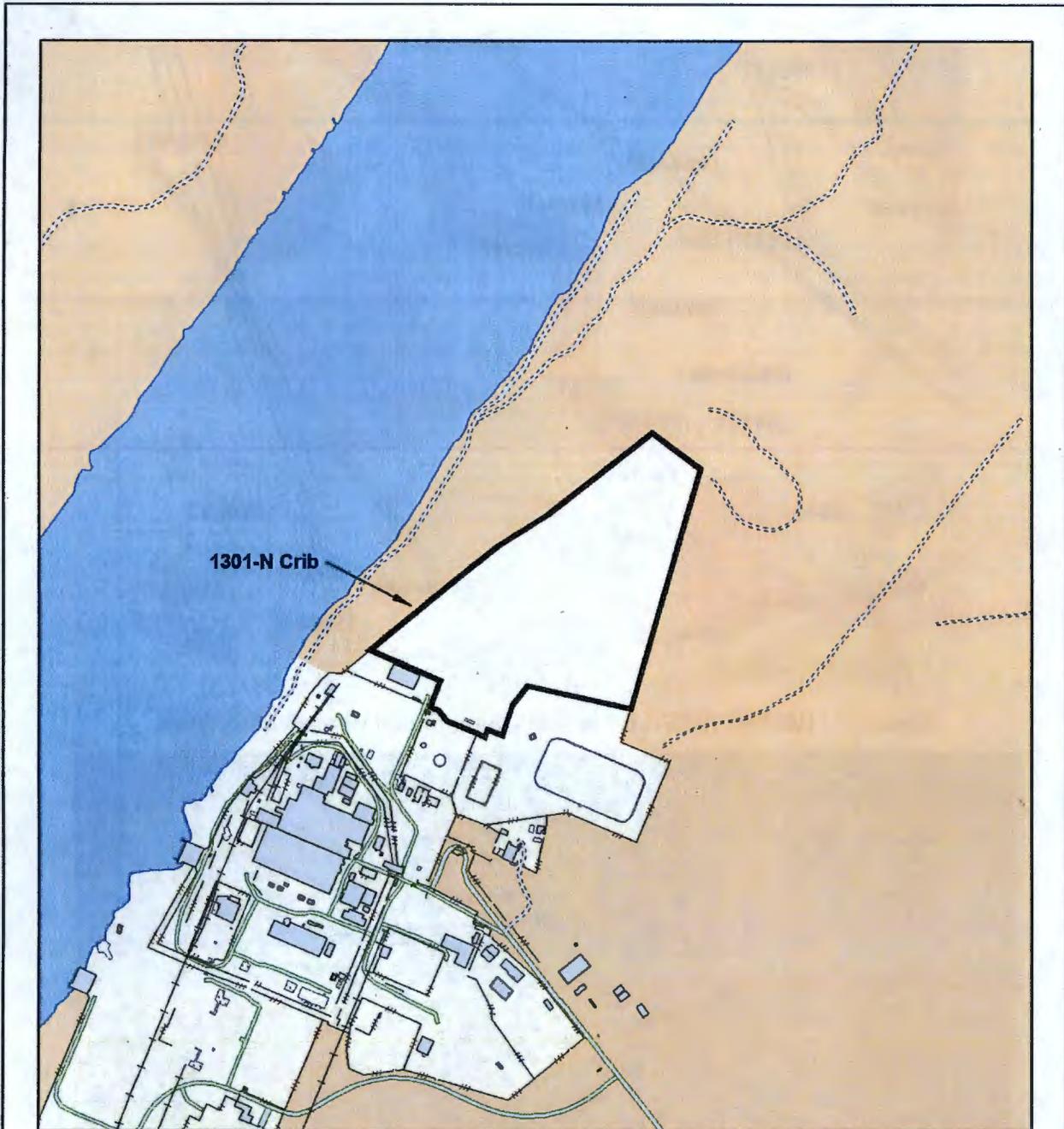
8605087-8CN  
(PHOTO TAKEN 1986)



TRENCH CONCRETE COVER

8605087-15CN  
(PHOTO TAKEN 1986)

1  
 2  
 3



### 1301-N Crib

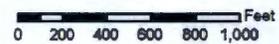
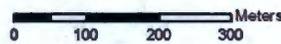
Prepared for:  
 US DEPARTMENT OF ENERGY  
 RICHLAND OPERATIONS OFFICE



