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MASTER SCHEDULE - CY-1975
HANFORD ENVIRONMENTAL SURVEILLANCE
ROUTINE PROGRAM
EFFECTIVE NOVEMBER 1, 1974

J.J. Fix and J.P. Corley

Battelle
Pacific Northwest Laboratories
Richland, Washington 99352

NOVEMBER 1974

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Environmental Evaluations Section
Occupational and Environmental Safety Department

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PACIFIC NORTHWEST LABORATORIES
RICHLAND, WASHINGTON 99352

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MASTER SCHEDULE - CY-1975

HANFORD ENVIRONMENTAL SURVEILLANCE - ROUTINE PROGRAM

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I. INTRODUCTION

This report provides the current schedule of data collection for the routine environmental surveillance program at the Hanford plant, as conducted by the Environmental Evaluation Section of Battelle-Northwest for the Atomic Energy Commission. Because minor modifications in this schedule are made from time to time, any questions about specific entries should be referred to the authors.

The intent of the program is to evaluate the levels of radioactive and non-radioactive pollutants in the Hanford environs as set forth in AECM 0513 and to monitor compliance for the Hanford plant with applicable environmental criteria given in AECM 0524 and Washington State Water Quality Standards. Air quality data is obtained in a separate program administered by the Hanford Environmental Health Foundation.

The data collected is available in routine reports issued by the Environmental Evaluations staff. Groundwater data and evaluation are reported in the series, "Radiological Status of the Groundwater Beneath the Hanford Project for ...," the latest issue being BNWL-1752 for July-December, 1972. Data from locations within the plant boundaries are presented in the annual "Environmental Status of the Hanford Reservation for ..." report series, the most recent report being BNWL-B-336 for 1973. Data from off-plant locations are presented in the annual "Environmental Surveillance at Hanford for ..." series of reports, the latest being BNWL-1811 and addendum for 1973.

Environmental samples are collected from locations expected to indicate the maximum effect from Hanford operations. Samples are collected from all significant media categories; viz. soil, water, air, milk, etc. Changes continue to be made in the groundwater surveillance program to provide improved delineation of tritium and nitrate ion concentrations in groundwater.

Frequency Symbols Used

D - Daily	SM - Semi-monthly
W - Weekly	M Comp. - Monthly Composite
BW - Biweekly	Q - Quarterly
SW - Semi-weekly	A - Annually
M - Monthly	SA - Semi-annually
BM - Bimonthly	† - BNW
	NRA - Not Routinely Analyzed

II. WATER SAMPLES

A. Columbia River Raw Integrated

Location	EMA #	Frequency	Measurement
Richland	1000	W BW Comp. M Comp. Q (last monthly comp. of qtr.)	Beta, Gamma scan I-131 H-3, Sr-90, Cs-137, Alpha Pu
Bonneville Dam	0955	M Comp	Gamma scan
100-B	6156	M Comp	Gamma scan, Beta, ^{90}Sr, Alpha
		Q	Pu, ^{137}Cs
		NRA	^{131}I

B. Columbia River Raw Grab

Vernita	†1204	W	pH, Diss. O_2 Turbidity
	†1373	M	Coliform, Entero-cocci, BOD
	†1616	W	NO_3^-
	1615	M Comp.	H-3,
100-F	†1392	M	Coliform, Entero-cocci, BOD
300 Area Riverbank Spring	†1394	M	Coliform, Entero-cocci, BOD
Hanford Powerline Mi. 362.6 Crossing	6208	M	Alpha, H-3 Gamma scan, ^{90}Sr
Below 100-N	6102	M M	Beta, Gamma scan NO_3^-
300 Area	†6134	D	pH, DO, Turbidity
North Richland	†1365	M	Coliform, Entero-cocci, BOD
Richland	†1617	W	NO_3^-

II. WATER SAMPLES (contd)

C. Sanitary Water Integrated

Location	EMA #	Frequency	Measurement
182-N	1367	W M Comp	Beta H-3, Gamma scan
300 Area	1686	W	Alpha, Beta, Gamma scan
Richland	1002	W	Alpha, Beta
		M Comp	Sr-90, Gamma scan

D. Waste Water

Gable Pond North (216-A-25)	1054	Q	Alpha, Beta Gamma scan, Sr-90
Chemical Sewer Emergency Ditch (216-B-63)	1725	Q	Alpha, Beta Gamma scan
B-Pond North (216-B-3)	0015	Q	Alpha, Beta Gamma scan, Sr-90
T-Pond North (216-T-4)	1290	Q	Alpha, Beta Gamma scan
U-Pond (216-U-10)	0024	Q	Alpha, Beta Gamma scan
100-F Leach Trench	1718	M	Alpha, Sr-90
300 Pond Integrated	1354	W M Comp	Alpha, Beta** Gamma scan
300 Area Leach Trench	†1393	M	Coliform, Entero-cocci, BOD
West Lake	6133	Q	Alpha, Beta, Sr-90 Gamma scan

** Chemical analysis by HEDL

II. WATER SAMPLES (contd)

E. Groundwater

Well #	EMA #	Measurements BM	Q	SA
(299-) E13-12	2541			NO_3^-
E19-1	2359			NO_3^-, H-3
E24-4	2540			NO_3^-, H-3
E24-7	2542			NO_3^-, H-3, Beta
E25-9	2543			NO_3^-, H-3
E25-11	2544			NO_3^-, H-3
E26-1	2545			NO_3^-, H-3
E26-2	2364			NO_3^-, H-3
E27-5	2378			NO_3^-, H-3
E28-5	2285			NO_3^-, H-3 Beta
E28-7	2289			Beta
E28-12	2546			NO_3^-
E28-17	2547			NO_3^-
E28-18	2548			NO_3^-, H-3
E32-1	2358			NO_3^-, H-3 Beta
E33-3	2552			NO_3^-
E33-10	2306			NO_3^-, H-3 Beta
E33-14	2297			NO_3^-, H-3 Beta
E33-17	2295			Beta
E34-1	2549			NO_3^-, H-3
W6-1	2990			H-3
W10-5	2890			H-3, Beta
W10-8	2997			NO_3^-

II. WATER SAMPLES (contd)

E. Groundwater

	Well #	EMA #	Measurements BM	Q	SA
(299-)	W11-7	2879			H-3, Beta
	W11-9	2881			NO_3^-, H-3
	W11-12	2888			H-3, Beta
	W11-15	2998			NO_3^-, H-3
	W12-1	2883			NO_3^-, H-3
	W14-1	2999			H-3
	W15-2	2891			NO_3^-, H-3
	W18-5	2983			NO_3^-, H-3
	W19-3	2991			NO_3^-, H-3, Beta
	W21-1	2930			NO_3^-, H-3, Beta
	W22-22	2984			NO_3^-, H-3
	W22-26	2985			NO_3^-
	W23-1	3000			NO_3^-
	W23-3	3001			NO_3^-, H-3
	W23-4	2986			NO_3^-
	W23-10	3002			NO_3^-, H-3
(699-)	S0-8	4818		H-3	
	S3-25	4787		H-3,NO_3^-	
	S3-E12	4553	NO_3^-		H-3
	S6-E4C-P	4721	NO_3^-		H-3

