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Department of Energy

Richland Operations Office
P.O. Box 550
Richland, Washington 99352

DEC 02 1994

95-PCA-042

Mr. Douglas R. Sherwood
Hanford Project Manager
U.S. Environmental Protection Agency
Region 10
712 Swift Boulevard
Richland, Washington 99352

Mr. Steven M. Alexander
Section Manager
Perimeter Areas
Nuclear Waste Program
State of Washington
Department of Ecology
1315 West Fourth Avenue
Kennewick, Washington 99336



Dear Messrs. Sherwood and Alexander:

HANFORD FACILITY DANGEROUS WASTE PERMIT APPLICATION, 325 HAZARDOUS WASTE TREATMENT UNITS PART A PERMIT APPLICATION (FORM 3), REVISION 3

This letter transmits Revision 3 of the Hanford Facility Dangerous Waste Part A Permit Application (Form 3) for the 325 Hazardous Waste Treatment Units. Revision 3 accomplishes the following two actions:

- Deletes the 3100 facility from the 325/3100 Hazardous Waste Treatment Unit Part A (Form 3) Permit Application. The 3100 facility project has no funding, no activities identified for it, and has never existed.
- Consolidates the 325 Shielded Analytical Laboratory (SAL) and activities under the 325 Hazardous Waste Treatment Unit Part A (Form 3). The 325 SAL has been operating under the Physical/Chemical Treatment Facilities Part A (Form 3). This action will allow the Pacific Northwest Laboratory (PNL) and the U.S. Department of Energy, Richland Operations Office (RL) to consolidate similar 325 Building activities under the same management within the same Part A (Form 3) and eventually the same Part B permit application.

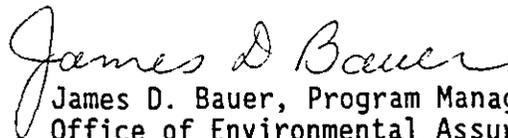
The above actions were part of an agreement reached with Jeanne Wallace, Ecology's Unit Manager for the 325/3100 Hazardous Waste Treatment Unit, and RL and PNL staff in various Unit Manager meetings over the last several months. A consolidation proposal was sent to your office on April 11, 1994, letter from J. D. Bauer of RL to D. C. Nylander of Ecology. In a May 18, 1994, response letter to J. D. Bauer, Jeanne Wallace concurred on the above actions.

Messrs. Sherwood and Alexander -2-
95-PCA-042

The resulting unit will be known as the 325 Hazardous Waste Treatment Units.

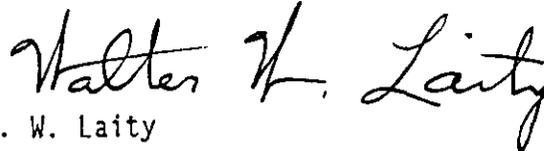
If you have any questions regarding this, please contact Mr. C. E. Clark of RL at (509) 376-9333, or Mr. H. T. Tilden of PNL, at (509) 376-0499.

Sincerely,



James D. Bauer, Program Manager
Office of Environmental Assurance,
Permits, and Policy
DOE Richland Operations Office

EAP:CEC



W. W. Laity
Manager
Materials and Chemical Sciences Center
Pacific Northwest Laboratory

Enclosure

cc w/encl:
Administrative Records, H6-08
R. Bowman, WHC
W. Burke, CTUIR
T. Chikalla, PNL
D. Duncan, EPA
R. Jim, YIN
W. Laity, PNL
D. Powaukee, NPT
J. Wallace, Ecology
J. Witczak, Ecology

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Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 character/inch).

FORM 3	DANGEROUS WASTE PERMIT APPLICATION	1. EPA/STATE I.D. NUMBER <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <td>W</td><td>A</td><td>7</td><td>8</td><td>9</td><td>0</td><td>0</td><td>0</td><td>8</td><td>9</td><td>6</td><td>7</td> </tr> </table>	W	A	7	8	9	0	0	0	8	9	6	7
W	A	7	8	9	0	0	0	8	9	6	7			

FOR OFFICIAL USE ONLY		COMMENTS
APPLICATION APPROVED	DATE RECEIVED (mo., day, & yr.)	

II. FIRST OR REVISED APPLICATION
Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA/STATE I.D. Number, or if this is a revised application, enter your facility's EPA/STATE I.D. Number in Section I above.

A. FIRST APPLICATION (place an "X" below and provide the appropriate date)

<input type="checkbox"/> 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center; font-size: 0.8em;">MO.</td> <td style="width: 33%; text-align: center; font-size: 0.8em;">DAY</td> <td style="width: 33%; text-align: center; font-size: 0.8em;">YR.</td> <td style="font-size: 0.8em;">FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)</td> </tr> <tr> <td style="border: 1px solid black; width: 33px; height: 20px;"></td> <td style="border: 1px solid black; width: 33px; height: 20px;"></td> <td style="border: 1px solid black; width: 33px; height: 20px;"></td> <td></td> </tr> </table>	MO.	DAY	YR.	FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)					<input type="checkbox"/> 2. NEW FACILITY (Complete item below) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center; font-size: 0.8em;">MO.</td> <td style="width: 33%; text-align: center; font-size: 0.8em;">DAY</td> <td style="width: 33%; text-align: center; font-size: 0.8em;">YR.</td> <td style="font-size: 0.8em;">FOR NEW FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR IS EXPECTED TO BEGIN</td> </tr> <tr> <td style="border: 1px solid black; width: 33px; height: 20px;"></td> <td style="border: 1px solid black; width: 33px; height: 20px;"></td> <td style="border: 1px solid black; width: 33px; height: 20px;"></td> <td></td> </tr> </table>	MO.	DAY	YR.	FOR NEW FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR IS EXPECTED TO BEGIN				
MO.	DAY	YR.	FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)														
MO.	DAY	YR.	FOR NEW FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR IS EXPECTED TO BEGIN														

B. REVISED APPLICATION (place an "X" below and complete Section I above)

<input checked="" type="checkbox"/> 1. FACILITY HAS AN INTERIM STATUS PERMIT	<input type="checkbox"/> 2. FACILITY HAS A FINAL PERMIT
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III. PROCESSES - CODES AND CAPACITIES

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the (Section III-C).

