

4142

**RCRA PART B PERMIT APPLICATION SECTION  
A: PART A PERMIT APPLICATION (MODIFIED)  
VOLUME 1 OF 13**

**03/01/93**

**DOE-FN/EPA  
150  
REPORT**

# RCRA PART B PERMIT APPLICATION

4142



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**SECTION A: PART A PERMIT APPLICATION (MODIFIED)**

**(Volume 1 of 13)**

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## **Fernald Environmental Management Project**

U.S. EPA Identification No. OH6890008976  
Ohio EPA Permit No. 05-31-0681







ITEM VII: OPERATOR INFORMATION (Continued)

## NAME OF CO-OPERATOR

Fernald Environmental Restoration Management Corporation (FERMCO)

## STREET OR P.O. BOX

P.O. BOX 398704

## CITY OR TOWN

Cincinnati

## STATE

Ohio

## ZIP CODE

45239-8704

## TELEPHONE NUMBER

(513) 738-6200

EPA I.D. Number (enter from page 1)

Secondary ID Number (enter from page 1)

0 | H | 6 | 8 | 9 | 0 | 0 | 0 | 8 | 9 | 7 | 6

**XI. Nature of Business (provide a brief description)**

The Fernald Environmental Management Project (FEMP) is a large scale integrated production facility which formerly produced uranium metal used in the fabrication of fuel cores for nuclear reactors operated by the United States Department of Energy. Current activities include waste management operations, remedial investigation, environmental response actions, nuclear materials disposition, new construction, and miscellaneous operations (e.g., wastewater treatment).

**XII. Process - Codes and Design 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. Twelve lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. 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 in Item XIII.
- B. **PROCESS DESIGN CAPACITY** - For each code entered in column A, enter the capacity of the process.
  - 1. **AMOUNT** - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process unit.
  - 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.
- C. **PROCESS TOTAL NUMBER OF UNITS** - Enter the total number of units used with the corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	UNIT OF MEASURE	UNIT OF MEASURE CODE
D79	<u>DISPOSAL:</u> INJECTION WELL	GALLONS; LITERS; GALLONS PER DAY; OR LITERS PER DAY	GALLONS .....	G
D80	LANDFILL	ACRE- FEET OR HECTARE- METER	GALLONS PER HOUR .....	E
D81	LAND APPLICATION	ACRES OR HECTARES	GALLONS PER DAY .....	U
D82	OCEAN DISPOSAL	GALLONS PER DAY OR LITERS PER DAY	LITERS .....	L
D83	SURFACE IMPOUNDMENT	GALLONS OR LITERS	LITERS PER HOUR .....	H
S01	<u>STORAGE:</u> CONTAINER (barrel, drum, etc.)	GALLONS OR LITERS	LITERS PER DAY .....	V
S02	TANK	GALLONS OR LITERS	SHORT TONS PER HOUR .....	D
S03	WASTE PILE	CUBIC YARDS OR CUBIC METERS	METRIC TONS PER HOUR .....	W
S04	SURFACE IMPOUNDMENT	GALLONS OR LITERS	SHORT TONS PER DAY .....	N
T01	<u>TREATMENT:</u> TANK	GALLONS PER DAY OR LITERS PER DAY	METRIC TONS PER DAY .....	S
T02	SURFACE IMPOUNDMENT	GALLONS PER DAY OR LITERS PER DAY	POUNDS PER HOUR .....	J
T03	INCINERATOR	SHORT TONS PER HOUR; METRIC TONS PER HOUR; GALLONS PER HOUR; LITERS PER HOUR; OR BTU'S PER HOUR	KILOGRAMS PER HOUR .....	R
T04	OTHER TREATMENT <small>(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundment or incinerators. Describe the processes in the space provided in item XIII.)</small>	GALLONS PER DAY; LITERS PER DAY; POUNDS PER HOUR; SHORT TONS PER HOUR; KILOGRAMS PER HOUR; METRIC TONS PER DAY; METRIC TONS PER HOUR; OR SHORT TONS PER DAY	CUBIC YARDS .....	Y
			CUBIC METERS .....	C
			ACRES .....	B
			ACRE- FEET .....	A
			HECTARES .....	O
			HECTARE- METER .....	F
			BTU's PER HOUR .....	K

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)

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0 H 6 8 9 0 0 0 8 9 7 6

**XII. Process - Codes and Design Capacities (continued)**

EXAMPLE FOR COMPLETING ITEM XII (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.

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Line Number	A. PROCESS CODE (from list above)			B. PROCESS DESIGN CAPACITY		C. PROCESS TOTAL NUMBER OF UNITS	FOR OFFICIAL USE ONLY					
				1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)							
X 1	S	0	2	600	G	0	0	2				
X 2	T	0	3	20	E	0	0	1				
1	S	0	1	11,689,095	G	0	0	7				
2												
3												
4												
5												
6												
7												
8												
9												
1 0												
1 1												
1 2												

NOTE: If you need to list more than 12 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for additional treatment processes in Item XIII.

**XIII. Additional Treatment Processes (follow instructions from Item XII)**

Line Number (enter numbers in sequence with Item XII)	A. PROCESS CODE			B. TREATMENT PROCESS DESIGN CAPACITY		C. PROCESS TOTAL NUMBER OF UNITS	D. DESCRIPTION OF PROCESS
				1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)		
	T	0	4				
	T	0	4				
	T	0	4				
	T	0	4				

<b>EPA I.D. Number (enter from page 1)</b>	<b>Secondary ID Number (enter from page 1)</b>																								
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%;">0</td><td style="width: 12.5%;">H</td><td style="width: 12.5%;">6</td><td style="width: 12.5%;">8</td><td style="width: 12.5%;">9</td><td style="width: 12.5%;">0</td><td style="width: 12.5%;">0</td><td style="width: 12.5%;">0</td><td style="width: 12.5%;">8</td><td style="width: 12.5%;">9</td><td style="width: 12.5%;">7</td><td style="width: 12.5%;">6</td> </tr> </table>	0	H	6	8	9	0	0	0	8	9	7	6	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; height: 20px;"></td><td style="width: 12.5%;"></td><td style="width: 12.5%;"></td> </tr> </table>												
0	H	6	8	9	0	0	0	8	9	7	6														

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**XIV. Description of Hazardous Wastes**

- A. EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous 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 hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item XII A, on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item XII A, on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that processes that characteristic or toxic contaminant.

**NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:**

1. Enter the first two as described above.
2. Enter "000" in the extreme right box of Item XIV-D(1).
3. Enter in the space provided on page 7, Item XIV-E, 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 (D.(2)).

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

1. Select one of the EPA Hazardous 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 EPA Hazardous 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 EPA Hazardous Waste Number that can be used to describe the hazardous waste.