II. WATER SAMPLES (contd)

E. Groundwater (contd)

			Measurements		
	Well #	EMA #	BM	Q	SA
(699-)	S6-E4D	4504	NO_3^-	H-3	
	S8-19	4421		H-3,NO_3^-	
	S11-E12-P	4747		H-3,NO_3^-	
	S12-3	4424		H-3,NO_3^-	
	S12-29-0	4592			NO_3^-
	S19-11	4780			NO_3^-
	S19-E13	4802	NO_3^-	Alpha, Beta, F^-,Cr^{+6}	
	S29-E12	4803		Alpha, F^-,NO_3^- Cr^{+6}	
	S30-E15A	4804		Alpha, F^-,NO_3^- Cr^{+6}	
	S31-1-P	4745		H-3,NO_3^-	
	1-18	4513	NO_3^-		H-3
	2-3	4423	NO_3^-	H-3	
	2-33-0	4526		H-3	NO_3^-
	3-45	4593			NO_3^-

II. WATER SAMPLE (contd)

E. Groundwater (contd)

			Measurements		
	Well #	EMA #	BM	Q	SA
(699-)	8-17	4426		Beta	H-3, NO_3^-
	8-25	4788		H-3, Beta	NO_3^-
	8-32	4420	NO_3^-	H-3	
	9-E2	4519		H-3, NO_3^-	
	10-E12-0	4581	NO_3^-		
	10-E12-P	4678	NO_3^-		H-3
	10-54	4428			H-3, NO_3^-, Beta
	11-0	4834		NO_3^-,H-3	
	11-1	4833		NO_3^-,H-3	
	12-1	4832		NO_3^-,H-3	
	13-1A	4830		NO_3^-,H-3	
	13-1B	4831		NO_3^-,H-3	
	14-E6-P	4700		H-3, NO_3^-	
	14-E6-Q	4701		NO_3^-, H-3	
	14-E6-R	4702		H-3, NO_3^-	
	14-E6-S	4703		H-3, NO_3^-	
	15-15-B	4810		Beta, H-3 NO_3^-	
	15-26	4464		Beta	H-3,NO_3^-
	17-5	4422	NO_3^-,H-3		

II. WATER SAMPES (contd)

E. Groundwater (contd)

			Measurements		
	Well #	EMA #	BM	Q	SA
(699-)	19-43	4417		NO_3^-	
	20-E5-P	4705		NO_3^-	H-3
	20-E5-Q	4706		NO_3^-	H-3
	20-E5-R	4707		NO_3^-	H-3
	20-E5-S	4708		NO_3^-	H-3
	20-E12-O	4567			NO_3^-
	20-E12-P	4611			H-3, NO_3^-
	20-20	4418		Beta	H-3, NO_3^-, Ru
	20-39-O	4559		NO_3^-, H-3	
	24-1-P	4710		NO_3^-	H-3
	24-1-Q	4711		NO_3^-	H-3
	24-1-R	4712		NO_3^-	H-3
	24-1-S	4713		NO_3^-	H-3
	24-33	4416		Beta, NO_3^-	H-3
	25-70	4452		NO_3^-	
	26-15	4518		Beta	H-3, Ru, NO_3^-
	26-89	4598			NO_3^-
	27-8	4557		Beta, NO_3^-	H-3

II. WATER SAMPLES (contd)

E. Groundwater (contd)

			Measurements		
	Well #	EMA #	BM	Q	SA
(699-)	28-40-0	4481		Beta, NO_3^-	H-3
	29-78	4594		H-3, NO_3^-	
	31-53B-0	4520		H-3, NO_3^-	Beta
	31-65-0	4495		H-3, NO_3^-	
	32-22	4794		Beta, NO_3^-	H-3
	32-43	4778			H-3, NO_3^-, Beta Gamma scan
	32-62-0	4550		H-3, NO_3^-	
	32-70	4492		H-3, Beta	NO_3^-
	32-72-0	4491	NO_3^-	Beta	H-3
	32-77	4446		H-3, Beta NO_3^-	
	33-56	4523		H-3, NO_3^-	Beta
	34-39A	4448		NO_3^-, Beta	H-3
	34-41	4789		Beta, H-3 NO_3^-	
	34-42	4790		Beta, H-3 NO_3^-	
	34-51	4414	NO_3^-	H-3, Beta	Gamma scan
	35-9	4419	NO_3^-	H-3, Beta	
	35-66	4494	NO_3^-	H-3, NO_3^-	Beta

II. WATER SAMPLES (contd)

E. Groundwater (contd)

Well #	EMA #	Measurements BM	Q	SA
(699-) 35-70	4441		H-3, Beta NO_3^-	
35-78	4445	NO_3^-	H-3, Beta	
36-46-P	4751		Gamma scan H-3, NO_3^-, Beta	
36-46-Q	4752		Gamma scan H-3, NO_3^-, Beta	
36-61A	4447		H-3, NO_3^-	Beta
36-61B-P	4784		NO_3^-	H-3
37-43-0	4480		H-3, Beta NO_3^-	
37-82A-0	4554		H-3, NO_3^-	
38-65-P	4785		NO_3^-	H-3
38-70-0	4493		Beta, H-3 NO_3^-	Gamma scan
39-39	4791		H-3, NO_3^-	
39-79-0	4444	NO_3^-	H-3, Beta	
40-1	4566		H-3, NO_3^-	
40-33	4431		H-3, NO_3^-	
40-62	4458		NO_3^-, H-3	
41-23	4430		Beta, NO_3^-	H-3

II. WATER SAMPLES (contd)

E. Groundwater (contd)

	Well #	EMA #	Measurements BM	Q	SA
(699-)	42-12	4517	NO_3^-	Beta	H-3
	42-42	4486		NO_3^-	H-3
	43-42	4773		NO_3^-	H-3
	43-89	4438		NO_3^-	H-3
	44-64	4548		NO_3^-, H-3	
	45-42	4450		NO_3^-	H-3
	45-69	4449		NO_3^-, H-3	
	46-21	4479	NO_3^-	H-3, Beta	
	47-35	4478		H-3, NO_3^-	
	47-46	4564		NO_3^-, H-3	
	47-60	4434		NO_3^-, H-3	
	48-71	4487		H-3, NO_3^-	
	49-28	4816		NO_3^-	H-3
	49-55	4562		H-3, NO_3^-, Beta	
	49-57	4485		H-3, NO_3^- Beta	
	49-79	4443		NO_3^-	H-3
	50-28A	4160	NO_3^-	H-3	
	50-28B	4844		NO_3^-	
	50-42	4460		H-3, NO_3^-	
	50-53	4473		H-3, Ru Beta, NO_3^-	