B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.

1. AMOUNT - Enter the amount.

2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PRO-CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS	PRO-CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:			Treatment:		
CONTAINER (barrel, drum, etc)	S01	GALLONS OR LITERS	TANK	T01	GALLONS PER DAY OR LITERS PER DAY
TANK	S02	GALLONS OR LITERS	SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS	INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS	OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Section III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY
Disposal:					
INJECTION WELL	D80	GALLONS OR LITERS			
LANDFILL	D81	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER			
LAND APPLICATION	D82	ACRES OR HECTARES			
OCEAN DISPOSAL	D83	GALLONS PER DAY OR LITERS PER DAY			
SURFACE IMPOUNDMENT	D84	GALLONS OR LITERS			
UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE CODE
GALLONS	G	LITERS PER DAY	LITERS PER DAY	V	ACRE-FEET
LITERS	L	TONS PER HOUR	TONS PER HOUR	D	HECTARE-METER
CUBIC YARDS	Y	METRIC TONS PER HOUR	METRIC TONS PER HOUR	W	ACRES
CUBIC METERS	C	GALLONS PER HOUR	GALLONS PER HOUR	E	HECTARES
GALLONS PER DAY	U	LITERS PER HOUR	LITERS PER HOUR	H	

EXAMPLE FOR COMPLETING SECTION III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
		1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)				1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)	
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
7	S 0 1	750	G		7				
2	T 0 4	(maximum) 55	U		8				
3					9				
4					10				

Continued from the front.

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESS (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

The 325 Hazardous Waste Treatment Units (325 HWTUs) consist of the Shielded Analytical Laboratory (SAL) located in Rooms 32, 200, 201, 201A, 202, and 203 and the Hazardous Waste Treatment Unit (HWTU) located in Rooms 520, 527A, and 528 of the 325 Building. Up to 750 gallons of mixed (radioactive and dangerous) waste may be stored in containers in the 325 HWTUs. A maximum of 55 gallons of mixed waste may be treated per day in the 325 HWTUs.

Mixed waste treatments are conducted as small, bench-scale operations. Treatment processes at the SAL may include the following:

- pH adjustment
- Ion exchange
- Waste concentration by evaporation
- Precipitation/filtration and solvent extraction
- Solids washing
- Phase separation
- Solidification/stabilization.

IV. DESCRIPTION OF DANGEROUS WASTES

- A. DANGEROUS WASTE NUMBER - Enter the four digit number from Chapter 173-303 WAC for each listed dangerous waste you will handle. If you handle dangerous wastes which are not listed in Chapter 173-303 WAC, enter the four digit number(s) that describes the characteristics and/or the toxic contaminants of those dangerous wastes.
- B. ESTIMATED ANNUAL QUANTITY - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed dangerous waste: For each listed dangerous waste entered in column A select the code(s) from the list of process codes contained in Section III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed dangerous wastes: For each characteristic or toxic contaminant entered in Column A, select the code(s) from the list of process codes contained in Section III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed dangerous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: DANGEROUS WASTES DESCRIBED BY MORE THAN ONE DANGEROUS WASTE NUMBER - Dangerous wastes that can be described by more than one Waste Number shall be described on the form as follows:

1. Select one of the Dangerous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other Dangerous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other Dangerous Waste Number that can be used to describe the dangerous waste.

EXAMPLE FOR COMPLETING SECTION IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES																
	1. PROCESS CODES (enter)							2. PROCESS DESCRIPTION (if a code is not entered in D(1))															
X-1	K	0	5	4	900	P	T	0	3	D	8	0											
X-2	D	0	0	2	400	P	T	0	3	D	8	0											
X-3	D	0	0	1	100	P	T	0	3	D	8	0											
X-4	D	0	0	2			T	0	3	D	8	0											included with above

III.C. PROCESSES - CODES AND CAPACITIES (continued)

Mixed waste treatment processes at the HWTU may include the following:

- pH adjustment
- Ion exchange
- Carbon absorption
- Oxidation
- Reduction
- Waste concentration by evaporation
- Precipitation
- Filtration
- Phase separation
- Catalytic destruction
- Solidification/stabilization.

Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)
 WA 7 8 9 0 0 0 8 9 6 7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES									
							1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))					
1	D	0	0	1	12,000*	K	S	0	1	T	0	4	Storage-Container/Treatment-Other			
2	D	0	0	2	Included with above											
3	D	0	0	3												
4	D	0	0	4												
5	D	0	0	5												
6	D	0	0	6												
7	D	0	0	7												
8	D	0	0	8												
9	D	0	0	9												
10	D	0	1	0												
11	D	0	1	1												
12	D	0	1	2												
13	D	0	1	3												
14	D	0	1	4												
15	D	0	1	5												
16	D	0	1	6												
17	D	0	1	7												
18	D	0	1	8												
19	D	0	1	9												
20	D	0	2	0												
21	D	0	2	1												
22	D	0	2	2												
23	D	0	2	3												
24	D	0	2	4												
25	D	0	2	5												
26					* 9,500 (S01); 2,500 (T04)											

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Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)

W	A	7	8	9	0	0	0	8	9	6	7
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IV. DESCRIPTION OF DANGEROUS WASTES (continued)												
LINE NO.	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES					
							1. PROCESS CODES (enter)					2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	D	0	2	6		K	S01	T04				Storage-Container/Treatment-Other
2	D	0	2	7								(Continued)
3	D	0	2	8								
4	D	0	2	9								
5	D	0	3	0								
6	D	0	3	1								
7	D	0	3	2								
8	D	0	3	3								
9	D	0	3	4								
10	D	0	3	5								
11	D	0	3	6								
12	D	0	3	7								
13	D	0	3	8								
14	D	0	3	9								
15	D	0	4	0								
16	D	0	4	1								
17	D	0	4	2								
18	D	0	4	3								
19	F	0	0	1								
20	F	0	0	2								
21	F	0	0	3								
22	F	0	0	4								
23	F	0	0	5								
24	F	0	2	7								
25	F	0	3	9								
26	K	0	1	1								

