Resource Book - Decommissioning of Contaminated Facilities at Hanford

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RESOURCE BOOK - DISPOSTION (D&D) OF RETIRED CONTAMINATED FACILITIES AT HANFORD

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I. CONTAMINATED LIQUID DISPOSAL SITES

I.0 INTRODUCTION

Section 1.0 and Appendix I discuss the following types of contaminated liquid disposal sites on the Hanford Reservation: cribs and French drains; trenches; ponds (swamps) and ditches; reverse wells; and unplanned releases. Section 1.0 describes the various types of sites, provides a rationale for their classification, and identifies and evaluates various alternative disposition strategies. Appendix I includes the following:

Table I.1	A list of approximate total beta curies in the various areas, calculated as of December 1972 from waste discharge records.
Table I.2	A list of the six classes of contaminated liquid disposal sites.
Table I.3	A list of the disposition alternatives considered potentially applicable.
Table I.4	Index of the 100 Area liquid waste disposal sites.
Table I.5	Index of the 200 East Area liquid waste disposal sites.
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Section I.1	Data sheets for the transuranic disposal sites (Class I).
Section I.2	Data sheets for the transuranic-fission product disposal sites (Class II).
Section I.3	Data sheets for the fission product disposal sites (Class III).
Section I.4	Data sheets for the low-activity disposal sites (Class IV).
Section I.5	Data sheets for the induced activation product disposal sites (Class V).
Section I.6	Data sheets for ponds and ditches (Class VI).
References	

The data sheets, one for each site on the Hanford Reservation, collect the readily available information concerning location, structure, function, status, and the nature of the waste discharged to the site. The waste volumes and radionuclide inventories are based on plant discharge records.

Although much has been done in the geology and hydrology of the Hanford Reservation and many monitoring wells have been dug, very little has been done to verify inventories and determine spatial distributions of radionuclides in the liquid waste disposal areas. Full evaluation of the various disposition alternatives for a given site (acceptable procedures, safety considerations, cost estimates, etc.) will require extensive additional site characterization in nearly every case.

It is anticipated that a limited well drilling program coupled with application of modeling techniques would meet these needs. Additional effort will be required to refine the drilling and modeling techniques to minimize the cost associated with the characterization program.

TABLE I.1. Approximate Beta Radioactivity Levels in Contaminated Liquid Disposal Sites (Calculated for December 1972)

Areas	Total Beta Ci
100 Areas	5000
200 Areas	1.6×10^5
300 Areas	400
600 Areas	N.A.

TABLE I.2 Contaminated Liquid Disposal Site Classification

Class I. Transuranic Disposal Sites (>0.04 g Pu/m^2,[a] <0.04 Beta Ci/m^2[b])

- A. Acidic Wastes
- B. Neutral-Basic Wastes

Class II. Transuranic-Fission Product Disposal Sites (>0.04 g Pu/m^2,[a] >0.04 Beta Ci/m^2[b])

- A. Acidic Wastes
- B. High-Salt, Neutral-Basic Wastes
- C. Low-Salt, Neutral-Basic Wastes

Class III. Fission Product Disposal Sites (<0.04 g Pu/m^2,[a] >0.04 Beta Ci/m^2[b])

- A. Acidic Wastes
- B. High-Salt, Neutral-Basic Wastes
- C. Low-Salt, Neutral-Basic Wastes

Class IV. Low-Activity Sites (<0.04 g Pu/m^2,[a] <0.04 Beta Ci/m^2[b])

Class V. Induced Activation Product Disposal Sites (100 Areas)

- A. Rupture Debris Cribs and Trenches
- B. Laboratory and Decontamination Wastes

Class VI. Ponds and Ditches

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a. Grams Pu discharged to the site per square meter of bottom area, estimated from plant discharge records. The level of 0.04 g Pu/m^2 is based on 1) current (April 1975) regulations which require retrievable storage of wastes contaminated with transuranics at levels exceeding 10 n Ci/g and 2) the assumption that most of the plutonium is located in the top 6 in. of soil.

b. Beta curies remaining 12/31/73 out of those discharged to the site per square meter of bottom area. The level of 0.04 Beta Ci/m^2 is based on the assumption that it represents about the maximum activity level which could be excavated without requiring remote control equipment.

TABLE 1.3. Potential Disposition Alternatives[a] for Contaminated Liquid Disposal Sites

A. Prepare the site for interim (up to 20 years) maintenance and surveillance.

B. Stabilize the site for interim (up to 300 years) maintenance and surveillance.

C. Stabilize the contamination in place.

D. Remove gross levels of hazardous radionuclides.

E. Remove all contamination above prescribed limits.

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a. See Section 1.3.1 for a discussion of these alternatives.

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(Contaminated Liquid Disposal Sites Appendix I)

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2. L. L. Lundgren, Radioactive Liquid Waste Disposal Facilities - 200 Area, ARH-2155, Atlantic Richfield Hanford Co., Richland, WA, August 31, 1971.

3. V. W. Wood, Index of CPD Crib Building Numbers - Designs of CPD Radioactive Waste Disposal Sites, HW-55176, 1958

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9. P. G. Ortiz, Engineering Evaluation of Waste Disposal Cribs, ARH-3046, Atlantic Richfield Hanford Co., Richland, WA, April 11, 1974.

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15. U.S. Atomic Energy Commission, Historical Summary of Hanford Radioactively Contaminated Waste Disposal Facilities, July 1974.

16. R. E. Brown and H. G. Ruppert, Underground Waste Disposal at Hanford Works, HW-9671, 1948.

17. R. E. Brown and H. G. Ruppert, The Underground Disposal of Liquid Wastes at the Hanford Works, HW-17088, February 5, 1950.

TABLE I.4. Contaminated Liquid Disposal Sites: 100 Areas

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	Appendix No.
116-B-1	Trench	V	100-B-C	UNI	400 x 50 ft; 15 ft deep	Uncovered	I.5.1/VIII.1.1
116-B-2	Trench	V	100-B-C	UNI	130 x 10 ft; 6 ft deep		I.5.2
116-B-3	Crib	V	100-B-C	UNI	10 x 10 ft; 10 ft deep	Wooden Structure	I.5.3
116-B-4	Crib	V	100-B-C	UNI	10 x 10 ft; 20 ft deep		I.5.4
116-B-5	Crib	V	100-B-C	UNI	84 x 8 ft; 5 ft deep		I.5.5
116-B-6	Crib (2)	V	100-B-C	UNI	12 x 8 ft; 6 ft deep		I.5.6
116-B-7	Outfall Structure	-	100-B-C	UNI	300 sq. ft.		VIII.1.1
116-B-8	Outfall Structure	-	100-B-C	UNI	300 sq. ft.		VIII.1.1
116-C-1	Trench	V	100-B-C	UNI	600 x 100 ft; 15 ft deep		I.5.11/VIII.1.1
116-C-2	Crib	V	100-B-C	UNI	10 x 10 ft; 10 ft deep	Wooden Structure	I.5.12

TABLE I.4. Contaminated Liquid Disposal Sites: 100 Areas

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	Appendix No.
116-D-1A	Trench	V	100-D-DR	UNI	130' x 10' 6 ft deep		I.5.21
116-D-1B	Trench	V	100-D-DR	UNI	100' x 10' 15' deep		I.5.22
116-D-2	Crib	V	100-D-DR	UNI	10 x 10 ft; 10 ft deep	Wooden Structure	I.5.23
116-D-3	French Drain	V	100-D-DR	UNI	3 ft diam		I.5.24
116-D-4	French Drain	V	100-D-DR	UNI	3 ft diam		I.5.25
116-D-5	Outfall Structure	-	100-D-DR	UNI	250 sq. ft.		VIII.1.2
116-DR-1	Trench	V	100-D-DR	UNI	300 x 15 ft; 20 ft deep		I.5.31/VIII.1.2
116-DR-2	Trench	V	100-D-DR	UNI	100 x 4 ft; 4 ft deep		I.5.32/VIII.1.2
116-DR-3	Trench	V	100-D-DR	UNI	8 x 8 ft; 7 ft deep		I.5.33
116-DR-4	Crib	V	100-D-DR	UNI	10 x 10 ft; 10 ft deep	Wooden Structure	I.5.34

TABLE I.4. Contaminated Liquid Disposal Sites: 100 Areas

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	Appendix No.
116-DR-5	Outfall Structure	-	100-D-DR	UNI	250 sq. ft.		VIII.1.2
116-F-1	Trench	V	100-F	UNI	3000 x 40 ft; 10 ft deep	Natural Ditch	I.5.41
116-F-2	Trench	V	100-F	UNI	550 x 200 ft; 20 ft deep	Open Trench	I.5.42
116-F-3	Trench	V	100-F	UNI	100 x 20 ft; 10 ft deep	Open Trench	I.5.43
116-F-4	Crib	V	100-F	UNI	10 x 10 ft; 10 ft deep	Wooden Structure	I.5.44
116-F-5	Crib	V	100-F	UNI	10 x 10 ft; 10 ft deep		I.5.45
116-F-6	Trench	V	100-F	UNI	10 x 10 ft; 15 ft deep		I.5.46
116-F-7	Crib	V	100-F	UNI	N.A.		I.5.47
116-F-8	Outfall Structure	-	100-F	UNI	250 sq. ft.		VIII.1.3
116-F-9	Trench (2)	V	100-F	BNW	20 x 30 ft		I.5.48
116-H-1	Trench	V	100-H	UNI	1000 x 75 ft; 15 ft deep	Open Trench	I.5.51/VIII.1.4

TABLE I.4. Contaminated Liquid Disposal Sites: 100 Areas

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth	Remarks	Appendix No.
116-H-2	Crib	V	100-H	UNI	150 x 40 ft; 5 ft deep		I.5.52
116-H-3	French Drain	V	100-H	UNI	N/A		I.5.53
116-H-4	Crib	V	100-H	UNI	10 x 10 ft; 10 ft deep		I.5.54
116-H-5	Outfall Structure	-	100-H	UNI	400 Sq. ft.		VIII.1.4
116-K-1	Crib	V	100-K	UNI	400 x 400 ft; 30 ft deep		I.5.61/VIII.1.5
116-K-2	Trench	V	100-K	UNI	4000 x 45 ft; 15 ft deep		I.5.62/VIII.1.5
116-K-3	Outfall Structure	V	100-K	UNI	1200 Sq. ft.		VIII.1.5
116-KE-1	Crib	V	100-K	UNI	10 x 10 ft; 10 ft deep		I.5.63
116-KE-2	Crib	V	100-K	UNI	10 x 10 ft; 10 ft deep		I.5.64
116-KW-1	Crib	V	100-K	UNI	10 x 10 ft; 10 ft deep		I.5.65
116-N-1	Crib and Trench	V	100-N	UNI	290 x 125 ft; 3 ft deep (crib) 1600 x 45 ft; 15 ft deep (trench)		I.5.71

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Landlord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci/m^2	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-A-1	Crib	IV	200E	ARHCO	30 x 30 ft; 15 ft deep	Rock-filled	<0.1 / 0.03	<0.01 / <0.01	I.4.1
216-A-2	Crib	IIC	200E	ARHCO	20 x 20 ft; 28 ft deep	Rock-filled	130 / 7.7	3.5 / 0.21	I.2.1
216-A-3	Crib	IV	200E	ARHCO	20 x 20 ft; 16 ft. deep	Rock-filled	0.2 / 0.6	0.01 / 0.02	I.4.2
216-A-4	Crib	IIC	200E	ARHCO	20 x 20 ft; 25 ft deep	Rock-filled	140 / 33	3.8 / 0.89	I.2.2
216-A-5	Crib	IIA	200E	ARHCO	35 x 35 ft; 32 ft deep	Rock-filled	65 / 180	0.57 / 1.6	I.2.3
216-A-6	Crib	IIIC	200E	ARHCO	100 x 100 ft; 19 ft deep	Rock-filled	<36 / 810	<0.04 / 0.87	I.3.1
216-A-7	Crib	IIIC	200E	ARHCO	10 x 10 ft; 15 ft deep	Rock-filled	1 / 8	0.01 / 0.85	I.3.2
216-A-8	Crib	IIIC	200E	ARHCO	880 x 20 ft; 14 ft deep	Rock-filled	50 / 1700	0.03 / 1.1	I.3.3
216-A-9	Crib	IIIA	200E	ARHCO	420 x 20 ft; 12 ft deep	Rock-filled	0.5 / 47	<0.01 / 0.06	I.3.4
216-A-10	Crib	IIA	200E	ARHCO	275 x 45 ft; 15 ft deep	Rock-filled	340 / 3500	0.30 / 3.0	I.2.4
216-A-11	French Drain	IIC	200E	ARHCO	30 in. dia.; 30 ft deep		NA / <50	NA* / <100	I.2.5

* NA - Not Available

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix Page No.
216-A-12	French Drain	IIC	200E	ARHCO	30 in. diam; 30 ft deep		NA / <50	NA* / <100	I.2.6
216-A-13	French Drain	IIC	200E	ARHCO	2 ft diam; 18 ft deep		NA / <1	NA / <3	I.2.7
216-A-14	French Drain	IIC	200E	ARHCO	30 in diam; 29 ft deep		NA / <<1	NA / <<2	I.2.8
216-A-15	French Drain	IIA	200E	ARHCO	2 ft diam; 44 ft deep		NA / <50	NA / <133	I.2.9
216-A-16	French Drain	IIC	200E	ARHCO	4 ft diam; 17 ft deep		NA / <10	NA / <8	I.2.10
216-A-17	French Drain	IIC	200E	ARHCO	4 ft diam; 17 ft deep		NA / <1	NA / <0.8	I.2.11
216-A-18	Excavation	IV	200E	ARHCO	80 x 80 ft; 15 ft deep	Excavation-Crib Not Built	<0.1 / <0.26	<0.01 / <0.01	I.4.3
216-A-19	Crib	IV	200E	ARHCO	25 x 25 ft; 15 ft deep	Excavation	<0.1 / 0.26	<0.01 / <0.01	I.4.4
216-A-20	Crib	IV	200E	ARHCO	25 x 25 ft; 15 ft deep	Hole	<0.1 / 0.26	<0.01 / <0.01	I.4.5
216-A-21	Crib	IIC	200E	ARHCO	60 x 16 ft; 19 ft deep	Gravel-filled	150 / 258	1.7 / 2.9	I.2.12
216-A-22	Crib	IIC	200E	ARHCO	6 ft diam; 16 ft deep	Rock-filled	NA / <1	NA / <0.4	I.2.13

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu Beta Ci	As of 12/31/73 G Pu/m^2 Beta Ci/m^2	Appendix Page No.
216-A-23A	French Drain	IIC	200E	ARHCO	42 in. diameter		NA / <50	NA* / <4.4	I.2.14
216-A-23B	French Drain	IIC	200E	ARHCO	42 in. diameter		NA / <5	NA / <6	I.2.15
216-A-24	Crib	IIIC	200E	ARHCO	1400 x 20 ft	Rock-filled	<5 / 814	<0.01 / 0.31	I.3.5
216-A-25	Swamp	VI	200E	ARHCO	71 Acres	Gable Mountain Swamp	420 / 2500	<0.01 / 0.01	I.6.1
216-A-26A	French Drain	IIC	200E	ARHCO	3 ft diameter		NA / <1	NA / <1.4	I.2.16
216-A-26B	French Drain	IIC	200E	ARHCO	4 ft diameter		NA / <1	NA / <0.8	I.2.17
216-A-27	Crib	IIC	200E	ARHCO	200 x 10 ft	Sand-filled	97 / 260	0.52 / 1.4	I.2.18
216-A-28	Crib	IV	200E	ARHCO	10 ft diameter	Rock-filled	0 / 0.9	None / 1.8	I.4.6
216-A-29	Ditch	VI	200E	ARHCO	6500 x 6 ft		NA	NA	I.6.2
216-A-30	Crib	IIC	200E	ARHCO	1400 x 10 ft	Crushed Stone-filled	<71 / 710	<0.06 / 0.54	I.2.19
216-A-31	Crib	IIC	200E	ARHCO	70 x 10 ft	Gravel-filled	9 / 580	0.13 / 8.7	I.2.20
216-A-32	Crib	IV	200E	ARHCO	70 x 8 ft	Gravel-filled	NA / <1	NA / <.002	I.4.7

* NA - Not Available

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix Page No.
216-A-33	French Drain	IIC	200E	ARHCO	6 ft diameter		NA / <1	NA* / <0.4	I.2.21
216-A-34	Pond (2)	VI	200E	ARHCO	280 x 30 ft and 130 x 30 ft		NA / <1	NA	I.6.3
216-A-35	French Drain	IIC	200E	ARHCO	6 ft diameter		NA / <1	NA / <0.4	I.2.22
216-A-36A	Crib	IIC	200E	ARHCO	100 x 11 ft	Gravel-filled	80 / 7000	0.78 / 68	I.2.23
216-A-36B	Crib	IIC	200E	ARHCO	500 x 11 ft	Crushed Stone-filled	<180 / 5700	<0.35 / 11	I.2.24
216-A-37-1	Crib	IV	200E	ARHCO	700 x 10 ft	Crushed Stone-filled Not Used	None	None	I.4.8
216-A-37-2	---	--	200E	ARHCO	—	Not Built	None	None	-------
216-A-38-1	Crib	IV	200E	ARHCO	520 x 15 ft	Crushed Stone-filled Not Used	None	None	I.4.9
216-A-38-2	---	--	200E	ARHCO	—	Not Built	None	None	-------
216-A-39	Crib 2 Trenches	IIIC	200E	ARHCO	90 x 2 ft	Back-filled	None / 4C	None / 1.2	I.3.6
216-A-40	Trench **	VI	200E	ARHCO	400 x 20 ft	Open Trench		NA	I.6.4
216-A-41	Crib	IIA	200E	ARHCO	10 x 10 ft	Gravel-filled	NA / <1	NA / <0.1	I.2.25

* NA - Not Available.