II. WATER SAMPLES (contd)

E. Groundwater (contd)

	Well #	EMA #	Measurements BM	Q	SA
(699-)	50-85-0	4497		NO_3^-	H-3
	51-63	4488		H-3, NO_3^-	
	51-75-0	4496		H-3, NO_3^-	
	53-47	4774	NO_3^-	H-3	
	53-55-0	4563		H-3, NO_3^-	
	53-103	4772			H-3, NO_3^-
	54-42	4432		NO_3^-,	H-3
	54-45	4811		H-3	
	54-57	4469		H-3, NO_3^-	
	55-50C	4483	NO_3^-	H-3	
	55-70-0	4442		NO_3^-	
	55-76	4533		NO_3^-	
	57-83-0	4558		NO_3^-	
	59-32	4815			NO_3^-
	59-58	4827		H-3, NO_3^-	
	59-80B	4437		NO_3^-	
	60-32	4814			NO_3^-
	60-57	4826		H-3, NO_3^-	
	60-60	4435		H-3, NO_3^-	

II. WATER SAMPLES (contd)

E. Groundwater (contd)

			Measurements		
	Well #	EMA #	BM	Q	SA
(699-)	61-62	4825		H-3, NO_3^-	
	61-66	4474		H-3, NO_3^-	
	62-31	4813			NO_3^-
	62-43F	4537			NO_3^-
	63-26	4499			NO_3^-
	63-51	4845		H-3, NO_3^-	
	63-55	4823		H-3, NO_3^-	
	63-58	4822		H-3, NO_3^-	
	63-90	4436		NO_3^-	H-3
	63-95	4848		H-3, NO_3^-	
	64-27	4849		H-3, NO_3^-	
	64-62	4824		H-3, NO_3^-	
	65-50	4477			H-3, NO_3^-
	65-59-0	4532		H-3, NO_3^-	
	65-72	4468		H-3	NO_3^-
	65-83	4775		H-3	NO_3^-
	65-95	4847		H-3, NO_3^-	
	66-23-0	4547			NO_3^-
	66-38-0	4586			NO_3^-
	66-39	4812			NO_3^-

II. WATER SAMPLES (contd)

E. Groundwater (contd)

			Measurements		
	Well #	EMA #	BM	Q	SA
(699-)	66-58	4821		$H\text{-}3$, NO_3^-	
	66-64	4820		$H\text{-}3$, NO_3^-	
	67-51	4561		NO_3^-	$H\text{-}3$
	67-86	4585			$H\text{-}3$, NO_3^-
	67-98	4556			NO_3^-, $H\text{-}3$
	68-105	4588			NO_3^-, $H\text{-}3$
	69-45-0	4560			NO_3^-, $H\text{-}3$
	70-68	4455			$H\text{-}3$, NO_3^-
	71-30	4490			NO_3^-, $H\text{-}3$
	71-52	4454		NO_3^-	$H\text{-}3$
	71-77	4584		$H\text{-}3$	NO_3^-
	72-73	4569			NO_3^-, $H\text{-}3$
	72-88	4465			NO_3^-, $H\text{-}3$
	72-92-0	4565			NO_3^-, $H\text{-}3$
	72-98	4463			NO_3^-, $H\text{-}3$
	74-44	4516		$H\text{-}3$	NO_3^-
	74-48-0	4589		NO_3^-, $H\text{-}3$	
	74-60	4583		NO_3^-, $H\text{-}3$	
	77-36	4500		NO_3^-, $H\text{-}3$	
	77-54	4512		NO_3^-	$H\text{-}3$

II. WATER SAMPLES (contd)

E. Groundwater (contd)

Well #	EMA #	Measurements BM	Q	SA
(699-) 78-62	4511		H-3, NO_3^-	
80-43-P	4760			H-3, NO_3^-
80-43-Q	4761			H-3, NO_3^-
80-43-R	4762			H-3, NO_3^-
80-43-S	4763		NO_3^-	H-3
81-58-0	4597		H-3, NO_3^-	
83-47-0	4515		H-3	NO_3^-
84-35-0	4596		NO_3^-	H-3
87-55	4792		NO_3^-, H-3	
89-35	4571		NO_3^-, H-3	
96-49-0	4591		NO_3^-	H-3
97-43-0	4590		NO_3^-	H-3
101-48B	4846			H-3, NO_3^-

II. WATER SAMPLES (contd)

E. Groundwater (contd)

	Well #	EMA #	Measurements BM	Q	SA
(699-)	Hanford 6	4756	NO_3^-	H-3	
	Hanford 9	4776	NO_3^-		
	Hanford 19	4771		NO_3^-, H-3	

Water Quality

Well #	EMA #	Frequency	Measurements
699-8-17	4426	SA	pH, $SO_4^=$, Na^+, Ca^{++}
699-15-26	4464	SA	pH, $SO_4^=$, Na^+, Ca^{++}
699-26-15	4518	SA	pH, $SO_4^=$, Na^+, Ca^{++}
699-32-43	4778	SA	pH, $SO_4^=$, Na^+, Ca^{++}

100 Area and Associated 600 Area Wells

	Well #	EMA #	BM	Q	SA
(199-)	B3-1	1851		Beta, H-3	Gamma scan
	B3-2-P	1856			H-3, NO_3^-, Beta
	B3-2-Q	1857			H-3, Beta NO_3^-
	B4-4	1891			H-3, NO_3^-, Beta
	B9-1	1893			H-3, NO_3^-
	D2-5	1894		NO_3^-	H-3
	D5-12	1892		NO_3^-, H-3	Beta
	D8-3	1862		NO_3^-, H-3	

II. WATER SAMPLES (contd)

E. Groundwater (contd)

100 Area and Associated 600 Area Wells (contd)

			Measurements		
	Well #	EMA #	BM	Q	SA
(199-)	F5-1	1865		NO_3^-, H-3	
	F5-3	1867		NO_3^-, H-3	
	F5-4	1868		NO_3^-, H-3	
	F7-1	1871			H-3
	F8-1	1888		NO_3^-, H-3	
	H3-1	1890		NO_3^-,	H-3
	H4-3	1877	Alpha, Beta NO_3^-, Cr^{+6}, F^-	H-3	Gamma scan
(199-)	K-11	1882		NO_3^-	H-3
	K-19	1884		NO_3^-, H-3	
	K-20	1885		NO_3^-, H-3	Beta
	K-22	1887		NO_3^-, H-3	
	N-3-0	1896		H-3, Beta	Sr, Gamma scan
	N-4-0	1899		H-3, Beta NO_3^-	Sr, Gamma scan
	N-6	1901		Beta, H-3	Sr, Gamma scan
	N-10-P	1900		H-3, Beta NO_3^-	Sr, Gamma scan
	N-14	1902		Beta, H-3 NO_3^-	Sr, Gamma scan
	N-15	1903		Beta, H-3 NO_3^-	Sr, Gamma scan