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Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)
 WA 7 8 9 0 0 0 8 9 6 7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES			
				1. PROCESS CODES (enter)			
1	K 0 1 3		K	S01	T04		Storage-Container/Treatment-Other
2	K 0 4 8						(Continued)
3	K 0 4 9						
4	K 0 5 0						
5	K 0 5 1						
6	K 0 5 2						
7	P 0 0 1						
8	P 0 0 2						
9	P 0 0 3						
10	P 0 0 4						
11	P 0 0 5						
12	P 0 0 6						
13	P 0 0 7						
14	P 0 0 8						
15	P 0 0 9						
16	P 0 1 0						
17	P 0 1 1						
18	P 0 1 2						
19	P 0 1 3						
20	P 0 1 4						
21	P 0 1 5						
22	P 0 1 6						
23	P 0 1 7						
24	P 0 1 8						
25	P 0 1 9						
26	P 0 2 0						

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Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)
 WA 7 8 9 0 0 0 8 9 8 7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)										D. PROCESSES		
L I N E	N O	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))
		P	0	2	1			S01	T04			
1		P	0	2	1		K	S01	T04			Storage-Container/Treatment-Other
2		P	0	2	2							(Continued)
3		P	0	2	3							
4		P	0	2	4							
5		P	0	2	6							
6		P	0	2	7							
7		P	0	2	8							
8		P	0	2	9							
9		P	0	3	0							
10		P	0	3	1							
11		P	0	3	3							
12		P	0	3	4							
13		P	0	3	6							
14		P	0	3	7							
15		P	0	3	8							
16		P	0	3	9							
17		P	0	4	0							
18		P	0	4	1							
19		P	0	4	2							
20		P	0	4	3							
21		P	0	4	4							
22		P	0	4	5							
23		P	0	4	6							
24		P	0	4	7							
25		P	0	4	8							
26		P	0	4	9							

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Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)									
W A 7 8 9 0 0 0 8 9 6 7									
IV. DESCRIPTION OF DANGEROUS WASTES (continued)									
LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES					
				1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))	
1	P 0 5 0		K	S01	T04				Storage-Container/Treatment-Other
2	P 0 5 1								(Continued)
3	P 0 5 4								
4	P 0 5 6								
5	P 0 5 7								
6	P 0 5 8								
7	P 0 5 9								
8	P 0 6 0								
9	P 0 6 2								
10	P 0 6 3								
11	P 0 6 4								
12	P 0 6 5								
13	P 0 6 6								
14	P 0 6 7								
15	P 0 6 8								
16	P 0 6 9								
17	P 0 7 0								
18	P 0 7 1								
19	P 0 7 2								
20	P 0 7 3								
21	P 0 7 4								
22	P 0 7 5								
23	P 0 7 6								
24	P 0 7 7								
25	P 0 7 8								
26	P 0 8 1								

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Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)													
W A 7 8 9 0 0 0 8 9 6 7													
IV. DESCRIPTION OF DANGEROUS WASTES (continued)													
LINE NO.	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES						
							1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))		
1	P	0	8	2		K	S01	T04					Storage-Container/Treatment-Other
2	P	0	8	4									(Continued)
3	P	0	8	5									
4	P	0	8	7									
5	P	0	8	8									
6	P	0	8	9									
7	P	0	9	2									
8	P	0	9	3									
9	P	0	9	4									
10	P	0	9	5									
11	P	0	9	6									
12	P	0	9	7									
13	P	0	9	8									
14	P	0	9	9									
15	P	1	0	1									
16	P	1	0	2									
17	P	1	0	3									
18	P	1	0	4									
19	P	1	0	5									
20	P	1	0	6									
21	P	1	0	7									
22	P	1	0	8									
23	P	1	0	9									
24	P	1	1	0									
25	P	1	1	1									
26	P	1	1	2									

Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)

W	A	7	8	9	0	0	0	8	9	6	7
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IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES		
							1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))	
1	P	1	1	3		K	S01	T04	Storage-Container/Treatment-Other
2	P	1	1	4					(Continued)
3	P	1	1	5					
4	P	1	1	6					
5	P	1	1	8					
6	P	1	1	9					
7	P	1	2	0					
8	P	1	2	1					
9	P	1	2	2					
10	P	1	2	3					
11	U	0	0	1					
12	U	0	0	2					
13	U	0	0	3					
14	U	0	0	4					
15	U	0	0	5					
16	U	0	0	6					
17	U	0	0	7					
18	U	0	0	8					
19	U	0	0	9					
20	U	0	1	0					
21	U	0	1	1					
22	U	0	1	2					
23	U	0	1	4					
24	U	0	1	5					
25	U	0	1	6					
26	U	0	1	7					

Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)									
W A 7 8 9 0 0 0 8 9 6 7									
IV. DESCRIPTION OF DANGEROUS WASTES (continued)									
L I N E	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEA- SURE (enter code)	D. PROCESSES					
				1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))	
1	U 0 1 8		K	S01	T04				Storage-Container/Treatment-Other
2	U 0 1 9								(Continued)
3	U 0 2 0								
4	U 0 2 1								
5	U 0 2 2								
6	U 0 2 3								
7	U 0 2 4								
8	U 0 2 5								
9	U 0 2 6								
10	U 0 2 7								
11	U 0 2 8								
12	U 0 2 9								
13	U 0 3 0								
14	U 0 3 1								
15	U 0 3 2								
16	U 0 3 3								
17	U 0 3 4								
18	U 0 3 5								
19	U 0 3 6								
20	U 0 3 7								
21	U 0 3 8								
22	U 0 3 9								
23	U 0 4 1								
24	U 0 4 2								
25	U 0 4 3								
26	U 0 4 4								

Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)
 WA 7 8 9 0 0 0 8 9 6 7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES				
				1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U 0 4 5		K	S01	T04			Storage-Container/Treatment-Other
2	U 0 4 6							(Continued)
3	U 0 4 7							
4	U 0 4 8							
5	U 0 4 9							
6	U 0 5 0							
7	U 0 5 1							
8	U 0 5 2							
9	U 0 5 3							
10	U 0 5 5							
11	U 0 5 6							
12	U 0 5 7							
13	U 0 5 8							
14	U 0 5 9							
15	U 0 6 0							
16	U 0 6 1							
17	U 0 6 2							
18	U 0 6 3							
19	U 0 6 4							
20	U 0 6 6							
21	U 0 6 7							
22	U 0 6 8							
23	U 0 6 9							
24	U 0 7 0							
25	U 0 7 1							
26	U 0 7 2							

9 13317 0553

Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)
 WA 7 8 9 0 0 0 8 9 6 7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)				D. PROCESSES				
LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U 0 7 3		K	S01	T04			Storage-Container/Treatment-Other
2	U 0 7 4							(Continued)
3	U 0 7 5							
4	U 0 7 6							
5	U 0 7 7							
6	U 0 7 8							
7	U 0 7 9							
8	U 0 8 0							
9	U 0 8 1							
10	U 0 8 2							
11	U 0 8 3							
12	U 0 8 4							
13	U 0 8 5							
14	U 0 8 6							
15	U 0 8 7							
16	U 0 8 8							
17	U 0 8 9							
18	U 0 9 0							
19	U 0 9 1							
20	U 0 9 2							
21	U 0 9 3							
22	U 0 9 4							
23	U 0 9 5							
24	U 0 9 6							
25	U 0 9 7							
26	U 0 9 8							

(enter "A", "B", "C", etc. behind the "3" to identify photo copied pages)

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)
W A 7 8 9 0 0 0 8 9 6 7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)				D. PROCESSES				
LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U 0 9 9		K	S01	T04			Storage-Container/Treatment-Other
2	U 1 0 1							(Continued)
3	U 1 0 2							
4	U 1 0 3							
5	U 1 0 5							
6	U 1 0 6							
7	U 1 0 7							
8	U 1 0 8							
9	U 1 0 9							
10	U 1 1 0							
11	U 1 1 1							
12	U 1 1 2							
13	U 1 1 3							
14	U 1 1 4							
15	U 1 1 5							
16	U 1 1 6							
17	U 1 1 7							
18	U 1 1 8							
19	U 1 1 9							
20	U 1 2 0							
21	U 1 2 1							
22	U 1 2 2							
23	U 1 2 3							
24	U 1 2 4							
25	U 1 2 5							
26	U 1 2 6							

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Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)											
W A 7 8 9 0 0 0 8 9 6 7											
IV. DESCRIPTION OF DANGEROUS WASTES (continued)											
LINE NO.	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES				
	1	2	3	4			1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U	1	2	7		K	S01	T04			Storage-Container/Treatment-Other
2	U	1	2	8							(Continued)
3	U	1	2	9							
4	U	1	3	0							
5	U	1	3	1							
6	U	1	3	2							
7	U	1	3	3							
8	U	1	3	4							
9	U	1	3	5							
10	U	1	3	6							
11	U	1	3	7							
12	U	1	3	8							
13	U	1	3	9							
14	U	1	4	0							
15	U	1	4	1							
16	U	1	4	2							
17	U	1	4	3							
18	U	1	4	4							
19	U	1	4	5							
20	U	1	4	6							
21	U	1	4	7							
22	U	1	4	8							
23	U	1	4	9							
24	U	1	5	0							
25	U	1	5	1							
26	U	1	5	2							

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Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)
 WA 7 8 9 0 0 0 8 9 6 7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U 1 5 3		K	S01 T04	Storage-Container/Treatment-Other
2	U 1 5 4				(Continued)
3	U 1 5 5				
4	U 1 5 6				
5	U 1 5 7				
6	U 1 5 8				
7	U 1 5 9				
8	U 1 6 0				
9	U 1 6 1				
10	U 1 6 2				
11	U 1 6 3				
12	U 1 6 4				
13	U 1 6 5				
14	U 1 6 6				
15	U 1 6 7				
16	U 1 6 8				
17	U 1 6 9				
18	U 1 7 0				
19	U 1 7 1				
20	U 1 7 2				
21	U 1 7 3				
22	U 1 7 4				
23	U 1 7 6				
24	U 1 7 7				
25	U 1 7 8				
26	U 1 7 9				

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Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)											
W A 7 8 9 0 0 0 8 9 6 7											
IV. DESCRIPTION OF DANGEROUS WASTES (continued)											
L I N E	N O	A. DANGEROUS WASTE NO. (enter code)			B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES				
							1. PROCESS CODES (enter)		2. PROCESS DESCRIPTION (if a code is not entered in D(1))		
1	U	1	8	0		K	S01	T04			Storage-Container/Treatment-Other
2	U	1	8	1							(Continued)
3	U	1	8	2							
4	U	1	8	3							
5	U	1	8	4							
6	U	1	8	5							
7	U	1	8	6							
8	U	1	8	7							
9	U	1	8	8							
10	U	1	8	9							
11	U	1	9	0							
12	U	1	9	1							
13	U	1	9	2							
14	U	1	9	3							
15	U	1	9	4							
16	U	1	9	6							
17	U	1	9	7							
18	U	2	0	0							
19	U	2	0	1							
20	U	2	0	2							
21	U	2	0	3							
22	U	2	0	4							
23	U	2	0	5							
24	U	2	0	6							
25	U	2	0	7							
26	U	2	0	8							

