

0020718

**NOTICE OF INTENT  
FOR EXPANSION UNDER  
INTERIM STATUS**

**PUREX PLANT  
HANFORD FACILITY,  
RICHLAND, WASHINGTON**



**U.S. DEPARTMENT OF ENERGY, DOE RICHLAND FIELD OFFICE**

**MARCH 1992**

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1.0 INTRODUCTION

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3  
4 The Washington State Department of Ecology (Ecology) *Dangerous Waste*  
5 *Regulations*, Washington Administrative Code (WAC) 173-303-281, requires that  
6 existing dangerous waste management facility owners and/or operators submit a  
7 Notice of Intent (NOI) before submittal of a permit application for new or  
8 expanded dangerous waste management units. The following information is being  
9 filed with Ecology by the U.S. Department of Energy, DOE Richland Field Office  
10 (DOE-RL), the owner and operator. This NOI is to serve notice of the intent  
11 to add tank storage capability to existing treatment tanks U3, U4, and F18 at  
12 the PUREX (plutonium-uranium extraction) Plant on the Hanford Facility,  
13 Richland, Washington.

14  
15 The PUREX Plant is being expanded under interim status to add the  
16 capability for tank storage in waste treatment tanks U3, U4, and F18 as part  
17 of ongoing waste minimization efforts. The Part A Dangerous Waste Permit  
18 Application, Form 3, will be modified to add the process code 'S02' specifying  
19 tank storage for the designated tanks. This modification will result in the  
20 reduced generation of radioactive dangerous waste (mixed waste) at the  
21 PUREX Plant and also will reduce the volume of mixed waste subsequently stored  
22 in the Double-Shell Tank System:

23  
24 Presently, tanks U3, U4, and F18 are operated under interim status and  
25 are used for waste treatment only. Mixed waste generated at the PUREX Plant  
26 is collected in the tanks, chemically adjusted to meet the waste acceptance  
27 criteria of the Double-Shell Tank System, and transferred to a designated  
28 double-shell tank within 90 days. A minimum liquid level is required in the  
29 tanks to allow agitation, sampling, and transfer. If the minimum liquid level  
30 is not present in the tanks, water must be added resulting in a greater  
31 quantity of waste, which subsequently must be managed. The expansion of the  
32 waste management unit for waste storage in tanks U3, U4, and F18 will allow  
33 waste to be accumulated in the tanks until an adequate volume is available for  
34 transfer without the addition of water. This expansion will facilitate waste  
35 transfer operations and also will serve to reduce the volume of waste  
36 generated at the PUREX Plant.

37  
38 The following identifies the owner and operator of the Hanford Facility  
39 and the primary contact:

40  
41 Owner and Operator: U.S. Department of Energy, DOE Richland Field Office

42  
43 Manager, DOE Richland Field Office: Mr. John D. Wagoner

44  
45 Contact, DOE Richland Field Office: Mr. R. D. Izatt

46  
47 Address: U.S. Department of Energy  
48 DOE Richland Field Office  
49 Post Office Box 550  
50 Richland, Washington 99352

51  
52 Telephone: (509) 376-5441.



1 U3 and U4 is water. Low pH accounts for the primary chemical constituent of  
2 the waste with the average pH of a batch of waste collected being 4.5 (based  
3 on analytical data). Occasionally the pH of the waste collected can fall  
4 below 2.0; therefore, the waste received is periodically corrosive dangerous  
5 waste (D002). Other constituents from spent laboratory solutions and  
6 decontamination solutions also could be present in small amounts. Because  
7 many different constituents could be present in small quantities from the  
8 laboratory and from decontamination operations, the waste received at the  
9 tanks might be given dangerous waste numbers of D001, D002, D003, D004, D005,  
10 D006, D007, D008, D009, D010, D011, WT01, WT02, WC01, WC02, WP01, and WP02.  
11

12 Tank F18 is a nominally 5,000-gallon (18,927-liter) stainless steel tank  
13 that receives mixed waste solutions from the PUREX Canyon cell floor sumps;  
14 drainage from the vessel vent system, condenser vent system, and sampler  
15 headers; hot shop maintenance cell solutions; sample gallery floor drain  
16 solutions; and solutions generated from bottoms changeouts of the  
17 F-11 concentrator (Figure 4). The primary dangerous constituent in tank F18  
18 solutions is nitric acid, causing the solutions to be designated as a  
19 corrosive dangerous waste (D002) due to low pH. The waste received at the  
20 tank also could contain any of the other various chemical constituents in  
21 generally low concentrations used at the PUREX Plant and might be given  
22 dangerous waste numbers of D001, D002, D003, D004, D005, D006, D007, D008,  
23 D009, D010, D011, WT01, WT02, WC01, WC02, WP01, and WP02.  
24

### 25 26 2.3 DESCRIPTION OF WASTE MANAGEMENT ACTIVITIES SUBJECT TO DANGEROUS 27 WASTE PERMITTING REQUIREMENTS 28

29 Mixed waste solutions generated at the PUREX Plant are collected in tanks  
30 U3, U4, and F18 until sufficient quantities are accumulated to allow  
31 agitation, sampling, treatment, and transfer [approximately 3,500 gallons  
32 (13,249 liters) for tanks U3 and U4 and 1,900 gallons (7,192 liters) for  
33 tank F18]. Once an adequate volume of waste is present in the tanks, the  
34 waste is sampled and a caustic ratio analysis is performed. Based on the  
35 sampling results, sodium hydroxide and sodium nitrite solutions are added to  
36 the waste to meet the Double-Shell Tank System waste acceptance criteria. The  
37 waste is mixed for approximately 1 hour, and resampled to ensure the waste  
38 exceeds a pH of 12 and contains 0.011 molar of sodium nitrite (Double-Shell  
39 Tank System waste acceptance criteria for corrosion control). Following  
40 verification that the waste meets the Double-Shell Tank System waste  
41 acceptance criteria, the waste is transferred to a designated double-shell  
42 tank.  
43

44 To avoid storage of the waste in the tanks beyond 90 days, present  
45 practices could necessitate the addition of water to the tanks to achieve the  
46 minimum volume of liquid required for transfer. This practice increases the  
47 volume of waste that subsequently must be stored in the Double-Shell Tank  
48 System. The expansion of the waste management unit to allow for tank storage  
49 will provide for the accumulation of waste in the tanks until sufficient  
50 quantities are available to transfer the waste without the addition of water.  
51 This will eliminate the practice of adding water solely for the purpose of  
52 transferring the waste out of the tanks within 90 days.

1  
2 **2.4 DESCRIPTION OF MAJOR EQUIPMENT**  
3

4 The major equipment associated with the expansion includes tanks U3, U4,  
5 and F18. Tanks U3 and U4 (Figure 5) are nominally 8,000-gallon (30,283-liter)  
6 miscellaneous waste tanks that were placed in service in 1956. The tanks are  
7 constructed of 304L stainless steel and are located in U-Cell, in the  
8 northeast portion of the PUREX 202-A Building. Tank F18 (Figure 6) is a  
9 nominally 5,000-gallon (18,927-liter) miscellaneous waste tank that also was  
10 placed in service in 1956. Tank F18 is constructed of 304L stainless steel  
11 and is located in F-Cell of the PUREX 202-A Building. Ancillary piping  
12 associated with the tanks includes all waste transfer piping from the waste  
13 tanks to the 241-A-151 diversion box in the Double-Shell Tank System. A  
14 partial floor plan of the 202-A Building showing the general location of  
15 U-Cell, F-Cell, and the 241-A-151 diversion box is included as Figure 7.  
16 Figure 8 provides a cut-a-way view of the PUREX Plant showing the locations of  
17 tanks U3, U4, and F18.  
18  
19

20 **2.5 COMPLIANCE WITH STATE ENVIRONMENTAL POLICY ACT**  
21

22 The *State Environmental Policy Act of 1971* Environmental Checklist is  
23 provided as Appendix B.  
24  
25

26 **2.6 COMPLIANCE WITH SITING STANDARDS**  
27

28 The proposed expansion involves only the addition of storage capacity to  
29 existing treatment tanks at the PUREX Plant. The storage of waste in the  
30 treatment tanks is expected to have a positive impact on the environment as it  
31 will reduce the amount of waste required to be stored at the Double-Shell Tank  
32 System.  
33  
34

35 **2.6.1 Criteria for Elements of the Natural Environment**  
36

37 The following section addresses measures in place at the PUREX Plant to  
38 provide protection of the natural environment. Each element of the criteria  
39 identified in WAC 173-303-282(6) is addressed.  
40

41 **2.6.1.1 Earth.** This section addresses the potential for the release of  
42 dangerous waste into the environment because of structural damage resulting  
43 from the conditions of the earth at the waste management unit.  
44

45 **2.6.1.1.1 Seismic Risk.** The PUREX Plant is located in Benton County,  
46 Washington, and has been identified as being in Zone 2B in accordance with the  
47 Uniform Building Code (ICBO 1991). The original design specifications for the  
48 PUREX Plant specified that earthquake resistance be provided in accordance  
49 with the 1952 Uniform Building Code, Zone 2, earthquake regulations.  
50

1 A seismic hazards onsite risk analysis has been performed on the PUREX  
2 Plant. This risk analysis concluded that onsite seismic risks from the  
3 operation of the PUREX Plant were within an acceptable level.  
4

5 2.6.1.1.2 Subsidence. The PUREX Plant is located in the 200 East Area  
6 of the Hanford Facility. This area of the Hanford Facility is not considered  
7 an area subject to subsidence.  
8

9 2.6.1.1.3 Slope or Soil Instability. The PUREX Plant is not located in  
10 an area of slope or soil instability, or is it in an area affected by unstable  
11 slope of soil conditions.  
12

13 2.6.1.2 Air. The PUREX Plant is not an incineration unit. Discussion of  
14 measures taken to reduce air emissions resulting from incineration is not  
15 applicable.  
16

17 2.6.1.3 Water. This section addresses the potential for contaminating water  
18 of the state in the event of a release of dangerous waste.  
19

20 2.6.1.3.1 Surface Water. The following addresses considerations for the  
21 protection of surface water.  
22

23 2.6.1.3.1.1 Flood, Seiche, and Tsunami Protection. Three sources of  
24 potential flooding of the area were considered: (1) the Columbia River, (2)  
25 the Yakima River, and (3) storm-induced run-off in ephemeral streams draining  
26 the Hanford Site. No perennial streams occur in the central part of the  
27 Hanford Site.  
28

29 The Federal Emergency Management Agency has not prepared floodplain maps  
30 for the Columbia River through the Hanford Site. The flow of the Columbia  
31 River is largely controlled by several upstream dams that are designed to  
32 reduce major flood flows. Based on a U.S. Army Corps of Engineers study of  
33 the flooding potential of the Columbia River that considered historical data  
34 and water storage capacity of the dams on the Columbia River (COE 1969), the  
35 U.S. Department of Energy (ERDA 1976) has estimated the probable maximum flood  
36 (Figure 9). The estimated probable maximum flood would have a larger  
37 floodplain than either the 100- or 500-year floods. The PUREX Plant is well  
38 above the elevation of the Columbia River probable maximum flood and,  
39 therefore, is not within the 100- or 500-year floodplain.  
40

41 The 100-year floodplain for the Yakima River, as determined by the  
42 Federal Emergency Management Agency (FEMA 1980), is shown in Figure 10. The  
43 PUREX Plant is not within the floodplain.  
44

45 The only other potential source of flooding of the PUREX Plant run-off  
46 from a large precipitation event in the Cold Creek watershed. This event  
47 could result in flooding of the ephemeral Cold Creek. Skaggs and Walters  
48 (1981) have given an estimate of the probable maximum flood using conservative  
49 values of precipitation, infiltration, surface roughness, and topographic  
50 features. The resulting flood area (Figure 11) would not affect the PUREX  
1 Plant. The 100-year flood would be less than the probable maximum flood.  
2

1       **2.6.1.3.1.2 Perennial Surface Water Bodies.** There are no perennial  
2 surface water bodies within one-quarter mile (0.4 kilometer) of the PUREX  
3 Plant.  
4

5       **2.6.1.3.1.3 Surface Water Supply.** The PUREX Plant is not located within  
6 an area designated as a watershed or is it located within one-quarter mile  
7 (0.4 kilometer) of a surface water intake for domestic water.  
8

9       **2.6.1.3.2 Groundwater.** The following addresses consideration for the  
10 protection of groundwater. The PUREX Plant is an "existing facility" as  
11 defined by WAC 173-303-282(3); therefore, compliance with the contingent  
12 groundwater protection program is not required.  
13

14       **2.6.1.3.2.1 Depth to Groundwater.** The PUREX Plant is located in the  
15 200 East Area of the Hanford Facility. The depth to groundwater at this  
16 location is over 200 feet (322 meters).  
17

18       **2.6.1.3.2.2 Sole Source Aquifer.** The PUREX Plant is not located over an  
19 area designated as a 'sole source aquifer' under section 1424(e) of the *Safe*  
20 *Water Drinking Act of 1974.*  
21

22       **2.6.1.3.2.3 Groundwater Management Areas and Special Protection Areas.**  
23 The proposed expansion involves only the addition of storage capacity at  
24 existing treatment tanks in the PUREX Plant. The storage of waste in the  
25 existing tanks is not expected to result in an increased potential for release  
26 of dangerous waste to groundwater.  
27

28       **2.6.1.3.2.4 Groundwater Intakes.** The PUREX Plant is not located within  
29 one-quarter mile (0.4 kilometer) of a groundwater intake for domestic water.  
30

31       **2.6.1.4 Plants and Animals.** The proposed expansion will not result in an  
32 increased potential for dangerous waste to contaminate plant and animal  
33 habitat in the event of a release of dangerous waste.  
34

35       **2.6.1.5 Precipitation.** The PUREX Plant is not located in an area having a  
36 mean annual precipitation level of greater than 100 inches (254 centimeters).  
37  
38

## 39 **2.6.2 Criteria for Elements of the Built Environment**

40

41       No modification to the existing PUREX Plant is planned as part of the  
42 proposed action. The addition of storage capacity to existing treatment tanks  
43 will have no impact to the built environment as no physical modification of  
44 the existing waste management unit is planned. Demonstration of consideration  
45 of criteria for elements of the built environment as specified by  
46 WAC 173-303-282(7) is therefore not considered applicable.  
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### 3.0 TEN-YEAR COMPLIANCE HISTORY

The U.S. Department of Energy, DOE Richland Field Office, has not received any notice of noncompliance since the 222-S Laboratory Complex--219-S Waste Handling Facility NOI was filed in November 1991.