II. WATER SAMPLES (contd)

E. Groundwater (contd)

300 Area and Associated 600 Area Wells

			Measurements			
	Well #	EMA #	M	BM	Q	SA
(399-)	1-1	4403	Alpha, Beta NO_3^-, F^-	U, Cr^{+6}		
	1-2	4404			Cr^{+6}, F^-, NO_3, Alpha	Beta
	1-3	4406	NO_3^-, F^-	U	Cr^{+6} Alpha, Beta	
	1-4	4407			NO_3^-	Cr^{+6}, F^- Alpha, Beta
	3-1	4401	Alpha, NO_3^- Cr^{+6}, F^-	Beta, U		
	3-8	4786	Alpha, Beta			F^-, Cr^{+6} NO_3^-
	4-1	4410		NO_3^-, Cr^{+6}	Alpha, Beta, F^-	
	4-7	4568		NO_3^-, Cr^{+6}	Alpha, Beta F^-	
	5-1	4411		NO_3^-	F^-, Cr^{+6} Alpha	
	6-1	4409		NO_3^-	F^-, Cr^{+6} Alpha	

II. WATER SAMPLES (contd)

E. Groundwater (contd)

300 Area and Associated 600 Area Wells (contd)

Well #	EMA #	Measurements M	BM	Q	SA
8-2	4408			F^-, Cr^{+6}, Alpha, Beta, NO_3^-	Gamma scan
8-3	4412		NO_3^-	F^-, Cr^{+6}, Alpha	
699-S27-E14	4413			Alpha, Cr^{+6}, NO_3^-, F^-	

Off-Plant Wells

Designation	EMA #	Frequency	Measurement
Webber Ranch	3500	SA	NO_3^-, H-3
W-15	3501	SA	NO_3^-, H-3
White Bluffs	3502	SA	NO_3^-, H-3
Vail Ranch	3503	SA	NO_3^-, H-3
Hildebrandt	3505	SA	NO_3^-, H-3

III. AIR

A. Air Filters

Location	EMA #	Frequency	Measurement
100-K	0058	BW	Beta
100-N (WPPSS)	1529	W	Beta, Low alpha
100-D	1074	W	Beta
100-F	1075	BW	Beta

III. AIR

A. Air Filters (contd)

Location	EMA #	Frequency	Measurement
100 Area Fire Sta.	6154	BW	Beta
200 WEC	0046	BW	Beta, Low alpha
200 WWC	0045	W	Beta, Low alpha
Redox	0028	W	Beta, Low alpha
200 ESE	0043	W	Beta, Low alpha
200 ENC	1401	W	Beta, Low alpha
Hanford	0057	BW	Beta
Yakima Barricade	1650	BW	Beta
Vernita Bridge	1651	BW	Beta
WYE Barricade	0924	BW	Beta, Low alpha
ERC	0929	BW	Beta
Rattlesnake Springs	0972	BW	Beta
300 Area (3705 Bldg.)	1531	W	Beta, Low alpha
ACRMS	1793	BW	Beta
300 Southwest Gate	6148	BW	Beta
300 South Gate	6150	BW	Beta, Low alpha
Benton City	0029	BW	Beta, Low alpha
Wahluke Slope #2	1551	BW	Beta
Bery Ranch	1405	BW	Beta, Low alpha
Othello	1652	BW	Beta
Connell	1653	BW	Beta
Cooke Bros	1118	BW	Beta

III. AIR (contd)

A. Air Filters (contd)

Location	EMA #	Frequency	Measurement
Wahluke Watermaster	1119	BW	Beta
Baxter Substation	6235	BW	Beta
Byers Landing	0247	BW	Beta, Low alpha
Pasco	1654	BW	Beta
Richland	0054	BW	Beta, Low alpha
Sunnyside	0964	BW	Beta
Moses Lake	0960	BW	Beta
Washtucna	0959	BW	Beta
Walla Walla	0262	BW	Beta, Low alpha
McNary Dam	0958	BW	Beta, Low alpha

B. Charcoal Cartridges

100-K	1581	M	NRA
100-N (WPPSS)	1661	BW	I-131
100-D	1582	M	NRA
100-F	1583	M	NRA
100 Area Fire Sta.	6155	M	NRA
200 WEC	1662	M	NRA
200 WWC	6152	M	NRA
Redox	1663	M	NRA
200 ESE	1664	BW	I-131
200 ENC	1665	M	NRA
Hanford	1666	M	NRA
Yakima Barricade	1667	M	NRA

III. AIR (contd)

B. Charcoal Cartridges (contd)

Location	EMA #	Frequency	Measurement
Vernita Bridge	1668	M	NRA
Wye Barricade	1584	M	NRA
ERC	1585	M	NRA
Rattlesnake Springs	1586	M	NRA
300 Area (3705 Bldg.)	1669	M	NRA
ACRMS	1795	M	NRA
300 Southwest Gate	6149	BW	I-131
300 South Gate	5151	M	NRA
Benton City	1670	BW	I-131
Wahluke #2	1671	M	NRA
Berg Ranch	1672	M	NRA
Othello	1673	M	NRA
Connell	1674	M	NRA
Cooke Bros.	1675	M	NRA
Wahluke Watermaster	1676	M	NRA
Baxter Substation	6236	BW	I-131
Byers Landing	0246	BW	I-131
Pasco	1678	M	NRA
Richland	0231	BW	I-131
Sunnyside	1680	M	NRA
Moses Lake	1682	M	NRA
Washtucna	1683	M	NRA

III. Air (contd)

B. Charcoal Cartridges (contd)

Location	EMA #	Frequency	Measurement
Walla Walla	0261	M	NRA
McNary Dam	1684	M	NRA

C. Tritium Cartridges

100N (WPPSS)	6187	BW	H-3
200 ENC	6200	BW	H-3
Berg Ranch	6205	BW	H-3
Baxter Substation	6237	BW	H-3
Richland	6207	BW	H-3

D. Composite Analyses

1. Definition of Composites

EMA #		EMA #	
1742	Outer Northeast Quadrant	1752	Active Area #4
	Moses Lake		300 Area
	Washtucna		Byers Landing
			ACRMS
			300 South Gate
			300 Southwest Gate
1743	Inner Northeast Quadrand	1753	Active Area #5
	Othello		100 Area Fire Sta.
	Connell		100-K
	Berg Ranch		100-N
	Wahluke Watermaster		100-D
	Cooke Bros		