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES							
				1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))			
1	U 2 0 9		K	S01	T04						Storage-Container/Treatment-Other
2	U 2 1 0										(Continued)
3	U 2 1 1										
4	U 2 1 2										
5	U 2 1 3										
6	U 2 1 4										
7	U 2 1 5										
8	U 2 1 6										
9	U 2 1 7										
10	U 2 1 8										
11	U 2 1 9										
12	U 2 2 0										
13	U 2 2 1										
14	U 2 2 2										
15	U 2 2 3										
16	U 2 2 5										
17	U 2 2 6										
18	U 2 2 7										
19	U 2 2 8										
20	U 2 3 2										
21	U 2 3 3										
22	U 2 3 4										
23	U 2 3 5										
24	U 2 3 6										
25	U 2 3 7										
26	U 2 3 8										

(enter "A", "B", "C", etc. behind the "3" to identify photo copied pages)

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Continued from page 2.
 NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (entered from page 1)

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

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES										
	1	2	3	9			1. PROCESS CODES (enter)					2. PROCESS DESCRIPTION (if a code is not entered in D(1))					
1	U	2	3	9		K	S	0	1	T	0	4	Storage-Container/Treatment-Other				
2	U	2	4	0									(Continued)				
3	U	2	4	3													
4	U	2	4	4													
5	U	2	4	5													
6	U	2	4	6													
7	U	2	4	7													
8	U	2	4	8													
9	U	2	4	9													
10	U	3	2	8													
11	U	3	5	3													
12	U	3	5	9													
13	W	T	0	1													
14	W	T	0	2													
15	W	P	0	1													
16	W	P	0	2													
17	W	P	0	3													
18	W	C	0	2													
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	

Continued from the front.

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM SECTION D(1) ON PAGE 3.

Routine mixed waste treatment that will be conducted in the 325 HWTUs will include pH adjustment, ion exchange, carbon absorption, oxidation, reduction, waste concentration by evaporation, precipitation, filtration, solvent extraction, phase separation, solids washing, catalytic destruction, and solidification/stabilization. These waste treatments will be conducted on small quantities of diverse radioactive and mixed wastes generated from ongoing research and development and analytical chemistry activities. Waste to be handled in the 325 HWTUs will include listed waste, waste from non-specific sources, selected wastes from specific sources, characteristic waste, and state-only waste, all of which is also regulated under the Atomic Energy Act of 1954 (as amended). Multi-source leachate (F039) is included as a waste derived from non-specific source waste F001 through F005.

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

This information is provided on the attached drawings and photos.

LATITUDE (degrees, minutes, & seconds)

LONGITUDE (degrees, minutes, & seconds)

VIII. FACILITY OWNER

A. If the facility owner is also the facility operator as listed in Section VII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER

2. PHONE NO. (area code & no.)

3. STREET OR P.O. BOX

4. CITY OR TOWN

5. ST.

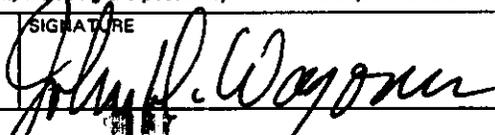
6. ZIP CODE

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME (print or type)
 John D. Wagoner, Manager
 U.S. Department of Energy
 Richland Operations Office

SIGNATURE



DATE SIGNED

12/2/94

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME (print or type)

SIGNATURE

DATE SIGNED

SEE ATTACHMENT

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

John D. Wagoner
Owner/Operator
John D. Wagoner, Manager
U.S. Department of Energy
Richland Operations Office

12/2/94
Date

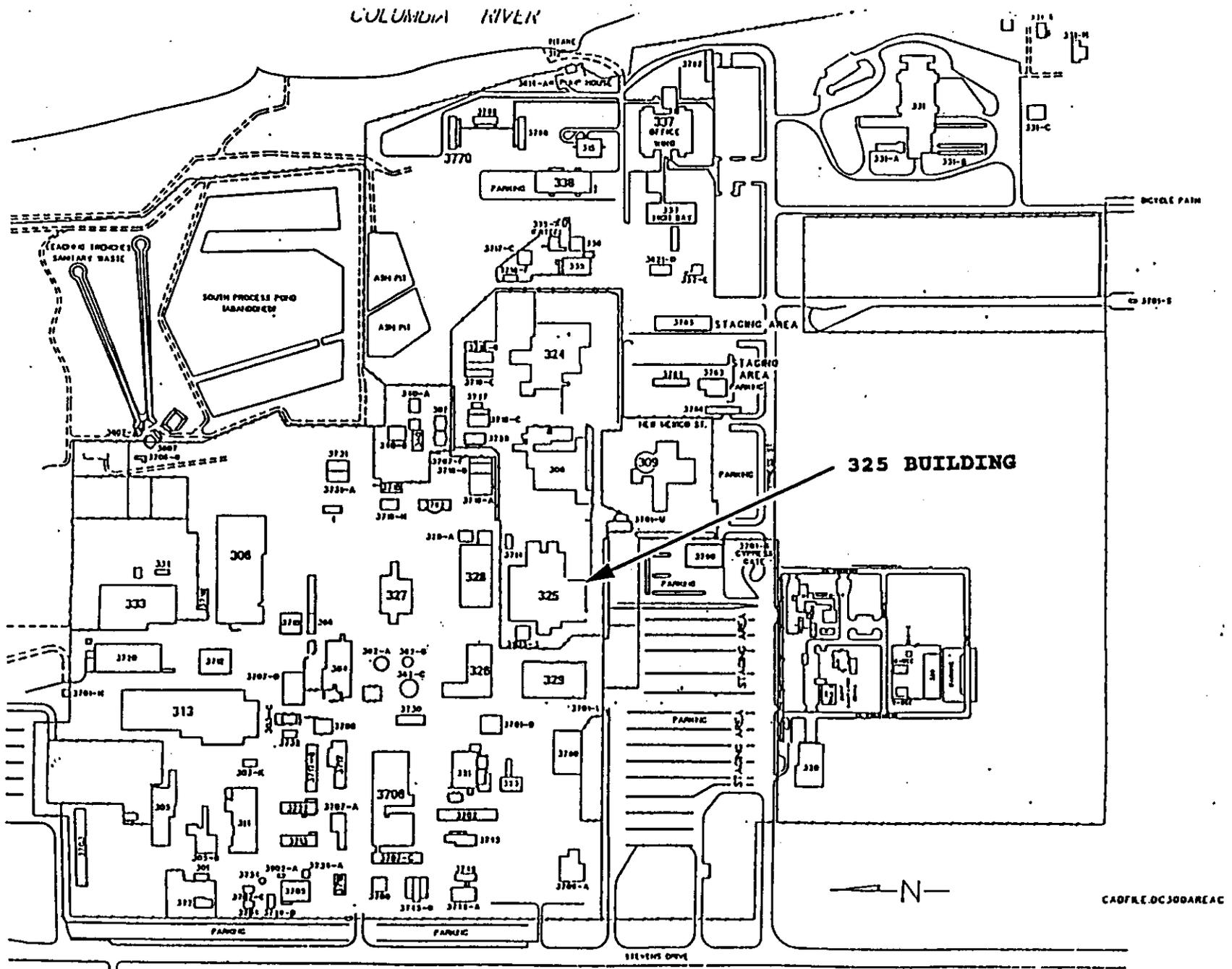
William J. Madia
Co-operator
William J. Madia, Director
Pacific Northwest Laboratory