** Being modified as a lined and covered trench for retention of contaminated waste water pending recycle to underground storage tanks.

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-B-1	--	--	200 E	ARHCO		Not Built			
216-B-2-1	Ditch	VI	200E	ARHCO	7000' x 6'; 6' deep			See 216-B-3	I.6.11
216-B-2-2E	Ditch	VI	200E	ARHCO		Same Site as B-2		See 216-B-3	I.6.12
216-B-2-2W	Ditch	VI	200E	ARHCO				See 216-B-3	I.6.13
216-B-3	Pond	VI	200E	ARHCO	46 Acres			<0.01 / <0.01	I.6.14
216-B-4	Reverse Well	IIC	200E	ARHCO	8" diam; 110' deep		NA / <<1	NA / <<1	I.2.31
216-B-5	Reverse Well	IIC	200E	ARHCO	8" diam; 302' deep		4300 / 160	1.0×10^5 / 3.9×10^3	I.2.32
216-B-6	Reverse Well	IIA	200E	ARHCO	6' diam; 75' deep		NA / <10	NA	I.2.33
216-B-7A	Crib	IIB	200E	ARHCO	14' x 14'; 14' deep	Wooden Structure	4300 / 6800	117 / 186	I.2.34
216-B-7B	Crib	IIB	200E	ARHCO	14' x 14'; 14' deep	Wooden Structure			I.2.35
216-B-8	Crib	IIB	200E	ARHCO	12' x 12' 14' deep(Crib) 300 x 4 ft; 14' deep (Tile Field)	Wooden Structure	30 / 73	2.2 / 5.4	I.2.36

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-B-9	Crib	IIC	200E	ARHCO	14' x 14' (Crib) 180' x 4'; 17' deep (Tile Field)	Wooden Structure	170 / 31	2.1 / 0.39	I.2.37
216-B-10-A	Crib	IIA	200E	ARHCO	14' x 14'; 20' deep	Wooden Structure	9.8 / 6.8	0.54 / 0.37	I.2.38
216-B-10-B	Crib	IV	200E	ARHCO	14' x 14'; 20' deep	Wooden Structure		<0.01 / <0.01	I.4.11
216-B-11-A	Reverse Well	IIC	200E	ARHCO	4' diam; 40' deep	Vertical Culvert	4 / 66	3.4 / 56	I.2.39
216-B-11-B	Reverse Well	IIC	200E	ARHCO	4' diam; 40' deep	Vertical Culvert		Included in 11-A	I.2.40
216-B-12	Crib	IIC	200E	ARHCO	161 x 50'; 30' deep	Wooden Structure	370 / 2400	0.50 / 3.3	I.2.41
216-B-13	French Drain	IIC	200E	ARHCO	4' diam; 18' deep	Limestone-filled, Wood Cover	NA / <1	NA / <0.8	I.2.42
216-B-14	Crib	IIB	200E	ARHCO	40' x 40'; 13' deep	Steel, Concrete, Wood	25 / 870	0.17 / 5.9	I.2.43
216-B-15	Crib	IIIB	200E	ARHCO	40' x 40'; 13' deep	Steel, Concrete, Wood	5 / 550	0.03 / 3.7	I.3.11

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-B-16	Crib	IIB	200E	ARHCO	40' x 40'; 13' deep	Steel, Concrete, Wood	10 / 1800	0.07 / 12	I.2.44
216-B-17	Crib	IIB	200E	ARHCO	40' x 40'; 13' deep	Steel, Concrete, Wood	10 / 490	0.07 / 3.3	I.2.45
216-B-18	Crib	IIB	200E	ARHCO	40' x 40'; 13' deep	Steel, Concrete, Wood	10 / 580	0.07 / 3.9	I.2.46
216-B-19	Crib	IIB	200E	ARHCO	40' x 40'; 13' deep	Steel, Concrete, Wood	10 / 620	0.07 / 4.2	I.2.47
216-B-20	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	1.3 / 3000	<0.01 / 6.5	I.3.12
216-B-21	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	10 / 1500	0.02 / 3.2	I.3.13
216-B-22	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	2.6 / 630	0.01 / 1.4	I.3.14
216-B-23	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	1.8 / 350	<0.01 / 0.75	I.3.15
216-B-24	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	7.7 / 430	0.02 / 0.92	I.3.16

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-B-25	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	2.0 / 360	<0.01 / 0.77	I.3.17
216-B-26	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	2.5 / 2700	0.01 / 5.8	I.3.18
216-B-27	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	0.7 / 870	<0.01 / 1.9	I.3.19
216-B-28	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	5.6 / 190	0.01 / 0.41	I.3.20
216-B-29	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	1.1 / 360	<0.01 / 0.77	I.3.21
216-B-30	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	2.1 / 5200	<0.01 / 11	I.3.22
216-B-31	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	5.2 / 330	0.01 / 0.71	I.3.23
216-B-32	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	2.6 / 510	0.01 / 1.1	I.3.24
216-B-33	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	12 / 420	0.03 / 0.90	I.3.25
216-B-34	Trench	IIIB	200E	ARHCO	500' x 10'	Wood Cover	5.7 / 79	0.01 / 0.17	I.3.26

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-B-35	Trench	IIIB	200E	ARHCO	252' x 10'; 10' deep		1.2 / 810	0.01 / 3.5	I.3.27
216-B-36	Trench	IIIB	200E	ARHCO	252' x 10' 10' deep		0.8 / 1600	0.01 / 6.8	I.3.28
216-B-37	Trench	IIIB	200E	ARHCO	252' x 10' 10' deep		2.0 / 3800	0.01 / 16	I.3.29
216-B-38	Trench	IIIB	200E	ARHCO	252' x 10'; 10' deep		1.2 / 2900	0.01 / 12	I.3.30
216-B-39	Trench	IIIB	200E	ARHCO	252' x 10'; 10' deep		1.5 / 580	0.01 / 2.5	I.3.31
216-B-40	Trench	IIIB	200E	ARHCO	252' x 10'; 10' deep		1.0 / 780	<0.01 / 3.3	I.3.32
216-B-41	Trench	IIIB	200E	ARHCO	252' x 10'; 10' deep		0.30 / 1200	<0.01 / 5.1	I.3.33
216-B-42	Trench	IIB	200E	ARHCO	252' x 10'; 10' deep		10 / 1500	0.04 / 6.4	I-2-48
216-B-43	Crib	IIIB	200E	ARHCO	30' x 30'; 14' deep	Concrete Slab Cover Supported by Concrete Pipe	0.5 / 2100	0.01 / 25	I.3.34
216-B-44	Crib	IIB	200E	ARHCO	30' x 30'; 14' deep	Concrete Slab Cover Supported by Concrete Pipe	15 / 4500	0.18 / 54	I-2-49

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-B-45	Crib	IIB	200E	ARHCO	30' x 30'; 14' deep	Concrete Slab Cover Supported By Concrete Pipe	10 / 5500	0.12 / 66	I.2.50
216-8-46	Crib	IIB	200E	ARHCO	30' x 30'; 14' deep	Concrete Slab Cover Supported by Concrete Pipe	20 / 2200	0.24 / 26	I.2.51
216-B-47	Crib	IIB	200E	ARHCO	30' x 30'; 14' deep	Concrete Slab Cover Supported by Concrete Pipe	5.0 / 980	0.06 / 12	I.2.52
216-B-48	Crib	IIB	200E	ARHCO	30' x 30'; 14' deep	Concrete Slab Cover Supported by Concrete Pipe	5.0 / 2300	0.06 / 27	I.2.53
216-B-49	Crib	IIB	200E	ARHCO	30' x 30'; 14' deep	Concrete Slab Cover Supported by Concrete Pipe	15 / 4000	0.18 / 48	I.2.54
216-B-50	Crib	IIIC	200E	ARHCO	30' x 30'; 14' deep	Concrete Slab Cover Supported By Concrete Pipe	<0.24 / 156	< 0.01 / 1.9	I.3.35

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-B-51	Drain	IIC	200E	ARHCO	5' diam	Wood Cover	NA / <10	NA / 5.6	I.2.55
216-B-52	Crib	IIB	200E	ARHCO	580' x 10'	Wood Cover	19 / 470	0.04 / 0.87	I.2.56
216-B-53-A	Trench	IB	200E	ARHCO	60' x 10'		100 / 0.91	1.8 / 0.02	I.1.1
216-B-53-B	Trench	IIC	200E	ARHCO	150' x 10'		5.0 / 26	0.04 / 0.19	I.2.57
216-B-54	Trench	IIIC	200E	ARHCO	200' x 10'		5.0 / 19	0.03 / 0.10	I.3.36
216-B-55	Crib	IIIC	200E	ARHCO	7500 ft^2	Gravel-filled	0.43 / 56	< 0.01 / 0.08	I.3.37
216-B-56	Crib	IV	200E	ARHCO	700 ft^2	Not used		none	I.4.12
216-B-57	Crib	IIIC	200E	ARHCO	3000 ft^2	Gravel-filled	< 0.19 / 650	< 0.01 / 2.3	I.3.38
216-B-58	Trench	IIC	200E	ARHCO	2000 ft^2	Plywood Cover	6.7 / 31	0.04 / 0.16	I.2.58
216-B-59*	Trench	IV	200E	ARHCO	8000 ft^2			None / < 0.01	I.4.13

* 5/75: Being lined, compartmented and covered for retention of any abnormally radioactive cooling water.

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-B-60*	Drain	IIIC	200E	ARHCO	8' diam	Steel Caisson Concrete Top	0.08 / 42	0.02 / 9.0	I.3.39
216-B-61	Crib	VI	200E	ARHCO	1750 ft^2	Not used		None	I.6.15
216-B-62	Crib	IV	200E	ARHCO	5000 ft^2	Gravel filled	Very low	Very low**	I.4.14
216-B-63	Ditch	IV	200E	ARHCO	5000 ft^2	Chemical Sewer Ditch		< 0.01 / 0.01	I.6.16

* 5/75: Now covered by 225-B Encapsulation Facility.
**Put into service 11/73.

TABLE I.5. Contaminated Liquid Disposal Sites: 200 East Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-C-1	Crib	IIB	200E	ARHCO	23' x 8'; 13' deep	Concrete	8 / 270	0.62 / 16	I.2.61
216-C-2	Dry Well	IIC	200E	ARHCO	12" diam 40' deep	NA	NA / < 1	NA / < 13	I.2.62
216-C-3	Pit	IIIA	200E	ARHCO	10' x 50'; 10' deep	Leaching Pit,Gravel	1 / 25	0.02 / 0.53	I.3.41
216-C-4	Crib	IIC	200E	ARHCO	20' x 10'; 16' deep	Gravel filled	1 / 36	0.05 / 1.9	I.2.63
216-C-5	Crib	IIB	200E	ARHCO	20' x 10'; 16' deep	Gravel filled	1 / 13	0.05 / 0.69	I.2.64
216-C-6	Crib	IIIA	200E	ARHCO	20' x 10'; 16' deep	Gravel filled	< .10 / 91	< 0.01 / 4.9	I.3.42
216-C-7	Crib	IV	200E	ARHCO	20' x 10'; 16' deep	Gravel filled	< 1.1 / 0.45	< 0.06 / < 0.02	I.4.21
216-C-8	French Drain	IIIA	200E	ARHCO	6' diam		< NA / 10	< NA / 4	I.3.43
216-C-9	Pond	VI	200E	ARHCO	80,000 ft^2		NA	< 0.01 / < 0.01	I.6.21
216-C-10	Crib	IIIA	200E	ARHCO	160 ft^2	Crushed Rock-filled	< .15 / 105	< 0.01 / 7.1	I.3.44

TABLE I.6 Contaminated Liquid Disposal Sites: 200 North Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-N-1	Pond	VI	200N	ARHCO	50,000 ft^2	Exhumed; released from Red Zone status.			I.6.31
216-N-2	Trench	IV	200N	ARHCO	500 ft^2		NA / 0.43	NA / <0.01	I.4.31
216-N-3	Trench	IV	200N	ARHCO	500 ft^2		NA / <0.49	NA / <0.01	I.4.32
216-N-4	Pond	VI	200N	ARHCO	100,000 ft^2		1 / 0.45	<0.01 / <0.01	I.6.32
216-N-5	Trench	IV	200N	ARHCO	1200 ft^2		None / <0.49	None / <0.01	I.4.33
216-N-6	Pond	VI	200N	ARHCO	75,000 ft^2		1 / .45	<.01 / <.01	I.6.33
216-N-7	Trench	IV	200N	ARHCO	1200 ft^2		None / <.49	None / <0.01	I.4.34

TABLE I.7 Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73: G Pu / Beta Ci	As of 12/31/73: G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-S-1&2	Crib	IIA	200W	ARHCO	90' x 40'; 37' deep	Wooden Structure	1200 / 7.5×10^3	3.6 / 22	I.2.71
216-S-3	Crib	IIC	200W	ARHCO	10' x 10'; 6' deep		0.5 / 63	0.05 / 6.8	I.2.72
216-S-4	French Drain (2)	IV	200W	ARHCO	30" diam; 20' deep		NA	NA	I.4.41
216-S-5	Crib	IIA	200W	ARHCO	210' x 210'; 15' deep	Gravel filled	580 / 240	0.14 / 0.06	I.2.73
216-S-6	Crib	IIC	200W	ARHCO	210 x 210'; 15' deep	Gravel filled	470 / 970	0.11 / 0.23	I.2.74
216-S-7	Crib	IIA	200W	ARHCO	50' x 100'; 24' deep	Wooden Structure		0.95 / 14	I.2.75
216-S-8	Trench	IV	200W	ARHCO	100' x 60'		2.0 / 16	<0.01 / 0.03	I.4.42
216-S-9	Crib	IIA	200W	ARHCO	300' x 30'	Gravel filled	65 / 1300	0.08 / 1.6	I.2.76
216-S-10	Ditch and Pond	VI	200W	ARHCO	13,500 ft^2 (Ditch) 5 Acres (Pond)		<0.1 / 2.5	Very low	I.6.41
216-S-11	Pond	VI	200W	ARHCO	1.5 Acres		<0.23 / 3.7		I.6.42