**EXAMPLE FOR COMPLETING ITEM XIV (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 Number	A. EPA HAZARD WASTE NO. (enter code)					B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESS															
								(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																			Included With Above



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EPA I.D. Number (enter from page 1)										Secondary ID Number (enter from page 1)													
O	H	6	8	9	0	0	0	8	9	7	6												
XIV. Description of Hazardous Wastes (continued)																							
Line Number	A. EPA HAZARDOUS 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	11000	P	S	0	1														
2	D	0	0	6																		INCLUDED IN ABOVE	
3	D	0	0	7																		INCLUDED IN ABOVE	
4	D	0	0	8																		INCLUDED IN ABOVE	
5	D	0	0	9																		INCLUDED IN ABOVE	
6	D	0	1	1																		INCLUDED IN ABOVE	
7	D	0	3	5																		INCLUDED IN ABOVE	
8	F	0	0	3																		INCLUDED IN ABOVE	
9	F	0	0	5																		INCLUDED IN ABOVE	
10	D	0	0	1	10000	P	S	0	1														
11	D	0	0	6																		INCLUDED IN ABOVE	
12	D	0	0	7																		INCLUDED IN ABOVE	
13	D	0	0	8																		INCLUDED IN ABOVE	
14	F	0	0	3																		INCLUDED IN ABOVE	
15	D	0	0	1	10500	P	S	0	1														
16	D	0	0	6																		INCLUDED IN ABOVE	
17	D	0	0	8																		INCLUDED IN ABOVE	
18	D	0	0	9																		INCLUDED IN ABOVE	
19	D	0	3	9																		INCLUDED IN ABOVE	
20	F	0	0	1																		INCLUDED IN ABOVE	
21	F	0	0	2																		INCLUDED IN ABOVE	
22	D	0	0	1	10500	P	S	0	1														
23	D	0	0	6																		INCLUDED IN ABOVE	
24	D	0	0	8																		INCLUDED IN ABOVE	
25	F	0	0	1																		INCLUDED IN ABOVE	
26	F	0	0	2																		INCLUDED IN ABOVE	
27	D	0	0	1	10500	P	S	0	1														
28	D	0	0	6																		INCLUDED IN ABOVE	
29	F	0	0	1																		INCLUDED IN ABOVE	
30	F	0	0	2																		INCLUDED IN ABOVE	
31	D	0	0	1	10500	P	S	0	1														
32	D	0	0	7																		INCLUDED IN ABOVE	
33					Blank																	Left Blank	

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EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
O H 6 8 9 0 0 0 8 9 7 6	

IV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS 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	16500	P	S	0	1												
2	D	0	0	7																	INCLUDED IN ABOVE
3	D	0	0	8																	INCLUDED IN ABOVE
4	D	0	0	1	10500	P	S	0	1												
5	D	0	0	7																	INCLUDED IN ABOVE
6	D	0	0	8																	INCLUDED IN ABOVE
7	D	0	1	0																	INCLUDED IN ABOVE
8	D	0	1	8																	INCLUDED IN ABOVE
9	F	0	0	2																	INCLUDED IN ABOVE
10	D	0	0	1	11500	P	S	0	1												
11	D	0	0	7																	INCLUDED IN ABOVE
12	D	0	0	8																	INCLUDED IN ABOVE
13	F	0	0	1																	INCLUDED IN ABOVE
14	F	0	0	2																	INCLUDED IN ABOVE
15	F	0	0	3																	INCLUDED IN ABOVE
16	F	0	0	5																	INCLUDED IN ABOVE
17	D	0	0	1	10500	P	S	0	1												
18	D	0	0	7																	INCLUDED IN ABOVE
19	F	0	0	3																	INCLUDED IN ABOVE
20	D	0	0	1	20000	P	S	0	1												
21	D	0	0	8																	INCLUDED IN ABOVE
22	D	0	0	1	15000	P	S	0	1												
23	D	0	0	8																	INCLUDED IN ABOVE
24	D	0	1	8																	INCLUDED IN ABOVE
25	D	0	0	1	17000	P	S	0	1												
26	D	0	0	8																	INCLUDED IN ABOVE
27	D	0	1	8																	INCLUDED IN ABOVE
28	D	0	1	9																	INCLUDED IN ABOVE
29	D	0	3	9																	INCLUDED IN ABOVE
30	D	0	4	0																	INCLUDED IN ABOVE
31	F	0	0	2																	INCLUDED IN ABOVE
32	F	0	0	3																	INCLUDED IN ABOVE
33					Blank																Left Blank

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EPA I.D. Number (enter from page 1)										Secondary ID Number (enter from page 1)													
O	H	6	8	9	0	0	0	8	9	7	6												
XIV. Description of Hazardous Wastes (continued)																							
Line Number	A. EPA HAZARDOUS 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	10000	P	S	0	1														
2	D	0	0	8																		INCLUDED IN ABOVE	
3	D	0	1	8																		INCLUDED IN ABOVE	
4	D	0	3	5																		INCLUDED IN ABOVE	
5	D	0	0	1	11500	P	S	0	1														
6	D	0	0	8																		INCLUDED IN ABOVE	
7	D	0	1	9																		INCLUDED IN ABOVE	
8	D	0	3	9																		INCLUDED IN ABOVE	
9	D	0	4	0																		INCLUDED IN ABOVE	
10	F	0	0	2																		INCLUDED IN ABOVE	
11	F	0	0	3																		INCLUDED IN ABOVE	
12	F	0	0	5																		INCLUDED IN ABOVE	
13	D	0	0	1	10500	P	S	0	1														
14	D	0	0	8																		INCLUDED IN ABOVE	
15	D	0	3	5																		INCLUDED IN ABOVE	
16	F	0	0	5																		INCLUDED IN ABOVE	
17	D	0	0	1	10500	P	S	0	1														
18	D	0	0	8																		INCLUDED IN ABOVE	
19	F	0	0	1																		INCLUDED IN ABOVE	
20	D	0	0	1	10500	P	S	0	1														
21	D	0	0	8																		INCLUDED IN ABOVE	
22	F	0	0	1																		INCLUDED IN ABOVE	
23	F	0	0	2																		INCLUDED IN ABOVE	
24	D	0	0	1	10000	P	S	0	1														
25	D	0	0	8																		INCLUDED IN ABOVE	
26	F	0	0	3																		INCLUDED IN ABOVE	
27	F	0	0	5																		INCLUDED IN ABOVE	
28	D	0	0	1	10600	P	S	0	1														
29	D	0	1	0																		INCLUDED IN ABOVE	
30	D	0	0	1	75000	P	S	0	1														
31	D	0	1	0																		INCLUDED IN ABOVE	
32	F	0	0	2																		INCLUDED IN ABOVE	
33					Blank																	Left Blank	

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EPA I.D. Number (enter from page 1)							Secondary ID Number (enter from page 1)															
O	H	6	8	9	0	0	0	0	8	9	7	6										
XIV. Description of Hazardous Wastes (continued)																						
Line Number	A. EPA HAZARDOUS 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	20000	P	S	0	1													
2	D	0	1	8																	INCLUDED IN ABOVE	
3	D	0	0	1	10000	P	S	0	1													
4	D	0	1	8																	INCLUDED IN ABOVE	
5	D	0	2	6																	INCLUDED IN ABOVE	
6	D	0	0	1	10500	P	S	0	1													
7	D	0	1	8																	INCLUDED IN ABOVE	
8	U	0	1	9																	INCLUDED IN ABOVE	
9	D	0	0	1	150000	P	S	0	1													
10	D	0	1	9																	INCLUDED IN ABOVE	
11	D	0	2	2																	INCLUDED IN ABOVE	
12	D	0	2	8																	INCLUDED IN ABOVE	
13	D	0	2	9																	INCLUDED IN ABOVE	
14	D	0	3	5																	INCLUDED IN ABOVE	
15	D	0	3	9																	INCLUDED IN ABOVE	
16	D	0	4	0																	INCLUDED IN ABOVE	
17	F	0	0	1																	INCLUDED IN ABOVE	
18	F	0	0	3																	INCLUDED IN ABOVE	
19	F	0	0	5																	INCLUDED IN ABOVE	
20	D	0	0	1	10000	P	S	0	1													
21	D	0	1	9																	INCLUDED IN ABOVE	
22	D	0	2	2																	INCLUDED IN ABOVE	
23	D	0	3	9																	INCLUDED IN ABOVE	
24	F	0	0	2																	INCLUDED IN ABOVE	
25	F	0	0	3																	INCLUDED IN ABOVE	
26	D	0	0	1	44500	P	S	0	1													
27	D	0	1	9																	INCLUDED IN ABOVE	
28	D	0	3	9																	INCLUDED IN ABOVE	
29	D	0	4	0																	INCLUDED IN ABOVE	
30	F	0	0	1																	INCLUDED IN ABOVE	
31	F	0	0	3																	INCLUDED IN ABOVE	
32	F	0	0	5																	INCLUDED IN ABOVE	
33					Blank																Left Blank	