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                |



O:\Projects\RCRA\_TSD\041102\_Top10Facility\Topos2005\_Bowman\Maps\050401\_1301NCrib\_LineDwg\_85x11\_Rev0.mxd - 4/1/2005 @ 11:46:23 AM

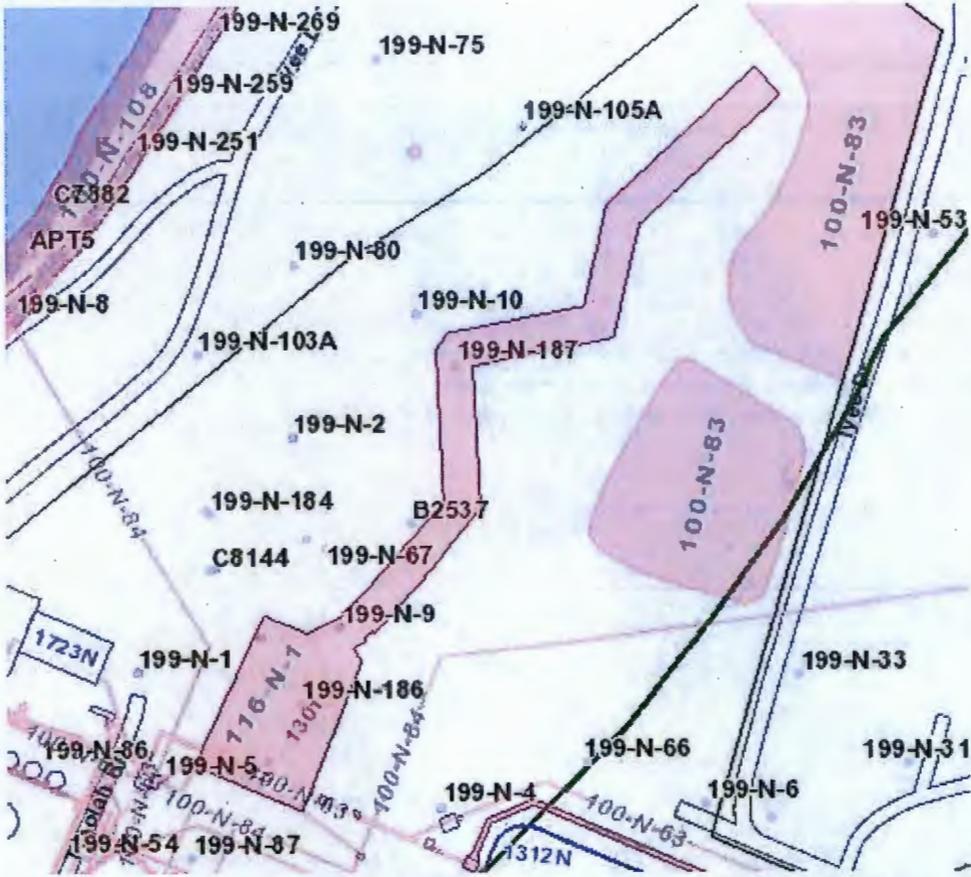


Figure 1. HMAPS (WIDS and Wells) Download: 116-N-1 with Wells



Figure 2. 116-N-1 Looking East from Well 199-N-186 (August 3, 2016)

1  
2  
3  
4  
5  
6

**CHAPTER 1.0**  
**PART A FORM**

1  
2  
3  
4  
5

This page intentionally left blank.

1  
2

	WASHINGTON STATE DEPARTMENT OF <b>E C O L O G Y</b>	<b>Dangerous Waste Permit Application                  Part A Form</b>
---	---	--

Date Received	Reviewed by: <i>Dora J. Alexander</i>	Date: 10/25/2016
Month Day Year	Approved by: <i>[Signature]</i>	Date: 10/25/2016
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

<b>City or Town</b>	<b>State</b>	<b>ZIP Code</b>
Richland	WA	99352

<b>County Code (if known)</b>	<b>County Name</b>
005	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	S E E T O P O M A P	03 22 1943