TABLE I.7 Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-S-12	Trench	IV	200W	ARHCO	1800 ft^2			0.01 / 0.01	I.4.43
216-S-13	Crib	IIC	200W	ARHCO	40' x 40'; 33' deep	Wooden Structure	8 / 12	0.05 / 0.08	I.2.77
216-S-14	Trench	IV	200W	ARHCO	100' x 8'; 6' deep	Released from Radiation Zone Status			I.4.44
216-S-15	Pond	VI	200W	ARHCO	100' x 50'; 24' deep				I.6.43
216-S-16	Pond and Ditch	VI	200W	ARHCO	1700 x 4'; 6' deep (Ditch) 31 Acres (Pond)		370 / 230		I.6.44
216-S-17	Pond	VI	200W	ARHCO	17 Acres		3 / 84		I.6.45
216-S-18	Crib	IV	200W	ARHCO	125' x 15'	Released from Radiation Zone Status.			I.4.45
216-S-19	Pond	VI	200W	ARHCO	3.5 Acres		21 / 10		I.6.46
216-S-20	Crib	IIC	200W	ARHCO	90' x 40'	Wooden Structure	170 / 250	0.51 / 0.76	I.2.78
216-S-21	Crib	IIIC	200W	ARHCO	50' x 50'	Wooden Structure	2.1 / 320	0.01 / 4.4	I.3.51
216-S-22	Crib	IV	200W	ARHCO	100' x 3.5'; 10' deep	Gravel filled	< .1 / 2.7	<0.01 / <0.01	I.4.46

TABLE I.7 Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-S-23	Crib	IIIC	200W	ARHCO	360' x 10'	Gravel Filled	<0.99 / 25	<0.01 / 0.07	I.3.52
216-S-24	Crib	IV	200W	ARHCO		Not Built	--	--	--
216-S-25	Crib	IV	200W	ARHCO	5750 ft^2		<0.01 / <0.01	<0.01 / <0.01	I.4.47

TABLE I.7 Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-T-1	Ditch	VI	200W	ARHCO	1800' x 25'; 10' deep		<0.1 / 0.22	<0.01 / <0.01	I.6.51
216-T-2	Reverse Well	IIA	200W	ARHCO	6" diam; 75' deep		NA / NA		I.2.81
216-T-3	Reverse Well	IIC	200W	ARHCO	8" diam; 206' deep		3300 / 117	Very High	I.2.82
216-T-4	Ditch & Pond	VI	200W	ARHCO	850' x 8' (Ditch) 2.5 Acres (Pond)			<0.01 / 0.05	I.6.52
216-T-5	Crib	IIB	200W	ARHCO	50' x 10'; 25' deep		180 / 90	3.9 / 1.9	I.2.83
216-T-6	Crib	IIC	200W	ARHCO	90' x 14'; 26' deep		390 / 690	3.3 / 5.9	I.2.84
216-T-7	Crib & Tile Field	IIB	200W	ARHCO	12' x 12' x 26' (Crib) 26,200 ft^2 (Tile Field)	Wooden Structure	130 / 134	0.05 / 0.05	I.2.85
216-T-8	Crib (2)	IB	200W	ARHCO	12' x 12' x 25'	Wooden Structure	5 / 2.3	0.04 / 0.02	I.1.2
216-T-9	Trench	IV	200W	ARHCO	50 x 10'; 6' deep	Filled; released from Radiation Zone status			I.4.51
216-T-10	Trench	IV	200W	ARHCO	50' x 10'; 6' deep	Filled; released from Radiation Zone status			I.4.52

TABLE I.7 Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-T-11	Trench	IV	200W	ARHCO	50' x 10'; 6' deep	Filled; released from Radiation Zone Status			I.4.53
216-T-12	Pit	IIC	200W	ARHCO	15 x 10'; 8' deep		1 / 19	0.07 / 1.3	I.2.86
216-T-13	Trench	IV	200W	ARHCO	20' x 20'; 10' deep	Filled; released from Radiation Zone Status			I.4.54
216-T-14	Trench	IIIB	200W	ARHCO	220' x 10'; 10' deep		0.88 / 580	<0.01 / 2.8	I.3.61
216-T-15	Trench	IIIB	200W	ARHCO	240' x 10'; 10' deep		0.94 / 1300	<0.01 / 5.8	I.3.62
216-T-16	Trench	IIIB	200W	ARHCO	240' x 10'; 10' deep		0.65 / 650	<0.01 / 2.9	I.3.63
216-T-17	Trench	IIIB	200W	ARHCO	240' x 10'; 10' deep		0.53 / 460	<0.01 / 2.1	I.3.64
216-T-18	Crib	IIB	200W	ARHCO	10' x 10'; 10' deep	Concrete	1800 / 78	190 / 8.3	I.2.87
216-T-19	Crib & Tile Field	IIIC	200W	ARHCO	12' x 12'; 30' deep (Crib) 350 x 85' (Tile Field)	Wooden Crib	14 / 580	<0.01 / 1.2	I.3.65
216-T-20	Pit	IIIA	200W	ARHCO	10' x 10'; 4' deep	Filled	None / 2.4	None / 0.26	I.3.66

TABLE I.7 Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73: G Pu / Beta Ci	As of 12/31/73: G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-T-21	Trench	IIIB	200W	ARHCO	240' x 10'; 10' deep		1 / 510	<0.01 / 2.3	I.3.67
216-T-22	Trench	IIIB	200W	ARHCO	240' x 10'; 10' deep		2 / 2300	<0.01 / 10	I.3.68
216-T-23	Trench	IIIB	200W	ARHCO	240' x 10'; 10' deep		1 / 1700	<0.01 / 7.5	I.3.69
216-T-24	Trench	IIIB	200W	ARHCO	240' x 10'; 10' deep		2.0 / 1800	0.01 / 8.02	I.3.70
216-T-25	Trench	IIIB	200W	ARHCO	180' x 10'; 10' deep		1.0 / 11000	0.01 / 65	I.3.71
216-T-26	Crib	IIB	200W	ARHCO	30' x 30'; 15' deep	Concrete	59 / 1090	0.70 / 13	I.2.88
216-T-27	Crib	IIC	200W	ARHCO	30' x 30'; 15' deep	Concrete	13 / 400	0.16 / 4.7	I.2.89
216-T-28	Crib	IIC	200W	ARHCO	30' x 30'; 15' deep	Concrete	70 / 1400	0.84 / 17	I.2.90
216-T-29	French Drain	IIA	200W	ARHCO	110' x 48'		NA / <8	NA / <8	I.2.91
216-T-30		IIIB	200W	ARHCO	Diversion box overflowed to ground; 160' x 90' area		1 / 97	<0.01 / 0.2	I.3.72
216-T-31	French Drain	IV	200W	ARHCO	36" diam	Released from Radiation Zone Status			I.4.55

TABLE I.7 Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73: G Pu / Beta Ci	As of 12/31/73: G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-T-32	Crib	IIB	200W	ARHCO	68' x 14'; 26' deep	Wooden Structure	3200 / 61	36 / 0.7	I.2.92
216-T-33	Crib	IIC	200W	ARHCO	30' x 5'	Gravel Filled	5.0 / 2.0	0.36 / 0.14	I.2.93
216-T-34	Crib	IIC	200W	ARHCO	200' x 30'	Gravel Filled	110 / 1300	0.19 / 2.3	I.2.94
216-T-35	Crib	IIC	200W	ARHCO	450 x 10'	Rock Filled	66 / 83	0.13 / 0.21	I.2.95
216-T-36	Crib	IIIC	200W	ARHCO	160' x 10'	Rock Filled	2.5 / 36	0.02 / 0.23	I.3.73

TABLE I.7 Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-U-1	Crib	IIC	200W	ARHCO	14' x 14'; 24' deep	Wooden Structure	43 / 19	1.2 / .52	I.2.101
216-U-2	Crib	IIC	200W	ARHCO	14' x 14'; 24' deep	In Series with U-1	Included in Above		I.2.102
216-U-3	French Drain	IIIC	200W	ARHCO	6' diam.; 12' deep		<0.1 / 1.4	<0.03 / 0.48	I.3.81
216-U-4	Reverse Well	IIIA	200W	ARHCO	6" diam		NA / <1	NA / <1	I.3.82
216-U-4A	Dry Well	IIIA	200W	ARHCO	36" diam; 75' deep		<0.009 / 0.62	<0.01 / 0.95	I.3.83
216-U-4B	Dry Well	IIC	200W	ARHCO	36" diam; 75' deep		0.054 / 0.57	0.08 / 0.87	I.2.103
216-U-5	Ditch	VI	200W	ARHCO	40' x 10'; 10' deep		<0.05 / 0.12	<0.01 / <0.01	I.6.61
216-U-6	Ditch	VI	200W	ARHCO	75' x 10'; 10' deep		<0.05 / 0.12	<0.01 / <0.01	I.6.62
216-U-7	French Drain	IIC	200W	ARHCO	30" diam		NA / <1	NA / <2	I.2.104
216-U-8	Crib	IA	200W	ARHCO	160' x 50'; 31' deep	Wooden Structure	370 / 2.7	0.50 / <0.01	I.1.3
216-U-9	Ditch	VI	200W	ARHCO	3500' x 6'; 6' deep		NA	NA	I.6.63

TABLE I.7 Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-U-10	Pond	VI	200W	ARHCO	22 Acres		$\frac{8000}{66}$	$< \frac{0.01}{0.01}$	I.6.64
216-U-11	Trench	VI	200W	ARHCO	1960 x 5' (Old Trench)		$< \frac{NA}{0.1}$	$< \frac{NA}{0.01}$	I.6.65
216-U-11	Trench	VI	200W	ARHCO	3440 x 5' (New Trench)				I.6.66
216-U-12	Crib	IIIA	200W	ARHCO	100' x 10'	Gravel Filled	$\frac{1.0}{174}$	$\frac{0.01}{1.9}$	I.3.84
216-U-13	Crib (2)	IV	200W	ARHCO	200' x 20'	Two Cribs in Parallel		$< \frac{0.01}{0.01}$	I.4.61
216-U-14	Ditch	VI	200W	ARHCO	5680' x 8'			NA	I.6.67
216-U-15	Crib	IV	200W	ARHCO	20' x 20'	Wood Structure		$< \frac{0.01}{0.01}$	I.4.62

TABLE I.7. Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-Z-1	Ditch	VI	200W	ARHCO	4250 ' x 4'			Low Level	I.6.71
216-Z-1	Crib	IB	200W	ARHCO	14' x 14' 17' deep	Wooden Structure	7000 / 0.24	385 / 0.01	I.1.12
216-Z-1A	Tile Field	IA	200W	ARHCO	260' x 100' 12' deep		50 / 0.3	24(ave) / --	I.1.13
216-Z-1AA	Tile Field	IA	200W	ARHCO	Boundaries Undefined	Section of 216-Z-1A	30000 / 1	See Z-1A	I.1.14
216-Z-1AB	Tile Field	IA	200W	ARHCO	Boundaries Undefined	Section of 216-Z-1A	17000 / 1	See Z-1A	I.1.15
216-Z-1AC	Tile Field	IA	200W	ARHCO	Boundaries Undefined	Section of 216-Z-1A	11000	See Z-1A	I.1.16
216-Z-2	Crib	IB	200W	ARHCO	14' x 14' 17' deep	Wooden Structure	Inc. in Z-1	386 / 0.01	I.1.17
216-Z-3	Crib	1B	200W	ARHCO	70' x 5' 25' deep	Rock Filled	5700 / 0.32	175 / 0.01	I.1.18
216-Z-4	Crib	IB	200W	ARHCO	10' x 10' 15' deep	Hole	2.0 / 0.2	0.22 / 0.02	I.1.19
216-Z-5	Crib	IIB	200W	ARHCO	80' x 14' 24' deep	Wooden Structure	340 / 150	3.3 / 1.5	I.2.111

TABLE I.7. Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu / Beta Ci	As of 12/31/73 G Pu/m^2 / Beta Ci/m^2	Appendix No.
216-Z-6,6A	Crib	IB	200W	ARHCO	50' x 6'; 2' deep	Wooden Structure	5.0 / 0.2	0.18 / 0.01	I.1.20
216-Z-7	Crib(2)	IIC	200W	ARHCO	140' x 5'; 36' deep	2 Cribs; Wooden Structure	2000 / 1200	15.4 / 9.3	I.2.112
216-Z-8	French Drain	IB	200W	ARHCO	36" dia; 17' deep	Concrete	484 / NA	735 / -	I.1.21
216-Z-9	Crib	IA	200W	ARHCO	90' x 120'; 20' deep	Cavern, Concrete Roof	38000 / 0.3	229 / <0.01	I.1.22
216-Z-10	Reverse Well	IB	200W	ARHCO	6" dia; 151' deep		50 / NA	5000 / -	I.1.23
216-Z-11	Ditch	VI	200W	ARHCO	2615' x 4'; 2' deep			Low Level	I.6.72
216-Z-12	Crib	IB	200W	ARHCO	300' x 20'; 20' deep	Gravel Filled	25000 / 0.6	42 / 0.001	I.1.24
216-Z-13	French Drain	IV	200W	ARHCO	36" dia			Low Level	I.4.71
216-Z-14	French Drain	IV	200W	ARHCO	36" dia			Low Level	I.4.72
216-Z-15	French Drain	IV	200W	ARHCO	36" dia			Low Level	I.4.73

TABLE I.7. Contaminated Liquid Disposal Sites: 200 West Area

Site Number	Site Type	Site Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	As of 12/31/73 G Pu Beta Ci	As of 12/31/73 G Pu/m^2 Beta Ci/m^2	Appendix No.
216-Z-16	Crib	IB	200W	ARHCO	180' x 10'	Rock Filled	<700 <0.2	<0.43 <0.001	I.1.25
216-Z-17	Trench	IB	200W	ARHCO	300' x 10'		50 .02	0.18 <0.01	I.1.26
216-Z-18	Crib (5)	IA	200W	ARHCO	207' x 10'; 20' deep (each crib)	Five parallel cribs; Rock Filled	22900 NA	23 <0.04	I.1.27
216-Z-19	Ditch	VI	200W	ARHCO	2675' x 4'			Low Level	I.6.73

TABLE I.8. Contaminated Liquid Disposal Sites: 300 and 600 Areas

Site Number	Site Type	Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	Appendix No.
316-1	Pond	VI	300	HEDL	8 Acres		I.6.81
316-2	Pond	VI	300	HEDL	10 Acres		I.6.82
316-3	Trench	VI	300	HEDL			I.6.83
316-4	Crib	IV	600	ARHCO		2 SS Tanks	I.4.81
316-5	Trench	VI	300	HEDL	2 ea 1500 ft x 30 ft (top); 12 ft deep		I.6.84
-	Crib	IB	600	ARHCO		Exhumed	I.1.31 and IX.1
UN-316-1	Unplanned Release	IIC	300	HEDL			I.2.121

TABLE I.9. UNPLANNED RELEASES: 100 AREAS

Site							
Number	Type	Class	Area	Land-lord	Bottom Surface Dimensions (Length x Width; Depth)	Remarks	Appendix No.
3-13-71 141-C	Unplanned* Release	V	100-F	UNI		Spill From Sewer Line	I.5.81
6-27-72 1310-N	Unplanned* Release	V	100-N	UNI		Chemical Waste Pipe Leak	I.5.82

* Identification of unplanned releases is by date and facility. Only incidents involving ground contamination are included; leakage from retention basin systems is omitted.