7 Oct 94
Date

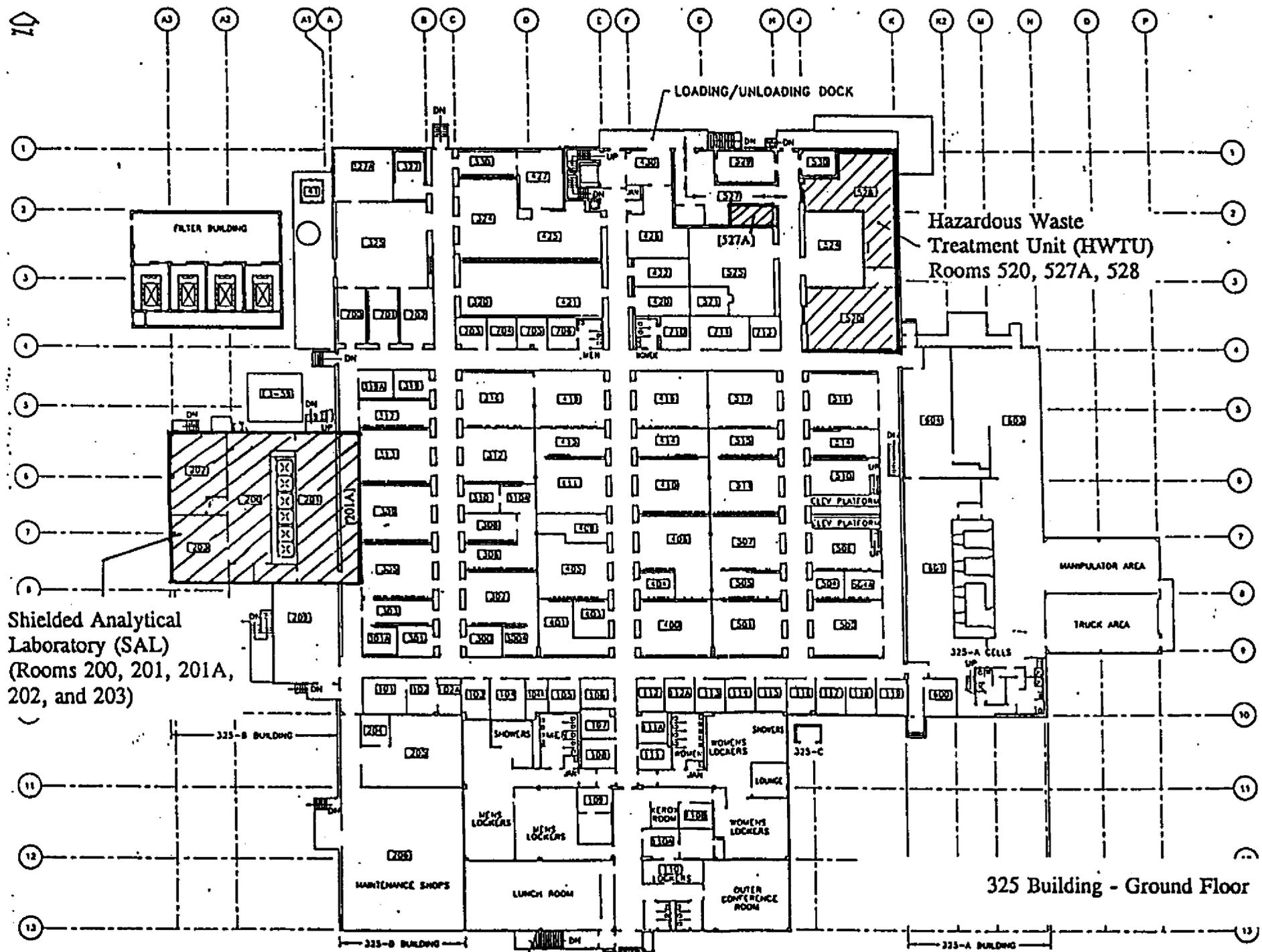
9 13317 0562

V. FACILITY DRAWING

Drawings showing the location of the 325 Building and the layout of the 325 HWTUs are provided on the following pages.



Location of 325 Building in 300 Area.