III. AIR (contd)

D. Composite Analyses

1. Definition of Composites

EMA #		EMA #	
1744	Outer Southeast Quadrant	1754	Innter Eastern Quadrant
	Walla Walla		100-F
	McNary		Hanford
			Baxter Substation
			Wye Barricade
1748	Outer Western Quadrant	1745	Inner Southeast Quadrant
	Sunnyside		Richland
			Pasco
1749	Active Area #1	1746	Inner Southwest Quadrant
	200 ENC		Rattlesnake Springs
			ERC
1750	Active Area #2		Benton City
	200 ESE	1747	Inner Northwest Quadrant
1751	Active Area #3		Yakima Barricade
			Vernita
	200 WEC		Wahluke #2
	200 WWC		
	Redox		

2. Analyses Required

Location	EMA #	Frequency	Measurement
Outer Northeast Quad.	1742	M	Gamma scan,
		Q	Sr-90, Pu-239
Inner Northeast Quad.	1743	M	Gamma scan
		Q	Sr-90, Pu-239
Outer Southeast Quad.	1744	M	Gamma scan
		Q	Sr-90, Pu-239
Inner Southeast Quad.	1745	M	Gamma scan
		Q	Sr-90, Pu-239
Inner Southwest Quad.	1746	M	Gamma scan
		Q	Sr-90, Pu-239

III. AIR (contd)

D. Composite Analyses (contd)

2. Analyses Required

Location	EMA #	Frequency	Measurement
Inner Northwest Quad.	1747	M Q	Gamma scan Sr-90, Pu-239
Outer Western Quad.	1748	M Q	Gamma scan Sr-90, Pu-239
Active Area #1	1749	M Q	Gamma scan Sr-90, Pu-239
Active Area #2	1750	Q	Sr-90, Pu-239
Active Area #3	1751	M Q	Gamma scan Sr-90, Pu-239
Active Area #4	1752	M Q	Gamma scan Sr-90, Pu-239
Active Area #5	1753	M	Gamma scan
Inner Eastern Quad	1754	M Q	Gamma scan Sr-90, Pu-239

E. Other

200 WNE	1370	W	Total beta
200 EEC	0042	W	Total beta
200 EWC	0041	W	Total beta
300 Pond	1543	W	Total beta
300 Pond	6239	W	Charcoal cartridge (NRA)
RRC CP 63	6180	BW	Alpha, Beta
RRC CP 63	6181	M	Charcoal cartridge
RRC CP 64	6182	BW	Alpha, Beta
RRC CP 64	6183	M	Charcoal cartridge

IV. MILK

A. Commercial Sources

Milk	Location	EMA #	Frequency	Measurement
Lucerne	Tri-City	0309	M Q	I-131, gamma scan Sr-90
Darigold-Arden	Tri-City	1647	M Q	I-131, gamma scan Sr-90

B. Farm Sources

Col. Basin	Lazy Dee	6165	BW Q	I-131, gamma scan Sr-90
River-Irrig. (Ditch)	Harris (Riverview)	0975	BW Q	I-131, gamma scan Sr-89, Sr-90
Courneya	Benton City	6217	BW Q	I-131, gamma scan Sr-90
Kelley	Benton City	6216	BW Q	I-131, gamma scan Sr-90
Col. Basin Comp. #3 (Raw)	Taylor Cook Bros. Price Bleazard	1648	NRA	I-131, gamma scan Sr-90

Note: Current cattle forage, hay or pasture grass is routinely collected from all farms where milk is sampled, but analyses are made only by special request.

V. FISH

A. Whitefish (Muscle)

	Location	EMA #	Frequency	Measurement
Whitefish	Ringold to Richland			
(5 fish/sample)		1563	M. Comp.	Gamma scan, P-32 Sr-90

VI. WILD FOWL

A. River Ducks

40 Birds/yr	100-K to Hanford	According to species & location	Oct-Jan.	Sr-90, Gamma scan (muscle)

B. River Geese

20 birds/yr	100-K to Hanford	According to species & location	Oct-Jan.	Gamma scan (muscle)

C. Pheasant

20 birds/yr	100-K to 100-D and 300 Area vicinity	According to species & location	Oct-Jan.	Sr-90, Gamma scan (muscle)

D. Pond Ducks and Coot

4 birds/yr	U-Pond (216-U-10)	According to species & location	Q	Sr-90, Gamma scan (muscle), Pu-239 (liver)
4 birds/yr	Gable Pond (216-A-25)	According to species & location	Q	Sr-90, Gamma scan (muscle)
4 birds/yr	B-Pond (216-B-3)	According to species & location	Q	Sr-90, Gamma scan (muscle)
4 birds/yr	T-Pond (216-T-4)	According to species & location	Q	Sr-90, Gamma scan (muscle)
4 birds/yr	West Lake	According to species & location	Q	Sr-90, Gamma scan (muscle), U (liver)
4 birds/yr	300 Area Pond	According to species & location	Q	Sr-90, Gamma scan (muscle), Pu-239, U (liver)

VI. WILD FOWL (contd)

D. Pond Ducks and Coot (contd)

	Location	EMA #	Frequency	Measurement
4 birds/yr	100-F Leach Trench	According to species & location	Q	Sr-90, Gamma scan (muscle), Pu-239 (liver)

Note: When several birds of the same species and location are collected on the same day, muscle from up to five birds may be composited for a gamma scan. The gamma scan of the composite will obviate the gamma scans of those individual birds. Schedule applies when ponds are supporting waterfowl.

VII. MAMMALS

A. Deer

3 deer/yr	As avail. (Road kills may be used if fresh)	According to location	Oct-Dec. Hunting season only	Sr-90, Gamma scan (muscle), Pu-239 (liver)

B. Small Mammals

*	Rabbits	BC Crib Area	6084	2 in May 2 in Nov	Gamma scan (muscle) Sr-90 (bone) Pu-239 (liver)
	Rabbits, Muskrat or Mice	100 Area & 200 Area Waste Disposal Sites Preferably	According to location	4/year at each of 9 locations (Ducks & Coot Ponds)	Sr-90, (bone), Gamma scan, (muscle), Pu-239 (liver), U (depending on location)

Note: Up to 3 mice may be composited from one location at one time. The analyses on mice are to be done on the whole mouse rather than on separate organs etc.

* Report to ARHCO, AEC-RL.