### 4.0 JUSTIFICATION OF NEED

The addition of storage capacity to the PUREX Plant tanks U3, U4, and F18 is being pursued as part of ongoing waste minimization efforts. Storage of liquids in the existing treatment tanks will allow the accumulation of waste in the tanks until sufficient quantities are available to treat and transfer without the addition of water. This will eliminate the present practice of sometimes adding water to the tanks to achieve the minimum liquid level required for treatment and transfer within 90 days following receipt of the waste. The quantity of waste generated at the PUREX Plant will be reduced, as well as the quantity of waste requiring storage at the Double-Shell Tank System.

### 5.0 IMPACT ON OVERALL CAPACITY AT THE HANFORD FACILITY AND THE STATE OF WASHINGTON

The current capacity for storing, treating, and/or disposing of liquid mixed waste is limited within Washington State and the Hanford Facility. The expansion of the PUREX Plant waste management unit to allow for tank storage in tanks U3, U4, and F18 will reduce the volume of waste required to be stored and subsequently treated on the Hanford Facility. No negative environmental impacts as a result of the expansion have been identified.

6.0 REFERENCES

- 1  
2  
3  
4 COE, 1969, *Lower Columbia River Standard Project Flood and Probable Maximum*  
5 *Flood*, U.S. Army Corps of Engineers, North Pacific Division,  
6 Portland, Oregon.  
7  
8 DOE-RL, 1988, *Hanford Facility Dangerous Waste Part A Permit Application*,  
9 DOE/RL-88-21, Vols. 1-3, U.S. Department of Energy-Richland Operations  
10 Office, Richland, Washington.  
11  
12 Ecology, 1991, *Dangerous Waste Regulations*, Washington Administrative Code,  
13 Chapter 173-303, Washington State Department of Ecology,  
14 Olympia, Washington.  
15  
16 ERDA, 1976, *Evaluation of Impact of Potential Flooding Criteria on the Hanford*  
17 *Project*, RLO-76-4, U.S. Energy Research and Development Administration-  
18 Richland Operations Office, Richland, Washington.  
19  
20 FEMA, 1980, *Flood Insurance Study: Benton County Washington*, Federal  
21 Emergency Management Agency, Federal Insurance Administration,  
22 Washington, D.C.  
23  
24 ICBO, 1991, *Uniform Building Code*, International Conference of Building  
25 Officials, Whittier, California.  
26  
27 *Safe Drinking Water Act of 1974*, 42 USC 300f et seq.  
28  
29 *Shoreline Management Act of 1971*, Revised Code of Washington,  
30 Chapter 90.58.101 et seq., Olympia, Washington.  
31  
32 Skaggs, R.L. and W.H. Walters, 1981, *Flood Risk Analysis of Cold Creek Near*  
33 *the Hanford Site*, PNL-4219, Pacific Northwest Laboratory, Richland,  
34 Washington.  
35  
36 *State Environmental Policy Act of 1971*, 42 USC 4321.  
37

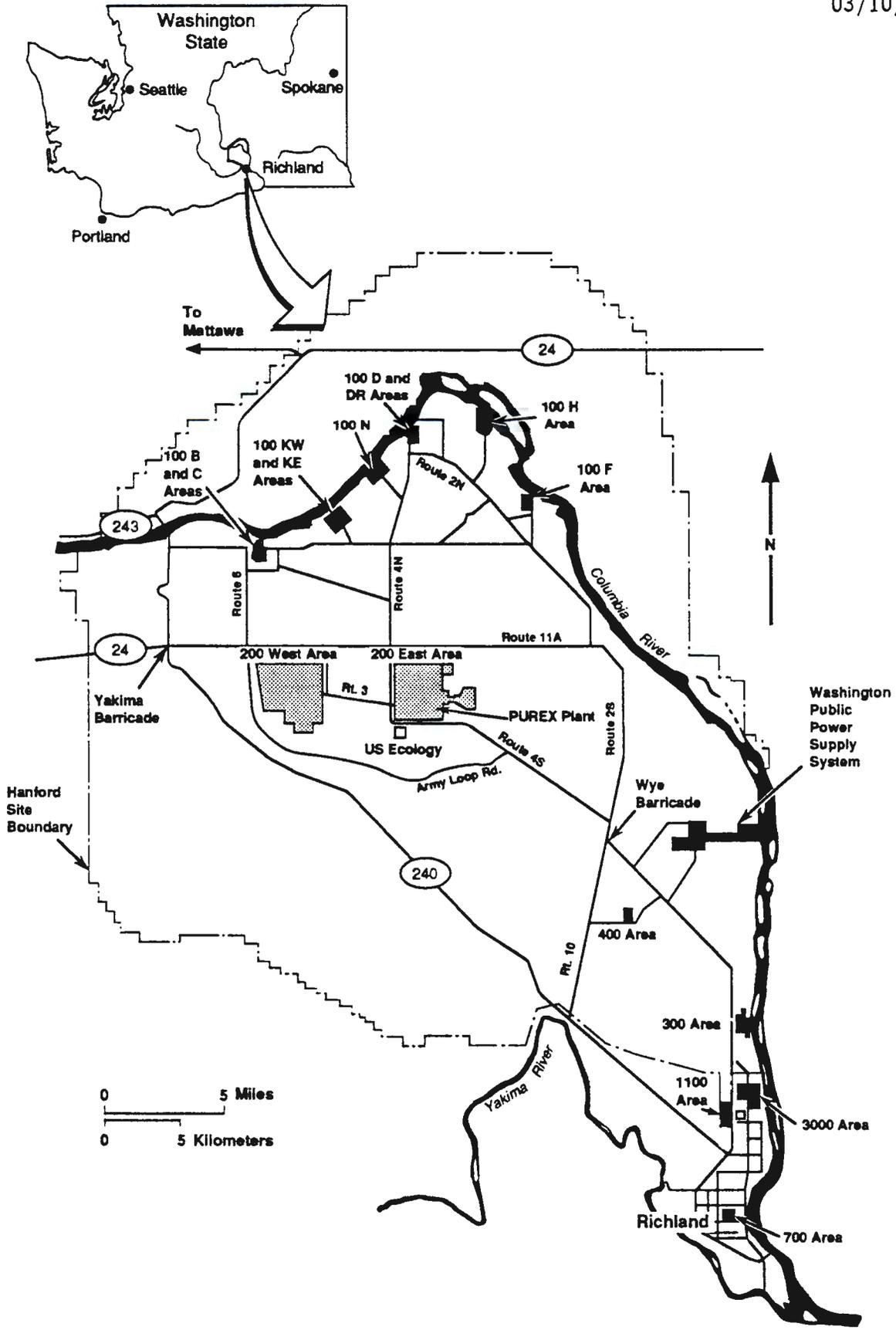


Figure 1. Hanford Site.

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# 200 East Area

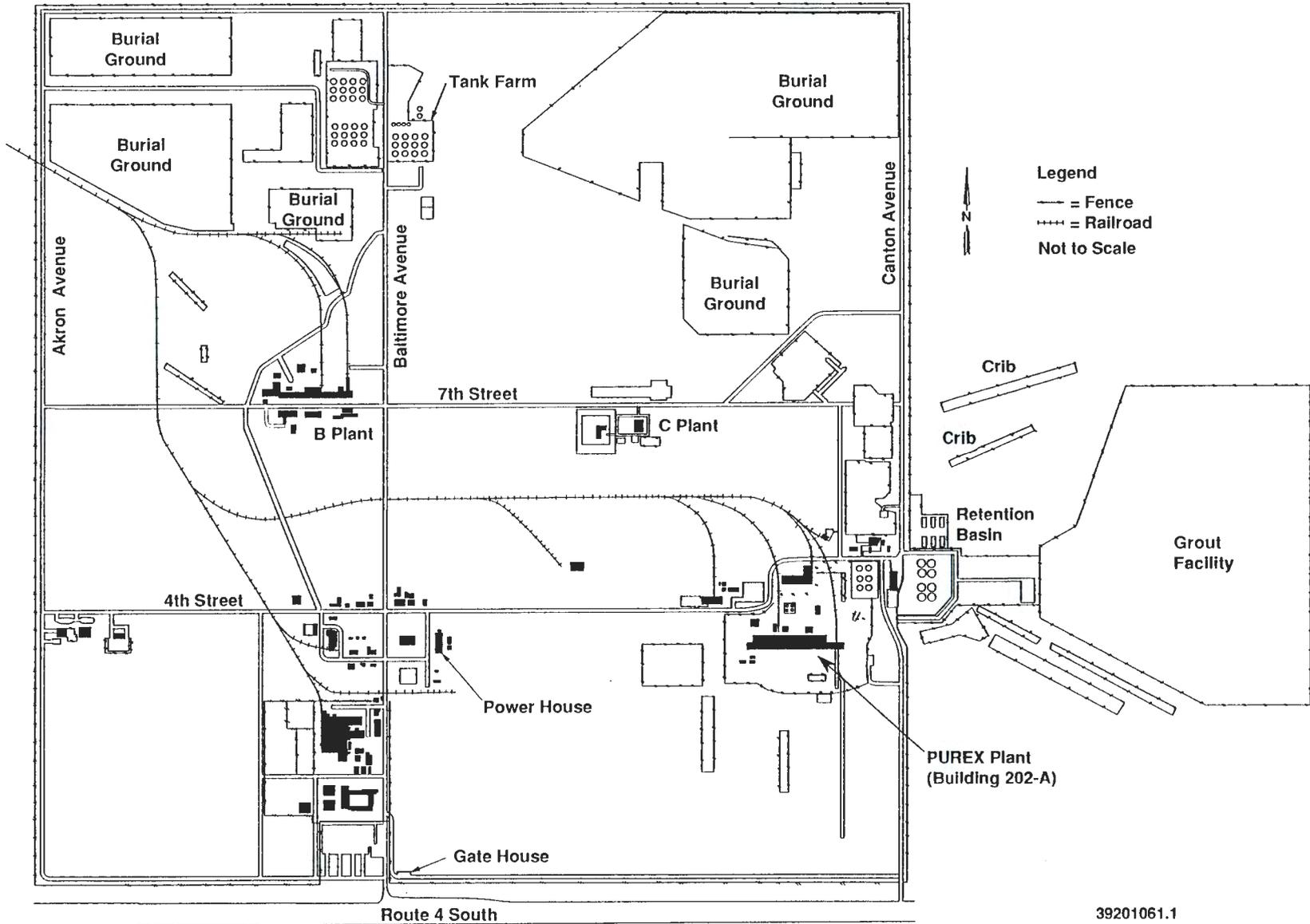
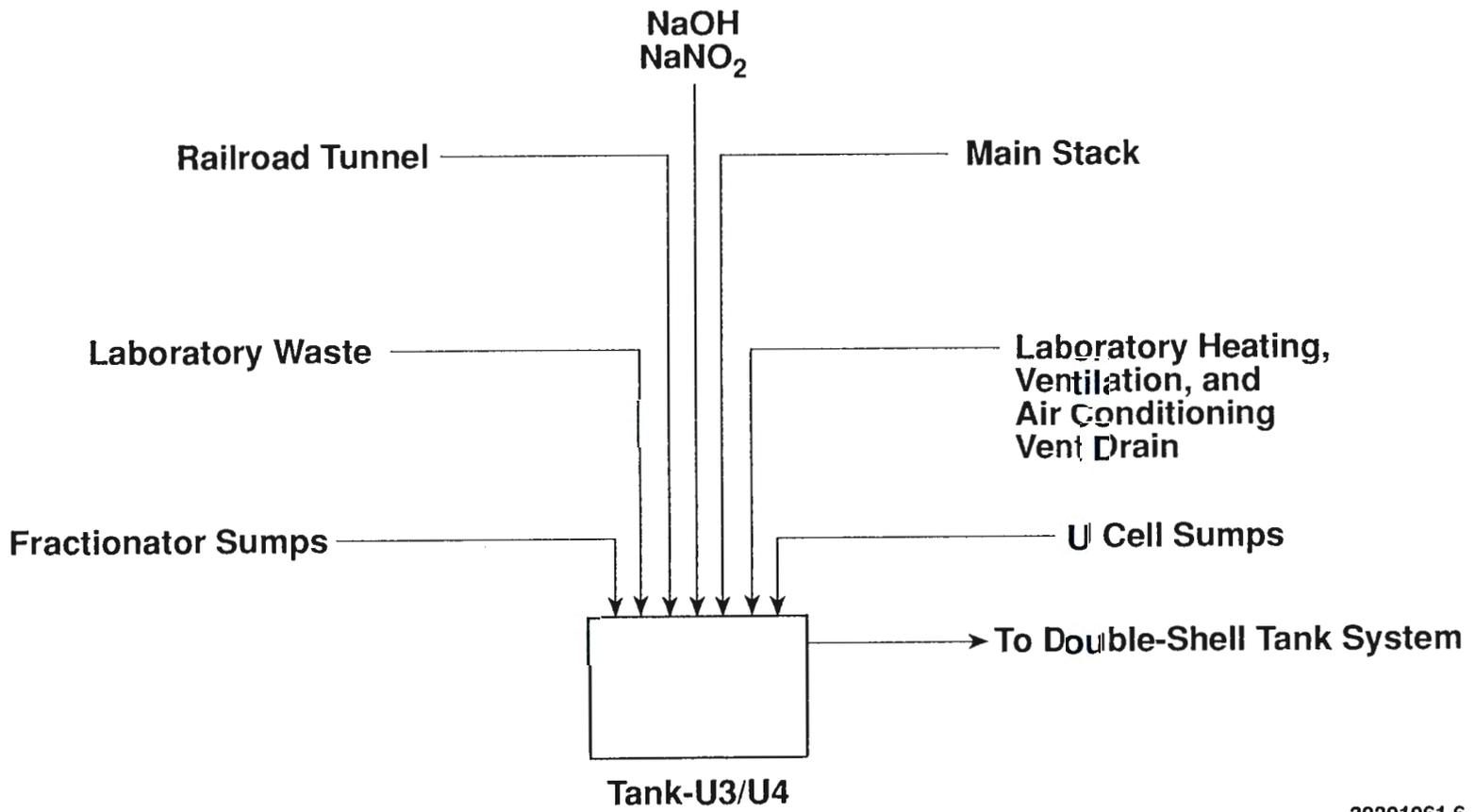