**V. Facility Mailing Address**

**Street or P.O. Box**

P.O. Box 550

<b>City or Town</b>	<b>State</b>	<b>ZIP Code</b>
Richland	WA	99352

1

<b>VI. Facility contact (Person to be contacted regarding waste activities at facility)</b>													
<b>Name (last)</b>						<b>(first)</b>							
Shoop						Doug S							
<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 (area code and number)</b>							
Department of Energy * Owner/Operator CH2MHill Plateau Remediation Company ** Co-Operator for 1324-N Surface Impoundment						(509) 376-7395* (509) 370-0293**							
<b>Street or P.O. Box</b>													
P.O. Box 550* 2420 Stevens Center Place, P.O. Box 1600**													
<b>City or Town</b>						<b>State</b>		<b>ZIP Code</b>					
Richland						WA		99352* (99354**)					
<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>							
Doug S Shoop, 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. 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>IX. NAICS Codes (5/6 digit codes)</b>													
<b>A. First</b>						<b>B. Second</b>							
5	6	2	2	1		Waste Treatment & Disposal	9	2	4	1	1	0	Administration of Air & Water Resource & Solid Waste Management Programs
<b>C. Third</b>						<b>D. Fourth</b>							
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 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.

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

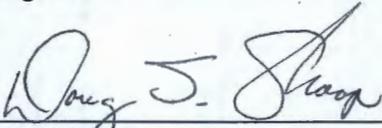
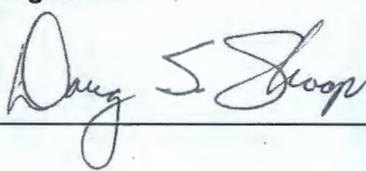
**XVI. Facility Drawing**  
 All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

**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.

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

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.