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O	H	6	8	9	0	0	0	8	9	7	6												
XIV. Description of Hazardous Wastes (continued)																							
Line Number	A. EPA HAZARDOUS 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	2	10000	P	S	0	1														
2	D	0	0	6																		INCLUDED IN ABOVE	
3	D	0	0	2	11000	P	S	0	1														
4	D	0	0	6																		INCLUDED IN ABOVE	
5	D	0	0	9																		INCLUDED IN ABOVE	
6	D	0	0	2	25000	P	S	0	1														
7	D	0	0	7																		INCLUDED IN ABOVE	
8	D	0	0	2	15000	P	S	0	1														
9	D	0	0	7																		INCLUDED IN ABOVE	
10	D	0	0	8																		INCLUDED IN ABOVE	
11	D	0	0	2	84000	P	S	0	1														
12	D	0	0	7																		INCLUDED IN ABOVE	
13	D	0	0	8																		INCLUDED IN ABOVE	
14	D	0	1	9																		INCLUDED IN ABOVE	
15	D	0	2	8																		INCLUDED IN ABOVE	
16	D	0	3	9																		INCLUDED IN ABOVE	
17	F	0	0	1																		INCLUDED IN ABOVE	
18	F	0	0	2																		INCLUDED IN ABOVE	
19	D	0	0	2	10000	P	S	0	1														
20	D	0	0	7																		INCLUDED IN ABOVE	
21	D	0	0	9																		INCLUDED IN ABOVE	
22	D	0	1	1																		INCLUDED IN ABOVE	
23	D	0	0	2	10000	P	S	0	1														
24	D	0	0	8																		INCLUDED IN ABOVE	
25	D	0	0	2	84000	P	S	0	1														
26	D	0	0	8																		INCLUDED IN ABOVE	
27	D	0	0	9																		INCLUDED IN ABOVE	
28	D	0	1	0																		INCLUDED IN ABOVE	
29	F	0	0	1																		INCLUDED IN ABOVE	
30	F	0	0	2																		INCLUDED IN ABOVE	
31	F	0	0	5																		INCLUDED IN ABOVE	
32					Blank																	Left Blank	
33					Blank																	Left Blank	

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EPA I.D. Number (enter from page 1)										Secondary ID Number (enter from page 1)													
O	H	6	8	9	0	0	0	8	9	7	6												
XIV. Description of Hazardous Wastes (continued)																							
Line Number	A. EPA HAZARDOUS 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	2	80000	P	S	0	1														
2	D	0	0	8																		INCLUDED IN ABOVE	
3	D	0	1	0																		INCLUDED IN ABOVE	
4	D	0	0	2	10000	P	S	0	1														
5	D	0	0	9																		INCLUDED IN ABOVE	
6	D	0	0	2	10000	P	S	0	1														
7	D	0	0	9																		INCLUDED IN ABOVE	
8	U	1	5	1																		INCLUDED IN ABOVE	
9	D	0	0	2	10500	P	S	0	1														
10	D	0	1	1																		INCLUDED IN ABOVE	
11	D	0	0	2	50000	P	S	0	1														
12	U	1	3	4																		INCLUDED IN ABOVE	
13	D	0	0	3	11000	P	S	0	1														
14	D	0	0	3	11000	P	S	0	1														
15	F	0	0	1																		INCLUDED IN ABOVE	
16	U	0	5	6																		INCLUDED IN ABOVE	
17	D	0	0	4	1200000	P	S	0	1														
18	D	0	0	4	11000	P	S	0	1														
19	D	0	0	5																		INCLUDED IN ABOVE	
20	D	0	0	6																		INCLUDED IN ABOVE	
21	D	0	0	7																		INCLUDED IN ABOVE	
22	D	0	0	4	12000	P	S	0	1														
23	D	0	0	5																		INCLUDED IN ABOVE	
24	D	0	0	6																		INCLUDED IN ABOVE	
25	D	0	0	7																		INCLUDED IN ABOVE	
26	D	0	0	8																		INCLUDED IN ABOVE	
27					Blank																	Left Blank	
28					Blank																	Left Blank	
29					Blank																	Left Blank	
30					Blank																	Left Blank	
31					Blank																	Left Blank	
32					Blank																	Left Blank	
33					Blank																	Left Blank	

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

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EPA I.D. Number (enter from page 1)										Secondary ID Number (enter from page 1)													
O	H	6	8	9	0	0	0	8	9	7	6												
IV. Description of Hazardous Wastes (continued)																							
Line Number	A. EPA HAZARDOUS 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	4	10500	P	S	0	1														
2	D	0	0	5																		INCLUDED IN ABOVE	
3	D	0	0	6																		INCLUDED IN ABOVE	
4	D	0	0	7																		INCLUDED IN ABOVE	
5	D	0	0	8																		INCLUDED IN ABOVE	
6	D	0	1	0																		INCLUDED IN ABOVE	
7	D	0	1	8																		INCLUDED IN ABOVE	
8	F	0	0	2																		INCLUDED IN ABOVE	
9	D	0	0	4	11000	P	S	0	1														
10	D	0	0	5																		INCLUDED IN ABOVE	
11	D	0	0	6																		INCLUDED IN ABOVE	
12	D	0	0	7																		INCLUDED IN ABOVE	
13	D	0	0	8																		INCLUDED IN ABOVE	
14	D	0	1	1																		INCLUDED IN ABOVE	
15	D	0	0	4	10500	P	S	0	1														
16	D	0	0	5																		INCLUDED IN ABOVE	
17	D	0	0	6																		INCLUDED IN ABOVE	
18	D	0	0	7																		INCLUDED IN ABOVE	
19	D	0	0	8																		INCLUDED IN ABOVE	
20	D	0	2	2																		INCLUDED IN ABOVE	
21	F	0	0	2																		INCLUDED IN ABOVE	
22	F	0	0	3																		INCLUDED IN ABOVE	
23	D	0	0	4	17000	P	S	0	1														
24	D	0	0	5																		INCLUDED IN ABOVE	
25	D	0	0	7																		INCLUDED IN ABOVE	
26	D	0	0	8																		INCLUDED IN ABOVE	
27	D	0	1	0																		INCLUDED IN ABOVE	
28	D	0	1	1																		INCLUDED IN ABOVE	
29					Blank																	Left Blank	
30					Blank																	Left Blank	
31					Blank																	Left Blank	
32					Blank																	Left Blank	
33					Blank																	Left Blank	

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1)										Secondary ID Number (enter from page 1)													
O	H	6	8	9	0	0	0	8	9	7	6												
XIV. Description of Hazardous Wastes (continued)																							
Line Number	A. EPA HAZARDOUS 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	4	10000	P	S	0	1														
2	D	0	0	5																		INCLUDED IN ABOVE	
3	D	0	0	8																		INCLUDED IN ABOVE	
4	D	0	2	2																		INCLUDED IN ABOVE	
5	F	0	0	2																		INCLUDED IN ABOVE	
6	F	0	0	3																		INCLUDED IN ABOVE	
7	D	0	0	4	12500	P	S	0	1														
8	D	0	0	6																		INCLUDED IN ABOVE	
9	D	0	0	7																		INCLUDED IN ABOVE	
10	D	0	0	8																		INCLUDED IN ABOVE	
11	D	0	0	4	110000	P	S	0	2														
12	D	0	0	6																		INCLUDED IN ABOVE	
13	D	0	0	7																		INCLUDED IN ABOVE	
14	D	0	0	8																		INCLUDED IN ABOVE	
15	D	0	1	0																		INCLUDED IN ABOVE	
16	D	0	0	4	82500	P	S	0	1														
17	D	0	0	6																		INCLUDED IN ABOVE	
18	D	0	0	8																		INCLUDED IN ABOVE	
19	D	0	0	4	15000	P	S	0	1														
20	D	0	0	7																		INCLUDED IN ABOVE	
21	D	0	0	8																		INCLUDED IN ABOVE	
22	D	0	1	0																		INCLUDED IN ABOVE	
23	D	0	0	4	16500	P	S	0	1														
24	D	0	0	8																		INCLUDED IN ABOVE	
25	D	0	0	4	36000	P	S	0	1														
26	D	0	0	8																		INCLUDED IN ABOVE	
27	D	0	1	0																		INCLUDED IN ABOVE	
28	D	0	0	4	11500	P	S	0	1														
29	D	0	0	8																		INCLUDED IN ABOVE	
30	D	0	1	1																		INCLUDED IN ABOVE	
31					Blank																	Left Blank	
32					Blank																	Left Blank	
33					Blank																	Left Blank	