TABLE I.10 UNPLANNED RELEASES: 200 EAST AREA

FACILITY NO.	FACILITY PAST DESIGNATION	CLASS	LANDLORD	REMARKS	APPENDIX
UN-216-E-1	241-B-151 Diversion Box Ground Contamination	IV	ARHCO	Most of contam. soil removed. Remaining covered.	I.4.91
UN-216-E-2	241-B-152 Diversion Box Ground Contamination	IV	ARHCO	Portion 50 ft^2 removed and buried. Remaining covered.	I.4.92
UN-216-E-3	241-B-153 Diversion Box Ground Contamination	IV	ARHCO	50 x 100 ft marked as rad. zone. Contam. covered with gravel.	I.4.93
UN-216-E-4	241-B-153 Line Break	IIIB	ARHCO	5400 gal leaked to ground. Contamination covered with gravel.	I.3.101
UN-216-E-5	241-B-154 Diversion Box Ground Contamination	IV	ARHCO	Metal waste soln. contam. covered with soil.	I.4.94
UN-216-E-6	Ground Contamination Near 241-BX-153 and 155	IV	ARHCO	22.6 rad/hr surf. contam. covered 200 ft^2 with clean soil.	I.4.95
UN-216-E-7	242-B to 207-B Line Break	IV	ARHCO	5 leaks, covered with 2 in. clean soil	I.4.96
UN-216-E-8	221-B, R-3 Line Break	IV	ARHCO	100 x 500 ft cave-in backfilled. Major portion removed.	I.4.97
UN-216-E-9	241-CR-151 Line Break	IIB	ARHCO	36,000 gal contam. covered with clean gravel.	I.2.131
UN-216-E-10	241-C-152 Line Break	IIB	ARHCO	2600 gal contam. covered with clean gravel.	I.2.132
UN-216-E-11	241-CR Cleaning Pit	IV	ARHCO	Not Available.	I.4.98
UN-216-E-12	241-ER-151 Catch Tank Leak	IV	ARHCO	1700 gal contam. acid. No ground contam. found.	I.4.99

TABLE I.10 (Continued)

FACILITY NO.	FACILITY PAST DESIGNATION	CLASS	LANDLORD	REMARKS	APPENDIX
UN-216-E-13	221-B, R-13 Line Break Near Utility Pit	IIIB	ARHCO	15 rad/hr at bottom of pit within 2 in. of source.	I.3.102
UN-216-E-14	241-C-Tank Farm Line Break SW Corner	IIB	ARHCO	1300 ft^3 contam. not below 20 ft.	I.2.133
UN-216-E-15	224-B South Side Pu Ground Contamination	I	ARHCO	Not Available.	I.1.41

TABLE I.11 UNPLANNED RELEASES: 200 WEST AREA

FACILITY NO.	FACILITY PAST DESIGNATION	CLASS	LANDLORD	REMARKS	APPENDIX
UN-216-W-1	216-S-4 Culvert Pipes Cooling Water Well	IV	ARHCO	Pipes on end to 20 ft. Rad. accumulated at bottom of pipes.	I.4.111
UN-216-W-2	216-S-207 Redox Retention Basin	IV	ARHCO	Basin concrete surface covered with soil.	I.4.112
UN-216-W-3	216-S-15 Condenser Cooling Water Pond	IV	ARHCO	10 rad/hr at surface covered with 2 ft dirt.	I.4.113
UN-216-W-4	233-S Floor Overflow	IV	ARHCO	150 yd^2 contam. covered with 28 yd clean gravel.	I.4.114
UN-216-W-5	23rd and Camden Roadside Line Break	IIIB	ARHCO	Surface contam. removed to depth of 3 ft remaining covered 3 ft soil.	I.3.111
UN-216-W-6	221-T, R-19 Transfer Line Break	IIIB	ARHCO	20 rad/hr contam. covered with several feet gravel.	I.3.112
UN-216-W-8	105-TX to 118-TX Process Line Leak	IIIB	ARHCO	100 x 125 ft covered with soil. Contam. 4.5 rad/hr at 4 ft above surface.	I.3.113
UN-216-W-9	221-U Acid Spill R-1 through R-5	IV	ARHCO	65 x 90 ft contam. covered with 3 in. sand and gravel.	I.4.115
UN-216-W-10	U-152 Interfacial Crud 221-U	IV	ARHCO	Not Available.	I.4.116
UN-216-W-11	216-U-7, 221-U Vessel Vent Blower Pit	IV	ARHCO	300 lb U to ground estab. radiation zone.	I.4.117
UN-216-W-12	224-T Southeast Side Pu	I	ARHCO	Gross alpha contam. 50 ft long, 12 ft wide, 12 ft deep, 139 drums soil removed marked for underground contamination.	I.1.51

I. CONTAMINATED LIQUID
DISPOSAL SITES

I. Contaminated Liquid Disposal Sites

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class IB - Transuranic Disposal)	216-B-53A Trench	216-B-53A

Location	Service Dates	Status
BC Crib Area, South of 200 East Area (Across highway) (Figure C.1.11)	10/65-11/65	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-35972, W-54690 to N-35972, W-54750	H-2-3336 H-2-35020	Ground Water Table Site Depth	743 ft 404 ft (1973) 8 ft (minimum)

Source and Description of Waste

5.49×10^5 liters of neutral-basic waste from 300 Area operations of the Hanford Laboratories.

Description of Facility

Trench, 60 x 10 ft bottom surface area. Used on specific retention basis until its capacity was reached. The overground piping to the trench was removed and the trench backfilled.

Radionuclide Content (calculated from discharge records)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	100	100
Beta, Ci	50	0.91
^{90}Sr, Ci	<0.10	<0.081
^{106}Ru, Ci	5.0	0.014
^{137}Cs, Ci	<0.10	<0.08
^{60}Co, Ci	0.50	0.16
U, kg	23	23

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class IB)	222-T-1 and 2 Crib	216-T-8

Location	Service Dates	Status
200 West Area, 50 ft East of 222-T and 500 ft North of 23rd St. (Figure C.1.10)	5/50-9/51	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-43545, W-72950	H-2-353	Ground	719 ft
		Water Table	464 ft (1973)
		Site Depth	25 ft

Source and Description of Waste

5.0×10^5 liters of neutral-basic waste from 222-T: decontamination sink waste and "slupper" waste.

Description of Facility

Two wooden-structure cribs, each 12 x 12 ft in bottom area. Pipelines in building were blanked in 9/1951.

Radionuclide Content (calculated from discharge records)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	5.0	5.0
Beta, Ci	1.0×10^2	2.31
^{90}Sr, Ci	1.0	0.568
^{106}Ru, Ci	5.0	6.9×10^{-7}
^{137}Cs, Ci	<1.0	0.589
^{60}Co, Ci	<0.1	$<4.83 \times 10^{-3}$
U, kg	4.5	4.5

Other Potential Hazards

Wooden structure of crib may collapse. Prompt remedial action would be required to prevent spread of contamination and correct other hazards.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class I A)	216-WR-1, 2 and 3 cribs 216-U-9	216-U-8

Location	Service Dates	Status
200 West. 450 ft west of Beloit Avenue and 750 ft south of 16th Street. (Figure C.1.10)	6/52-3/60	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-36860, W-73100	H-2-43028 H-2-31321	Ground	694 ft
		Water Table	464 ft
		Site Depth	31 ft

Source and Description of Waste

3.79×10^8 liters. Process condensate from 221-U and 224-U; 291-U-1 Stack Drainage. Acidic.

Description of Facility

One crib, wooden structure, bottom surface 160 ft x 50 ft. Deactivation: Pipeline blanked north of the crib.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	3.7×10^2	3.7×10^2
Beta, Ci	2.7×10^3	2.71
^{90}Sr, Ci	<0.1	$<6.5 \times 10^{-2}$
^{106}Ru, Ci	2.3×10^2	1.2×10^{-3}
^{137}Cs, Ci	<0.1	$<6.7 \times 10^{-2}$
^{60}Co, Ci	<0.1	$<10.0 \times 10^{-3}$
U, kg	2.4×10^4	2.4×10^4

Other Potential Hazards

Wooden structure may collapse. Prompt remedial action would be required to prevent spread of contamination and correct other hazards.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class IB)	234-5 No. 1 Crib 216-Z-7	216-Z-1 (Crib)

Location	Service Dates	Status
About 400 ft South of the 234-5 Building (Figure C.1.10)	6/49-6/52 5/66-6/69	Inactive

Site Coordinates	Reference Drawings	Elevations
N-39379, W-76601	H-2-16459 H-2-24924 No. 2 H-2-32528	Ground 676 ft Water Table 475 ft (1973) Site Depth 17 ft

Source and Description of Waste

3.4×10^7 liters of neutral-basic process waste, analytical and development laboratory waste from 234-5 Bldg. via the 241-Z settling tank during period 6/49 to 6/52 including 236-Z and 242-Z wastes during period 5/66 to 6/66. Cribs 216-Z-1 and 2 were inactive during period 6/52 to 6/66. Infiltration capacity was exceeded in 6/52.

Description of Facility

Wooden structure crib with bottom 14 ft x 14 ft. Effluent pipeline was blanked directly west of the crib.

Radionuclide Content (calculated from discharge records)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	7.0×10^3	7.0×10^3
Beta, Ci	50	0.24
^{90}Sr, Ci	<0.1	<0.06
^{106}Ru, Ci	10	1.6×10^{-6}
^{137}Cs, Ci	<0.1	<0.06
^{60}Co, Ci	<0.1	$<4.5 \times 10^{-3}$
U, kg	81	81

Other Potential Hazards

Wooden structure of crib may collapse--requiring prompt remedial action to prevent spread of contamination and to correct other hazards.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Tile Field (Class IA)	234-5 Tile Field 216-Z-7	216-Z-1A Tile Field

Location	Service Dates	Status
About 500 ft South of the 234-5 Building (Figure C.1.10)	6/49 to 3/59 5/64 to 4/69	Inactive

Site Coordinates (Approximately)	Reference Drawings	Elevations	
N-39023, W-76501 to N-39435, W-76815	H-2-16459 H-2-24923 H-2-32528	Ground Water Table Site Depth	676 ft 475 ft 12 ft

Source and Description of Waste

Same as 216-Z-1 and 2 cribs. Received overflow from these cribs--estimated to be 1.0 x 10^6 liters. Acidic.

Description of Facility

Tile field covering an area of 260 ft x 100 ft. Use of 216-Z-1 and Z-2 cribs and tile field was discontinued in 3/59 when groundwater samples in vicinity of crib showed alpha contamination. Returned to active status 5/64 to 4/69 for 236-Z Bldg. and 242-Z Bldg. wastes. (See date sheets for 216-Z-1AA, 1AB, 1AC for subsequent history of this tile field)

Radionuclide Content (calculated from discharge records)

Radionuclide	At Time of Discharge	As of 12/31/75
Pu, g	50	50
Beta, Ci	28	0.30
^{90}Sr, Ci	<0.1	<0.07
^{106}Ru, Ci	10	1.4×10^{-4}
^{137}Cs, Ci	<0.1	<0.07
^{60}Co, Ci	<0.1	<0.013
U, kg	<0.05	<0.05

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Tile Field (Class IA)	Part of former Z-1A tile field	216-Z-1AA

Location	Service Dates	Status
About 500 ft South of the 234-5 Building (Figure C.1.10)	6/64 to 6/66	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-39334, W-76601 to N-39234, W-76601	H-2-16459 H-2-32528 H-2-24923 H-2-27503	Ground 676 ft Water Table 475 ft (1973) Site Depth 12 ft

Source and Description of Waste

Received 236-Z and 242-Z process waste (AAW). Approximate chemical composition: HNO_3 - 0.15M, $Al(NO_3)_3$ - 0.2M, $AlF(NO_3)_2$ - 0.3M, $Mg(NO_3)_2$ - 0.3M, $Ca(NO_3)_2$ - 0.2M, $NaNO_3$ - 0.95M. Also received organic waste mixed with AAW--includes TBP and DBBP and CC/4. Waste volume = 1.9×10^6 liters. Acidic.

Description of Facility

Same tile field as 216-Z-1A except that the waste effluent line was positioned further into the main trunk line of the tile field to feed this particular section of the field.

Radionuclide Content (calculated from discharge records)

Radionuclide	At Time of Discharge	As of 12/31/75
Pu, g	3.0×10^4	3.0×10^4
Beta, Ci	210	0.95
^{90}Sr, Ci	<0.1	<0.08
^{106}Ru, Ci	100	0.26
^{137}Cs, Ci	<0.1	<0.08
^{60}Co, Ci	<0.1	<0.29
U, kg	<0.05	<0.05

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Tile Field (Class IA)	Part of former Z-1-A tile field	216-Z-1AB

Location	Service Dates	Status
About 600 ft South of the 234-5 Bldg. (Figure C.1.10)	6/66-10/67	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-39234, W-76601 to N-39159, W-76601	H-2-27503 H-2-32528	Ground Water Table Site Depth	676 ft 475 ft (1973) 12 ft

Source and Description of Waste

Same as 216-Z-1AA. Waste volume = 1.9×10^6 liters. Acidic.

Description of Facility

Same as 216-Z-1AA

Radionuclide Content (calculated from discharge records)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	1.7×10^4	1.7×10^4
Beta, Ci	105	0.99
^{90}Sr, Ci	<0.1	<0.08
^{106}Ru, Ci	50	0.28
^{137}Cs, Ci	<0.1	<0.08
^{60}Co, Ci	<0.1	<0.04
U, kg	<0.05	<0.05

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Tile Field (Class IA)	Part of former 2-1-A Tile Field	216-Z-1AC

Location	Service Dates	Status
About 700 ft South of the 234-5 Bldg (Figure C.1.10)	10/67-5/69	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-39159, W-76601 to N-39063, W-76601	H-2-27503 H-2-3-2528	Ground 676 ft Water Table 475 ft (1973) Site Depth 12 ft

Source and Description of Waste

Same as 216-Z-1AA. Waste Volume = 1.4×10^6 liters. Acidic.

Description of Facility

Same as 216-Z-1AA.

Radionuclide Content (calculated from discharge records)

Radionuclide	At Time of Discharge
Pu, g	1.1×10^4

CONTAMINATED LIQUID DISPOSAL SITES

Description of Facility

Radionuclide Content (continued)

Depth	Gram ^{239}Pu/liter of Soil
0 - 1 in. *(0 - 2.5 cm)*	13 - 20
2 - 3 in. *(5 - 7.5 cm)*	1 - 9
4 - 6 in. *(10 - 15 cm)*	0.1 - 3
7 - 9 in. *(17.5 - 22.5 cm)*	0.1 - 0.8
10 - 15 in. *(25 - 30 cm)*	0.1 - 0.3

Core samples taken down to a depth of eight feet indicated that the Pu concentration remained constant at about 0.1 g/liter after a depth of about 1 ft. Future programs were planned for determining how far the Pu extended down the soil column. (For further details on the 1973 study refer to ARH-2915, "Nuclear Reactivity Evaluations of the 216-Z-9 Enclosed Trench.")

Disposition Plans

Excavate top 1 ft layer of soil and package for retrievable storage. Excavation planned to begin in 1976 (Ref ARH-2651-1).

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class IB)	234-5 No. 2 Crib 216-Z-7	216-Z-2 Crib

Location	Service Dates	Status
Same as 216-Z-1 Crib (Figure C.1.10)	Same as 216-Z-1	Inactive

Site Coordinates	Reference Drawings	Elevations
N-39411, W-76601	Same as 216-Z-1 Crib	Ground 676 ft Water Table 475 ft (1973) Site Depth 17 ft

Source and Description of Waste

Same as 216-Z-1 Crib neutral-basic waste

Description of Facility

Same as 216-Z-1 Crib

Radionuclide Content (calculated from discharge records)

Included in 216-Z-1 Crib Inventory

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class IB)	216-Z-3 Culvert 234-5 No. 3 and No.4 Cribs, 216-Z-8	216-Z-3

Location	Service Dates	Status
200 West Area (See Figure C.1.10) 1000 ft West of Camden Ave and 250 ft South of 241-Z Retention Basin	6/52-3/59	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-39435, W-76461	H-2-12292 H-2-24923 H-2-32528	Ground	676 ft
		Water Table	475 ft (1973)
		Site Depth	25 ft

Source and Description of Waste

1.78×10^8 liters of miscellaneous neutral-basic waste from Z-Plant process, analytical lab and development lab. Discharged to crib via 241-Z settling tank.