---

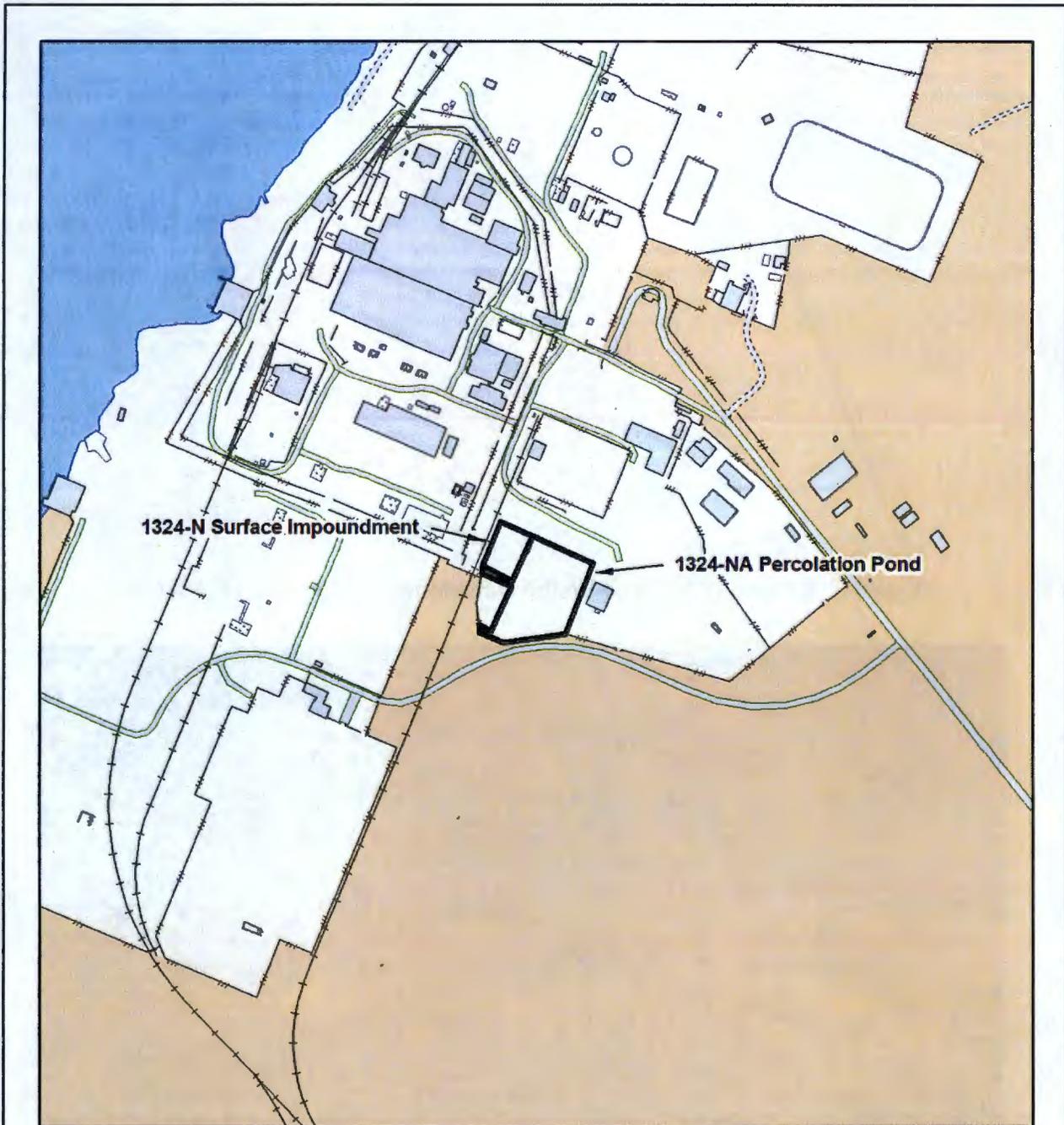
## 1324-N Surface Impoundment

---



94051304-3CN  
(PHOTO TAKEN 1994)

1  
2



**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





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



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

1  
2

 <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: <i>Debra J. Alyanda</i>	Date: 11   04   20   16															
Month Day Year		Approved by: <i>[Signature]</i>	Date: 11   04   20   16															
Please refer to instructions for completing this form.																		
<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																		
<b>City or Town</b>			<b>State</b>	<b>ZIP Code</b>														
Richland			WA	99352														
<b>County Code (if known)</b>	<b>County Name</b>																	
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														
F	S	E	E	T	O	P	O	M	A	P	0	3	2	2	1	9	4	3
<b>V. Facility Mailing 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														

1

<b>VI. Facility contact (Person to be contacted regarding waste activities at facility)</b>												
<b>Name (last)</b>						<b>(first)</b>						
Shoop						Doug S						
<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 (area code and number)</b>						
Department of Energy * Owner/Operator CH2MHill Plateau Remediation Company ** Co-Operator for 1324-NA Percolation Pond						(509) 376-7395* (509) 370-0293**						
<b>Street or P.O. Box</b>												
P.O. Box 550 * 2420 Stevens Center Place, P.O Box 1600 **												
<b>City or Town</b>						<b>State</b>		<b>ZIP Code</b>				
Richland						WA		99352* (99354**)				
<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>						
Doug S Shoop, 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. 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>IX. NAICS Codes (5/6 digit codes)</b>												
<b>A. First</b>						<b>B. Second</b>						
5	6	2	2	1	Waste Treatment & Disposal	9	2	4	1	1	0	Administration of Air & Water Resource & Solid Waste Management Programs
<b>C. Third</b>						<b>D. Fourth</b>						

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 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  
2  
3  
4

**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	4	1,000,000	U	001		1							
	2	D	8	3	1,000,000	G	001		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							

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

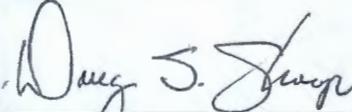
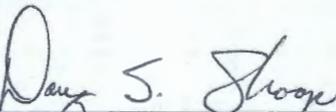
**XVI. Facility Drawing**  
 All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

**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.

<b>Operator*</b> Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office	<b>Signature</b> 	<b>Date Signed</b> 9/2/14
<b>Co-Operator**</b> Name and Official Title (type or print) John A Ciucci President CH2MHill Plateau Remediation Company	<b>Signature</b> 	<b>Date Signed</b> 8/20/14
<b>Co-Operator** – Address and Telephone Number</b> 2420 Stevens Center Place Richland, WA 99354 (509) 373-0293**		
<b>Facility-Property Owner*</b> Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office	<b>Signature</b> 	<b>Date Signed</b> 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.