Figure 2. Location of the PUREX Plant.

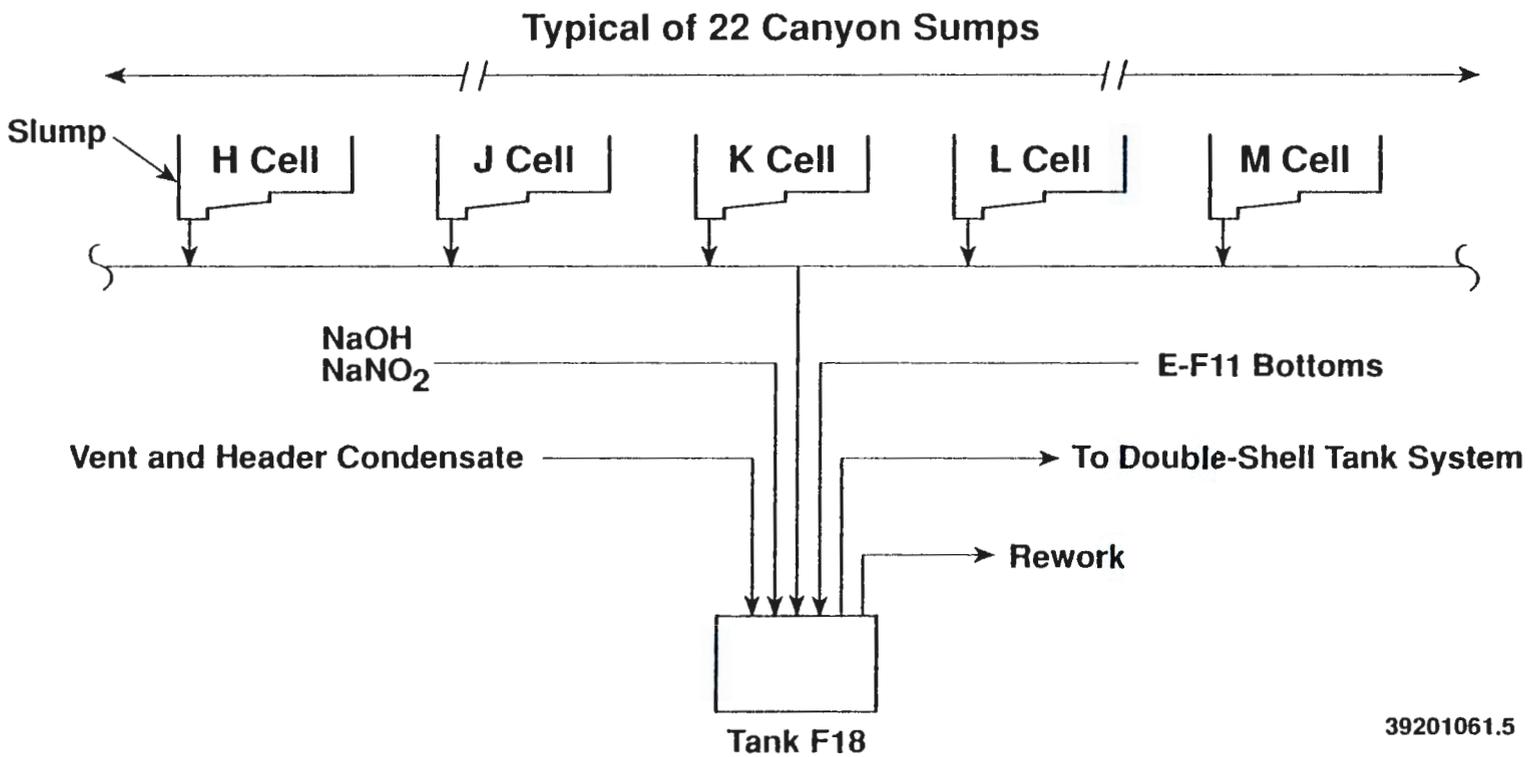
# Tank-U3/U4 Waste Stream Flow Diagram



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NOI-PUREX Plant  
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Figure 3. Tanks U3 and U4 Waste Stream Flow Diagram.



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Figure 4. Tank F18 Waste Stream Flow Diagram.

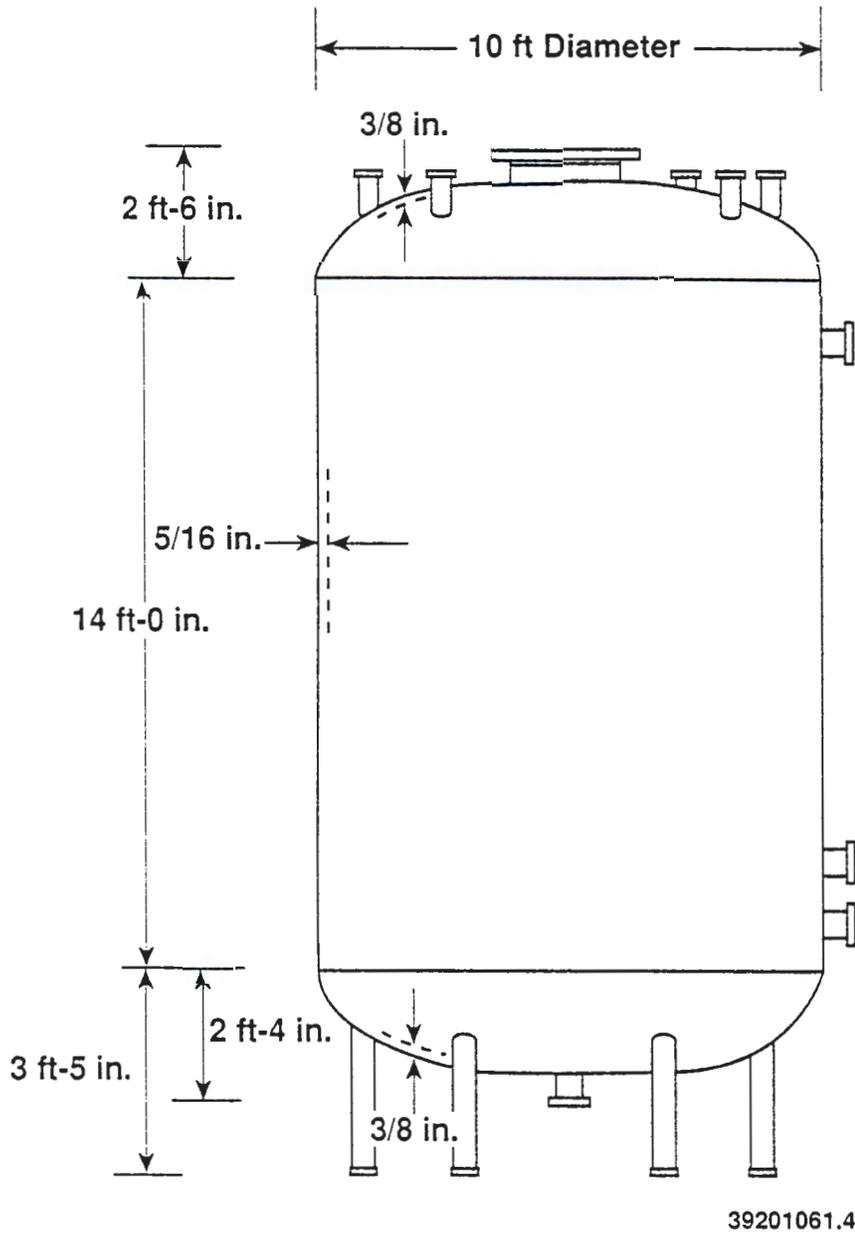


Figure 5. U-Cell Tank [8,000-Gallon (30,283-Liter)]  
(Typical of Tank U3 and Tank U4).

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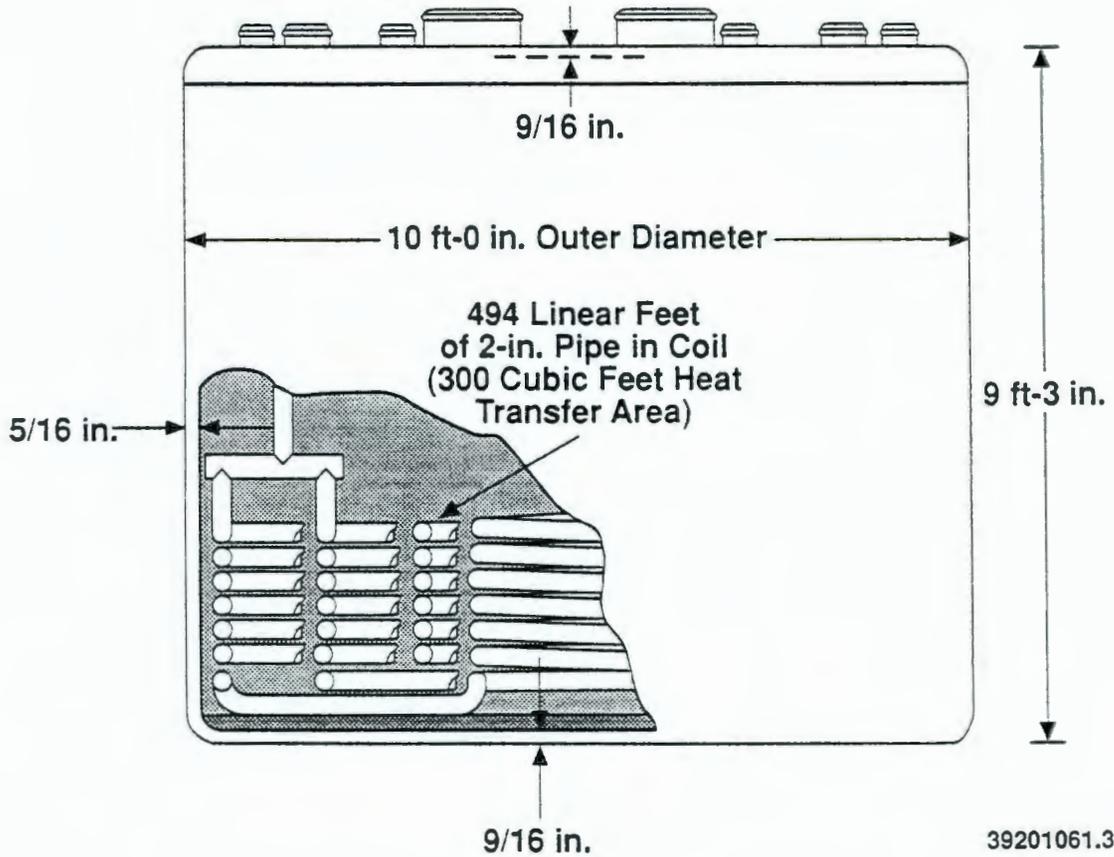
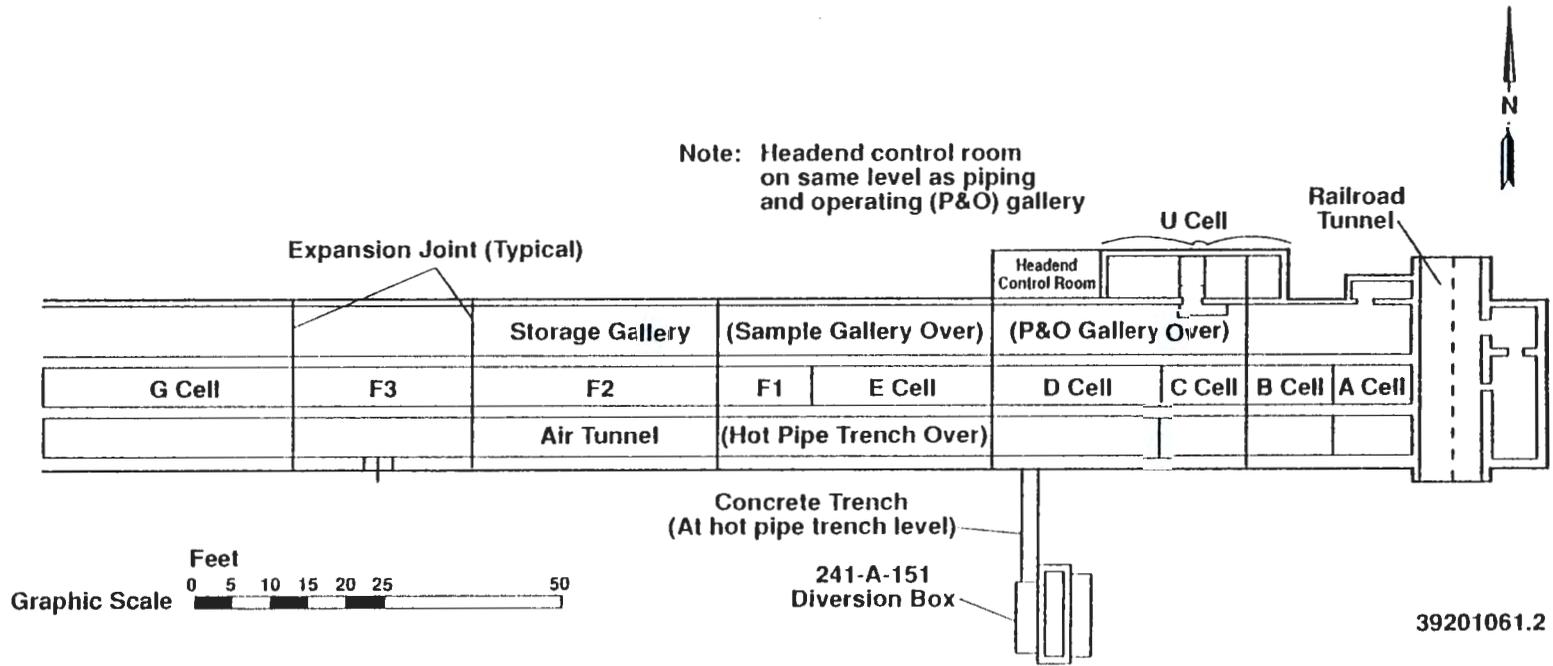