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EPA I.D. Number (enter from page 1)										Secondary ID Number (enter from page 1)											
O	H	6	8	9	0	0	0	8	9	7	6										
XIV. Description of Hazardous Wastes (continued)																					
Line Number	A. EPA HAZARDOUS 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	4	10100	P	S	0	1												
2	D	0	0	8																	INCLUDED IN ABOVE
3	D	0	1	1																	INCLUDED IN ABOVE
4	F	0	0	5																	INCLUDED IN ABOVE
5	D	0	0	4	11000	P	S	0	1												
6	D	0	1	1																	INCLUDED IN ABOVE
7	D	0	0	4	11500	P	S	0	1												
8	D	0	1	9																	INCLUDED IN ABOVE
9	D	0	3	9																	INCLUDED IN ABOVE
10	F	0	0	2																	INCLUDED IN ABOVE
11	D	0	0	5	238000	P	S	0	1												
12	D	0	0	5	19000	P	S	0	1												
13	D	0	0	6																	INCLUDED IN ABOVE
14	D	0	0	7																	INCLUDED IN ABOVE
15	D	0	0	8																	INCLUDED IN ABOVE
16	D	0	0	5	12500	P	S	0	1												
17	D	0	0	6																	INCLUDED IN ABOVE
18	D	0	0	7																	INCLUDED IN ABOVE
19	D	0	0	8																	INCLUDED IN ABOVE
20	D	0	0	9																	INCLUDED IN ABOVE
21	D	0	0	5	10000	P	S	0	1												
22	D	0	0	6																	INCLUDED IN ABOVE
23	D	0	0	7																	INCLUDED IN ABOVE
24	D	0	0	8																	INCLUDED IN ABOVE
25	F	0	0	3																	INCLUDED IN ABOVE
26	D	0	0	5	10500	P	S	0	1												
27	D	0	0	6																	INCLUDED IN ABOVE
28	D	0	0	8																	INCLUDED IN ABOVE
29	F	0	0	1																	INCLUDED IN ABOVE
30	D	0	0	5	25000	P	S	0	1												
31	D	0	0	7																	INCLUDED IN ABOVE
32	D	0	0	5	213000	P	S	0	1												
33	D	0	0	8																	INCLUDED IN ABOVE

414

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
O H 6 8 9 0 0 0 8 9 7 6	

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS 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	5	16500	P	S	0	1													
2	D	0	0	8																		INCLUDED IN ABOVE
3	F	0	0	2																		INCLUDED IN ABOVE
4	D	0	0	5	10000	P	S	0	1													
5	D	0	1	8																		INCLUDED IN ABOVE
6	D	0	0	6	11000	P	S	0	1													
7	D	0	0	6	10500	P	S	0	1													
8	D	0	0	7																		INCLUDED IN ABOVE
9	D	0	0	6	11000	P	S	0	1													
10	D	0	0	7																		INCLUDED IN ABOVE
11	D	0	0	8																		INCLUDED IN ABOVE
12	D	0	0	6	10000	P	S	0	1													
13	D	0	0	7																		INCLUDED IN ABOVE
14	D	0	0	8																		INCLUDED IN ABOVE
15	D	0	1	0																		INCLUDED IN ABOVE
16	F	0	0	5																		INCLUDED IN ABOVE
17	D	0	0	6	10200	P	S	0	1													
18	D	0	0	7																		INCLUDED IN ABOVE
19	D	0	0	8																		INCLUDED IN ABOVE
20	D	0	1	8																		INCLUDED IN ABOVE
21	D	0	4	0																		INCLUDED IN ABOVE
22	F	0	0	2																		INCLUDED IN ABOVE
23	F	0	0	5																		INCLUDED IN ABOVE
24	D	0	0	6	14000	P	S	0	1													
25	D	0	0	7																		INCLUDED IN ABOVE
26	D	0	0	8																		INCLUDED IN ABOVE
27	D	0	1	9																		INCLUDED IN ABOVE
28	D	0	2	9																		INCLUDED IN ABOVE
29	D	0	4	0																		INCLUDED IN ABOVE
30	F	0	0	1																		INCLUDED IN ABOVE
31	D	0	0	6	12500	P	S	0	1													
32	D	0	0	8																		INCLUDED IN ABOVE
33					Blank																	Left Blank

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

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EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)																								
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%;">O</td><td style="width: 12.5%;">H</td><td style="width: 12.5%;">6</td><td style="width: 12.5%;">8</td><td style="width: 12.5%;">9</td><td style="width: 12.5%;">0</td><td style="width: 12.5%;">0</td><td style="width: 12.5%;">0</td><td style="width: 12.5%;">8</td><td style="width: 12.5%;">9</td><td style="width: 12.5%;">7</td><td style="width: 12.5%;">6</td> </tr> </table>	O	H	6	8	9	0	0	0	8	9	7	6	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%;"></td><td style="width: 12.5%;"></td> </tr> </table>												
O	H	6	8	9	0	0	0	8	9	7	6														

KIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS 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	6	12500	P	S	0	1												
2	D	0	0	8																	INCLUDED IN ABOVE
3	D	0	1	8																	INCLUDED IN ABOVE
4	D	0	1	9																	INCLUDED IN ABOVE
5	D	0	2	8																	INCLUDED IN ABOVE
6	D	0	2	9																	INCLUDED IN ABOVE
7	D	0	3	9																	INCLUDED IN ABOVE
8	D	0	4	0																	INCLUDED IN ABOVE
9	F	0	0	2																	INCLUDED IN ABOVE
10	F	0	0	5																	INCLUDED IN ABOVE
11	D	0	0	6	10000	P	S	0	1												
12	D	0	0	9																	INCLUDED IN ABOVE
13	D	0	0	6	10000	P	S	0	1												
14	D	0	0	9																	INCLUDED IN ABOVE
15	D	0	1	0																	INCLUDED IN ABOVE
16	D	0	1	1																	INCLUDED IN ABOVE
17	D	0	1	8																	INCLUDED IN ABOVE
18	D	0	3	9																	INCLUDED IN ABOVE
19	D	0	4	0																	INCLUDED IN ABOVE
20	D	0	0	7	100000	P	S	0	1												
21	D	0	0	7	13000	P	S	0	1												
22	D	0	0	8																	INCLUDED IN ABOVE
23	D	0	0	7	35000	P	S	0	1												
24	D	0	0	8																	INCLUDED IN ABOVE
25	D	0	1	0																	INCLUDED IN ABOVE
26	D	0	0	7	10500	P	S	0	1												
27	D	0	1	0																	INCLUDED IN ABOVE
28	D	0	0	7	10100	P	S	0	1												
29	D	0	1	1																	INCLUDED IN ABOVE
30					Blank																Left Blank
31					Blank																Left Blank
32					Blank																Left Blank
33					Blank																Left Blank