Description of Facility

Rock crib with 70 ft x 5 ft bottom area

Radionuclide Content (calculated from discharge records)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	5.7×10^3	5.7×10^3
Beta, Ci	10.5×10^2	0.321
^{90}Sr, Ci	<0.1	$<6.83 \times 10^{-2}$
^{106}Ru, Ci	40.0	6.29×10^{-4}
^{137}Cs, Ci	<0.1	$<7.0 \times 10^{-2}$
^{60}Co, Ci	<0.1	$<1.0 \times 10^2$
U, kg	$<5.0 \times 10^{-2}$	$<5.0 \times 10^{-2}$

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class IB)	231-W-3 Pit, Sump or Crib 216-Z-3	216-Z-4

Location	Service Dates	Status
200 West Area (see Figure C.1.10) 250 ft East of 231-Z and 500 ft North of 2709-Z.	6/45-6/45	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-40875, W-76475	H-2-511 H-2-32528	Ground	670 ft
		Water Table	475 ft (1973)
		Site Depth	15 ft

Source and Description of Waste

$<1.1 \times 10^4$ liters of neutral-basic waste from 231-Z.

Description of Facility

A pit, bottom area 10 x 10 ft. Deactivated in 6/45 when increased building effluent flow exceeded the infiltration capacity of the pit. The building effluent was rerouted to 216-Z-6: the pipeline from 231-Z to the pit was capped west of the 231-W-151 diversion box. The pit was back-filled.

Radionuclide Content (calculated from discharge records)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	2.0	2.0
Beta, Ci	2.6	0.201
^{90}Sr, Ci	<0.1	$<4.96 \times 10^{-2}$
^{106}Ru, Ci	1.0	2.89×10^{-9}
^{137}Cs, Ci	<0.1	$<5.19 \times 10^{-2}$
^{60}Co, Ci	<0.1	$<2.33 \times 10^{-3}$
U, kg	$<5.0 \times 10^{-2}$	$<5.0 \times 10^{-2}$

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class IV)	221-B, R-3 line break	UN-216-E-8

Location	Service Dates	Status
South of 221-B	1946	-

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-42575, W-53450	H-2-44500 Sheet 7	Ground 686 ft Water Table 404 ft (1973) Site Depth NA

Source and Description of Waste

Metal waste from 221-B

Description of Facility

An area approximately 100 ft x 100 ft long due to waste from a leak in the R-3 line. During subsequent construction activity the major portion of the contaminated soil was removed to the 200-E Dry Waste Burial Ground.

Radionuclide Content (at time of discharge)

Approximately 10 Ci mixed fission products.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class IV)	241-CR-Cleaning Pit	UN-216-E-11

Location	Service Dates	Status
Inside C Tank Farm Area	1954	-

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-42800, W-48200	H-2-44500	Ground 683 ft Water Table 404 ft (1973) Site Depth NA

Source and Description of Waste

Not Available

Description of Facility

Not Available

Radionuclide Content (at time of discharge)

Not Available

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned release (Class IV)	241-ER-151 Catch Tank leak	UN-216-E-12

Location	Service Dates	Status
Approximately 800 ft SW of 221-B	3/53	-

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-41937, W-54702	H-2-44500 Sheet 7	Ground 697 ft Water Table 404 ft (1973) Site Depth

Source and Description of Waste

About 1700 gal of contaminated acid was lost to ground.

Description of Facility

A leak in 241-ER-151 catch tank. No ground surface contamination detected.

Radionuclide Content (at time of discharge)

Approximate 10 Ci mixed fission product.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class IV)	216-S-4 Culvert Pipes Cooling Water Well	UN-216-W-1

Location	Service Dates	Status
241-S Tank Farm	1953-1955	

Site Coordinates	Reference Drawings	Elevations
N-36110, W-76630 to N-36045, W-76630. N-36045, W-76575 to N-36110, W-76575	H-2-44510 Sheet 4	Ground 664 ft Water Table 404 ft (1973) Site Depth 20 ft

Source and Description of Waste

Tank condensate and cooling water from 101 and 104 tanks in the 241-S tank farm.

Description of Facility

Radioactivity accumulated at the bottom of two metal culvert pipes placed on end to a depth of 20 ft.

Radionuclide Content (at time of discharge)

Approximately 1 Ci Fission Products.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class IV)	216-S-207 Redox Retention Basin	UN-216-W-2

Location	Service Dates	Status
Approximate 1200 ft due west of 222-S Bldg.	1954	-

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-34220, W-75200	H-2-44510 Sheet 4	Ground 681 ft Water Table 464 ft Site Depth NA

Source and Description of Waste

Coil leaks in 202-S Bldg. resulted in contamination of cooling water.

Description of Facility

Concrete lined retention basin which was covered with soil after it became contaminated.

Radionuclide Content (at time of discharge)

Approximately 10 Ci mixed fission products.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class IV)	216-S-15 (110-S tank condenser cooling water pond)	UN-216-W-3

Location	Service Dates	Status
Approximately 100 ft east of the 241-S Tank Farm	1951-1952	

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-36066, W-75450	H-2-44510 Sheet 4	Ground 667 ft Water Table 470 ft (1973) Site Depth 2 ft

Source and Description of Waste

110-S tank condenser cooling wastes.
Low-salt, neutral/basic.

Description of Facility

Pond that had a surface dose rate of 10 rad/hr. It was covered with 2 ft of clean soil.

Radionuclide Content (at time of discharge)

Approximately 1 Ci Fission Products.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class IV)	233-S Floor Overflow	UN-216-W-4

Location	Service Dates	Status
Directly North of 233-S	January 1969	

Site Coordinates (Approx. Center)	Reference Drawings	Elevations
N-34625, W-74050	H-2-44510 Sheet 4	Ground 676 ft Water Table 470 ft (1973) Site Depth Surface

Source and Description of Waste

Plutonium contaminated water from the filter house drain line.

Description of Facility

233-S filter house drain line backed up and overflowed into a low spot on the ground (150 yd^2). Area was covered with 28 yards of clean gravel.

Radionuclide Content (at time of discharge)

Approximately 0.1 g ^{239}Pu.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class IV)	221-U Acid Spill R-1 Through R-5	UN-216-W-9

Location	Service Dates	Status
Northeast end of 221-U	March 1957	

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-38730, W-73050 to N-38550, W-73230	H-2-44510 Sheet 4	Ground 695 ft Water Table 470 ft Site Depth 3 in.

Source and Description of Waste

Reclaimed acid.

Description of Facility

Acid spilled onto the ground, area approximately 65 x 90 ft was covered with 3 in. of sand and gravel.

Radionuclide Content (at time of discharge)

Approximately 1 Ci Fission Products.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class IV)	U-152 Interfacial Grud 221-U	UN-216-W-10

Location	Service Dates	Status
About 300 ft west of the southwest end of the 221-U Bldg.	1956	-

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-38270, W-73900	H-2-44510 Sheet 4	Ground 695 ft Water Table 468 ft (1973) Site Depth NA

Source and Description of Waste

221-U Plant Interfacial Crud

Description of Facility

NA

Radionuclide Content

NA

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class IV)	216-U-7, 221-U Vessel Vent Blower Pit	UN-216-W-11

Location	Service Dates	Status
Northwest corner of 221-U Building	6/53	-

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-38670, W-73090	H-2-44510 Sheet 4	Ground	695 ft
		Water Table	470 ft
		Site Depth	NA

Source and Description of Waste

UNH solution from the 221-U Building.

Description of Facility

Solution overflowed to the 221-U Building vessel vent blower pit and then to ground through a french drain

Radionuclide Content (at time of discharge)

13.6 kg U

Class V - 100 Areas

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	107-B Liquid Waste Disposal Trench	116-B-1

Location	Service Dates	Status
200 ft East of 107-B Retention Basin (Figure VIII.1, C.1.2)	1950-1968	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-71530, W-79600	H-1-523	Ground 440 ft Water Table 393 ft (6/73) Site Depth 15 ft

Source and Description of Waste

Volume unknown. Effluent from the retention basin at times of high activity due to slug rupture.

Description of Facility

Trench. 500 ft x 50 ft bottom dimensions.

Radionuclide Content

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	105-B Storage Basin Trench	116-B-2

Location	Service Dates	Status
100-B Area. 250 ft NE of 105-B (Figure C.1.2)	1946-1946	Inactive (covered)

Site Coordinates	Reference Drawings	Elevations	
N-69080, W-80250	H-1-4049	Ground	468 ft
		Water Table	396 ft (6/73)
		Site Depth	6 ft

Source and Description of Waste

This trench was dug after a slug was accidently cut in half in the storage basin trench. The basin was cleaned by draining water into this trench.

Description of Facility

Trench, 130 ft x 10 ft bottom surface.

Radionuclide Content

Inventory unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	105-B Pluto Crib	116-B-3

Location	Service Dates	Status
100-B Area. 100 ft east of 105-B (Figure C.1.2)	1951-1956	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-69120, W-80430	H-1-4049	Ground	468 ft
		Water Table	396 ft (6/73)
		Site Depth	10 ft

Source and Description of Waste

Received water from tube containing a ruptured slug.

Description of Facility

Crib, 10 ft diameter bottom surface.

Radionuclide Content

Inventory unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	105-B Dummy Decontamination Disposal Crib	116-B-4

Location	Service Dates	Status
50 ft South of 105-B Pluto Crib (Figure C.1.2)	1957-1968	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-69070, W-80430	Not available	Ground	470 ft
		Water Table	400 ft
		Site Depth	20 ft

Source and Description of Waste

Volume unknown. Liquid waste from decontamination of dummy and poison elements.

Description of Facility

Crib. 40 ft x 40 ft bottom dimensions.

Radionuclide Content (calculated from discharge data)

Unknown. Low-level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	108-B Crib	116-B-5

Location	Service Dates	Status
100-C Area. 200 ft north of 1713-C (Solvent storage) (Figure C.1.2)	1950-1968	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-69925, W-80654	H-1-1595 H-1-1596	Ground	459 ft
		Water Table	398 ft (6/73)
		Site Depth	5 ft

Source and Description of Waste

Disposal of liquid tritium wastes. Only wastes of less than 1 μCi/cc of tritium was discharged to this crib.

Description of Facility

Trench, 84 ft x 8 ft bottom surface.

Radionuclide Content

Inventory unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	III-B Cribs (2)	116-B-6

Location	Service Dates	Status
100-B Area. Immediately north and south of the 111-B Bldg. (Figure C.1.2)	1951-1968	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-68620, W-80335	M2888 Sh 4	Ground	474 ft
		Water Table	396 ft (6/73)
		Site Depth	6 ft

Source and Description of Waste

Received radioactive wastes from the 111-B Bldg.

Description of Facility

Two cribs each with bottom surface area of 12 ft x 8 ft.

Radionuclide Content

Inventory unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	107-C Liquid Waste Disposal Trench	116-C-1

Location	Service Dates	Status
1000 ft East of the 107-B Retention Basin. (Figures VIII.1 and C.1.2)	1952-1968	Inactive

Site Coordinates	Reference Drawings	Elevations
N-71600, W-78800	M-1600-B	Ground 440 ft Water Table 393 ft (6/73) Site Depth 25 ft

Source and Description of Waste

Volume unknown. Effluent water from the retention basin during reactor outages due to ruptured slugs.

Description of Facility

Trench, 50 ft x 500 ft bottom dimensions.

Radionuclide Content

Unknown; low-level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	105-C Pluto Crib	116-C-2

Location	Service Dates	Status
100-B Area, 275 ft east of the NE corner of the 105-C Bldg. (Figure C.1.2)	1952-1956	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-67501, W-79962	SK-1-989	Ground	493 ft
		Water Table	400 ft (1973)
		Site Depth	15 ft

Source and Description of Waste

Unknown volume of contaminated wastes from the decontamination of dummy fuel elements on wash pad and contaminated water from the 105-C metal examining facilities.

Description of Facility

One crib, 16 ft x 23 ft bottom surface area.

Radionuclide Content

Inventory unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	105-D Storage Basin Trench #1	116-D-1A

Location	Service Dates	Status
100 ft east of 105-D (Figure C.1.3)	1947-1952	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-92230, W-52480	H-1-4046	Ground	468 ft
		Water Table	385 ft
		Site Depth	6 ft

Source and Description of Waste

Volume unknown. Contaminated water and sludge from 105-D storage basin.

Description of Facility

Trench, 130 ft x 10 ft bottom surface.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	105-D Storage Basin Trench #2	116-D-1B

Location	Service Dates	Status
100 ft Southeast of 105-D. (Figure C.1.3)	1953-1967	

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-92300, W-52570	H-1-4046	Ground	468 ft
		Water Table	385 ft
		Site Depth	15 ft

Source and Description of Waste

Volume unknown. Contaminated sludge from 105-D Fuel Storage Basin.

Description of Facility

Trench, 100 ft x 10 ft bottom dimensions.

Radionuclide Content

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	105-D Pluto Crib	116-D-2

Location	Service Dates	Status
100 ft east of 115-D (Figure C.1.3)	1950-1956	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-91970, W-52610	H-1-4046	Ground	466 ft
		Water Table	385 ft
		Site Depth	20 ft

Source and Description of Waste

Volume unknown. Effluent water from isolated tubes containing ruptured fuel elements.

Description of Facility

One crib, 10 ft diameter bottom surface.

Radionculide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	108-D Crib #1	116-D-3

Location	Service Dates	Status
Directly east of 108-D (Figure C.1.3)	1951-1967	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-92300, W-5270	H-1-4046	Ground	461 ft
		Water Table	385 ft
		Site Depth	3 ft

Source and Description of Waste

Volume unknown. Low level contamination assumed.

Description of Facility

French Drain, 3 ft diameter.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
French Drain (Class V)	108D Crib #2	116-D-4

Location	Service Dates	Status
100 ft east of 108D (Figure C.1.3)	1956-1957	Inactive

Site Coordinates	Reference Drawings	Elevations
N-92300 W-52620	None available	Ground 461 ft Water Table 385 ft Site Depth Unknown

Source and Description of Waste

Volume unknown. Wastes from contaminated maintenance shop.

Description of Facility

French drain, 3 ft diameter.

Radionuclide Content (calculated from discharge data)

Unknown. Low-level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	107 DR Liquid Waste Disposal Trench No. 1	116-DR-1

Location	Service Dates	Status
100 D-DR Area, 100 ft East of Northeast Corner of 107-DR Retention Basin	1950-1967	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-94650, W-51900	M-1600 D Sheet 8	Ground	420 ft
		Water Table	385 ft
		Site Depth	20 ft

Source and Description of Waste

Volume unknown. Effluent water from retention basins when 105-D or 105-DR had a ruptured fuel element.

Description of Facility

Trench, 300 ft x 15 ft bottom dimensions.

Radionuclide Content

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	107-DR Liquid Waste Disposal Trench No. 2	116-DR-2

Location	Service Dates	Status
100 D-DR Area, Southeast of 107-DR Waste Disposal Trench #1 (Figure C.1.3)	1955-1967	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-94100, W-52600	H-1-4046	Ground	420 ft
		Water Table	385 ft
		Site Depth	4 ft

Source and Description of Waste

Volume unknown. Effluent from Retention Basins during reactor outages caused by ruptured fuel elements.

Description of Facility

Trench, 100 ft x 4 ft.