Figure 6. Standard Tank [5,000-Gallon (18,927-Liter)]  
(Typical of Tank F18).

Figure 7. The PUREX 202-A Building Partial Floor Plan.



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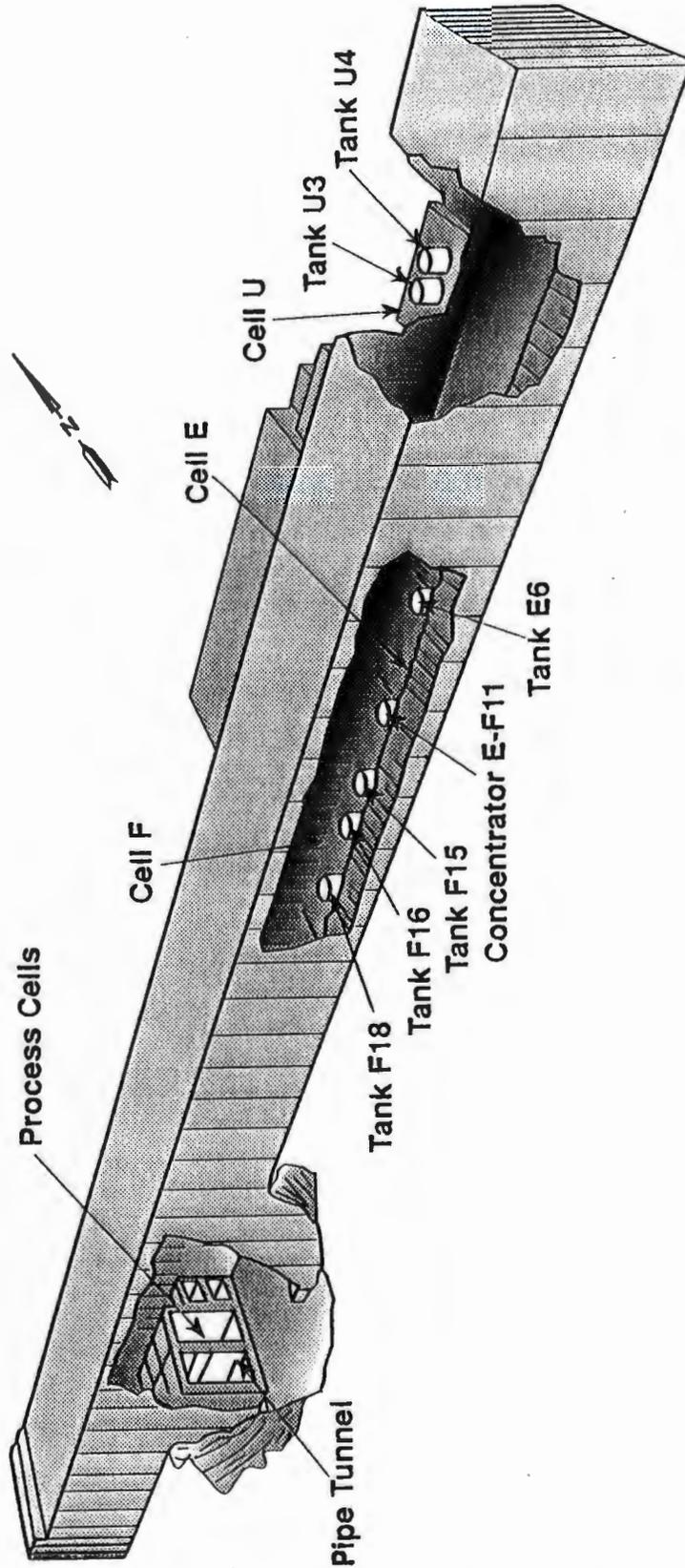


Figure 8. Cut-a-way View of the PUREX Plant Showing Locations of Tanks U3, U4, and F18.

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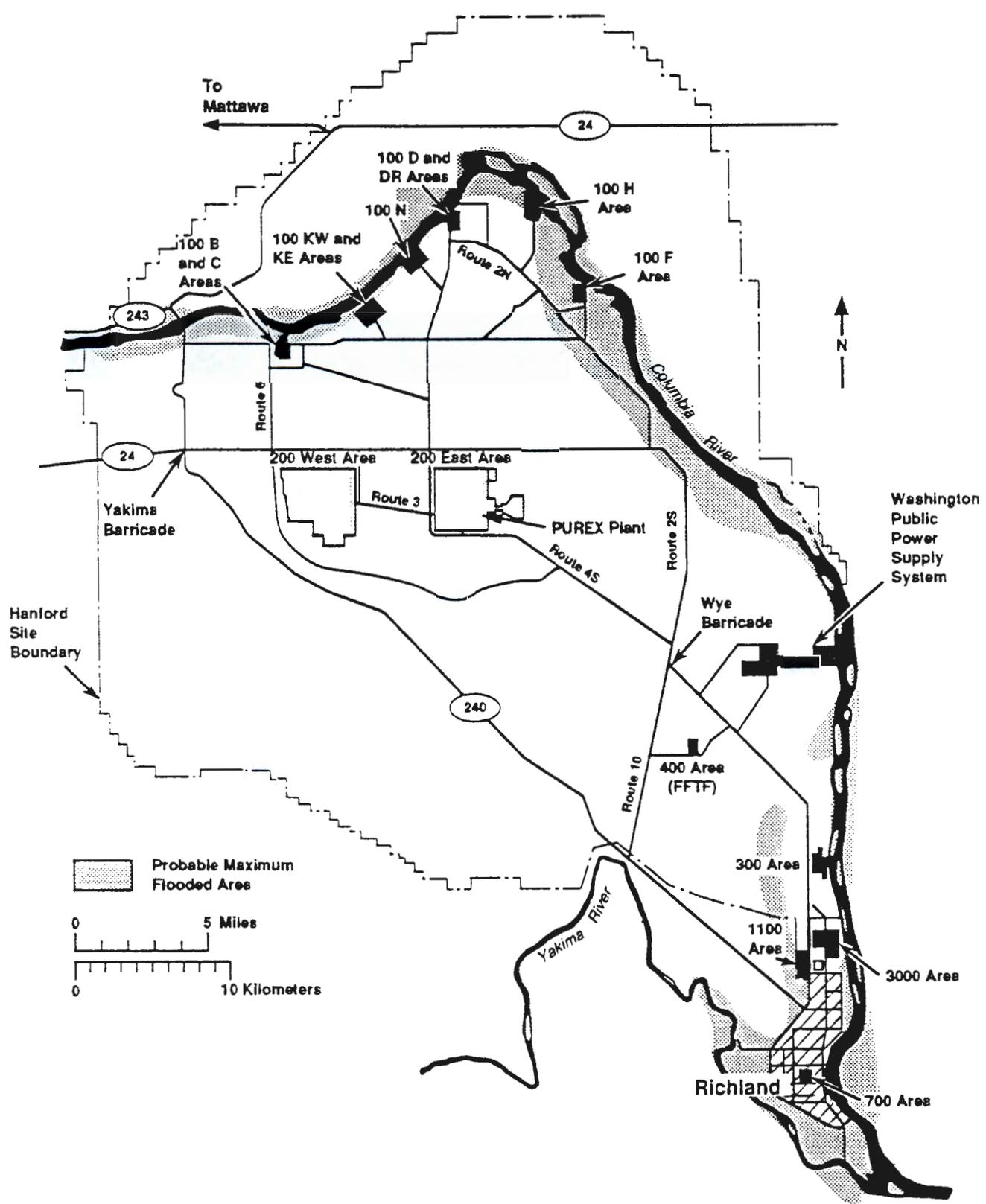


Figure 9. Columbia River Floodplain (probable maximum flood).

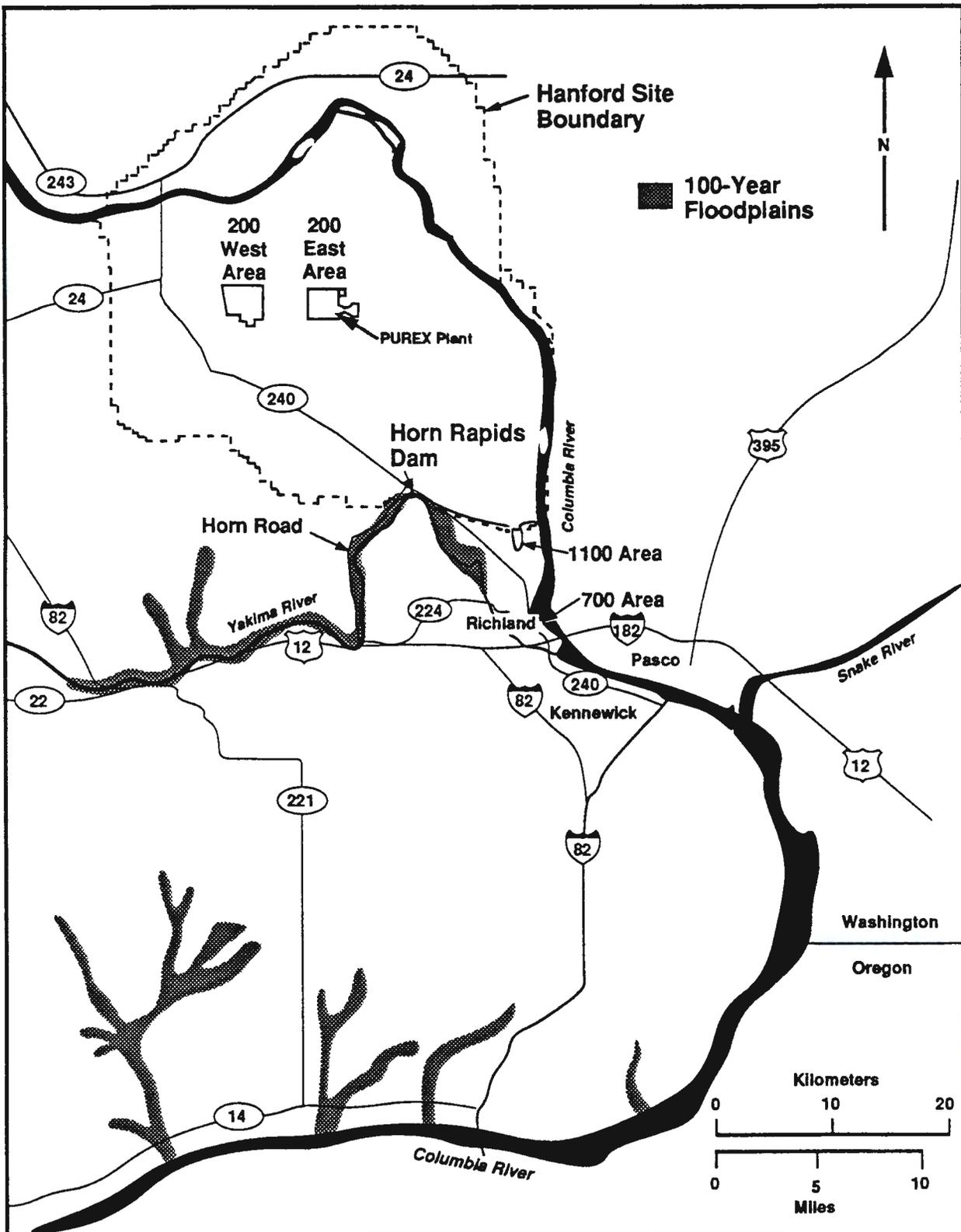


Figure 10. Yakima River Floodplain.