---

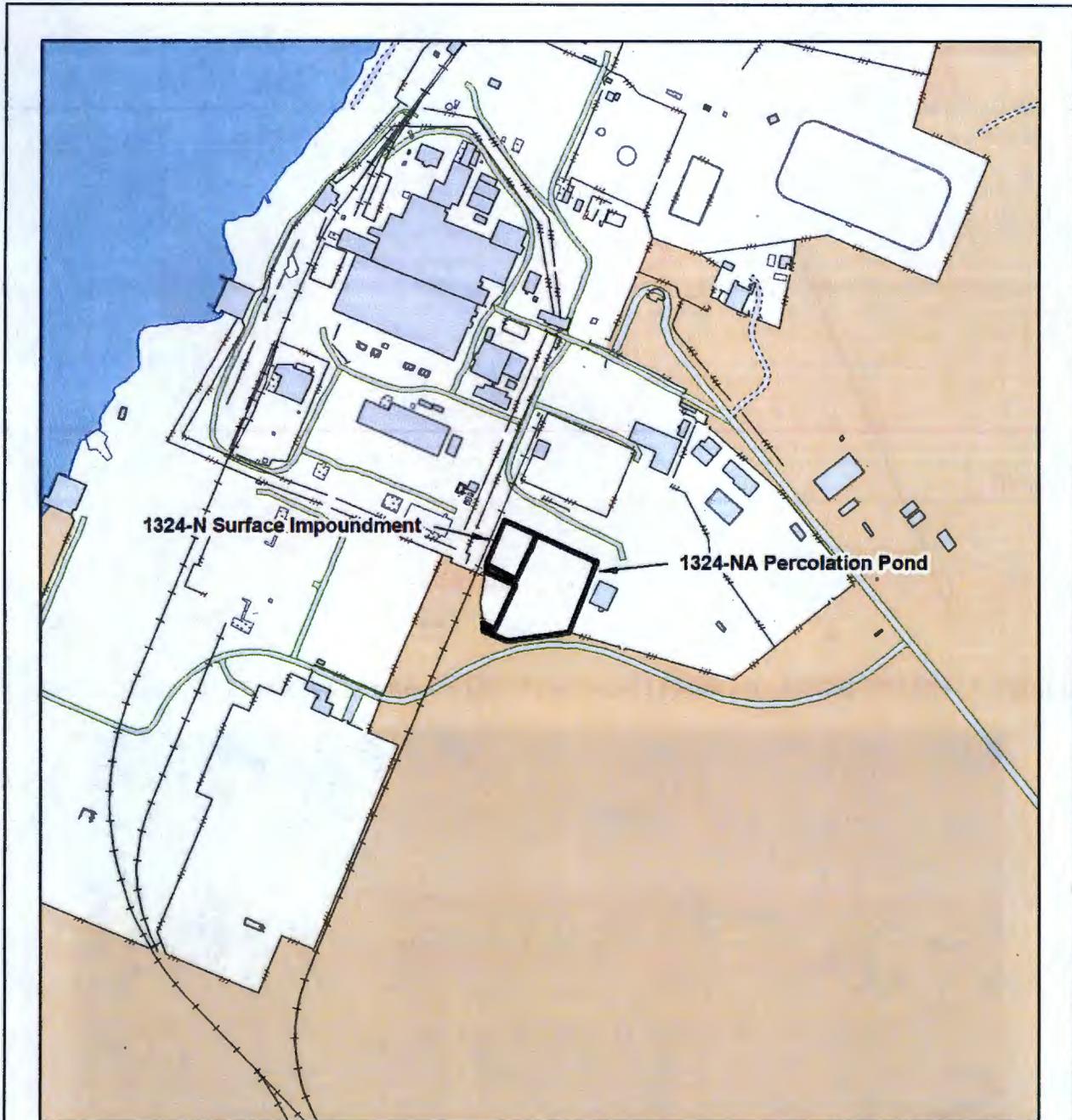
## 1324-NA Percolation Pond

---



94051304-3CN  
(PHOTO TAKEN 1994)

1  
2



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

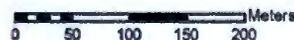
Prepared for:  
US DEPARTMENT OF ENERGY  
RICHLAND OPERATIONS OFFICE