Radionuclide Content

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	105-DR Storage Basin Trench	116-DR-3

Location	Service Dates	Status
150 ft East of 117-DR Bldg. (Figure C.1.3)	1955	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-90900, W-53000	None available	Ground	460 ft
		Water Table	385 ft
		Site Depth	7 ft

Source and Description of Waste

Volume unknown. Contaminated sludge removed from 105-DR Fuel Storage Basin.

Description of Facility

Trench, 8 ft x 8 ft bottom dimensions.

Radionuclide Content (calculated from discharge data)

Unknown. Low-level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	105-DR Pluto Crib	116-DR-4

Location	Service Dates	Status
200 ft southeast of 105-DR Bldg. (Figure C.1.3)	1950-1956	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-91025, W-52600	H-1-4046	Ground	461 ft
		Water Table	385 ft
		Site Depth	10 ft

Source and Description of Waste

Volume unknown. Effluent from isolated tubes containing ruptured slugs in 105-DR.

Description of Facility

Wood crib, 10 ft x 10 ft bottom surface.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	Lewis Canal	116-F-1

Location	Service Dates	Status
750 ft northwest of 105-F Bldg. (Figure C.1.4)	1953-1965	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-79400, W-32000	H-1-15244	Ground	400 ft
		Water Table	370 ft
		Site Depth	10 ft

Source and Description of Waste

Volume unknown. Liquid waste from 105-F and 190-F; decontamination wastes from 189-F.

Description of Facility

Trench, 3000 ft x 40 ft bottom surface.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	107 F Liquid Waste Disposal Trench	116-F-2

Location	Service Dates	Status
100 F Area, 150 ft SE of SE corner of 107-F Retention Basin (Figure C.1.4)	1950-1965	Inactive

Site Coordinates (Approximately)	Reference Drawings	Elevations	
N-79290, W-28570	H-1-1522 H-1-1540	Ground	400 ft
		Water Table	370 ft
		Site Depth	20 ft

Source and Description of Waste

Volume unknown. Effluent from retention basin during reactor outages due to fuel rupture.

Description of Facility

Trench, 550 ft x 200 ft. Filled with soil

Radionuclide Content

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	105-F Storage Basin Trench	116-F-3

Location	Service Dates	Status
130 ft south of 105-F (Figure C.1.4)	Late 1940's-1951	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-78890, W-30910	H-1-4048	Ground	413 ft
		Water Table	370 ft
		Site Depth	10 ft

Source and Description of Waste

Volume unknown. Reactor effluent (105-F) during an early rupture outage. In 1951, sludge from the 105-F storage basin was put in the trench.

Description of Facility

Open trench, 100 ft x 20 ft.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	105-F Pluto Crib	116-F-4

Location	Service Dates	Status
100 ft south of the SW corner of 105-F (Figure C.1.4)	1950-1956	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-78890, W-31057	H-1-5147	Ground	413 ft
		Water Table	370 ft
		Site Depth	10 ft

Source and Description of Waste

Volume unknown. Coolant water from process tubes containing ruptured fuel elements.

Description of Facility

Wood crib, 10 ft x 10 ft.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	Ball Washer Crib	116-F-5

Location	Service Dates	Status
250 ft southwest of 105-F (Figure C.1.4)	1953-1953	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-78855, W-31126	M-1-600F, Sheet 5 H-1-5147	Ground Water Table Site Depth	412 ft 370 ft 10 ft

Source and Description of Waste

Volume unknown. Waste from decontamination of boron steel balls.

Description of Facility

Crib, 10 ft x 10 ft bottom structure.

Radionuclide Content (calculated from discharge date)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	1608-F Liquid Waste Disposal Trench	116-F-6

Location	Service Dates	Status
180 ft south of the SW corner of 105-F (Figure C.1.4)	1952-1965	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-78730, W-30930	H-1-4048	Ground	413 ft
		Water Table	370 ft
		Site Depth	15 ft

Source and Description of Waste

Volume unknown. Disposal of reactor outage effluent water.

Description of Facility

Trench, 100 ft x 10 ft bottom surface.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	117-F Crib	116-F-7

Location	Service Dates	Status
450 ft south of the SW corner of 105-F (Figure C.1.4)	1960 to 1965	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-78800, W-31400	RL-REA-2514 Reference 12 Drawing B	Ground Water Table Site Depth	420 ft 370 ft Not known

Source and Description of Waste

Volume unknown. Drainage from confinement exhaust systems filter seal pots.

Description of Facility

Crib dimensions unknown. Facility is marked by a vent pipe and four steel fence posts.

Radionuclide Content (calculated from discharge data)

Radioactive material drained to this site had a short half-life and has decayed to the point where it is no longer of concern. As a consequence, the site has been released from radiation zone status.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	Animal Waste Leaching Trench	116-F-9

Location	Service Dates	Status
150 ft Northeast of 107-F Retention Basin. (Figure C.1.4)	1963-	Active

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-80000, W-28800	None available	Ground	420 ft
		Water Table	370 ft
		Site Depth	Not known

Source and Description of Waste

Volume unknown. Contaminated waste water from animal quarters.

Description of Facility

Two trenches, 20 ft x 30 ft.

Radionuclide Content (calculated from discharge data)

Unknown. Low-level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class V)	107-H Liquid Waste Disposal Trench	116-H-1

Location	Service Dates	Status
100-H Area, 350 ft South of 107-H Retention Basin. (Figure C.1.5)	1952 to May 1965	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-94850, W-38602	P 1009 Sheet 8 H-1-8724 DR	Ground	420 ft
		Water Table	410 ft
		Site Depth	15 ft

Source and Description of Waste

Volume unknown. Effluent from retention basin reactor outage due to fuel element ruptures; water from 107-H during deactivation of basin.

Description of Facility

Open Trench, 1000 ft x 75 ft

Radionuclide Content (calc. from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	1608-H Crib & Trench	116-H-2

Location	Service Dates	Status
250 ft south of 105-H (Figure C.1.5)	1953-1965	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-94830, W-39750	H-1-4047	Ground	420 ft
		Water Table	410 ft
		Site Depth	5 ft

Source and Description of Waste

Volume unknown. Received effluent during Ball 3X project.

Description of Facility

One crib, 150 ft x 40 ft bottom surface.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
French Drain (Class V)	105-H Dummy Decontamination French Drain; Perf Decontamination Drain	116-H-3

Location	Service Dates	Status
200 ft Southeast of 105 H (Figure C.1.5)	1950-1965	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-95000, W-39400	RL-REA-2514 Drawing A Ref 12	Ground	420 ft
		Water Table	410 ft
		Site Depth	Unknown

Source and Description of Waste

Volume unknown. Spent acid and rinse water from the 105-H dummy decontamination facility.

Description of Facility

French drain.

Radionuclide Content (calculated from discharge data)

Unknown. Low-level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	100 K Crib	116-K-1

Location	Service Dates	Status
100 K Area, 200 ft North corner of 100 K Area. (Figure C.1.6)	1955-1971	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N_k-5800, W_k-3700	H-1-25529	Ground	460 ft
		Water Table	410 ft
		Site Depth	30 ft

Source and Description of Waste

Volume unknown. Reactor coolant water from 107-K Retention Basins during reactor outages due to fuel ruptures.

Description of Facility

Crib, 400 ft x 400 ft bottom dimensions.

Radionuclide Content

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	100 K Mile Long Trench	116-K-2

Location	Service Dates	Status
450 ft Northeast of the North Corner of 100 K Area. (Figure C.1.6)	1955-1971	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-77960, W-67130	SK-1-20875	Ground	430 ft
		Water Table	410 ft
		Site Depth	15 ft

Source and Description of Waste

Volume unknown. Reactor coolant water from the 107-K retention basins during reactor outages due to fuel rupture.

Description of Facility

Trench, 4000 ft x 45 ft.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	115-KE Crib	116-KE-1

Location	Service Dates	Status
200 ft east of 1713 KE Bldg. (Figure C.1.6)	1955-1970	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N_k 4521, W_k 4376	H-1-23215 KE H-1-23207	Ground Water Table Site Depth	464 ft 410 ft 10 ft

Source and Description of Waste

Volume unknown. Condensate and other waste water from reactor gas purification.

Description of Facility

One crib, 10 ft x 10 ft bottom surface.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	1706 KER Crib	116-KE-2

Location	Service Dates	Status
180 ft west of 1706-KE Bldg. (Figure C.1.6)	1957-1964	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N_k 4435, W_k 5076	H-1-20365 KE H-1-20380 KE	Ground	464 ft
		Water Table	410 ft
		Site Depth	10 ft

Source and Description of Waste

Volume unknown. Wastes from cleanup columns in the 1706-KER loop.

Description of Facility

Crib, 10 ft x 10 ft bottom surface.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	115-KW Crib	116-KW-1

Location	Service Dates	Status
Approximately 230 ft east of 105-KW (Figure C.1.6)	1955-1971	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N_k 4521, W_k 6376	H-1-23215 KW H-1-23207	Ground Water Table Site Depth	464 ft 410 ft 10 ft

Source and Description of Waste

Volume unknown. Condensate and other waste water from reactor gas purification.

Description of Facility

One crib, 10 ft x 10 ft bottom surface.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib and Trench (Class V)	1301-N Crib and Trench	116-N-1

Location	Service Dates	Status
Northeast Corner of N-Area, outside fence (Figure C.1.7)	Crib: 1964- Trench: 1965-	Active

Site Coordinates (Approximate)	Reference Drawings	Elevations
N_N-7150, W_N-5920	H-1-30501 (Crib) H-1-28855 (Trench)	Ground 480 ft Water Table 400 ft Site Depth Crib: 3 ft Trench: 15 ft

Source and Description of Waste

Volume unknown. Radioactive effluent streams from 105-N and 109-N.

Description of Facility

Crib: 290 ft x 125 ft bottom dimensions.
Trench: 45 ft x 1600 ft bottom dimensions.

Radionuclide Content (calculated from discharge data)

Radionuclide	As of 12/31/73
^{60}Co	2000 Ci
^{90}Sr	50 Ci
^{106}Ru	80 Ci
^{134}Cs	90 Ci
^{137}Cs	350 Ci

Soil column is saturated; contamination is reported to be leaking into the Columbia River.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class V)		3-13-71 141-C

Location	Service Dates	Status
100 F Area, between 141-C and 141-N Bldgs. (Figure C.1.4)	3/13/71	

Site Coordinates (Approximately)	Reference Drawings	Elevations
N-80500, W-29100	--	Ground 400 ft Water Table 370 ft Site Depth

Source and Description of Waste

Description of Facility

Main sewer line from 141-C to 141-N plugged and spread contamination on the ground. Area 20 ft x 40 ft x 40 ft. Area stabilized with clean gravel cover.

Radionuclide Content (calculated from discharge data)

Area contaminated to levels of 8,000-20,000 c/m.

20.005 Ci ^{90}Sr

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Unplanned Release (Class V)		6-27-72 1310-N

Location	Service Dates	Status
100 N Area (Figure C.1.7)	6/27/72	

Site Coordinates (Approximately)	Reference Drawings	Elevations
N_N-7200, W_N-7200		Ground 460 ft Water Table 400 ft Site Depth

Source and Description of Waste[1]

90,000 gal discharged to ground.

Description of Facility

Piping leak-radioactive chemical waste handling facility.

Radionuclide Content (calculated from discharge data)

35 Ci (including 26 Ci ^{60}Co)

Class IV - Ponds and Ditches

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Swamp (Class VI)	Gable Mountain Swamp 216-A-25 Swamp.	216-A-25

Location	Service Dates	Status
Approximately 1 mile south of the west end of Gable Mountain (Figure C.1.8)	12/57-	Active

Site Coordinates	Reference Drawings	Elevations	
N-55632, W-51350 to N-54763, W-52052 to N-50962, W-47349 to N-51830, W-46647	H-2-3325 H-2-3330 H-2-3332 H-2-66018	Ground Water Table Site Depth	438 ft 403 ft 0

Source and Description of Waste

1.7×10^{11} liters. Cooling water from surface condenser in 241-A-431; process cooling water from 202-A; cooling water from 244-AR Vault. Received a single unplanned release of 10,000 Ci in June, 1964.

Description of Facility

Swamp. 71 Acres.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	4.2×10^{2}	4.2×10^{2}
Beta, Ci	2.3×10^{5}	2.5×10^{3}
^{90}Sr, Ci	4.8×10^{2}	3.9×10^{2}
^{106}Ru, Ci	7.4×10^{2}	1.1×10^{1}
^{137}Cs, Ci	3.6×10^{2}	3.0×10^{2}
^{60}Co, Ci	$<4.4 \times 10^{1}$	$<2.1 \times 10^{1}$
U, kg	$<6.4 \times 10^{2}$	$<6.4 \times 10^{2}$
^{233}U, g	$<4.6 \times 10^{2}$	$<4.6 \times 10^{2}$

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	--	216-A-29

Location	Service Dates	Status
200 East Area, West of 275 East Area Bldg. Outside perimeter fence (Figure C.1.9)	11/55-	Active

Site Coordinates	Reference Drawings	Elevations
N-40685, W-57025 to N-43200, W-44750	H-2-2431 H-2-55900 H-2-56521 H-2-56635	Ground 575 ft Water Table 464 ft Site Depth Not known

Source and Description of Waste

Chemical sewer waste, acid factionator condensate, and condenser cooling water from 202-A.

Description of Facility

Ditch, 6500 x 6 ft bottom dimensions.

Radionuclide Content (calculated from discharge data)

Included in 216-B-3 Pond data.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class VI)	216-A-34 Ditch	216-A-34

Location	Service Dates	Status
200 East Area, ∿300 ft East of Canton Ave., ∿900 ft Northeast of 241-A Tank Farm (Figure C.1.9)	11/55-12/57	Inactive

Site Coordinates	Reference Drawings	Elevations
N-41710, W,46800 to N-41875, W-46540 N-41775, W-46688 to N-41900, W-46680	H-2-44501 H-2-57110	Ground 659 ft Water Table 404 ft Site Depth NA

Source and Description of Waste

Volume unknown. Cooling water from the contact condenser in the 241-A-431 Bldg.

Description of Facility

Two ditches, 280 ft x 30 ft and 130 ft x 30 ft. Deactivation: effluent pipeline to the ditches was blanked off and the ditches backfilled.

Radionuclide Content (calculated from discharge records)

Total Beta: <1 Ci

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class VI)	216-A-39 Ditch 216-A-40 Ditch	216-A-40

Location	Service Dates	Status
200 East Area, ∿500 ft West of 241-AX Tank Farm, ∿500 ft South of 7th Ave. (Figure C.1.9)	1/68-present	Active

Site Coordinates	Reference Drawings	Elevations
N-41519, W-48209 to N-41868, W-48404	H-2-61979 H-2-63083 H-2-63084	Ground 683 ft Water Table 404 ft Site Depth Not known

Source and Description of Waste

9.5×10^5 liters. Diverted cooling water and steam condensate from the 244AR Vault.

Description of Facility

Open trench, 400 ft x 20 ft.

Radionuclide Content

Unknown.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	216-B-2	216-B-2-1

Location	Service Dates	Status
Head of ditch is located about 3000 ft northwest of 221-B. Ditch runs in an east by southeast direction (Figure C.1.9)	4/45-1964	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations
H-45000, W-51990 (Head) N-44400, W-49600 (Terminus)	H-2-2431	Ground 644 ft to 629 ft Water Table 404 ft (1973) Site Depth 6 ft

Source and Description of Waste

4/45 to 3/52: Received process cooling water, steam condensate and chemical sewer waste from 221-B Bldg and wastewater from 284-E Powerhouse.

3/52 to 1964: Received above effluents plus 241-CR Vault cooling water.

Description of Facility

A 3,500 ft ditch which has been backfilled. Use of ditch was terminated in 1964 following release of high-activity wastewater to the ditch. Wastewater was routed to this ditch from the 207-B retention basins. At the terminus of this ditch the wastewater flowed into a culvert which discharged into another ditch (216-B-3-1) and thence to the 216-B-3 pond. The 216-B-3-1 ditch (coordinates unknown) was also backfilled in 1964.