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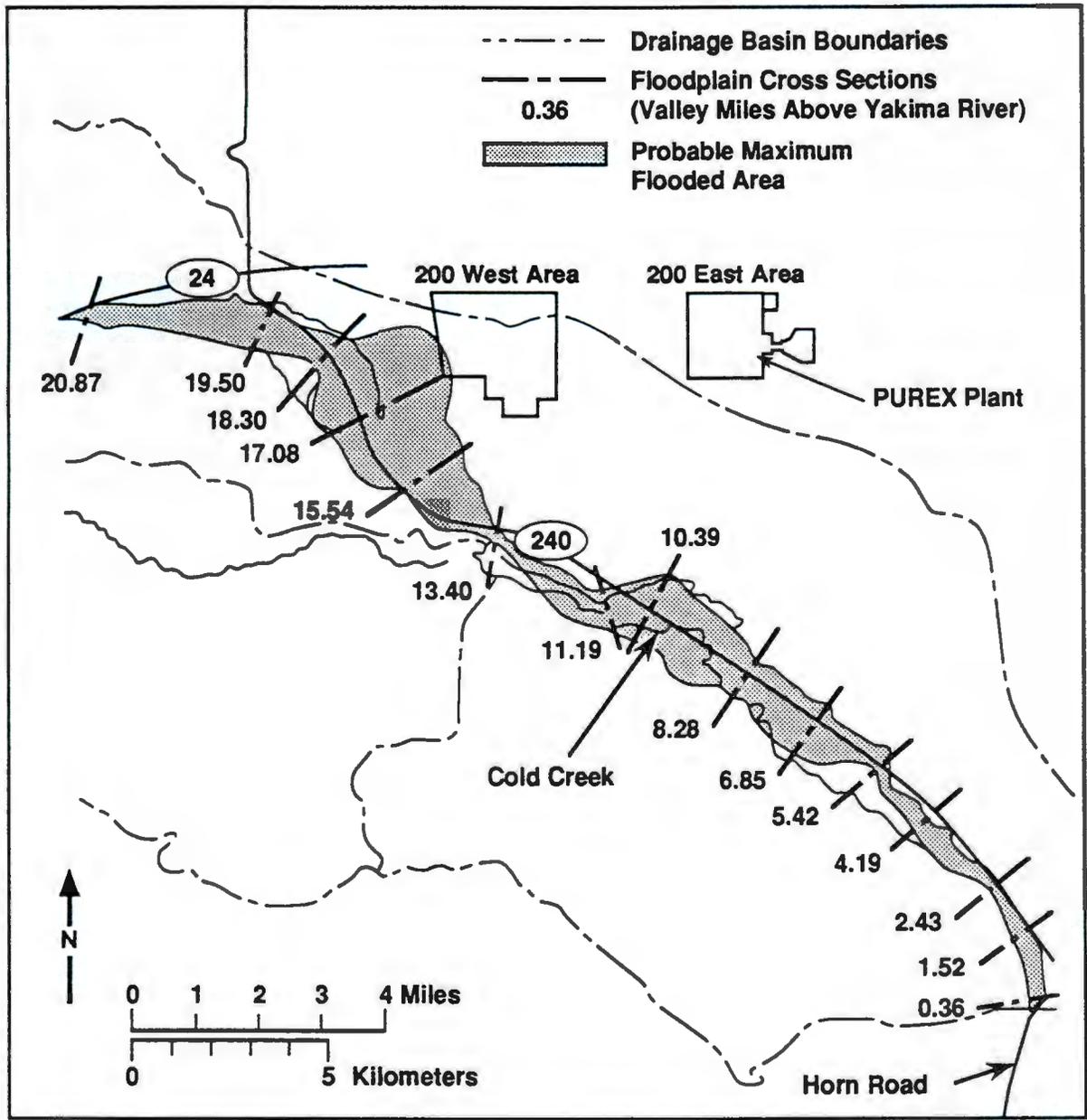


Figure 11. Cold Creek Watershed Floodplain.

APPENDIX A

HANFORD SITE MAPS

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APPENDIX A

CONTENTS

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7	H-13-000013	TOPOGRAPHIC MAP PUREX PLANT
8		
9	H-6-958	OVERALL HANFORD FACILITIES
10		
11	H-13-000020	PUREX PLANT RECORD OF SURVEY

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C

OFFICIAL RELEASE  
 BY WHC  
 DATE MAR 06 1992

DWG NO H-13-000020 SH 1 of 1 REV 0

			EDT 124509			
DRAWN BR KAMPPI			U.S. DEPARTMENT OF ENERGY			
CHECKED <i>D.D. Tiller</i>			Richland Operations Office			
DATE 1/27/92			Westinghouse Hanford Company			
DFTG APVD <i>[Signature]</i>			PUREX PLANT			
DATE 2-27-92						
COG ENGR <i>[Signature]</i>			RECORD OF SURVEY			
DATE 3-5-92						
OTHER			SIZE F			
OTHER <i>[Signature]</i>			BLDG NO 202-A			
OTHER			INDEX NO 0103			
APVD FOR IMPLEMENTATION			DWG NO H-13-000020			
BY			REV 0			
FOR			SCALE AS SHOWN			
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120 160 METERS



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DWG NO H-13-000013

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EDT 124508

DRAWN	<i>Pat A. Nash</i>	DATE	5-9-91
CHECKED	<i>G.D. Kelly</i>	DATE	1-21-92
DFTG APVD	<i>[Signature]</i>	DATE	
COG ENGR	<i>J.R. Bally</i>	DATE	1-24-92
QA			
OTHER	<i>P.V. Hancock</i>	DATE	1-24-92
OTHER			
OTHER	<i>D. E. [Signature]</i>	DATE	1-24-92
APVD FOR IMPLEMENTATION			
BY		DATE	
FOR			

U.S. DEPARTMENT OF ENERGY  
Richland Operations Office  
Westinghouse Hanford Company

# TOPOGRAPHIC MAP PUREX PLANT

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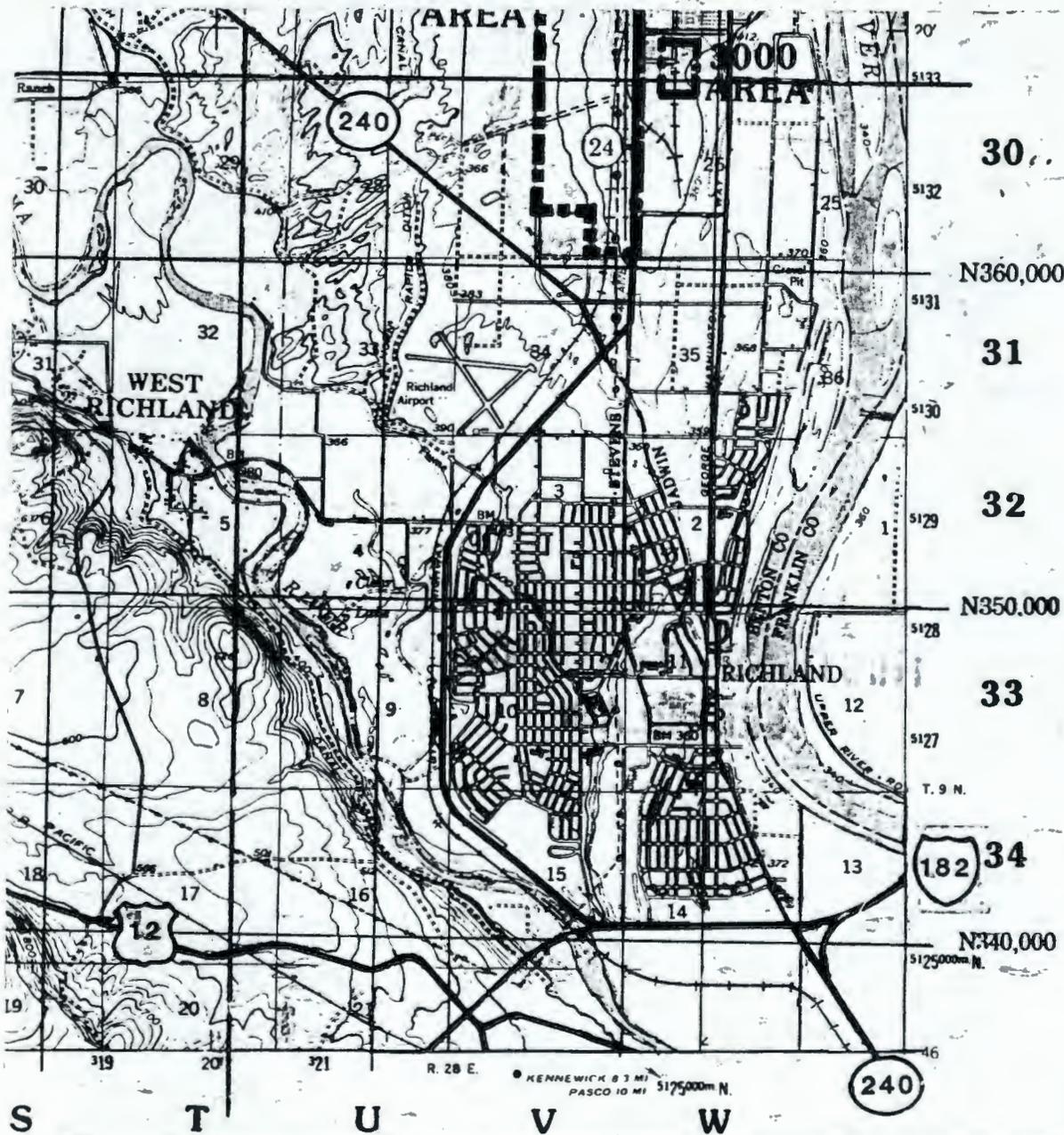
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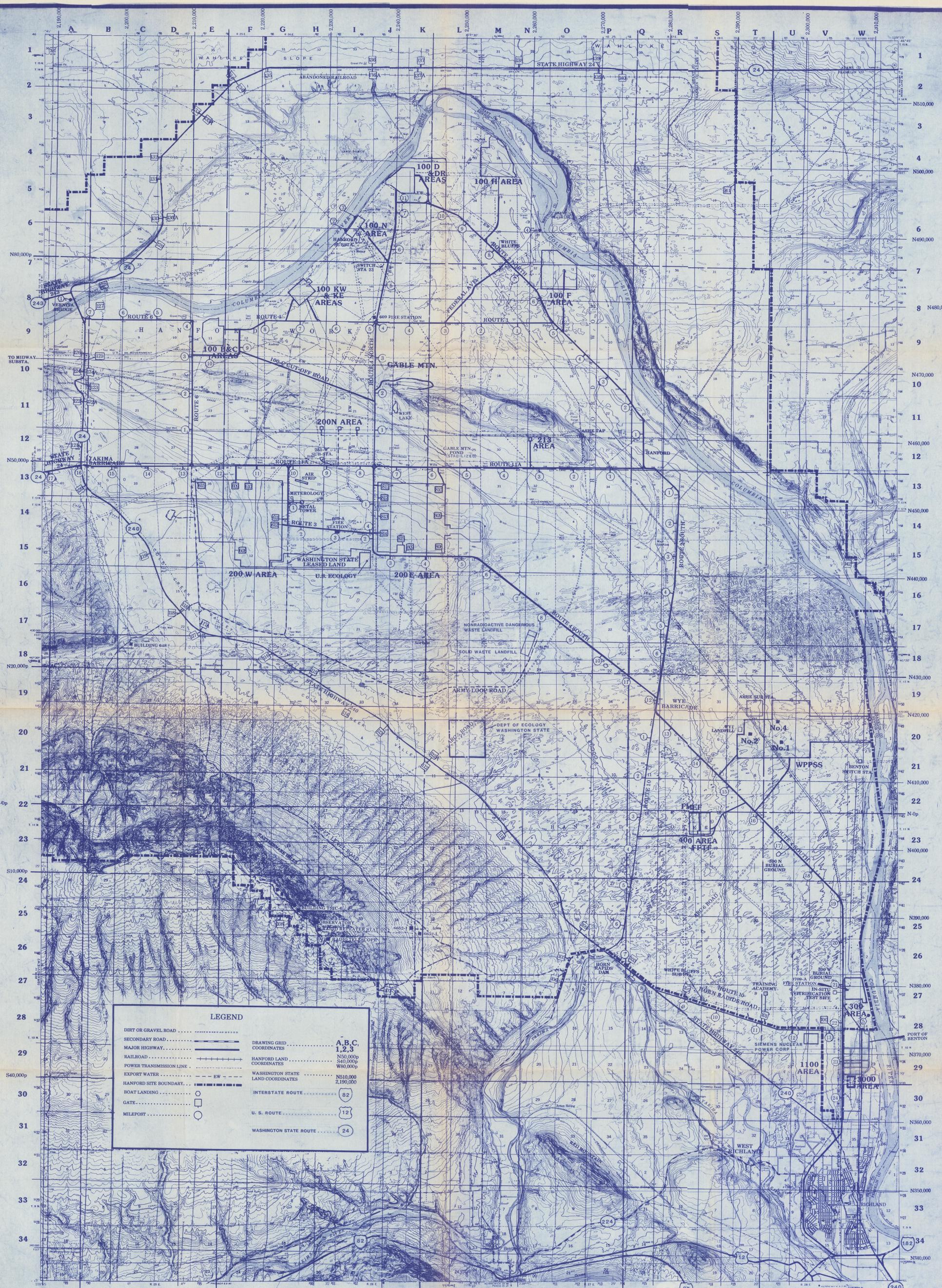
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<b>DRAWING APPROVALS</b>		<b>DATE</b>	<b>U. S. Department of Energy</b> Richland Operations Office		
APPD FOR QUALITY ASSURANCE					
	<i>[Signature]</i>	3/89	<h1>OVERALL HANFORD FACILITIES</h1>		
	<i>[Signature]</i>	13mar 89			
	<i>[Signature]</i>	2-17-89			
3	<b>RESPONSIBLE ENGINEER</b> R.L. MARTELL	3/89			
	DRAFTING APPD				
	<i>[Signature]</i>	3/3/89			
LAST REV.	<b>DRAWN</b> K.D. JUNE	3/89	SCALE <b>AS SHOWN</b>	BL. OR. NO. <b>600 GEN</b>	INDEX NO. <b>0100</b>
3	<b>CLASSIFICATION</b> NONE	<b>BY</b> NOT REQ'D	<b>DRAWING NO.</b> H-6-958		<b>SHEET NO.</b> 1
					<b>SHEETS</b> 1