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EPA I.D. Number (enter from page 1)										Secondary ID Number (enter from page 1)													
O	H	6	8	9	0	0	0	8	9	7	6												
IV. Description of Hazardous Wastes (continued)												D. PROCESSES											
Line Number	A. EPA HAZARDOUS 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	D	0	0	7	18000	P	S	0	1														
2	D	0	1	8																		INCLUDED IN ABOVE	
3	D	0	1	9																		INCLUDED IN ABOVE	
4	D	0	2	1																		INCLUDED IN ABOVE	
5	D	0	2	9																		INCLUDED IN ABOVE	
6	D	0	3	9																		INCLUDED IN ABOVE	
7	D	0	4	0																		INCLUDED IN ABOVE	
8	F	0	0	1																		INCLUDED IN ABOVE	
9	D	0	0	7	11000	P	S	0	1														
10	F	0	0	1																		INCLUDED IN ABOVE	
11	D	0	0	7	10000	P	S	0	1														
12	F	0	0	1																		INCLUDED IN ABOVE	
13	F	0	0	2																		INCLUDED IN ABOVE	
14	D	0	0	7	12500	P	S	0	1														
15	F	0	0	2																		INCLUDED IN ABOVE	
16	D	0	0	8	820000	P	S	0	1														
17	D	0	0	8	10000	P	S	0	1														
18	D	0	0	9																		INCLUDED IN ABOVE	
19	D	0	1	0																		INCLUDED IN ABOVE	
20	D	0	0	8	11000	P	S	0	1														
21	D	0	0	9																		INCLUDED IN ABOVE	
22	D	0	3	9																		INCLUDED IN ABOVE	
23	F	0	0	1																		INCLUDED IN ABOVE	
24	D	0	0	8	10000	P	S	0	1														
25	D	0	0	9																		INCLUDED IN ABOVE	
26	D	0	3	9																		INCLUDED IN ABOVE	
27	F	0	0	2																		INCLUDED IN ABOVE	
28	D	0	0	8	13000	P	S	0	1														
29	D	0	1	0																		INCLUDED IN ABOVE	
30	D	0	0	8	10000	P	S	0	1														
31	D	0	1	0																		INCLUDED IN ABOVE	
32	F	0	0	2																		INCLUDED IN ABOVE	
33					Blank																	Left Blank	

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EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
O H 6 8 9 0 0 0 8 9 7 6	

IV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS 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 8	11000	P	S	0	1											
2	D 0 1 1											INCLUDED IN ABOVE					
3	F 0 0 1											INCLUDED IN ABOVE					
4	D 0 0 8	20000	P	S	0	1											
5	D 0 1 8											INCLUDED IN ABOVE					
6	D 0 0 8	13000	P	S	0	1											
7	D 0 1 8											INCLUDED IN ABOVE					
8	D 0 1 9											INCLUDED IN ABOVE					
9	D 0 2 8											INCLUDED IN ABOVE					
10	D 0 2 9											INCLUDED IN ABOVE					
11	D 0 3 9											INCLUDED IN ABOVE					
12	D 0 4 0											INCLUDED IN ABOVE					
13	F 0 0 2											INCLUDED IN ABOVE					
14	D 0 0 8	11500	P	S	0	1											
15	D 0 1 8											INCLUDED IN ABOVE					
16	F 0 0 1											INCLUDED IN ABOVE					
17	F 0 0 2											INCLUDED IN ABOVE					
18	D 0 0 8	13000	P	S	0	1											
19	D 0 1 8											INCLUDED IN ABOVE					
20	F 0 0 2											INCLUDED IN ABOVE					
21	D 0 0 8	11000	P	S	0	1											
22	D 0 3 9											INCLUDED IN ABOVE					
23	D 0 4 0											INCLUDED IN ABOVE					
24	F 0 0 1											INCLUDED IN ABOVE					
25	D 0 0 8	26000	P	S	0	1											
26	F 0 0 1											INCLUDED IN ABOVE					
27	D 0 0 8	11000	P	S	0	1											
28	F 0 0 1											INCLUDED IN ABOVE					
29	F 0 0 2											INCLUDED IN ABOVE					
30	D 0 0 8	11000	P	S	0	1											
31	F 0 0 1											INCLUDED IN ABOVE					
32	F 0 0 2											INCLUDED IN ABOVE					
33	F 0 0 3											INCLUDED IN ABOVE					





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EPA I.D. Number (enter from page 1)										Secondary ID Number (enter from page 1)													
O	H	6	8	9	0	0	0	8	9	7	6												

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS 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	9	10500	P	S	0	1													
2	D	0	3	9																		INCLUDED IN ABOVE
3	F	0	0	2																		INCLUDED IN ABOVE
4	D	0	3	7	10000	P	S	0	1													
5	D	0	3	9	20000	P	S	0	1													
6	D	0	3	9	400000	P	S	0	1													
7	D	0	4	0																		INCLUDED IN ABOVE
8	D	0	4	3																		INCLUDED IN ABOVE
9	F	0	0	2																		INCLUDED IN ABOVE
10	D	0	3	9	18500	P	S	0	1													
11	D	0	4	0																		INCLUDED IN ABOVE
12	F	0	0	1																		INCLUDED IN ABOVE
13	D	0	3	9	38000	P	S	0	1													
14	D	0	4	0																		INCLUDED IN ABOVE
15	F	0	0	2																		INCLUDED IN ABOVE
16	D	0	3	9	28000	P	S	0	1													
17	F	0	0	2																		INCLUDED IN ABOVE
18	D	0	3	9	10500	P	S	0	1													
19	F	0	0	3																		INCLUDED IN ABOVE
20	F	0	0	5																		INCLUDED IN ABOVE
21	D	0	4	0	75000	P	S	0	1													
22	F	0	0	1																		INCLUDED IN ABOVE
23	F	0	0	2																		INCLUDED IN ABOVE
24	F	0	0	5																		INCLUDED IN ABOVE
25	F	0	0	1	500000	P	S	0	1													
26	F	0	0	1	680000	P	S	0	1													
27	F	0	0	2																		INCLUDED IN ABOVE
28	F	0	0	1	12000	P	S	0	1													
29	F	0	0	2																		INCLUDED IN ABOVE
30	F	0	0	3																		INCLUDED IN ABOVE
31	F	0	0	1	45000	P	S	0	1													
32	F	0	0	2																		INCLUDED IN ABOVE
33	F	0	0	5																		INCLUDED IN ABOVE





ITEM XV: MAPS

There are fifty-two (52) RCRA Hazardous Waste Management Units (HWMUs) at the Fernald Environmental Management Project (FEMP). The HWMU #2, Parts Cleaner in Welding Shop (Bldg 12), has been removed as requested in DOE letter # 997-92, dated 2-28-92. The HWMU's are identified on Figure A-1. The type of HWMU, process code, status, and dimensions are provided on Table A-1.

**Drinking Wells**

The only drinking water wells within one-quarter mile of the production area are those that supply the FEMP. They are shown on Figure A-1 as Production Wells #1 through #3. The drinking water wells within one-quarter mile of the property boundaries are shown on Figure A-2.