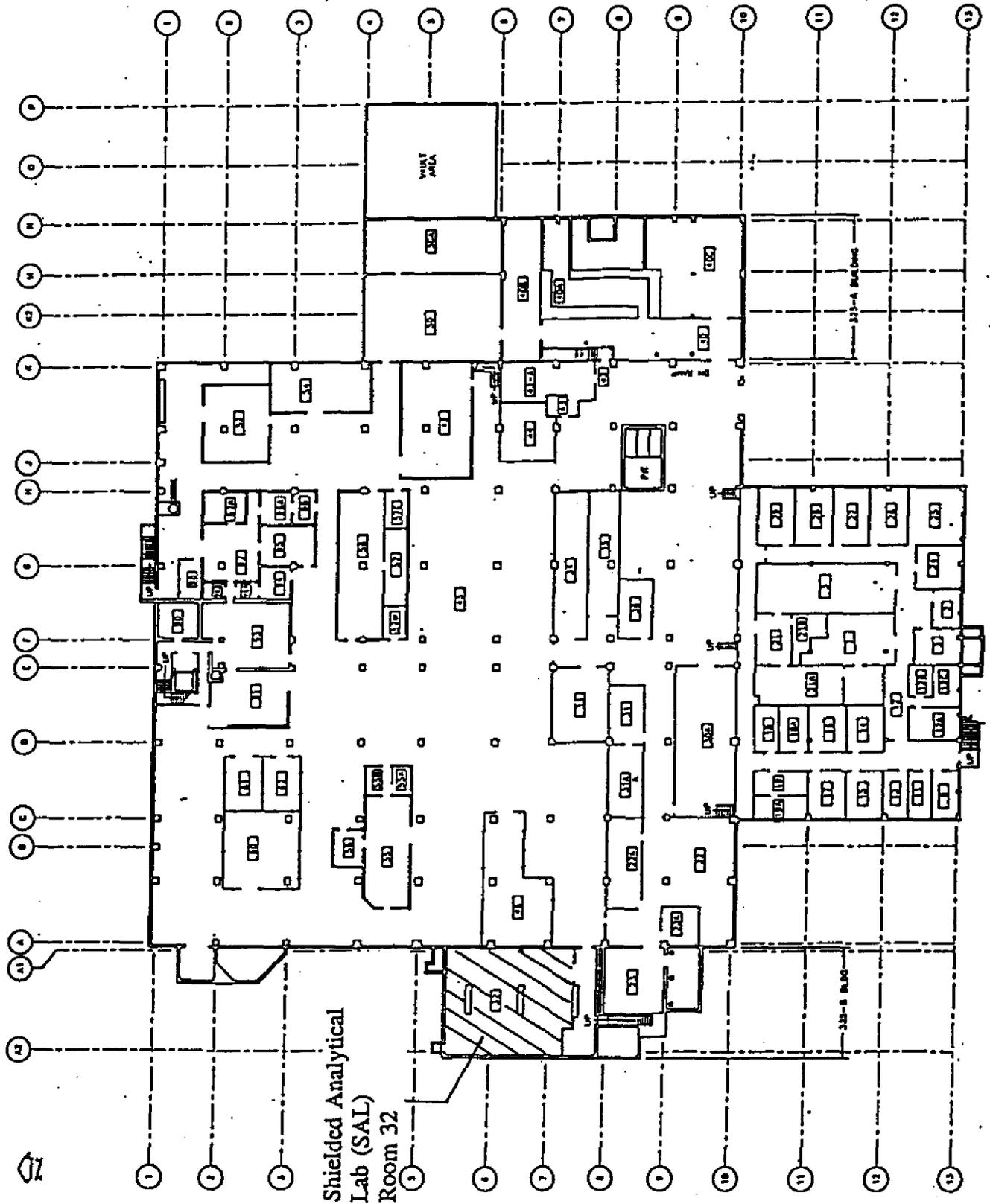


Shielded Analytical Laboratory (SAL)
 (Rooms 200, 201, 201A, 202, and 203)

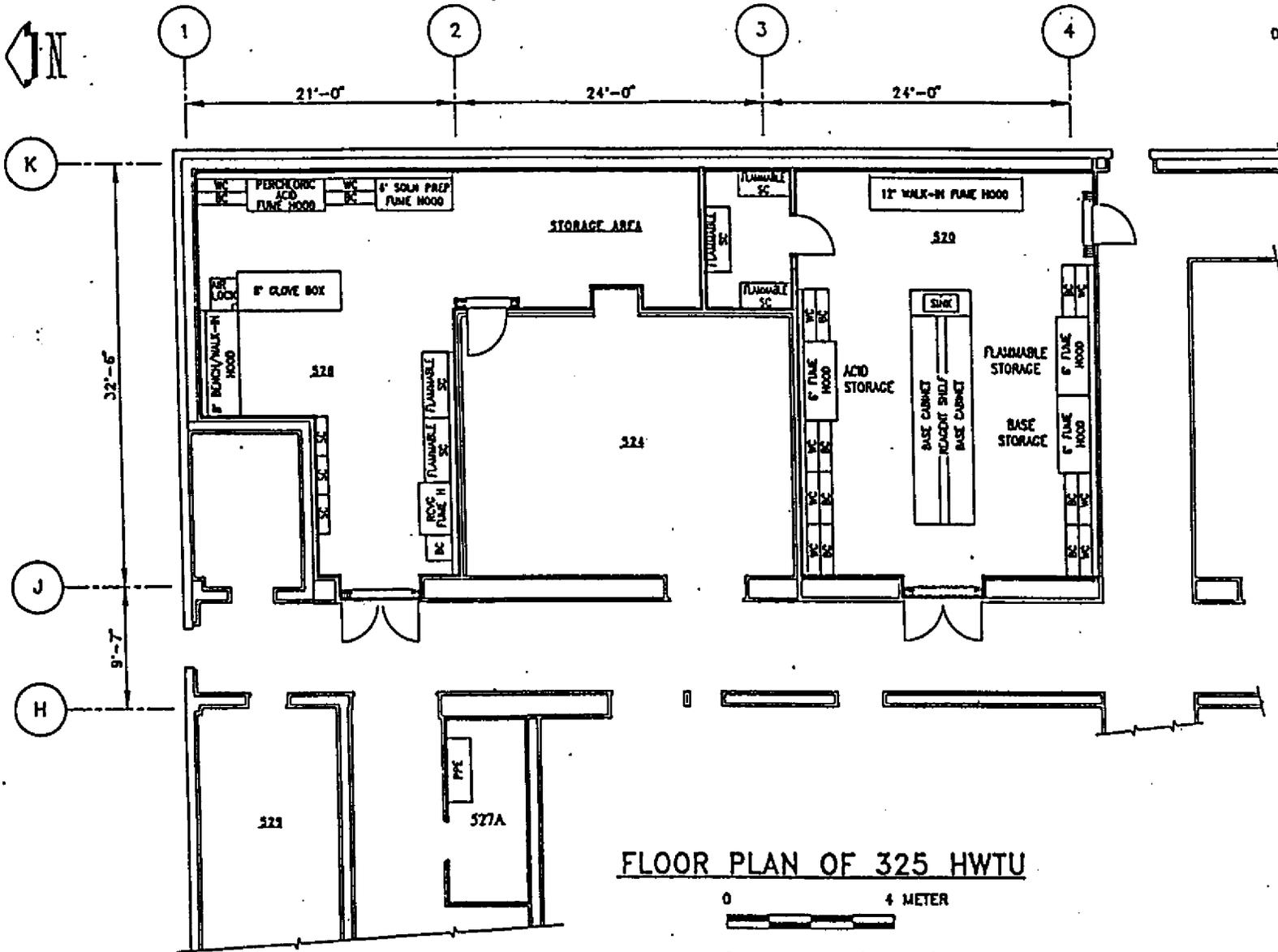
Hazardous Waste Treatment Unit (HWTU)
 Rooms 520, 527A, 528