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DIRT OR GRAVEL ROAD	.....	DRAWING GRID COORDINATES	A.B.C., 1,2,3
SECONDARY ROAD	.....	HANFORD LAND COORDINATES	N50,000p N40,000p N60,000p
MAJOR HIGHWAY	.....	WASHINGTON STATE LAND COORDINATES	N510,000 N210,000
RAILROAD	.....	INTERSTATE ROUTE	(82)
POWER TRANSMISSION LINE	.....	U. S. ROUTE	(12)
EXPORT WATER	.....	WASHINGTON STATE ROUTE	(24)
HANFORD SITE BOUNDARY	.....		
BOAT LANDING	.....		
GATE	.....		
MILEPOST	.....		



**NOTE**  
APPROVAL TO CHANGE THIS MAP MUST BE OBTAINED FROM THE ENVIRONMENTAL DIVISION, RCRA PERMITS SECTION BECAUSE THIS MAP WAS SUBMITTED WITH PERMIT APPLICATIONS TO THE WASHINGTON DEPARTMENT OF ECOLOGY.

OFFICIAL RELEASE  
BY WWC EPT-10111  
DATE MAR 17 1989

NO.	DATE	REVISIONS
1	11-20-81	REV. PER EGN-170550
2	11-30-81	
3	11-30-81	
4	11-30-81	
5	11-30-81	

DRAWING APPROVALS DATE  
APPROVED FOR QUALITY ASSURANCE  
RESPONSIBLE ENGINEER  
DRAWING APPROVED

U. S. Department of Energy  
Richland Operations Office  
Westinghouse Hanford Company

**OVERALL HANFORD FACILITIES**

AS SHOWN 600 GEN INDEX NO. 0100  
DRAWING NO. H-6-958 SHEET NO. 1 1

NEXT USED ON: END ITEM

DRAWING STATUS



# RECORD OF SURVEY

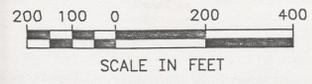
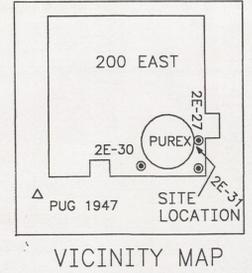
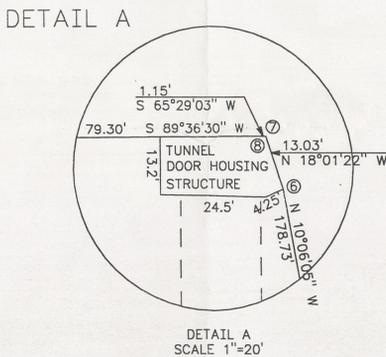
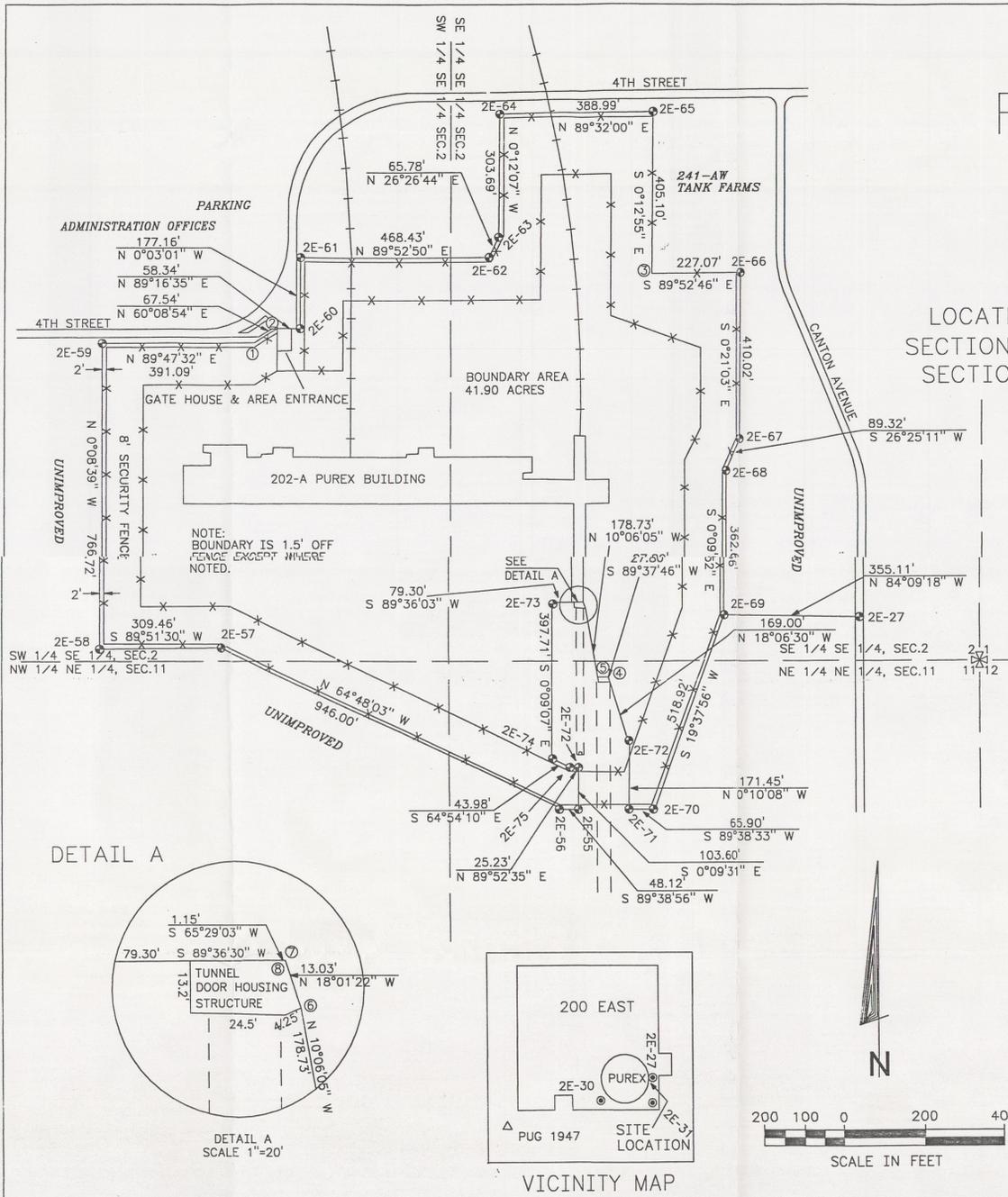
FOR

U.S. DEPARTMENT OF ENERGY  
RICHLAND OPERATIONS OFFICE

LOCATED IN THE SE 1/4 SE 1/4 AND SW 1/4 SE 1/4,  
SECTION 2, AND THE NE 1/4 NE 1/4 AND NW 1/4 NE 1/4,  
SECTION 11, TOWNSHIP 12 NORTH, RANGE 26 EAST, W.M.,  
BENTON COUNTY, WASHINGTON

## GENERAL NOTES

1. THE RECORD OF SURVEY FOR THE PUREX PLANT WAS PREPARED TO SATISFY THE REQUIREMENTS OF THE WASHINGTON ADMINISTRATION CODE (WAC) 173-303-806(4)(a)(xviii)(G) TO DEFINE THE LEGAL BOUNDARIES OF TREATMENT, STORAGE, AND/OR DISPOSAL (TSD) UNITS.
2. THE RECORD OF SURVEY ESTABLISHES THE LEGAL BOUNDARIES OF THE PUREX PLANT.
3. THE RECORD OF SURVEY WILL BE FILED WITH THE COUNTY OF BENTON IN THE STATE OF WASHINGTON WHEN A CERTIFICATION OF CLOSURE HAS BEEN FILED IN ACCORDANCE WITH WAC 173-303-610(9), NOTICE TO LOCAL LAND AUTHORITY.



SCALE FACTOR: 0.999914802  
ELEVATION FACTOR: 0.99994845

### CONTROL MONUMENTS AND CORNER COORDINATES

MONUMENT	N	E
2E-55	135,385.728	575,256.814
2E-56	135,385.638	575,242.150
2E-57	135,508.388	574,981.285
2E-58	135,508.155	574,886.974
2E-59	135,741.820	574,886.385
FEN COR ①	135,742.252	575,005.572
BLDG COR ②	135,752.498	575,023.426
2E-60	135,752.723	575,041.206
2E-61	135,806.715	575,041.158
2E-62	135,807.013	575,183.916
2E-63	135,824.962	575,192.844
2E-64	135,917.514	575,192.518
2E-65	135,918.480	575,311.061
FEN COR ③	135,795.022	575,311.525
2E-66	135,794.877	575,380.727
2E-67	135,669.922	575,381.492
2E-68	135,645.544	575,369.380
2E-69	135,535.021	575,369.698
2E-70	135,386.067	575,316.563
2E-71	135,385.942	575,296.479
2E-72	135,438.191	575,296.325
BLDG COR ④	135,487.144	575,280.317
BLDG COR ⑤	135,487.089	575,271.845
BLDG COR ⑥	135,540.714	575,262.292
BLDG COR ⑦	135,544.489	575,261.063
BLDG COR ⑧	135,544.344	575,260.744
2E-73	135,544.175	575,236.579

### NOTES

COORDINATES AND BASIS FOR BEARINGS ARE FROM GLOBAL POSITIONING SYSTEM MEASUREMENTS ON HANFORD 200E PLANT MONUMENTS 2E-27 AND 2E-31, BASED ON MONUMENT PUG 1947 NGS GEODETIC CONTROL DIAGRAM WALLA WALLA.

SITE BOUNDARY SURVEY MADE WITH H.P. 3820-A TOTAL STATION. THE BOUNDARY WAS A CLOSED TRAVERSE THROUGH MONUMENTS 2E-27 AND 2E-31, HAVING A CLOSURE GREATER THAN 1:20,000. ALL DIMENSIONS ARE GROUND LEVEL DISTANCES EXPRESSED IN FEET.

ALL COORDINATES ARE BASED ON THE WASHINGTON COORDINATE SYSTEM OF 1983, SOUTH ZONE (WCS 83S) PER 58.20 RCW.

SITE LOCATION WITHIN SECTION OR SECTIONS IS SCALED FROM A 7.5' QUADRANGLE MAP, USING LATITUDE AND LONGITUDE.

INDICATES MAGNETICALLY LOCATABLE 3" ALUMINUM MONUMENT WITH 2.5 FOOT ALUMINUM SHAFT, MARKED WITH SITE DESIGNATION NO., CORNER NO. AND SURVEYOR IDENTIFICATION.