Radionuclide Content (calculated from discharge data)

Inventory included in 216-B-3 Pond inventory.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	216-B-2-2	216-B-2-2E

Location	Service Dates	Status
Approximately 4000 ft northeast of the 202-A building. Ditch runs in an easterly direction. (Figure C.1.8)	1964-11/70	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-43692, W-46906 (Head) to N-43250, W-43300 (Terminus)	M-2600-E Sheet 26	Ground Water Table Site Depth	~600 ft to 576 ft 404 ft to 420 ft (1973) 6 ft

Source and Description of Waste

Received cooling water, steam condensate, chemical sewer waste from 221-B Bldg, 241 CR Vault cooling water, waste from 216-A-29 ditch, ITS #1 condenser cooling water and ITS #2 condenser cooling water. Volume is included in 216-B-3 pond inventory.

Description of Facility

Ditch, bottom area 19,980 sq ft. Backfilled in 1970 following release of contaminated wastewater from 221-B.
Reoccurring Problem: A few radioactive tumble weeds.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Beta, Ci	1.5×10^3	1.3×10^3
^{90}Sr, Ci	7.1×10^2	6.5×10^2
^{137}Cs, Ci	0.50	0.46

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	216-B-2-2	216-B-2-2W

Location	Service Dates	Status
Head of ditch is located about 3000 ft northwest of the 221-B building. Ditch runs in an east by southeast direction (Figure C.1.9)	1964-5/70	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-44930, N-44180 W-51990, W-48525	H-2-44500 Sheet 5	Ground	644 ft to 629 ft
		Water Table	404 ft (1973)
		Site Depth	6 ft

Source and Description of Waste

Received cooling water, steam condensate, chemical sewer waste from 221-B Bldg, 241 CR Vault cooling water, ITS #1 condenser cooling water and ITS #2 condenser cooling water. Volume is included in 216-B-3 pond inventory.

Description of Facility

A 4500 ft long ditch, bottom area 14,200 ft^2. Backfilled in 1970 following release of contaminated wastewater from 221-B.
Reoccurring Problem: A few radioactive tumble weeds.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	<0.04	<0.04
Beta, Ci	4.9×10^2	4.5×10^2
^{90}Sr, Ci	2.4×10^2	2.2×10^2
^{137}Cs, Ci	0.50	0.46
U, kg	<0.05	<0.05

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	B-Swamp 216-B-3 Swamp	216-B-3

Location	Service Dates	Status
Approximately 5000 ft NE of the 202-A building (Figure C.1.9)	4/45-Present	Active

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-43967, W-44787 N-42468, W-41745	H-6-418 H-2-2431	Ground Water Table Site Depth	576 ft 420 ft (1973) 0 ft

Source and Description of Waste

Receives 221-B low-level wastewater and 202-A chemical sewer waste via the 216-B-3 ditch. Total volume estimated to be 9.2×10^{10} liters as of 12/31/73.

Description of Facility

A 46 acre pond (1000 ft N-S, 6000 ft E-W). Includes the 216-B-2-3 ditch (Head coordinates N-44900/W-51990, Terminus coordinates N-44180/W-48525) and one 216-B-3-3 ditch (Head coordinates N-43692/W-46906, Terminus coordinates N-43200/W-43300)

Radionuclide Content (calculated from discharge data)

Radionuclide	At time of Discharge	As of 12/31/73
Pu, g	$<2.4 \times 10^2$	$<2.4 \times 10^2$
Beta, Ci	2.3×10^4	6.5×10^3
^{90}Sr, Ci	1.5×10^2	1.3×10^2
^{106}Ru, Ci	2.3×10^3	6.0
^{137}Cs, Ci	1.5×10^2	1.2×10^2
^{60}Co, Ci	<20	<9.1
U, kg	$<3.7 \times 10^2$	$<3.7 \times 10^2$
U, g	<30	<30

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class VI)	216-B-61 Crib	216-B-61

Location	Service Dates	Status
200 East Area ~500 ft northwest of 241-BY Tank Farm ~200 ft south of 12th street (Figure C.1.9)	Never Used	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-46650, W-54175 to N-46650, W-54350	H-2-34522 H-2-34523	Ground 663 ft Water Table 404 ft Site Depth

Source and Description of Waste

Future use: To receive waste storage tank condensate from ITS #1 Unit in the 241-BY Tank Farm.

Description of Facility

Gravel filled, 1750 ft^2 bottom surface area.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	B-Plant Chem Sewer	216-B-63

Location	Service Dates	Status
Approximately 1500 ft east of Baltimore Ave. at 10th street. (Figure C.1.9)	3/70-Present	Active

Site Coordinates	Reference Drawings	Elevations
N-45110, W-51793 to N-44635, W-50254	H-2-44500 Sheet 5	Ground 630 ft Water Table 404 ft Site Depth NA

Source and Description of Waste

1.4×10^{7} liters (as of 12/31/73). Chemical sewer wastes from B Plant.

Description of Facility

Open ditch, bottom dimensions are approximately 1400 ft x 4 ft.

Radionuclide Content (calculated from discharge data)

Radionuclide	At time of Discharge	As of 12/31/73
Pu, g	$<2.3 \times 10^{-1}$	$<2.3 \times 10^{-1}$
Beta, Ci	$<8.7 \times 10^{0}$	$<5.4 \times 10^{0}$
^{90}Sr, Ci	1.7×10^{0}	1.6×10^{0}
^{106}Ru, Ci	$<1.4 \times 10^{-1}$	$<2.5 \times 10^{-2}$
^{137}Cs, Ci	$<6.8 \times 10^{-1}$	$<6.4 \times 10^{-1}$
^{60}Co, Ci	$<1.3 \times 10^{-2}$	$<1.1 \times 10^{-2}$
U, kg	$<7.6 \times 10^{0}$	$<7.6 \times 10^{0}$

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	216-C-7 C-Canyon Excavation Semiworks Swamp	216-C-9

Location	Service Dates	Status
North of 7th Street, opposite C Area. (Figure C.1.9)	6/53-	Active

Site Coordinates	Reference Drawings	Elevations	
N-42581, W-49870 to N-42581, W-50694	H-2-4010 H-2-4606 H-2-32523	Ground Water Table Site Depth	681 ft 402 ft (1973) Surface

Source and Description of Waste

Volume unknown. Process cooling water from 201-C; floor drainage from 201-C, 215-C, 271-C, 276-C; miscellaneous water from 209-E and semiworks facilities.

Description of Facility

Pond, approximately 80,000 ft^2 surface area.

Radionuclide Content (calculated from discharge data)

Not known.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	212-N Swamp 216-N-1 Swamp	216-N-1

Location	Service Dates	Status
200 North Area (Figure C.1.8)	9/44 to 6/52	Inactive

Site Coordinates	Reference Drawings	Elevations
N-53700, W-65050 to N-54125, W-65475	H-2-32524	Ground ~580 ft Water Table 442 ft (1973) Site Depth Surface

Source and Description of Waste

Waste Volume Unknown. Basin overflow from the 212-N Bldg.

Description of Facility

Pond measuring 500 x 100 ft.

Radionuclide Content

Removed from radiation zone status.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	212-P Swamp 216-N-4 Swamp	216-N-4

Location	Service Dates	Status
200 North Area, 900 ft south of 212-P (Figure C.1.8)	9/44-6/52	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-53400, W-62600 to N-54300, W-62700	H-2-32524	Ground	558 ft
		Water Table	430 ft (1973)
		Site Depth	0 (surface)

Source and Description of Waste

9.46×10^8 liters. Basin overflow waste from 212-P.

Description of Facility

Pond, 500 ft x 200 ft bottom dimension.
Deactivation: Inlet valving to 212-P basin closed and locked.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	1	1
Beta, Ci	10	0.45
^{90}Sr, Ci	0.20	0.11
^{106}Ru, Ci	0.43	3.5×10^{-8}
^{137}Cs, Ci	0.21	0.12
^{60}Co, Ci	none	none
U, kg	4.5	4.5

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	212-R Swamp 216-N-6 Swamp	216-N-6

Location	Service Dates	Status
200 North Area, 900 ft south of 212-R (Figure C.1.8)	9/44-6/52	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-53600, W-60030 to N-54350, W-60115	H-2-32524	Ground	557 ft
		Water Table	430 ft (1973)
		Site Depth	0 (surface)

Source and Description of Waste

9.46×10^8 liters. Basin overflow waste from 212-R.

Description of Facility

Pond, 500 ft x 150 ft bottom dimension.
Deactivation: Inlet water valving to 212-R basin closed and logged.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	1	1
Beta, Ci	10	0.45
^{90}Sr, Ci	0.20	0.11
^{106}Ru, Ci	0.43	3.5×10^{-8}
^{137}Cs, Ci	0.21	0.12
^{60}Co, Ci	none	none
U, kg	4.5	4.5

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch and Pond (Class VI)	202-S Chemical Sump #1 and Ditch Chemical Sewer Trench	216-S-10

Location	Service Dates	Status
Ditch begins 1463 ft Southwest of 202-S, 133 ft south of 10th Street. Pond ends 4351 ft Southwest of 202-S (Figure C.1.8)	2/54-5/54	Inactive

Site Coordinates	Reference Drawings	Elevations
N-33800, W-75421 to N-32325, W-77100	H-2-32525	Ground 651 ft Water Table 471 ft (1973) Site Depth Pond, 0 ft; Ditch, 6 ft

Source and Description of Waste

2×10^6 liters. Chemical sewer waste from 202-S; overflow from high water tower.

Description of Facility

Ditch, 2250 ft x 6 ft bottom dimension.

Pond, 5 acres.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	<0.10	<0.10
Beta, Ci	24.0	2.5
^{90}Sr, Ci	1.0	0.62
^{106}Ru, Ci	10.0	<0.01
^{137}Cs, Ci	1.0	0.64
^{60}Co, Ci	none	none
U, kg	2.3	2.3

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	202-S Chemical Sump #2 and Chemical Sewer Trench. 216-S-11 Swamp	216-S-11

Location	Service Dates	Status
Starts 3135 ft Southwest of 202-S (Figure C.1.8)	5/54	Active

Site Coordinates	Reference Drawings	Elevations	
N-32690, W-77070 to N-31750, W-76640	H-2-5962 H-2-2430 H-2-34762	Ground	651 ft
		Water Table	471 ft (1973)
		Site Depth	0

Source and Description of Waste

3.22×10^9 liters. Waste from air conditioning and drain in 202-S.

Description of Facility

Pond, 1.5 acres.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	<0.23	<0.23
Beta, Ci	1.0×10^2	3.7
^{90}Sr, Ci	1.1	<0.82
^{106}Ru, Ci	10.	<0.01
^{137}Cs, Ci	1.1	<0.83
^{60}Co, Ci	<0.13	<0.06
U, kg	<27.0	<27.0

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	241-S-110 Pond 216-S-2 110-S Tank Overflow	216-S-15 (Also UN-216-W-3)

Location	Service Dates	Status
2128 ft NW of 202-S 316 ft North of 13th St. (Figure C.1.10)	12/51 to 10/52	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-36066, W-75450	H-2-32525 H-2-44510 (Sheet 4)	Ground	667 ft
		Water Table	475 ft (1967)
		Site Depth	Surface

Source and Description of Waste

Volume not available. Condenser spray cooling water from 110-S Tank in 241-S Tank Farm.

Description of Facility

Pond, 35 ft x 5 ft, backfilled with clean soil.

Radionuclide Content

Not available. Removed from service when condensed radioactive tank vapors were mixe with the normal waste discharged to this pond.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond and Ditch (Class VI)	202-S Swamp and Ditch 202-S Swamp #1 Redox Pond #2	216-S-16

Location	Service Dates	Status
Ditch starts 5472 ft southwest of 202-S and 2736 ft southwest of extreme southwest corner of 200-W Area perimeter fence (Figure C.1.8)	9/50-	Active

Site Coordinates	Reference Drawings	Elevations	
N-31600, W-81140 to N-32920, W-82180 N-32920, W-80900 to N-31600, W-80900	H-2-30264 H-2-46019	Ground Water Table Site Depth	651 ft 471 ft (1973) 6 ft

Source and Description of Waste

4.07×10^{10} liters. Process cooling water from 202-S.

Description of Facility

Ditch, 1700 ft x 4 ft
Pond, 31 acres.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	3.7×10^2	3.7×10^2
Beta, Ci	1.8×10^3	2.3×10^2
^{90}Sr, Ci	<92	<68
^{106}Ru, Ci	2.2×10^2	0.47
^{137}Cs, Ci	58.	41.
^{60}Co, Ci	<5.9	<2.6
U, kg	3.2×10^3	3.2×10^3

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	202-S Swamp 202-S Redox Swamp 216-S-1 Redox Pond #1	216-S-17

Location	Service Dates	Status
3743 ft southwest of 202-S 2983 ft south of Perimeter Road (Figure C.1.8)	10/51-4/54	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-31680, W-77350 to N-31180, W-79738 N-31635, W-79738 to N-32950, W-78265 N-32950, W77350	H-2-2594	Ground Water Table Site Depth	651 ft 471 ft (1973) 0 (surface)

Source and Description of Waste

6.43×10^9 liters. 10/51-1/53 Process cooling water and steam condensate from 202-S. 1/53-4-54 202-S effluent; overflow from 216-U-10 Pond via 216-U-9 Ditch.

Description of Facility

Pond, 17 acres.
Deactivation: Pipeline to the pond plugged north of 216-S-5 crib; pond area covered with clean earth. (Radionuclide inventory in sediments exceeded prescribed limits.)

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	3.0	3.0
Beta, Ci	1.1×10^3	84.
^{90}Sr, Ci	40.	24.
^{106}Ru, Ci	50.	<0.01
^{137}Cs, Ci	30.	19.
^{60}Co, Ci	None	None
U, kg	1.4×10^2	1.4×10^2

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	222-S Lab Swamp 216-SL-1 Redox Lab Swamp	216-S-19

Location	Service Dates	Status
2432 ft southeast of 202-S 1767 ft south of 10th Street (Figure C.1.8)	2/52-	Active

Site Coordinates	Reference Drawings	Elevations	
N-32200, W-72910 to N-31840, W-72650	H-2-34762 H-2-5224 H-2-32525 H-2-44510	Ground Water Table Site Depth	660 ft 461 ft (1973) 0 (surface)

Source and Description of Waste

7.28×10^8 liters. Effluents from 222-S Laboratory (ventilation cooling water; misc. wastes from lab hoods and decontamination sinks via 207-SL Retention Basin.

Description of Facility

Pond, 3.5 acres.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	21.	21.
Beta, Ci	3.3×10^2	10.
^{90}Sr, Ci	<2.5	<2.0
^{106}Ru, Ci	<6.8	<0.04
^{137}Cs, Ci	<2.3	<1.9
^{60}Co, Ci	<0.56	<0.21
U, kg	$<1.1 \times 10^2$	$<1.1 \times 10^2$

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	221-T Trench	216-T-1

Location	Service Dates	Status
200 ft north of 221-T 380 ft west of Beloit Avenue (Figure C.1.10)	11/44-	Active

Site Coordinates	Reference Drawings	Elevations	
N-44455, W-73050 to N-44570, W-73050 N-44955, W-73600 (terminus).	H-2-5101 M-2904 Sheet 11	Ground Water Table Site Depth	720 ft 456 ft (1973) 10 ft

Source and Description of Waste

1.78×10^8 liters. 11/44-1/64: Received miscellaneous waste from pilot plant experimental work, intermittent decontamination waste and waste from head end of 221-T Bldg.

1/64-6/70: Received the cooling water from the blow down vessel in the 277-T Bldg. (PNL-Neutron Generator Facility) and miscellaneous waste from PNL head end operations 221-T Bldg.