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

INTENDED USE: REFERENCE ONLY

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



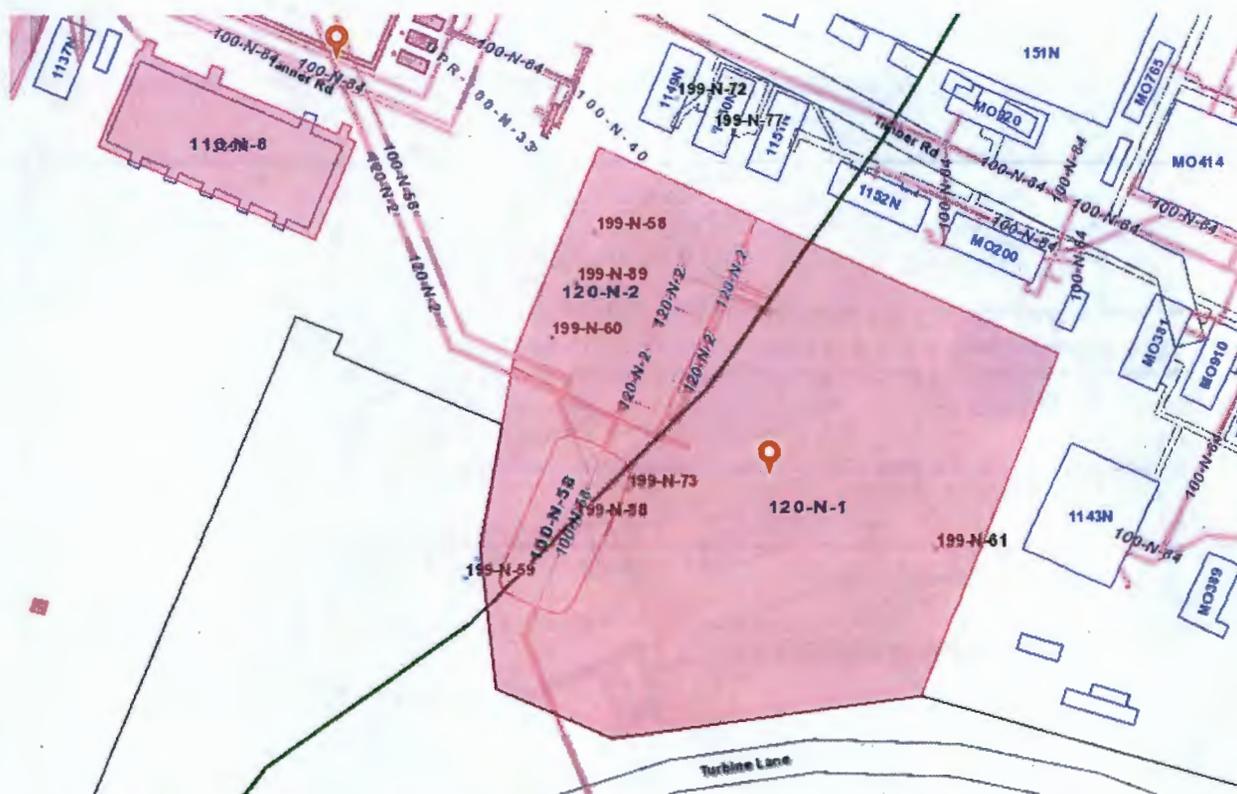


Figure 3. HMAPS (WIDS and Wells ) Download: 1324-N and 1324-NA (120-N-1 and 120-N-2)



Figure 4. Looking South from Well A704 (199-N-60)

1  
2  
3  
4  
5  
6

**CHAPTER 1.0**  
**PART A FORM**

1  
2  
3  
4  
5

This page intentionally left blank.



1

<b>VI. Facility contact (Person to be contacted regarding waste activities at facility)</b>											
<b>Name (last)</b>						<b>(first)</b>					
Shoop						Doug S					
<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 (area code and number)</b>					
Department of Energy * Owner/Operator CH2MHill Plateau Remediation Company.** Co-Operator for 1325-N Liquid Waste Disposal Facility						(509) 376-7395* (509) 373-0293**					
<b>Street or P.O. Box</b>											
P.O. Box 550 * P.O. Box 1600, 2420 Stevens Center Place**											
<b>City or Town</b>						<b>State</b>		<b>ZIP Code</b>			
Richland						WA		99352* (99354**)			
<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>					
Doug S Shoop, 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. 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>IX. NAICS Codes (5/6 digit codes)</b>											
<b>A. First</b>						<b>B. Second</b>					
5	6	2	2	1	Waste Treatment & Disposal	9	2	4	1	1	0 Administration of Air & Water Resource & Solid Waste Management Programs
<b>C. Third</b>						<b>D. Fourth</b>					

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.