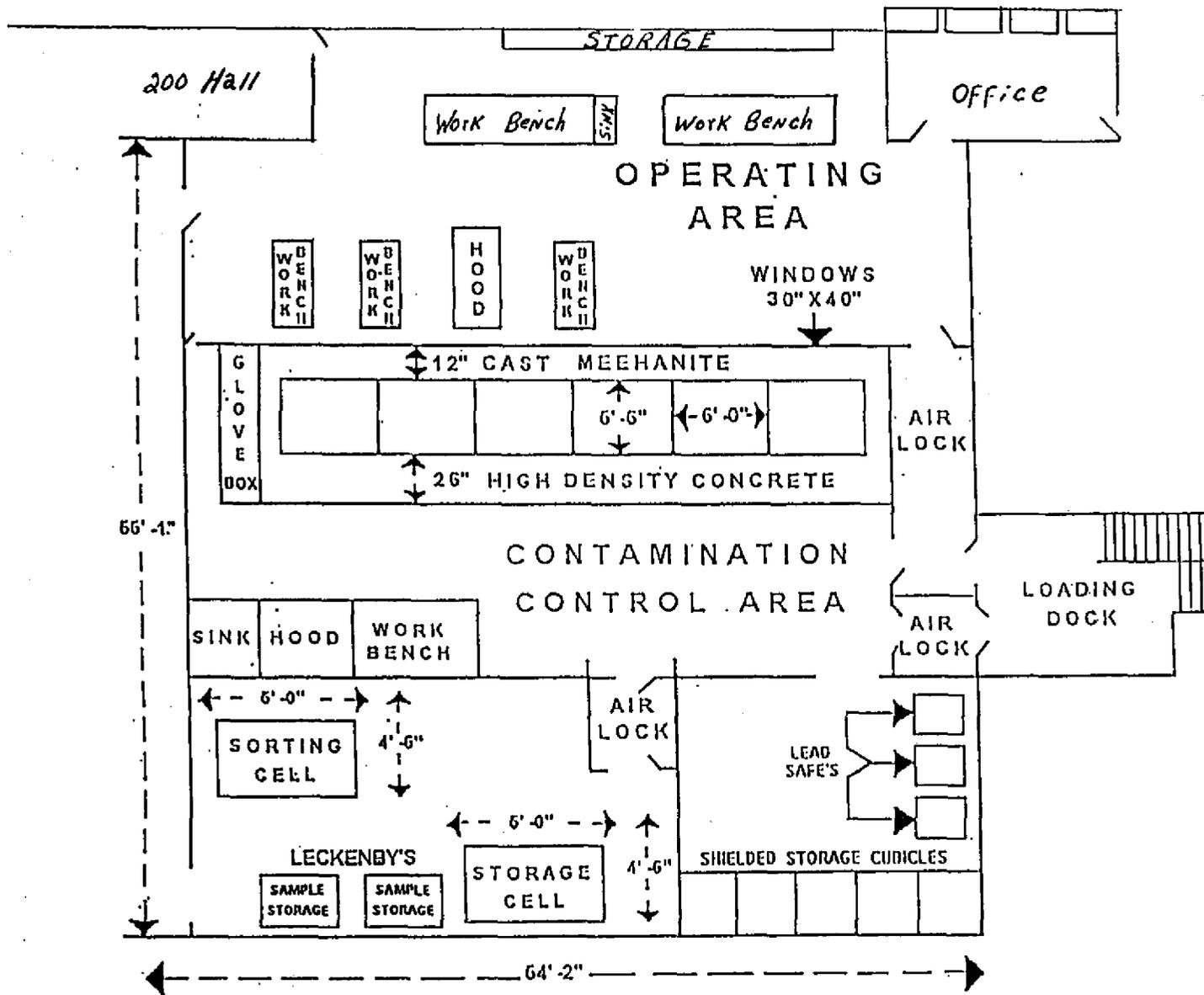
325 Building - Ground Floor

9
 1328 Hazardous Waste Treatment Units
 Rev. 3, 12/02/94
 Page 24 of 28



325 Building - Basement Floor





Floor Plan for the Shielded Analytical Laboratory (SAL)

325 HAZARDOUS WASTE TREATMENT UNITS



325 Hazardous Waste Treatment Unit

94091031-6CN
(PHOTO TAKEN 1994)



46°22'01"
119°16'34"

325 Shielded Analytical Laboratory

92100137-3CN
(PHOTO TAKEN 1992)