6/70-Present: Receives the condensate from steam heated radiators at head end of the 221-T Bldg.

Description of Facility

Ditch, 1800 ft x 25 ft bottom dimension.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	<0.10	<0.10
Beta, Ci	5.0	0.22
^{90}Sr, Ci	<0.10	<0.05
^{106}Ru, Ci	1.00	<0.01
^{137}Cs, Ci	<0.10	<0.06
^{60}Co, Ci	None	None
U, kg	4.5	4.5

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond and Ditch (Class VI)	216-T-4 Swamp	216-T-4

Location	Service Dates	Status
Ditch begins 2432 ft West of 221-T and 760 ft North of 23rd St. Pond is about 3000 ft W by NW of 221-T (Figure C.1.10)	11/44 to Present	Active

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-44000, W-75630 to N-46150, W-76970 N-46150, W-77150 to N-44000, W-77150	H-2-2430 H-2-578	Ground 670 ft Water Table 471 ft (1973) Site Depth Unknown

Source and Description of Waste

4.19×10^{10} liters. Process cooling water from 221-T and 224-T via 207-T Retention Basin; steam condensate from 221-T and from 242-T waste evaporator; Decontamination waste from 2706-T; (current) condenser cooling water from 242-T.

Description of Facility

Ditch, 850 ft x 8 ft bottom dimensions.
Pond, 2.5 acres.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	<3.7	<3.7
Beta, Ci	5.0×10^2	30
^{90}Sr, Ci	<6.2	<5.1
^{106}Ru, Ci	1.1×10^2	<0.09
^{137}Cs, Ci	11	9.2
^{60}Co, Ci	<3.4	<1.5
U, kg	<690	<690

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	221-U Cold U Trench #2 216-U-4	216-U-5

Location	Service Dates	Status
200 West. 250 ft west of Beloit Avenue at NW corner of 241 WR Vault (Figure C.1.10)	3/52-3/52	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-39027, W-72922	H-2-32527	Ground	705 ft
		Water Table	464 ft (1973)
		Site Depth	10 ft

Source and Description of Waste

2.25×10^6 liters. Unirradiated uranium waste from cold start-up run at U Plant.

Description of Facility

Ditch, 40 ft x 10 ft bottom surface area. Deactivation: Above ground piping removed and trench backfilled.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	$<5.0 \times 10^{-2}$	$<5.0 \times 10^{-2}$
Beta, Ci	0.5	0.12
^{90}Sr, Ci	$<5.0 \times 10^{-2}$	$<3.0 \times 10^{-2}$
^{106}Ru, Ci	$<5.0 \times 10^{-2}$	$<1.8 \times 10^{-8}$
^{137}Cs, Ci	$<5.0 \times 10^{-2}$	$<3.1 \times 10^{-2}$
^{60}Co, Ci	$<5.0 \times 10^{-2}$	$<2.9 \times 10^{-3}$
U, kg	3.6×10^2	3.6×10^2

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	221-U Cold U Trench #1 216-U-5 "U" Facility Unirr.UTrench	216-U-6

Location	Service Dates	Status
200 West. 500 ft west of Beloit Avenue and 300 ft north of 221-U. (Figure C.1.10)	3/52-3/52	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-39042, W-73038 to N-39079, W-73103	H-2-32527	Ground	705 ft
		Water Table	464 ft (1973)
		Site Depth	10 ft

Source and Description of Waste

2.25×10^6 liters. Unirradiated uranium waste from the cold start-up run at U-Plant.

Description of Facility

Ditch 75 ft x 10 ft bottom surface. Deactivation: above ground piping removed and the trench backfilled.

Radionuclide Content (calculated from discharge date)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	$<5.0 \times 10^{-2}$	$<5.0 \times 10^{-2}$
Beta, Ci	0.5	0.12
^{90}Sr, Ci	$<5.0 \times 10^{-2}$	$<3.0 \times 10^{-2}$
^{106}Ru, Ci	$<5.0 \times 10^{-2}$	$<1.8 \times 10^{-8}$
^{137}Cs, Ci	$<5.0 \times 10^{-2}$	$<3.1 \times 10^{-2}$
^{60}Co, Ci	$<5.0 \times 10^{-2}$	$<2.9 \times 10^{-3}$
U, kg	3.6×10^2	3.6×10^2

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class IV)	U Swamp-S Swamp Ditch 216-U-6	216-U-9

Location	Service Dates	Status
200 West. North end of ditch starts 2000 ft west of 271-S Tank Farm at end of Dayton Avenue. (Figure C.1.10)	3/52-4/54	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-35750, W-78050 to N-35900, W-77000	H-2-2430	Ground Water Table Site Depth	662 ft - 648 ft 470 ft (1973) 6 ft

Source and Description of Waste

Overflow from 216-U-10 Pond.

Description of Facility

Ditch, 6 ft wide and 3500 ft long. Deactivation: bottom area of trench backfilled.

Radionuclide Content

No data available.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	231 Swamp U Swamp 216-U-1	216-U-10

Location	Service Dates	Status
3720 ft southwest of 221-U, 532 ft south of 16th Street (Figure C.1.10)	3/52-	Active

Site Coordinates	Reference Drawings	Elevations
N-37200, W-78010 to N-35800, W-77000	H-2-2430 SK-2-1888	Ground 660 ft Water Table 475 ft (1973) Site Depth 0 (Surface)

Source and Description of Waste

1.21×10^{11} liters. Water from 216-Z-11, 216-U-14, 216-Z-19 and 231-Z Ditches; effluents and cooling water from 401-SX condensers.

Description of Facility

Pond, 22 acres.

Radionuclide Content (calculated from discharge data)

Radionuclide	At Time of Discharge	As of 12/31/73
Pu, g	8.1×10^3	8.1×10^3
Beta, Ci	3.1×10^3	66
^{90}Sr, Ci	<23	<16
^{106}Ru, Ci	3.1×10^2	<0.16
^{137}Cs, Ci	<16	<12
^{60}Co, Ci	<4.4	<1.9
U, kg	1.4×10^3	1.4×10^3

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class VI)	U-Swamp Extension Ditch 216-U-11 Ditch	216-U-11 (old ditch)

Location	Service Dates	Status
4940 ft southwest of 221-U. Runs under Dayton Avenue, heading straight west (Figure C.1.10)	11/44-8/55	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-36630, W-77890 to N-36630, W-79850	SK-2-1888 M-26000 W #23 and 24	Ground Water Table Site Depth	660 ft 475 ft 6 ft

Source and Description of Waste

Volume unknown. Overflow from U-10 Pond.

Description of Facility

Trench, 1960 ft x 5 ft bottom dimension (810 ft of the trench used as part of the new 216-U-11 trench). Deactivation: bottom area of ditch backfilled.

Radionuclide Content (calculated from discharge data)

<0.1 Ci Beta

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class VI)	U-Swamp Extension Ditch; 216-U-11 Trench 216-U-12	216-U-11 (new trench)

Location	Service Dates	Status
4940 ft southwest of 221-U, 230 ft north of Dayton Avenue (Figure C.1.10)	8/55-	Active

Site Coordinates	Reference Drawings	Elevations	
N-37460, W-78350 to N-37755, W-78629	H-2-2430 H-2-32527 SK-2-1888	Ground	660 ft
		Water Table	475 ft
		Site Depth	6 ft

Source and Description of Waste

Volume unknown. Intermittent overflow from 216-U-10 Pond.

Description of Facility

Trench, 3440 ft x 5 ft (includes 810 ft of old 216-U-11 Ditch).

Radionuclide Content (calculated from discharge data)

<0.1 Ci Beta

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	Laundry Ditch	216-U-14

Location	Service Dates	Status
Head of ditch is about 2500 ft West of 221-T. Ditch terminates at the 216-U-10 Pond. (Figure C.1.10)	7/44 -	Active

Site Coordinates (Approximate)	Reference Drawings	Elevations
N-36845, W-76910 to N-47270, W-74710	H-2-576 H-2-1495 H-2-32527	Ground 674 ft Water Table 475 ft Site Depth Unavailable

Source and Description of Waste

Volume not known. Wastes from 284-W Power House, 2723-W Laundry Bldg. Chemical sewer waste from 221-U, cooling water from 224-U, cooling water from the tank condenser on the 110-U Tank in the 241-U Tank Farm.

Description of Facility

Ditch, 5680 ft x 8 ft.

Radionuclide Content

<1 Ci Total Beta

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	Drain Ditch to U Swamp Z Plant Ditch	216-Z-1 Ditch

Location	Service Dates	Status
200 West Area. Begins East of the 231-Z Bldg. and 234-5 Blg. and runs South to the 216-U-10 Swamp.	12/44-3/59	Inactive

Site Coordinates	Reference Drawings	Elevations	
N-37050, W-76950 to N-40829, W-76505	H-2-576 H-2-1011 H-2-14035	Ground Water Table Site Depth	660 ft to 673 f 475 ft NA

Source and Description of Waste

12/44 to 7/49 received process cooling water and steam condensate from 231-Z. 7/49 to 5/53 received process cooling water and steam condensates from both the 231-Z Bldg. an the 234-5 Bldg. plus vacuum pump seal water from the 291-Z Bldg. 5/53 to 5/59 receive laboratory waste from 231-Z Bldg. and process cooling water and steam condensate from 234-5 Bldg. plus vacuum pump seal water from 291-Z Bldg.

Description of Facility

A 4150 ft long ditch that ran from the east side of the 231-Z Bldg. in a southerly direction to the 216-U-10 Pond. In 1949 a 1480 ft section of the head-end was backfilled and the 231-Z plant effluent was rerouted via an underground pipeline to the new head-end of the ditch (coordinates N-39420, W-75991).

A 2005 ft section of the ditch was deactivated after release of contamination from the 231-Z Bldg. (coordinates N-37495, W-76460 to N-39420, W-75991). The 2005 ft section of ditch was backfilled with berm from the excavation of the 216-Z-11 ditch. Used 665 ft of ditch south of 16th Street as part of new ditch (216-Z-11).

Radionuclide Content (calculated from discharge records)

Radionuclide content included in 216-U-10 Swamp Inventory.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	216-Z-1 Ditch Z Plant Ditch	216-Z-11

Location	Service Dates	Status
Starts 750 ft north of 234-5Z, 1000 ft west of Camden Avenue (Figure C.1.10)	3/59-4/71	Inactive

Site Coordinates	Reference Drawings	Elevations
N-37050, W-76950 to N-39420, W-75991	H-2-576 H-2-10011 H-2-32528 M-2904W #18	Ground 673 ft Water Table 475 ft (1973) Site Depth 2 ft

Source and Description of Waste

Volume unknown. Process cooling water and steam condensate from 234-5; vacuum pump seal water from 291-Z; cooling water from lab operations in 231-Z.

Description of Facility

Ditch, 2615 ft x 4 ft bottom dimension

Radionuclide Content (calculated from discharge data)

Unknown. Low level.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Ditch (Class VI)	Z Plant Ditch 216-U-10 Ditch	216-Z-19

Location	Service Dates	Status
200 West Area. Starts 760 ft SE of 234-5 Bldg. 450 ft West of Camden Ave. and runs in southwesterly direction to the U-10 Pond. (Figure C.1.10)	5/71 -	Active

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-37050, W-76950 to N-39420, W-75991	H-2-34762	Ground Water Table Site Depth	673 ft 475 ft (1973) Unknown

Source and Description of Waste

Volume included in data for 216-U-10 Pond. Process cooling water and steam condensate from 234-5 Building; vacuum pump seal water from 291-Z; cooling water from PNL laboratory operations in 231-Z.

Description of Facility

Ditch, 2765 ft x 4 ft (includes 665 ft of old 216-Z-1 Ditch and 235 ft of old 216-Z-11 Ditch).

Radionuclide Content

Included in data for 216-U-10 Pond.

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	300 Area South Process Pond	316-1

Location	Service Dates	Status
About 500 ft east of the 306 Bldg.	1945-5/75	Inactive

Site Coordinates	Reference Drawings	Elevations
N-55225/E-16250 N-54750/E-16280 N-54713/E-15584 N-55200/E-15441 N-55387/E-15789	M-3600 Sheets 2 & 13	Ground ~376 ft Water Table 342 ft (5/73) Site Depth Surface

Source and Description of Waste

Process wastewater from 300 Area facilities. Wastewater volume data unavailable.

Description of Facility

An 8 acre diked pond which has dried out since deactivation in May 1975. Pond has been dredged periodically to maintain high infiltration rates. Dredged material piled on edge of pond and on dikes. Both 316-1 and 316-2 ponds have contained large amounts of copper and uranium which were removed to a large extent with the dredged material.

Radionuclide Content

Radionuclide	As of 12/31/73
^{60}Co, mCi	1
U, Ci	2
Thorium	Present (quantity NA)

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Pond (Class VI)	300 Area North Process Pond	316-2

Location	Service Dates	Status
About 1000 ft NE of the 306 Bldg.	1950-5/74	Inactive

Site Coordinates	Reference Drawings	Elevations
N-57000/E-15880 N-56310/E-16050 N-56133/E-15325 N-56752/E-15325	M-3600 Sheets 1, 10, 12	Ground ∿376 ft Water Table 342 ft (5/73) Site Depth Surface

Source and Description of Waste

Process wastewater from 300 Area facilities. Wastewater volume data unavailable.

Description of Facility

A 10 acre diked pond which has dried out since deactivation in May 1974. Pond has been dredged periodically to maintain high infiltration rates. Both the 316-1 and 316-2 ponds have contained large amounts of copper and uranium which were removed to a large extend with the dredged material.

Radionuclide Content

Radionuclide	As of 12/31/73
^{147}Pm	^{90}Ci
^{234}U	∿3 Ci
^{235}U	∿0.1 Ci
^{238}U	∿2 Ci
Thorium	Present (quantity NA)

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class VI)	307 Disposal Trenches	316-3

Location	Service Dates	Status
About 300 ft NE of the 324 Bldg.	1954-1963	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-54265/E-16000 N-54185/E-1600 N-54185/E-15475 N-54265/E-15475	H-4-50304	Ground Water Table Site Depth	~385 ft 342 ft (1973) NA

Source and Description of Waste

Process wastewater from 300 Area facilities and sludge from 316-1 Pond.

Description of Facility

NA

Radionuclide Content

Radionuclide	As of 12/31/73
Uranium	1 Ci
Thorium	Present (quantity NA)

CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Trench (Class VI)	3904 Process Waste Trenches	316-5*

Location	Service Dates	Status
West of the 316-2 Pond (300 ft North Process Pond)	5/75 to Present	Active

Site Coordinates	Reference Drawings	Elevations
N-57700/E-15200 N-56165/E-15200 N-56165/E-15100 N-57550/E-15100 N-57550/E-14870 N-57700/E-14870	H-3-33840 H-3-33841	Ground ~375 ft Water Table 342 ft (5/23) Site Depth ~12 ft

Source and Description of Waste

Process wastewater from 300 Area facilities. Estimated flow is 2-3 mgd.

Description of Facility

Two trenches, about 1500 ft in length and about 30 ft wide at the top.

Radionuclide Content

Essentially nonradioactive (7/75).

* Tentative number assignment pending final designation by ERDA.

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CONTAMINATED LIQUID DISPOSAL SITES

Name/Type of Facility	Past Designation	Number
Crib (Class V)	105-H Pluto Crib	116-H-4

Location	Service Dates	Status
Near Southwest corner of 105-H (Figure C.1.5)	1950-1952	Inactive

Site Coordinates (Approximate)	Reference Drawings	Elevations	
N-95130, W-39850	P-1220 HW-27337 (Doc)	Ground Water Table Site Depth	421 ft 410 ft 10 ft

Source and Description of Waste

Volume unknown. Effluent from tubes containing ruptured fuel elements.

Description of Facility

Crib, wood structure, 10 ft x 10 ft bottom surface.

Radionuclide Content (calculated from discharge data)

Unknown. Low level contamination assumed.

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