**Outfall Locations**

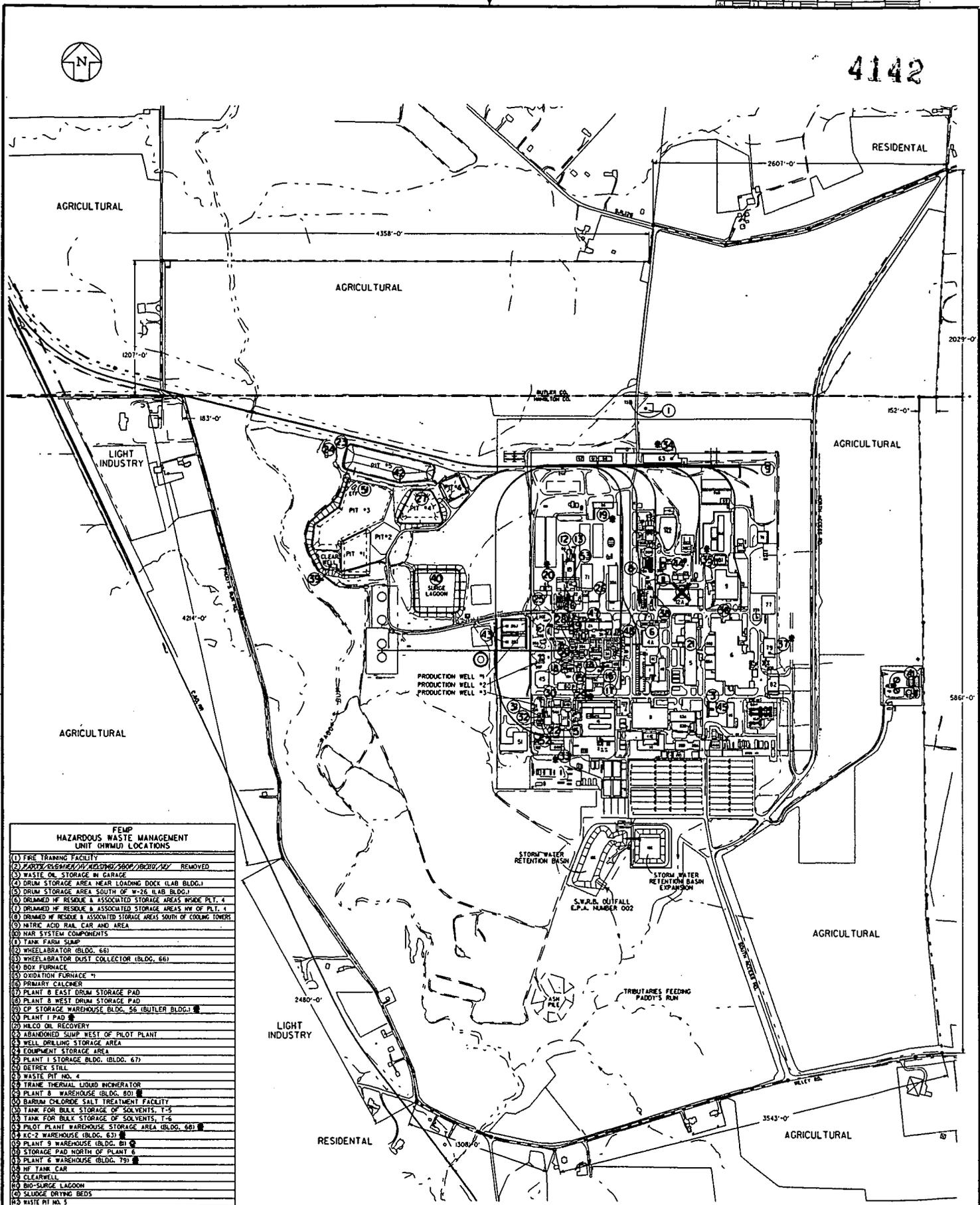
<u>Outfall No.</u>	<u>Latitude</u>			<u>Longitude</u>			<u>Receiving Water</u>
	(Deg	Min	Sec)	(Deg	Min	Sec)	
001	39	17	53	84	40	48	Great Miami River
002	39	17	36	84	41	21	Storm Sewer Outfall Ditch to Paddy's Run

**XVI: FACILITY DRAWING**

The Fernald Environmental Management Project is located on a 1,050 acre Federal Reservation in Hamilton and Butler Counties, Ohio. It is approximately 20 miles northwest of downtown Cincinnati, midway between Ross and Fernald, Ohio.

Due to the size of the FEMP, two maps have been provided to indicate the Hazardous Waste Management Units and their boundaries. Figure A-1 shows the location of each HWMU and Figure A-2 provides a general overview of the topographic region.





- FEMP  
HAZARDOUS WASTE MANAGEMENT  
UNIT (HWMU) LOCATIONS**
- (1) FIRE TRAINING FACILITY
  - (2) ~~PAINT BLENDER (W-26) BLDG. 107~~ REMOVED
  - (3) WASTE OIL STORAGE IN GARAGE
  - (4) DRUM STORAGE AREA NEAR LOADING DOCK (LAB BLDG.)
  - (5) DRUM STORAGE AREA SOUTH OF W-26 (LAB BLDG.)
  - (6) DRUMMED HF RESIDUE & ASSOCIATED STORAGE AREAS INSIDE PLT. 4
  - (7) DRUMMED HF RESIDUE & ASSOCIATED STORAGE AREAS NW OF PLT. 4
  - (8) DRUMMED HF RESIDUE & ASSOCIATED STORAGE AREAS SOUTH OF COOLING TOWER
  - (9) NITRIC ACID RAIL CAR AND AREA
  - (10) HAR SYSTEM COMPONENTS
  - (11) TANK FARM SUMP
  - (12) WHEELABRATOR (BLDG. 66)
  - (13) WHEELABRATOR DUST COLLECTOR (BLDG. 66)
  - (14) BOX FURNACE
  - (15) OXIDATION FURNACE #1
  - (16) PRIMARY CALCHER
  - (17) PLANT 8 EAST DRUM STORAGE PAD
  - (18) PLANT 8 WEST DRUM STORAGE PAD
  - (19) CP STORAGE WAREHOUSE, BLDG. 56 (BUTLER BLDG.)
  - (20) PLANT 1 PAD
  - (21) MILCO OIL RECOVERY
  - (22) ABANDONED SUMP WEST OF PILOT PLANT
  - (23) WELL DRINKING STORAGE AREA
  - (24) EQUIPMENT STORAGE AREA
  - (25) PLANT 1 STORAGE BLDG. (BLDG. 67)
  - (26) DETREX STILL
  - (27) WASTE PIT NO. 4
  - (28) FRAME THERMAL LIQUID INCHEMATOR
  - (29) PLANT 8 WAREHOUSE (BLDG. 80)
  - (30) BARIUM CHLORIDE SALT TREATMENT FACILITY
  - (31) TANK FOR BULK STORAGE OF SOLVENTS, 1-5
  - (32) TANK FOR BULK STORAGE OF SOLVENTS, 1-6
  - (33) PILOT PLANT WAREHOUSE STORAGE AREA (BLDG. 68)
  - (34) KC-2 WAREHOUSE (BLDG. 63)
  - (35) PLANT 9 WAREHOUSE (BLDG. 81)
  - (36) STORAGE PAD NORTH OF PLANT 6
  - (37) PLANT 6 WAREHOUSE (BLDG. 79)
  - (38) TANK CAR
  - (39) CLEARWELL
  - (40) BIO-SURGE LAGOON
  - (41) SLUDGE DRYING BEDS
  - (42) WASTE PIT NO. 5
  - (43) LIME SLUDGE PONDS
  - (44) COAL PILE RUNOFF BASIN
  - (45) UST #5
  - (46) URANYL NITRATE TANKS (OFFS STORAGE AREA)
  - (47) URANYL NITRATE TANKS (NORTH OF PLANT 2)
  - (48) URANYL NITRATE TANKS (SOUTHWEST OF PLANT 2)
  - (49) URANYL NITRATE TANKS (OKESTON AREA)
  - (50) URANYL NITRATE TANKS (AFFINATE BLDG.)
  - (51) EXPERIMENTAL TREATMENT FACILITY (ETF)
  - (52) NORTH & SOUTH SOLVENT TANKS (PILOT PLANT)
  - (53) SAFE GEOMETRY DIGESTION SUMP

HWMU'S THE FEMP IS SEEKING TO PERMIT

NO.      REVISIONS 2      ADDED HWMU NO. 53      10/9 S.J.S. 1      REVISED PER RES #184      1/29 S.J.S.		DATE      BY      APPD.      REF. DWG. NO.	NOTES: WEMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY	APPROVED: SAFETY DIV. ELECTRICAL MECHANICAL INSTRUMENTATION CHEMICAL CIVIL ENVIRONMENTAL GENERAL CHECKED APPROVED	WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO FERNALD, OHIO FERNALD ENVIRONMENTAL MANAGEMENT PROJECT U.S. DEPARTMENT OF ENERGY	SITE PLAN      RCRA PART A FIGURE A-1 FACILITY LOCATION MAP SCALE: 1" = 300' 75X-5500-X-00171      2
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SECTION A  
FIGURE A-2



ITEM XVII: PHOTOGRAPHS

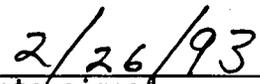
Photographs of the fifty-two (52) RCRA Hazardous Waste Management Units are provided as Attachment #2.