VII. MAMMALS (contd)

B. Small Mammals (contd)

	Location	EMA #	Frequency	Measurement
	100-N Trench	1775	M	Sr-90, Gamma scan

VIII. FOODSTUFFS

A. Meat, Chicken, Eggs

Farm meat, lean beef	Riverview (river-irrig.)	1292	SA As avail.	Gamma scan Sr-90
Commercial meat, lean beef	Pasco Meat Packers	1375	M	Sr-90, Gamma scan
Commercial Eggs	Safeway	1189	SA	Sr-90, Gamma scan
*Farm Eggs	Harris (Riverview)	1191	M Q	Gamma scan Sr-90
*Farm Eggs	Olsen (Riverview)	1756	M Q	Gamma scan Sr-90
*Farm chicken	Harris (Riverview)	1193	Q	Gamma scan, Sr-90
*Farm Chicken	Olsen (Riverview	6198	Q	Gamma scan, Sr-90
Commercial Chicken	Safeway	1157	SA	Gamma scan, Sr-90

* Samples from only one source in any one sampling period

VIII. FOODSTUFFS (contd)

B. Produce

	Location	EMA #	Frequency	Measurement
Commercial leafy veg. comp.	Tri-City	1601	M* Q*	Gamma scan, Sr-89, Sr-90
Farm leafy veg. comp.	Riverview	1609	M* Q*	Gamma scan Sr-90
Farm leafy veg. comp.	Benton City	1612	2 samples/yr*	Gamma scan Sr-90
C. Oysters	Willdpa Bay	0323	A	Gamma scan

IX. SOIL

A. Desert Soil

Location	EMA #	Frequency	Measurement
Benton City, 0-1"	6000	A	U, Sr-90, Gamma scan, Pu-239 + 240
ERC, 0-1"	6001	A	U, Sr-90, Gamma scan, Pu-239 + 240
Rt. 240 - Control Plot # 54, 0-1"	6002	A	U, Sr-90, Gamma scan, Pu-239 + 240
Rattlesnake Springs 0-1"	6003	A	U, Sr-90, Gamma scan, Pu-239 + 240
Yakima Barricade 0-1"	6004	A	U, Sr-90, Gamma scan Pu-239 + 240
Vernita Bridge - North end, 0-1"	6005	A	U, Sr-90, Gamma scan, Pu-239 + 240
Wahluke Slope Opposite 100-N 0-1"	6006	A	U, Sr-90, Gamma scan, Pu-239 + 240
Wahluke Slope #2 0-1"	6007	A	U, Sr-90, Gamma scan, Pu-239 + 240
Berg Ranch, 0-1	6008	A	U, Sr-90, Gamma scan, Pu-239 + 240

*During growing season, May-October only.

IX. SOIL (contd)

A. Desert Soil (contd)

Location	EMA #	Frequency	Measurement
Cooke Bros, 0-1"	6219	A	U, Sr-90, Gamma scan, Pu-239 + 240
Baxter Substation 0-1"	6220	A	U, Sr-90, Gamma scan, Pu-239 + 240
Byers Pumphouse 0-1"	6010	A	U, Sr-90, Gamma scan, Pu-239 + 240
Byers Landing 0-1"	6011	A	U, Sr-90, Gamma scan, Pu-239 + 240
Riverview - CP #55 0-1"	6012	A	U, Sr-90, Gamma scan, Pu-239 + 240
Island 340, 0-1"	6221	A	U, Sr-90, Gamma scan, Pu-239 + 240
N. Richland - CP #56 0-1"	6013	A	U, Sr-90, Gamma scan, Pu-239 + 240
300 A, South Gate CP #52, 0-1"	6222	A	U, Sr-90, Gamma scan, Pu-239 + 240
FFTF - CP #62 0-1"	6015	A	U, Sr-90, Gamma scan, Pu-239 + 240
4S - Army Loop Inter. 0-1"	6223	A	U, Sr-90, Gamma scan, Pu-239 + 240
Hanford Shoreline 0-1"	6224	A	U, Sr-90, Gamma scan, Pu-239 + 240
Prosser Barricade 0-1"	6225	A	U, Sr-90, Gamma scan, Pu-239 + 240
100-F Area - CP #58 0-1"	6018	A	U, Sr-90, Gamma scan, Pu-239 + 240
200 Area - CP #59 0-1"	6019	A	U, Sr-90, Gamma scan, Pu-239 + 240
200 Area - CP #60 0-1"	6020	A	U, Sr-90, Gamma scan, Pu-239 + 240

IX. SOIL (contd)

A. Desert Soil (contd)

Location	EMA #	Frequency	Measurement
Control Plot #40 0-1"	6226	A	U, Sr-90, Gamma scan Pu-239 + 240
200-E Hill - CP #61 0-1"	6022	A	U, Sr-90, Gamma scan, Pu-239 + 240

B. River Mud

Two locations (ten 1" layers)	*	A	Gamma scan

X VEGETATION

Benton City	6046	A	U, Sr-90, Gamma scan, Pu-239 + 240
ERC	6047	A	U, Sr-90, Gamma scan, Pu-239 + 240
Rt. 240 - CP #54	6048	A	U, Sr-90, Gamma scan, Pu-239 + 240
Rattlesnake Spring	6049	A	U, Sr-90, Gamma scan, Pu-239 + 240
Prosser Barricade	6227	A	U, Sr-90, Gamma scan, Pu-239 + 240
Yakima Barricade	6050	A	U, Sr-90, Gamma scan, Pu-239 + 240
Vernita Bridge - North End	6051	A	U, Sr-90, Gamma scan, Pu-239 + 240
Wahluke Slope - opposite 100 N	6052	A	U, Sr-90, Gamma scan, Pu-239 + 240
Wahluke Slope #2	6053	A	U, Sr-90, Gamma scan, Pu-239 + 240
Cooke Bros	6228	A	U, Sr-90, Gamma scan, Pu-239 + 240
Berg Ranch	6054	A	U, Sr-90, Gamma scan, Pu-239 + 240

* Not currently in schedule. Data obtained from another source.

X. VEGETATION (contd)

Location	EMA #	Frequency	Measurement
Baxter Substation	6229	A	U, Sr-90, Gamma scan, Pu-239 + 240
Byers Pumphouse	6056	A	U, Sr-90, Gamma scan, Pu-239 + 240
Byers Landing	6057	A	U, Sr-90, Gamma scan, Pu-239 + 240
Riverview - CP #55	6058	A	U, Sr-90, Gamma scan, Pu-239 + 240
Island 340	6230	A	U, Sr-90, Gamma scan, Pu-239 + 240
N. Richland - CP #56	6059	A	U, Sr-90, Gamma scan Pu-239 + 240
300 Area, South Gate - CP #52	6231	A	U, Sr-90, Gamma scan, Pu-239 + 240
FFTF - CP #62	6061	A	U, Sr-90, Gamma scan, Pu-239 + 240
4S - Army Loop Inter.	6232	A	U, Sr-90, Gamma scan, Pu-239 + 240
Hanford Shoreline	6233	A	U, Sr-90, Gamma scan, Pu-239 + 240
100 F Area - CP #58	6064	A	U, Sr-90, Gamma scan, Pu-239 + 240
200 Area - CP #59	6065	A	U, Sr-90, Gamma scan, Pu-239 + 240
200 Area - CP #60	6066	A	U, Sr-90, Gamma scan, Pu-239 + 240
Control Plot #40	6234	A	U, Sr-90, Gamma scan, Pu-239 + 240
200-E Hill - CP #61	6068	A	U, Sr-90, Gamma scan, Pu-239 + 240