2E-74	N 135,422.970	E 575,236.900
2E-75	N 135,417.285	E 575,249.038
2E-76	N 135,417.302	E 575,256.727
2E-27	N 135,524.000	E 575,477.358
2E-31	N 134,860.011	E 575,479.179
2E-30	N 134,963.781	E 574,670.921
PUG	N 134,746.864	E 572,503.297

### AUDITOR'S CERTIFICATE

FILED FOR RECORD THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 1991 A.D.  
AT \_\_\_\_\_ MINUTES PAST \_\_\_\_\_ M. AND RECORDED IN  
BOOK \_\_\_\_\_ OF SURVEY, PAGE \_\_\_\_\_ RECORDS  
OF BENTON COUNTY, WASHINGTON.  
FEE No. \_\_\_\_\_  
SURVEY No. \_\_\_\_\_ BENTON COUNTY AUDITOR

### SURVEYOR'S CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE UNDER MY  
DIRECT SUPERVISION IN CONFORMANCE WITH THE REQUIREMENTS  
OF THE SURVEY RECORDING ACT, CHAPTER 50, LAWS OF 1973  
AT THE REQUEST OF THE U.S. DEPARTMENT OF ENERGY.  
DATE 10/24/91  
WASHINGTON STATE SURVEYOR No. 11003

### KAISER ENGINEERS HANFORD CO.

RICHLAND, WASHINGTON 99352  
P.O. BOX 888  
WASHINGTON 509-373-2615

SE 1/4 SE 1/4, 2-12-26
SW 1/4 SE 1/4, 2-12-26
NE 1/4 NE 1/4, 11-12-26
NW 1/4 NE 1/4, 11-12-26
DATE: 9/5/91
JOB No: ER 1718
SHEET 1 OF 1

OFFICIAL RELEASE  
BY WHC  
DATE MAR 06 1992

DRAWN	BR KAMPP	1/28/92
CHECKED	C.D. Tilly	2/27/92
DATE APVD	Handwritten	2-27-92
DATE ENGR	Handwritten	3-5-92
CA	Handwritten	
OTHER		
OTHER		
APVD FOR IMPLEMENTATION		
BY		
DATE		

U.S. DEPARTMENT OF ENERGY	Richland Operations Office	Westinghouse Hanford Company
<b>PUREX PLANT RECORD OF SURVEY</b>		
SIZE	BLDG NO	INDEX NO
F	202-A	0103
DWG NO	H-13-000020	
REV	0	
SCALE AS SHOWN	SHEET 1 OF 1	

DWG NO	TITLE	REV NO	DESCRIPTION	REV BY	DATE	CHK BY	DATE	DFTD APVD DATE	COG ENGR	OTHER	OTHER
H-13-000013	TOPOGRAPHIC MAP PUREX PLANT										
DRAWING TRACEABILITY LIST		NEXT USED ON		H-13-000013		CADFILE		N000020A		CADCODE 1X:HW:ACD2:10.0:N	

APPENDIX B

STATE ENVIRONMENTAL POLICY ACT ENVIRONMENTAL CHECKLIST

1  
2  
3  
4

9 2 1 2 5 0 1 6 4 1

1

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9 2 1 2 5 8 0 1 6 4 2

STATE ENVIRONMENTAL POLICY ACT  
ENVIRONMENTAL CHECKLIST

FOR

THE PUREX PLANT

REVISION 0

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MARCH 1992

9 2 1 2 5 0 1 6 4 3

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A. BACKGROUND

1  
2  
3  
4 1. Name of proposed project if applicable:

5  
6 Expansion of the Hanford Facility PUREX Plant waste management unit.  
7 This *State Environmental Policy Act (SEPA) of 1971* Checklist is being  
8 submitted concurrently with the PUREX Plant Notice of Intent (NOI) of  
9 interim status expansion. Waste management activities at the PUREX Plant  
10 are planned to be expanded to allow dangerous waste storage in existing  
11 treatment tanks U3, U4, and F18.  
12

13 2. Name of applicants:

14  
15 U.S. Department of Energy, DOE Richland Field Office (DOE-RL); and  
16 Westinghouse Hanford Company.  
17

18 3. Address and phone number of applicant and contact person:

19  
20 U.S. Department of Energy Westinghouse Hanford Company  
21 DOE Richland Field Office P.O. Box 1970  
22 P.O. Box 550 Richland, Washington 99352  
23 Richland, Washington 99352  
24

25 Contact Persons:

26  
27 R. D. Izatt, Program Manager R. E. Lerch, Manager  
28 Office of Environmental Assurance, Environmental Division  
29 Permits and Policy (509) 376-5556  
30 (509) 376-5441  
31

32 4. Date checklist prepared:

33  
34 March 10, 1992  
35

36 5. Agency requesting the checklist:

37  
38 Washington State  
39 Department of Ecology  
40 Mail Stop PV-11  
41 Olympia, WA 98504-8711  
42

43 6. Proposed timing or schedule (including phasing, if applicable):

44  
45 The NOI for interim status expansion of the PUREX Plant is being  
46 submitted in accordance with the Washington Administrative  
47 Code (WAC) 173-303-281 "Notice of Intent," Section (2) Item (c). A  
48 modification to the existing Part A permit application is planned to be  
49 submitted to Ecology following the 150-day notification period required  
50 by the WAC. Dangerous waste storage in treatment tanks U3, U4, and F18  
51 will commence as needed thereafter following submittal of the revised  
52 Part A permit application.

1  
2 7. Do you have any plans for future additions, expansion, or further  
3 activity related to or connected with this proposal? If yes, explain.  
4

5 No.  
6

7 8. List any environmental information you know about that has been prepared,  
8 or will be prepared, directly related to this proposal.  
9

- 10 • The SEPA Checklist is being submitted concurrently with the NOI for  
11 expansion of the PUREX Plant waste management unit.  
12  
13 • A Part A Dangerous Waste Permit Application for the PUREX Plant  
14 initially was submitted to Ecology on November 25, 1987. Revision 1  
15 was submitted on May 19, 1988, Revision 2 of the Part A permit  
16 application was submitted October 18, 1989 and is presently in effect.  
17 Revision 3 of the Part A permit application is planned following the  
18 150-day notification period.  
19  
20 • A Part B permit application for the PUREX Plant currently is scheduled  
21 to be submitted to Ecology on September 30, 1992.  
22  
23 • The PUREX Plant is discussed in the following *National Environmental*  
24 *Policy Act* documentation: *Environmental Impact Statement, Operation*  
25 *of PUREX and Uranium Oxide Plant Facilities*, DOE/EIS-0089  
26 (U.S. Department of Energy, 1983, Washington, D.C.).  
27

28 Environmental information on the Hanford Site, in general, can be found  
29 in the following references: (1) *Final Environmental Impact Statement -*  
30 *Disposal of Hanford Defense High-Level, Transuranic and Tank Wastes*,  
31 DOE/EIS-0113 (U.S. Department of Energy 1987, Richland, Washington);  
32 (2) *Hanford Site National Environmental Policy Act (NEPA)*  
33 *Characterization*, PNL-6415 (Revision 4, Pacific Northwest  
34 Laboratory 1991, Richland, Washington); (3) *Draft Environmental Impact*  
35 *Statement - Decommissioning of Eight Surplus Production Reactors at the*  
36 *Hanford Site, Richland, Washington*, DOE/EIS-0119D (U.S. Department of  
37 Energy 1989, Washington, D.C.); and (4) *Archaeological Survey of the*  
38 *200 East and 200 West Areas, Hanford Site, Washington*, PNL-7624 (Pacific  
39 Northwest Laboratory 1990, Richland, Washington).  
40

41 9. Do you know whether applications are pending for government approvals of  
42 other proposals directly affecting property covered by your proposal? If  
43 yes, explain.  
44

45 No.  
46

47 10. List any government approvals or permits that will be needed for your  
48 proposal, if known.  
49

50 A modification to the Part A and a Part B Dangerous Waste Permit  
51 Application will be submitted following the notification period.  
52

- 1  
2 11. Give a brief, complete description of your proposal, including the  
3 proposed uses and the size of the project and site.  
4

5 Dangerous waste management activities at the PUREX Plant are being  
6 expanded under interim status to add the capability for tank storage in  
7 waste treatment tanks U3, U4, and F18 as part of ongoing waste  
8 minimization efforts. The Part A Dangerous Waste Permit Application,  
9 Form 3, will be modified to add the process code "S03" specifying tank  
10 storage for the designated tanks. This modification will result in the  
11 reduced generation of mixed waste at the PUREX Plant and also will reduce  
12 the volume of mixed (radioactive dangerous) waste subsequently required  
13 to be stored in the Double-Shell Tank System.  
14

15 Tanks U3, U4, and F18 presently are operated under interim status and are  
16 used for waste treatment only. Mixed waste generated at the PUREX Plant  
17 is collected in the tanks, chemically adjusted to meet the waste  
18 acceptance criteria of the Double-Shell Tank System, and transferred to a  
19 designated Double-Shell Tank within 90 days. A minimum liquid level is  
20 required in the tanks to allow agitation, sampling, and transfer. If the  
21 minimum liquid level is not present in the tanks, water must be added  
22 resulting in a greater quantity of waste that subsequently must be  
23 managed. The expansion of the waste management unit to allow waste  
24 storage in tanks U3, U4, and F18 will allow waste to be accumulated in  
25 the tanks until an adequate volume is available for transfer without the  
26 addition of water. This will facilitate waste transfer operations and  
27 also will serve to reduce the volume of waste generated by routine  
28 operations at the PUREX Plant.  
29

- 30 12. Give the location of the proposal. Give sufficient information for a  
31 person to understand the precise location of the proposed project,  
32 including a street address, if any, and section, township, and range, if  
33 known. If a proposal would occur over a range of area, provide the range  
34 or boundaries of the site(s). Provide a legal description, site plan,  
35 vicinity map, and topographic map, if reasonably available.  
36

37 The PUREX Plant is located in the southeast corner of the 200 East Area  
38 (on 4TH Street) in the center of the 560 square mile (1,450 square  
39 kilometer) Hanford Site. A legal description is provided in Appendix A  
40 of the NOI.  
41

## 42 B. ENVIRONMENTAL ELEMENTS

### 43 1. Earth

- 44  
45  
46 a. General description of the site (indicate one): Flat, rolling, hilly,  
47 steep, mountainous, other.  
48

49 Flat.

1 b. What is the steepest slope on the site (approximate percent slope)?  
2

3 The approximate slope of the land at the PUREX Plant is less than two  
4 percent.  
5

6 c. What general types of soils are found on the site (for example, clay,  
7 sand, gravel, peat, muck)? If you know the classification of  
8 agricultural soils, specify them and note any prime farmland.  
9

10 The soil at the PUREX Plant consists primarily of silty, sandy gravel.  
11 No farming is permitted at the 200 East Area.  
12

13 d. Are there surface indications or history of unstable soils in the  
14 immediate vicinity? If so, describe.  
15

16 No. There has been no history of unstable soils or subsidence in the  
17 area of this waste management unit.  
18

19 e. Describe the purpose, type, and approximate quantities of any filling  
20 or grading proposed. Indicate the source of the fill.  
21

22 None.  
23

24 f. Could erosion occur as a result of clearing, construction, or use? If  
25 so, generally describe.  
26

27 Not applicable for this proposal.  
28

29 g. Approximately what percent of the site will be covered with impervious  
30 surfaces after project construction (for example, asphalt or  
31 buildings)?  
32

33 No construction is proposed.  
34

35 h. Proposed measures to reduce or control erosion, or other impacts to  
36 the earth, if any?  
37

38 No impacts are expected as a result of the proposal.  
39

40 2. Air  
41

42 a. What types of emissions to the air would result from the proposal  
43 (i.e., dust, automobile, odors, industrial wood smoke) during  
44 construction and when the project is completed? If any, generally  
45 describe and give approximate quantities if known.  
46

47 No added emissions are expected to occur as a result of the proposal.  
48 Approximate quantities of air emissions from the PUREX Plant are given  
49 in documentation titled *Calendar 1990 Air Emissions Report for the*  
50 *Hanford Site* (DOE-RL 1991).  
51

1 b. Are there any off-site sources of emissions or odors that may affect  
2 your proposal? If so, generally describe.

3  
4 No.

5  
6 c. Proposed measures to reduce or control emissions or other impacts to  
7 the air, if any?

8  
9 None.

10  
11 **3. Water**

12  
13 a. Surface:

14  
15 1) Is there any surface water body on or in the immediate vicinity of  
16 the site (including year-round and seasonal streams, saltwater,  
17 lakes, ponds, wetlands)? If yes, describe type and provide names.  
18 If appropriate, state what stream or river it flows into.

19  
20 There is no surface water body on or in the immediate vicinity of  
21 the PUREX Plant. Two intermittent streams traverse through the  
22 Hanford Site. These are Cold Creek and Dry Creek. Water drains  
23 through these creeks during the wetter winter and spring months.  
24 No perennial streams originate within the Pasco Basin. Primary  
25 surface-water features associated with the Hanford Site are the  
26 Columbia and Yakima Rivers, and their major tributaries, the Snake  
27 and Walla Walla Rivers. West Lake, about 10 acres (4.05 hectares)  
28 in size and less than 3 feet (0.9 meter) deep, is the only natural  
29 lake within the Hanford Site. Waste water ponds, cribs, and  
30 ditches associated with nuclear fuel reprocessing and waste  
31 disposal activities also are present on the Hanford Site.

32  
33 2) Will the project require any work over, in, or adjacent to [within  
34 200 feet (61 meters) of] the described waters? If yes, please  
35 describe and attach available plans.

36  
37 No.