## ITEM XVIII. CERTIFICATION(S) (Page 1)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

U. S. Department of Energy  
Owner and Operator

  
\_\_\_\_\_  
T. J. Rowland, Acting Manager  
Fernald Site Office

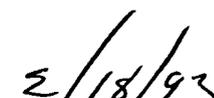
  
\_\_\_\_\_  
Date signed

The Department of Energy (DOE-FN) and its contractor, Fernald Environmental Restoration Management Corporation (FERMCO), have jointly signed this application as co-operators of the permitted facility. The Department has determined that dual signatures best reflect the actual appointment of responsibility under which the Department's Resource Conservation and Recovery Act (RCRA) responsibilities are for policy, programmatic, funding, and scheduling decisions, as well as, general oversight, and the contractor's RCRA responsibilities are for day-to-day operations, including but not limited to, the following responsibilities: waste analyses and handling, monitoring, record keeping, reporting, and contingency planning. Execution of this certification is not intended to nor does it waive or limit application of 42 U.S.C. §§9621(e)(1), 9621(f)(3), 9613(h), and 9622(e)(6).

For purposes of the certification required by 40 CFR 270.11(d), I certify to the best of my knowledge and belief, the truth, accuracy and completeness of the application. This certification, based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Fernald Environmental Restoration  
Management Corporation, Co-operator

  
\_\_\_\_\_  
N. C. Kaufman, President  
Fernald Environmental Restoration  
Management Corporation

  
\_\_\_\_\_  
Date signed

SECTION A  
TABLE A-1

TABLE A-1

UNIT NO.	FEMP HAZARDOUS WASTE MANAGEMENT UNITS	Type of Unit (1)	Process Code (2)	Status (3)	Dimensions (4)
1A	Fire Training Facility*	D	D80	2	84'8" x 68'
1B	Fire Training Facility*	D	D80	2	105' x 134'
2	<del>Plant 1 Bldg / W-26 Bldg / Shop / Bldg / HZ</del> (Removed) - (in accordance with letter DOE-997-92)	<del>S</del>	<del>S01</del>	<del>2</del>	<del>137' 17" 77' 14" 5' 11"</del>
3	Waste Oil Storage In Garage	S	S01	2	10' x 10'
4	Drum Storage Area Near Loading Dock (Lab Bldg)	S	S01	2	40' x 76'
5	Drum Storage Area South of W-26 (Lab Bldg)	S	S01	2	31'8" x 41'
6	Drummed HF Residue/Associated Storage Areas Inside Plant 4	S	S01	2	4' x 17'
7	Drummed HF Residue/Associated Storage Areas NW of Plant 4	S	S01	2	25' x 30'
8	Drummed HF Residue/Associated Storage Areas S. of Cooling Towers	S	S01	2	10' x 32'
9	Nitric Acid Rail Car and Area	S	S01	2	10' x 40' x 15'
10	NAR System Components	S	S02	2	13,262 sq ft
11	Tank Farm Sump	T	T02	3	165' x 135'
12	Wheelabrator (Bldg 66)	S	S01	2	24' x 20'
13	Wheelabrator Dust Collector (Bldg 66)	S	S01	2	30' x 17'
14	Box Furnace	T	T03	2	14' x 18'
15	Oxidation Furnace #1	T	T03	2	85 sq ft
16	Primary Calciner	T	T03	2	13.5 ft diam x 40' high
17	Plant 8 East Drum Storage Pad	S	S01	2	18,330 sq ft
18	Plant 8 West Drum Storage Pad	S	S01	2	12,304 sq ft
19	CP Storage Warehouse - Bldg 56 (Butler Bldg)	S	S01	1	50' x 180'
20	Plant 1 Pad	S	S01	1	480,000 sq ft
21	Milco Oil Recovery	S	S01	2	272 sq ft
22	Abandoned Sump West of Pilot Plant	S	S01	2	2' diam x 14' deep
23	Well Drilling Storage Area	S	S01	2	29' x 56'
24	Equipment Storage Area	S	S01	2	45' x 145'
25	Plant 1 Storage Bldg (Bldg 67)	S	S01	2	165' x 190'
26	Detrex Still	S	S02	2	32" X 76" X 7'6"

- 1) 1= Treatment S= Storage D= Disposal
  - 2) Process Codes provided in Item XII of Hazardous Waste permit Application Part A
  - 3) Process Code ~~BP601868~~ in Item XII of Hazardous Waste permit application
  - 3) 1= HWMU to be permitted  
 2= HWMU to be closed  
 3= HWMU to be operated, not permitted, Closure to be integrated with remedial actions  
 4= HWMU not to be operated, Closure to be integrated with remedial actions  
 5= HWMU closed
  - 4) Dimensions: width x length x height - unless otherwise indicated
  - 5) Waste Pit No. 4 is irregularly shaped; dimensions provided are for each side
- \* Unit 1 remains one unit, but is split into 2 areas (A & B) because a road divides the unit

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TABLE A-1 (cont)

UNIT NO.	FEMP HAZARDOUS WASTE MANAGEMENT UNITS	Type of Unit (1)	Process Code (2)	Status (3)	Dimensions (4)
27	Waste Pit No. 4	D	D80	5	170' x 320' x 400' x 320' (5)
28	Trane Thermal Liquid Incinerator	T	T03	2	50' x 52'
29	Plant 8 Warehouse (Bldg 80)	S	S01	1	60' x 170'
30	Barium Chloride Salt Treatment Facility	T	T04	5	50' x 75'
31	Tank for Bulk Storage of Solvents, T-5	S	S02	2	10' diameter
32	Tank for Bulk Storage of Solvents, T-6	S	S02	2	10' diameter
33	Pilot Plant Warehouse (Bldg 68)	S	S01	1	7' x 62'
34	KC-2 Warehouse (Bldg 63)	S	S01	1	346'2-3/8" x 82'
35	Plant 9 Warehouse (Bldg 81)	S	S01	1	80' x 100'
36	Storage Pad North of Plant 6	S	S01	2	8' x 40'
37	Plant 6 Warehouse (Bldg 79)	S	S01	1	100' x 170'
38	HF Tank Car	S	S01	2	10' x 36' x 15'
39	Clearwell	T	T02	3	30,600 sq ft
40	Bio-surge Lagoon	T	T02	3	160,000 sq ft
41	Sludge Drying Beds	T	T02	3	79' x 92'
42	Waste Pit No. 5	T	T02	4	184,000 sq ft
43	Lime Sludge Ponds	S	S04	3	40,000 sq ft
44	Coal Pile Runoff Basin	S	S04	3	5,778 sq ft
45	UST #5	S	S02	2	2'6" diameter
46	Uranyl Nitrate Tanks (NFS Storage Area)	S	S02	2	61'7" x 53'9"
47	Uranyl Nitrate Tanks (North of Plant 2)	S	S02	2	63'6" x 40'6"
48	Uranyl Nitrate Tanks (Southeast of Plant 2)	S	S02	2	54'7" x 45'4"
49	Uranyl Nitrate Tanks (Digestion Area (2 locations))	S	S02	2	127' x 20' (each location)
50	Uranyl Nitrate Tanks (Raffinate Building (2 locations))	S	S02	2	14' x 50' : 15' x 30'
51	Experimental Treatment Facility (ETF)	T	T04	4	20' x 48'
52	North and South Solvent Tanks (Pilot Plant)	S	S02	2	6'6" diameter each
53	Safe Geometry Digestion Sump (Plant 1)	S	S02	2	8" diameter x 12" deep