XI. SURFACE CONTAMINATION

A. Control Plots

	Ident. #	Frequency	Measurement
200 W	1 - 4 5 - 8	SM NRA	Contamination - GM
200 E	9 - 12 13 - 16	SM NRA	Contamination - GM
Wahluke Slope	17 - 24	NRA	Contamination - GM
300 Area	25 - 27	M	Contamination - GM
300 Burial Grd.	36, 37	NRA	Contamination - GM
200 BC Crib	39, 42, 47	M NRA	Contamination - GM
Gable Pond	43, 45	M	Contamination - GM
Hanford Ferry FS	46	NRA	Contamination - GM
B Pond	48	NRA	Contamination - GM
300 Area Parking Lot	49	NRA	Contamination - GM
S. of 331 Bldg.	50 52, 53	M NRA	Contamination - GM
FFTF Met Station	51	NRA	Contamination - GM
Richland Research Complex	63 - 67	M	Contamination - GM
Hanford Project Well Plots (19 total)	(699)	Same as well sampling	Contamination - GM

XI. SURFACE CONTAMINATION (contd)

A. Control Plots (contd)

Ident. #	Frequency	Measurement
S12-3		Contamination - GM Contamination - GM
S8-19		Contamination - GM
2-33-0		Contamination - GM
10-E12		Contamination - GM
20-E12		Contamination - GM
25-70		Contamination - GM
35-9		Contamination - GM
37-82A		Contamination - GM
40-1		Contamination - GM
50-28A		Contamination - GM
50-85		Contamination - GM
54-42		Contamination - GM
57-83		Contamination - GM
60-60		Contamination - GM
65-50		Contamination - GM
Hanford-9		Contamination - GM
199-B3-2Q		Contamination - GM
199-K-20		Contamination - GM
199-D5-12		Contamination - GM

B. Outside Surfaces

318 Smear (utility transformer)	D	Contamination
318 Dock Dose-Rate	D	Contamination (LLM, GM)

XI. SURFACE CONTAMINATION (contd)

C. Road Survey

	Ident. #	Frequency	Measurement
300 Area to 200-W Rt. 4-S & Rt. 3	1	M	Radiation Contamination Bioplastic Crystal
200-W to 300 Area Rt. 3 & Rt. 4-S	2	M	Radiation Contamination Bioplastic Crystal
Hanford Highway Horn Rapids to Yakima Barricade & Rt. 6	3	Q	Radiation Contamination Bioplastic Crystal
Wye Barricade on Rt. 2-S to Rt. 11-A, Rt. 11-A to Yakima Barricade	4	Q	Radiation Contamination Bioplastic Crystal
Jct. Rt. 11-A and 2N, on 2N, past 100 F,H,D to Rt 4N, Rt. 4N to Rt. 1, on Rt. 1 past 100 K, C to Rt. 6, Rt. 6 to Jct. with Rt. 11-A	5	Q	Radiation Contamination Bioplastic Crystal
Jct. Rt. 11-A and 6, on Rt. 6 to Rt. 1, Rt. 1 to Rt. 4N, on Rt. 4N to Rt. 2N, on Rt. 2N to Jct. with Rt. 11-A	5A	Q	Radiation Contamination Bioplastic Crystal
Jct. Rt. 2 & Rt. 1, White Bluffs cutoff, Rt. 4N to 200-E from Rt. 4N to C	6	Q	Radiation Contamination Bioplastic Crystal
200-E Perimeter	7	M	Radiation Contamination Bioplastic Crystal
200-W Perimeter	8	M	Radiation Contamination Bioplastic Crystal
300 Area on Rt. 10 to Prosser Barricade & Wye Barricade	10	Q	Radiation Contamination Bioplastic Crystal

XI. SURFACE CONTAMINATION (contd)

C. Road Survey (contd)

	Ident #	Frequency	Measurement
North Richland	11	Q	Radiation Contamination Bioplastic Crystal
Jct. 4N and 100-N Access Rd to N-Area, N Area to RR Crossing, left on Cutoff to Rt. 4N and back, Access Rd to 4N, Rt. 4N to Rt. 1, Rt. 1 to K-Area Access Rd, Access Rd to K-Area, K Area to Rt 1, Rt. 1 to Rt. 4N, Rt. 4N to Jct. with 100-N	12	BW	Radiation Contamination Bioplastic Crystal
Jct. Rt. 11-A & Area 213 Access Rd, on Rt. 11-A to Jct. Rt 3, Return	13	M	Radiation Contamination Bioplastic Crystal
Army Loop Rd.	14	M	Radiation Contamination Bioplastic Crystal
300 Area	15	M	Radiation Contamination Bioplastic Crystal

D. Railroad Survey

All plant tracks outside area fences		SA	Radiation Contamination Bioplastic Crystal

XII. AERIAL SURVEY

Project perimeter	3	A	Radiation, NaI Crystal
Richland - Ellensburg - Ritzville Triangle	4	A	Radiation, NaI Crystal
Columbia River - Vernita to McNary	5	A	Radiation, NaI Crystal

XIII. GAMMA DOSE RATE

A. Columbia River

	EMA #	Frequency	Measurement
Coyote Rapids	6135	M	Immersion Dose-TLD
Below 100-N	6104	M	Immersion Dose-TLD
Richland Pumphouse	1715	M	Immersion Dose-TLD
Hanford Powerline	6137	M	Immersion Dose-TLD

XIII. GAMMA DOSE RATE (contd)

B. Columbia River Shoreline

	EMA #	Frequency	Measurement
Vernita	6108	M	Dose Rate-LLM Contamination-Gm
Richland P.S. above Water Plant	6109	W	Dose Rate-LLM Contamination-GM
Sacajawea	6110	BW	Dose Rate-LLM Contamination-GM

For the following locations, Monthly Frequency and Dose Rate (LLM) plus Contamination (GM):

CRM	EMA #	Description
382.7 P	6240	Coyote Rapids
382.5 P	6132	Upstream of 100-K Boat Launch
379.4 P	6129	N Trench Springs (Red No. 37)
379.1 P	6209	Down River of 100-N (TLD 6104)
378.6 P	6128	Down River of 100-N (Red No. 41)
378.1 P	6238	Above 100-D
377.0 IF	6126	D-Island
376.8 F	6241	Down River Opposite 100-D
371.0 I	6123	Lower end of Locke Island
369.7 P	6121	White Bluffs Ferry Landing
368.3 P	6120	100-F
362.6 P	6118	Hanford Powerline Crossing (TLD 6137) & Survey
362.0 F	6117	Hanford Ferry Landing (Muddy Cove)
361.4 P	6242	Hanford Railroad Track
354.7 F	6114	Ringold
350.4 P	6113	Powerline Crossing (Plant)
350.4 F	6112	Powerline Crossing (Far)
345.2 F	6111	Byers Landing
343.3 P	6136	Port of Benton
340.5 P	6109	Richland Pumphouse