**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							
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	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	8	150	P	D	8	3								Includes Debris
	5	D	0	0	9	6,200	P	D	8	3								Includes Debris
	6	W	T	0	2	15,000	P	D	8	3								Includes Debris
	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.

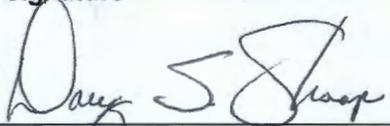
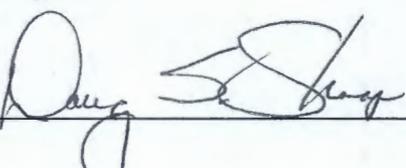
**XVI. Facility Drawing**  
All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

**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.

<b>Operator*</b> Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office	<b>Signature</b> 	<b>Date Signed</b> 9/25/16
<b>Co-Operator**</b> Name and Official Title (type or print) John A Ciucci President  CH2MHill Plateau Remediation Company	<b>Signature</b> 	<b>Date Signed</b> 8/25/16
<b>Co-Operator** – Address and Telephone Number</b> 2420 Stevens Center Place Richland, WA 99354 (509) 373-0293		
<b>Facility-Property Owner*</b> Name and Official Title (type or print) Doug S Shoop, Manager U.S. Department of Energy Richland Operations Office	<b>Signature</b> 	<b>Date Signed</b> 9/12/16