38  
39 3) Estimate the amount of fill and dredge material that would be  
40 placed in or removed from surface water or wetlands and indicate  
41 the area of the site that would be affected. Indicate the source  
42 of fill material.

43  
44 None.

45  
46 4) Will the proposal require surface water withdrawals or diversions?  
47 Give general description, purpose, and approximate quantities if  
48 known.

49  
50 No.  
51

1 5) Does the proposal lie within a 100-year floodplain? If so, note  
2 location on the site plan.

3  
4 No.

5  
6 6) Does the proposal involve any discharges of waste materials to  
7 surface waters? If so, describe the type of waste and anticipated  
8 volume of discharge.

9  
10 No.

11  
12 b. Ground:

13  
14 1) Will ground water be withdrawn, or will water be discharged to  
15 ground water? Give general description, purpose, and approximate  
16 quantities, if known.

17  
18 No.

19  
20 2) Describe waste materials that will be discharged into the ground  
21 from septic waste tanks or other sources, if any (for example:  
22 domestic sewage; industrial, containing the following  
23 chemicals...; agricultural; etc.). Describe the general size of  
24 the system, the number of such systems, the number of houses to be  
25 served (if applicable), or the number of animals or humans the  
26 system(s) are expected to serve.

27  
28 No additional waste water will be discharged into the ground as a  
29 result of this proposal.

30  
31 c. Water run-off (including storm water):

32  
33 1) Describe the source of run-off (including storm water) and method  
34 of collection and disposal, if any (include quantities, if known).  
35 Where will this water flow? Will this water flow into other  
36 waters? If so, describe.

37  
38 The Hanford Facility, which includes the PUREX Plant, has a  
39 mild desert climate and receives only 6 to 7 inches (15 to  
40 18 centimeters) of annual precipitation. Any precipitation that  
41 occurs at the site will run-off the existing buildings and seep  
42 into the soil on and near the site. No run-off is expected to  
43 enter surface waters.

44  
45 2) Could waste materials enter ground or surface waters? If so,  
46 generally describe.

47  
48 No additional potential for waste materials to enter ground or  
49 surface waters will occur as a result of the proposal.  
50

1 d. Proposed measures to reduce or control surface, ground, and run-off  
2 water impacts, if any:

3  
4 None.

5  
6 4. Plants

7  
8 a. Check the types of vegetation found on the site:

- 9  
10 \_\_\_ deciduous tree: alder, maple, aspen, other  
11 \_\_\_ evergreen tree: fir, cedar, pine, other  
12 x shrubs  
13 x grass  
14 \_\_\_ pasture  
15 \_\_\_ crop or grain  
16 \_\_\_ wet soil plants: cattail, buttercup, bulrush, skunk cabbage,  
17 other  
18 \_\_\_ water plants: water lily, eelgrass, milfoil, other  
19 x other types of vegetation

20  
21 The vegetation on the site consists of sagebrush, forbs, and other  
22 common central Washington desert plant species.

23  
24 b. What kind and amount of vegetation will be removed or altered?

25  
26 None.

27  
28 c. List threatened or endangered species known to be on or near the site.

29  
30 The Columbia milk-vetch and yellowcress are threatened and endangered  
31 plants occurring on the Hanford Site. Additional information  
32 concerning endangered and threatened species on the Hanford Site can  
33 be found in the environmental documents referred to in the answer to  
34 Checklist Question A.8.

35  
36 d. Proposed landscaping, use of native plants, or other measures to  
37 preserve or enhance vegetation on the site, if any:

38  
39 Not applicable.

40  
41 5. Animals

42  
43 a. Indicate (by underlining) any birds and animals which have been  
44 observed on or near the site or are known to be on or near the site:

45  
46 birds: hawk, heron, eagle, songbirds, other  
47 mammals: deer, bear, elk, beaver, other  
48 fish: bass, salmon, trout, herring, shellfish, other

49  
50 A variety of insects, birds, and mammals common to the Hanford Site,  
51 including pigeons, passerine birds, rodents, badgers, porcupines, and  
52 rabbits have been observed near the PUREX Plant site. Larger mammals

1 commonly seen in the vicinity include deer and coyote. Additional  
2 information on birds and animals on the Hanford Site can be found in  
3 the environmental documents referred to in the answer to Checklist  
4 Question A.8.

- 5  
6 b. List any threatened or endangered species known to be on or near the  
7 site.

8  
9 None. However, additional information concerning endangered and  
10 threatened species on the Hanford Site can be found in the  
11 environmental documents referred to in the answer to checklist  
12 Question A.8.

- 13  
14 c. Is the site part of a migration route? If so, explain.

15  
16 The site is part of the region-wide Pacific flyway for waterfowl.

- 17  
18 d. Proposed measures to preserve or enhance wildlife, if any:

19  
20 None.

21  
22 **6. Energy and Natural Resources**

- 23  
24 a. What kinds of energy (electric, natural gas, oil, wood stove, solar)  
25 will be used to meet the completed project's energy needs? Describe  
26 whether it will be used for heating, manufacturing, etc.

27  
28 Diesel fuel, gasoline, oil, propane gas, and electrical power are used  
29 to operate equipment, power building ventilation and lighting systems,  
30 and provide process heating. No additional demand on energy will  
31 occur as a result of the proposal.

- 32  
33 b. Would your project affect the potential use of solar energy by  
34 adjacent properties? If so, generally describe.

35  
36 No.

- 37  
38 c. What kinds of energy conservation features are included in the plans  
39 of this proposal? List other proposed measures to reduce or control  
40 energy impacts, if any:

41  
42 None.

43  
44 **7. Environmental Health**

- 45  
46 a. Are there any environmental health hazards, including exposure to  
47 toxic chemicals, risk of fire and explosion, spill, or hazardous  
48 waste, that could occur as a result of this proposal? If so,  
49 describe.

50  
51 No increase to existing environmental health hazards is expected as a  
52 result of the proposal.

1) Describe special emergency services that might be required.

Hanford Facility security, fire response, and ambulance services are on call 24 hours a day, 7 days a week, in the event of an onsite emergency.

2) Proposed measures to reduce or control environmental health hazards, if any:

The following are current measures used to control environmental health hazards: staged ventilation control, protective clothing, physical isolation, radiation shielding, pre-job planning, and specialized personnel training are used to maintain personnel exposure as low as reasonably achievable (ALARA). The ALARA program applies to both radioactivity and hazardous chemical substance exposure.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

None.

3) Proposed measures to reduce or control noise impacts, if any:

None.

## 8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The PUREX Plant is located within the 200 East Area of the Hanford Site. The Hanford Site is owned by the U.S. Government and is used for the production of special nuclear materials and the management of wastes associated with the production of those materials.

b. Has the site been used for agriculture? If so, describe.

No portion of the 200 East Area, including the site of the PUREX Plant, has been used for agricultural purposes since 1943.

1 c. Describe any structures on the site.  
2

3 Various structures associated with the operation of the PUREX Plant  
4 presently exist on the site. These structures are identified in the  
5 drawings submitted as part of the NOI.  
6

7 d. Will any structures be demolished? If so, what?  
8

9 No.  
10

11 e. What is the current zoning classification of the site?  
12

13 The Hanford Site is zoned by Benton County as an Unclassified Use (U)  
14 district.  
15

16 f. What is the current comprehensive plan designation of the site?  
17

18 The 1985 Benton County Comprehensive Land Use Plan designates the  
19 Hanford Site as the "Hanford Reservation". Under this designation,  
20 land on the Hanford Site may be used for "activities nuclear in  
21 nature." Nonnuclear activities are authorized "if and when DOE  
22 approval for such activities is obtained."  
23

24 g. If applicable, what is the current shoreline master program  
25 designation of the site?  
26

27 Does not apply.  
28

29 h. Has any part of the site been classified as an "environmentally  
30 sensitive" area? If so, specify.  
31

32 No.  
33

34 i. Approximately how many people would reside or work in the completed  
35 project?  
36

37 The PUREX Plant currently has a work force of approximately  
38 500 fulltime personnel. The proposal will not effect staffing.  
39

40 j. Approximately how many people would the completed project displace?  
41

42 None.  
43

44 k. Proposed measures to avoid or reduce displacement impacts, if any:  
45

46 None.  
47

48 l. Proposed measures to ensure the proposal is compatible with existing  
49 and projected land uses and plans, if any:  
50

51 None.  
52

1 9. Housing

2  
3 a. Approximately how many units would be provided, if any? Indicate  
4 whether high-, middle-, or low-income housing.

5  
6 None.

7  
8 b. Approximately how many units, if any, would be eliminated? Indicate  
9 whether high-, middle-, or low-income housing.

10  
11 None.

12  
13 c. Proposed measures to reduce or control housing impacts, if any:

14  
15 None.

16  
17 10. Aesthetics

18  
19 a. What is the tallest height of any proposed structure(s), not  
20 including antennas; what is the principal exterior building  
21 material(s) proposed?

22  
23 No construction is proposed.

24  
25 b. What views in the immediate vicinity would be altered or obstructed?

26  
27 None.

28  
29 c. Proposed measures to reduce or control aesthetic impacts, if any:

30  
31 None.

32  
33 11. Light and Glare

34  
35 a. What type of light or glare will the proposal produce? What time of  
36 day would it mainly occur?

37  
38 None.

39  
40 b. Could light or glare from the finished project be a safety hazard or  
41 interfere with views?

42  
43 No.

44  
45 c. What existing off-site sources of light or glare may affect your  
46 proposal?

47  
48 None.

1 d. Proposed measures to reduce or control light and glare impacts, if  
2 any:

3  
4 None.

5  
6 **12. Recreation**

7  
8 a. What designated and informal recreational opportunities are in the  
9 immediate vicinity?

10  
11 None.

12  
13 b. Would the proposed project displace any existing recreational uses?  
14 If so, describe.

15  
16 No.

17  
18 c. Proposed measures to reduce or control impacts on recreation,  
19 including recreation opportunities to be provided by the project or  
20 applicant, if any?

21  
22 None.

23  
24 **13. Historic and Cultural Preservation**

25  
26 a. Are there any places or objects listed on, or proposed for, national,  
27 state, or local preservation registers known to be on or next to the  
28 site? If so, generally describe.

29  
30 No places or objects listed on, or proposed for, national, state, or  
31 local preservation registers are known to be on or next to the  
32 PUREX Plant. Additional information on the Hanford Site environment  
33 can be found in the environmental documents referred to in the answer  
34 to Checklist Question A.8.

35  
36 b. Generally describe any landmarks or evidence of historic,  
37 archaeological, scientific, or cultural importance known to be on or  
38 next to the site.

39  
40 There are no known archaeological, historical, or native American  
41 religious sites at or next to the PUREX Plant. Additional  
42 information on the Hanford Site environment can be found in the  
43 environmental documents referred to in the answer to Checklist  
44 Question A.8.

45  
46 c. Proposed measures to reduce or control impacts, if any:

47  
48 Where appropriate, a cultural resource review will provide the  
49 vehicle for necessary approvals required under the *National Historic*  
50 *Preservation Act of 1966*.  
51

1 14. Transportation  
2

- 3 a. Identify public streets and highways serving the site, and describe  
4 proposed access to the existing street system. Show on site plans,  
5 if any.  
6

7 The site is not publicly accessible. Streets and highways serving  
8 the site are identified in the site maps included as part of the NOI.  
9

- 10 b. Is site currently served by public transit? If not, what is the  
11 approximate distance to the nearest transit stop?  
12

13 The site is not publicly accessible, and, therefore, is not served by  
14 public transportation. The nearest public transit is 25 miles  
15 (40 kilometers) away.  
16

- 17 c. How many parking spaces would the completed project have? How many  
18 would the project eliminate?  
19

20 Not applicable.  
21

- 22 d. Will the proposal require any new roads or streets, or improvements  
23 to existing roads or streets, not including driveways? If so,  
24 generally describe (indicate whether public or private).  
25

26 No.  
27

- 28 e. Will the project use (or occur in the immediate vicinity of) water,  
29 rail, or air transportation? If so, generally describe.  
30

31 No.  
32

- 33 f. How many vehicular trips per day would be generated by the completed  
34 project? If known, indicate when peak volumes would occur.  
35

36 Peak traffic volumes will occur at the beginning and end of regular  
37 working shifts. Many employees, however, will use the Hanford Site  
38 shuttle bus system that transports employees from northern Richland  
39 to the site. No increase in vehicular traffic will occur as a result  
40 of the proposal.  
41

- 42  
43 g. Proposed measures to reduce or control transportation impacts, if  
44 any:  
45

46 Not applicable.  
47

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15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any:

Not applicable.

16. Utilities

a. List utilities currently available at the site (electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other):

Electricity, telephone, water, and septic system are available at the site.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No additional utilities are proposed.

1 SIGNATURES

2  
3 The answers are true and complete to the best of my knowledge. I understand  
4 that the lead agency is relying on them to make its decision.  
5  
6  
7

8  
9 Robert D. Holt/Son  
10 R. D. Izatt, Program Manager  
11 Office of Environmental Assurance  
12 Permits and Policy  
13 U.S. Department of Energy  
14 DOE Richland Field Office

4/10/92  
Date

15  
16  
17  
18 R E Lerch  
19 R. E. Lerch, Manager  
20 Environmental Division  
21 Westinghouse Hanford Company  
22  
23  
24

3-20-92  
Date

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