XIII. GAMMA DOSE RATE (contd)

C. Other

1. TLD

Location	EMA #	Frequency	Measurement
200 ENC		BW	Integrated gamma dose
200 EEC		BW	Integrated gamma dose
200 ESE		BW	Integrated gamma dose
200 EWC		BW	Integrated gamma dose
200 WWC		BW	Integrated gamma dose
200 WEC		BW	Integrated gamma dose
200 WNE		BW	Integrated gamma dose
Redox		BW	Integrated gamma dose
100 K		BW	Integrated gamma dose
100 N		BW	Integrated gamma dose
100 F		BW	Integrated gamma dose
3705 Bldg.		BW	Integrated gamma dose
300 SW Gate		BW	Integrated gamma dose
ACRMS		BW	Integrated gamma dose
300 Pond		BW	Integrated gamma dose
747 Bldg		BW	Integrated gamma dose
300 S Gate		BW	Integrated gamma dose
All other air sample locations		M	Integrated gamma dose

Locations Without Air Samples

300 A S. Gate		M	Integrated gamma dose
331 Bldg.		M	Integrated gamma dose
Rt. 10 mi. 1.6		M	Integrated gamma dose
FFTF Site		M	Integrated gamma dose
FFTF North		M	Integrated gamma dose
FFTF SE		M	Integrated gamma dose
Wahluke Control Plots - 9 locations		M	Integrated gamma dose
Richland Research Complex 5 locations		M	Integrated gamma dose
Prosser Barricade		M	Integrated gamma dose

XIII. GAMMA DOSE RATE (contd)

C. Other (contd)

2. GM Reading

Location	Ident. #	Frequency	Measurement
300 Area Water Plant	None	W	GM

XIV. INSTRUMENTS

A. Radiation Monitors

300 Area	ACRMS	Continuous	Gamma Dose Rate - Water Surface
300 Area	Iodine Monitor	Continuous	I-131 Concentration in in River
318 Building	Radiation Detector	Continuous	Gross gamma

B. Temperature Monitors

Priest Rapids Gauge	Continuous	River Temperature (by others)
Richland	Continuous	River Temperature (by others)

XV. SURVEILLANCE OF WASTE DISPOSAL SITES

Active, inactive, and retired waste disposal sites require periodic monitoring to assure appropriate maintenance. The following sites require surveillance:

Location	Frequency
100-N Crib	SA
100-N Trench	Q
100-N Burning Ground	SA
100-K Trench	SA
100-K Solid Waste B.G.	Q
100-K Burning Pit	SA

XV. SURVEILLANCE OF WASTE DISPOSAL SITES (contd)

Location	Frequency
100-BC SE B. G. (105-C Solid Waste)	SA
100-BC SW B. G. (105-B Solid Waste, N. Solid Waste)	Q
100-BC Construction B. G.	SA
100-BC B. G. East of 108-B	SA
100-BC Dummy Decontamination Acid Waste	SA
100-BC Irradiated Metal Storage Basin Waste	SA
108-B Ball 3x Burial Ground	SA
108-B Crib	SA
105-C Trench	SA
105-B Trench	SA
107 Basin Sludge Burial	SA
105-C Metal Examination Waste Tank	SA
100-BC Overflow Pluto Crib	SA
107-C Retention Basin	SA
107-B Retention Basin	SA
100-BC Effluent Diversion Box	SA
100-BC Minor B.G.'s East of 105-B	SA
100-BC Outfall Structures	SA
100-DR Outfall Structures	SA
100-DDR Trench	SA
107-D Retention Basin	SA
107-DR Retention Basin	SA
100-DDR Effluent Lines	SA
100-D Dummy Decontamination Waste	SA
100-DDR Solid Waste B.G. (VSR Thimbles)	SA
100-DDR Construction B. G.	SA
100-DDR #3 B. G. NE of DR	SA
100-DDR Pluto Crib	SA
100-DDR 105 Basin Sludge B. G.	SA
100-DDR #1 B. G.	SA
100-DDR #2 B. G.	SA
100-H Trench	SA
107-H Basin	SA
100-H Effluent Lines (Junction Boxes)	SA
100-H Liquid Waste Burial	SA
100-H #1 B. G.	SA
100-H #2 B. G.	SA
100-F Lewis Canal	SA
100-F Swampy Area	SA
100-F Trench	SA
100-F Retention Basin	SA
100-F French Drain and Adjacent Wood Covered Pit	SA
100-F Ball Washer Crib	SA
100-F #3 B. G.	SA
100-F #2 B. G.	SA

XV. SURVEILLANCE OF WASTE DISPOSAL SITES (contd)

Location	Frequency
100-F #1 B. G.	Q
100-F Sawdust Burial	Q
100-F Leaching Trench	Q
100-F 60" Overground Pipe	SA
100-F Happy Valley Farm Plots	SA
200-W Redox Labs Pond (216-S-19)	Q
200-W New Redox Pond (216-S-16)	Q
200-W Old Redox Pond (216-S-17)	SA
200-W Part of Perimeter of U-Pond (216-U-10)	Q
200-W U-Pond Overflow (216-U-11)	SA
200-E Gable Mt. Ponds (216-A-25)	Q
200-E West Lake	SA
200-E B Pond (216-B-3)	Q
200-E B Pond Ditch #1	SA
200-E B Pond Ditch #2	Q
200-E B Pond Ditch #3	Q
200-E Snow's Canyon; Purex Chemical Sewer (216-A-29)	Q
200-E Purex Crib #1 (216-A-6)	SA
200-E Purex Crib #2 (216-A-30-1)	Q
200-E North of Purex Crib #3 (216-A-37-1)	SA
200-E NE Perimeter Fence	SA
200-E 216-BC Crib Area	SA
200-E California Nuclear B. G. Perimeter	Q
200-E - 200-W Transfer Lines	SA
300 Area 300 N B. G.	SA
300 Area 300 Wye B. G.	SA
300 Area #1 B. G.	SA
300 Area #2 B. G.	SA
300 Area #3 B. G.	SA
300 Area #4 B. G.	SA
300 Area #5 B. G.	Q
300 Area #7 B. G.	SA
300 Area #8 B. G.	SA
300 West B. G.	SA
300 Area Equipment Storage	SA
300 Area N. Process Pond at Perimeter Fence	Q
300 Area S. Process Pond at Perimeter Fence	Q
300 Area 331 B Process Waste Trenches	Q
300 Area 331 A Process Waste Trenches	SA
Gable Mt. Storage Vaults (213-J and K)	SA
200-N, P, and R Areas	SA

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