2

**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

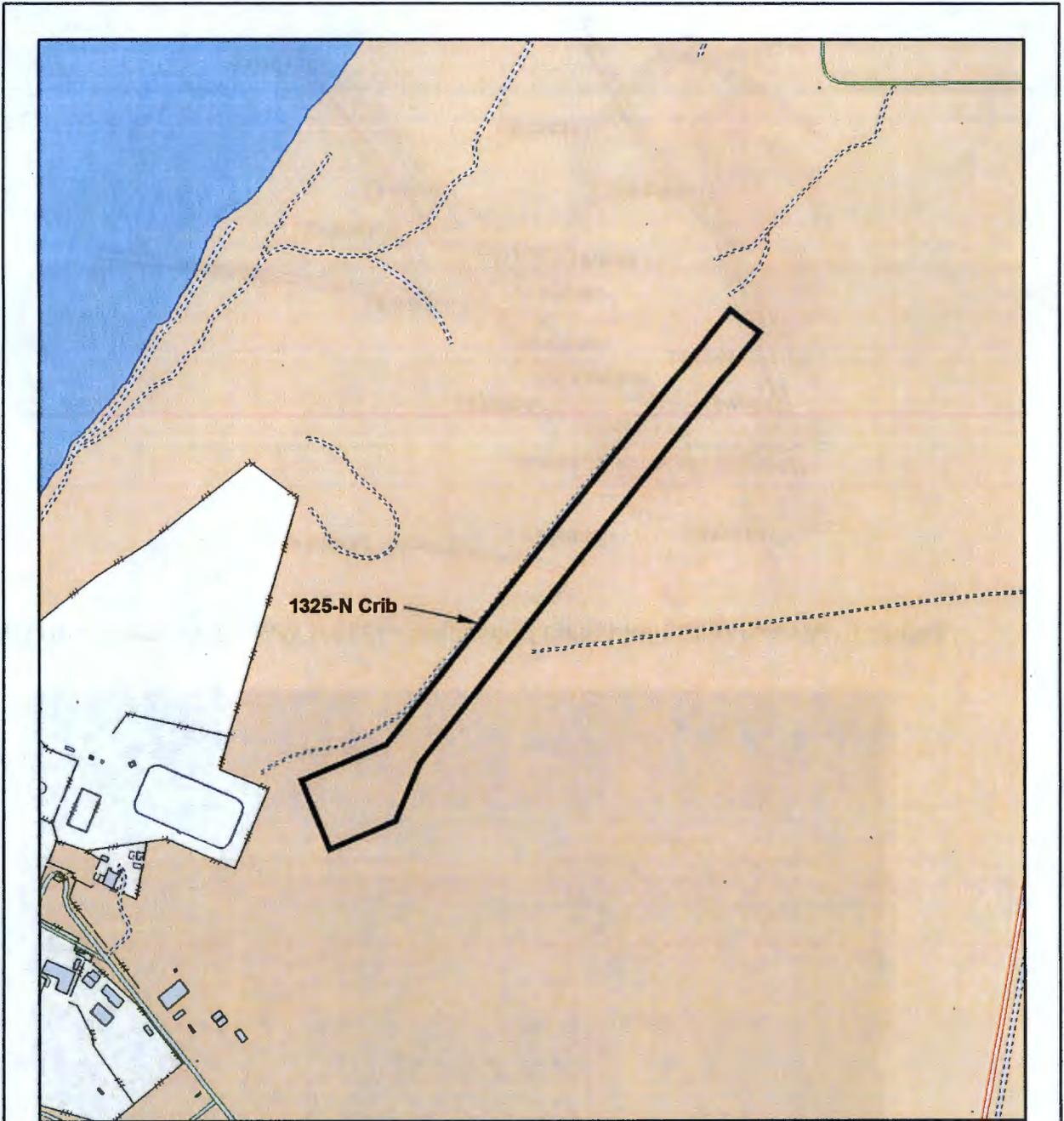
---

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26



8605087-6CN  
(PHOTO TAKEN 1986)

1  
 2



### 1325-N Crib

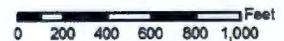
Prepared for:  
 US DEPARTMENT OF ENERGY  
 RICHLAND OPERATIONS OFFICE

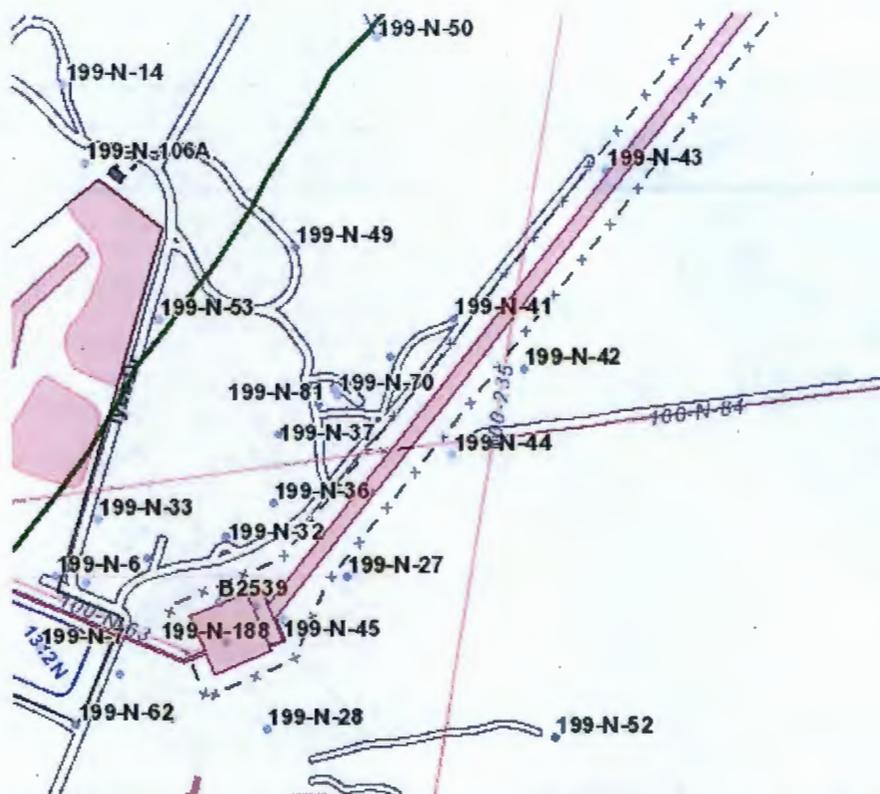


Created and Published by: Central Mapping Services  
 Fluor Hanford, Richland, WA (509) 376-8759

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                |





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



4  
5 **Figure 2. 116-N-3 Southeast from Well 199-N-188 (August 3, 2016)**  
6