- 1) T= Treatment S= Storage D= Disposal
  - 2) Process Codes provided in Item XII of Hazardous Waste permit Application Part A
  - 3) 1= HWMU to be permitted  
2= HWMU to be closed  
3= HWMU to be operated, not permitted, Closure to be integrated with remedial actions  
4= HWMU not to be operated, Closure to be integrated with remedial actions  
5= HWMU closed
  - 4) Dimensions: width x length x height - unless otherwise indicated
  - 5) Waste Pit No. 4 is irregularly shaped; dimensions provided are for each side
- Unit 1 remains one unit, but is split into 2 areas (A & B) because a road divides the unit



ITEM X: OTHER ENVIRONMENTAL PERMITS

Pursuant to OAC 3745-50-41, the following is a list of all permits or construction approvals received or applied for under the specified programs:

1) Hazardous Waste Management Program under RCRA

Part A Permit Applications submitted to OEPA:

Original submittal	07/06/84	
Revision 1	05/15/85	
Revision 2	10/30/85	(Part B submittal)
Revision 3	03/19/86	
Revision 4	04/28/86	
Revision 5	03/27/87	
Revision 6	11/02/87	
Revision 7	02/04/88	
Revision 8	07/28/88	
Revision 9	03/22/89	
Revision 10	09/22/89	(Part B submittal)
Revision 11	09/25/90	
Revision 12	06/28/91	
Revision FEMP 0	10/31/91	(Part B submittal)
Revision FEMP 1	03/31/92	
Revision FEMP 1.1	08/31/92	
Revision FEMP 1.2	10/15/92	
Revision FEMP 1.3	03/01/93	

Closure Plans (CP) previously submitted:

- a. Waste Pit No. 4  
Barium Chloride Salt Treatment Facility  
Storage Pad North of Plant 6  
Trane Thermal Liquid Incinerator  
Tank for Bulk Storage of Solvents, T-5 & T-6  
UST #5  
Waste Pit No. 5  
Equipment Storage Area  
HF Tank Car  
Waste Oil Storage in Garage  
Drum Storage Area South of W-26 (Laboratory Building  
Drummed HF Residue Storage Inside Plant 4  
Drummed HF Residue Storage Northwest of Plant 4  
Nitric Acid Rail Car
- b. Waste Pit No. 4 Post Closure Permit
- c. Closure Plans for HWMUs identified during HWMU review will be completed based on the compliance schedules submitted to OEPA in accordance with the Consent Decree and its Amendments.

ITEM X: OTHER ENVIRONMENTAL PERMITS (continued)

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2) Underground Injection Control Program (UIC) under SWDA

None

3) National Pollutant Discharge Eliminating System (NPDES) Program under CWA

1I000004\*cd (Former NPDES permit no. OH000004\*CD)

4) Prevention of Significant Deterioration (PSD) Program under the Clean Air Act

None

5) Nonattainment Program under the Clean Air Act

None

6) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act

NESHAP approval of construction received from EPA for the following:

1. UF<sub>6</sub> to UF<sub>4</sub> Reduction Facility #2
2. Thorium Packaging

NESHAP approval of modification received for the following:

1. Plasma Spray Crucible Coating Station
2. Crucible Grit Blaster
3. West Wagner Cold Saw
4. Flat Ingot Model 4 Milling Machine
5. Flat Ingot Model 4A Milling Machine
6. Flat Ingot Model 4B Milling Machine
7. Flat Ingot 425-20 Milling Machine
8. Flat Ingot No. 6 Milling Machine
9. Flat Ingot K&T A Milling Machine
10. Flat Ingot K&T B Milling Machine
11. Plant 6 Sump and Waste Treatment System
12. D&D Facility
13. Ingot Cooling Booth
14. Plant 8 Sump
15. Plant 8 Crusher
16. Plant 1 Material Handling

ITEM X: OTHER ENVIRONMENTAL PERMITS (continued)7) Ocean Dumping permits under the Marine Protection Research and Sanctuaries Act

None

8) Dredge or Fill permits under section 404 of the CWA

None

9) Other relevant environmental permits, including State Permits

State of Ohio Hazardous Waste Permit 05-31-0681

10) Wastewater Treatment Facility, Ohio EPA Permits-To-Install (PTI)

	<u>Project</u>	<u>PTI No.</u>
1.	Stormwater/Spill Retention Facility - FMPC	05-1043
2.	Process Wastewater Bionitrification	05-3672
3.	Bionitrification Surge Lagoon Facility - FMPC	05-2872
4.	Plant 6 Sump Reconstruction	05-2405
5.	Tank Farm Padwater Collection & Neutralization Sump	05-2873
6.	General Sump/Lime Handling System	05-3368
7.	Modification Plant 8 Sump	05-3518
8.	Decontamination and Decommissioning (D&D) Facility	05-3390
9.	Bionitrification Effluent Treatment System	05-3879
10.	Coal Pile Runoff Collection Facility	05-4172
11.	Manhole 34 Spill Control	05-5127

11) Air Permit Status Source Report

See attached lists:

FEMP Air Permit Report  
FEMP Sources Submitted for Air Permits

1  
Fernald Environmental Management Project  
Environmental Compliance  
Air Permit Report for Ohio EPA Premise No. 1431110128  
Listed by Ohio EPA Permit Number

4142

Permit Number	Equipment Description
B001	100 MMBTU/HR COAL-FIRED BOILER: MULTICLONE-ESP
B003	100 MMBTU/HR COAL-FIRED BOILER: MULTICLONE-ESP
K002	MAINTENANCE SHOP PAINT SPRAY BOOTH
P006	AMMONIA STRIPPING PROCESS
P008	URANIUM INGOT COLD SAWS W/CARTRIDGE & HEPA FILTERS
P011	WEST CRUCIBLE BURNOUT STATION: FABRIC FILTER
P012	NORTH DUOMATIC LATHE W/FABRIC FILTER
P013	MACHINE LATHES W/ FABRIC FILTER
P020	SEP. BOOTH, 2 REMELT FURNACES, BURNOUT, MOLD CLEAN
P022	MISCELLANEOUS MACHINING OPERATIONS
P032	FINISH CORE MACHINING - PLANT 6 W/FABRIC FILTER
P033	EAST SIDE JOLTERS, 8-F, PLANT 5: FABRIC FILTER
P038	SLAG CRUSHING & PACKAGING STATION - PLANT 5
P054	MOLD RECONDITIONING, SEPERATION, AND COLD SAW LINE
P056	WEST SIDE JOLTERS, H-L, PLANT 5
P061	NO. 1 "F" MACHINE: DUST COLLECTOR G5-251
P062	NO. 3 "F" MACHINE & CAPPING STATION (EAST)
P065	CRUCIBLE BURNOUT & SEPARATION BOOTH: FABRIC FILTER
P067	CASTING FURNACES #15 THRU #28: FABRIC FILTER
P082	FLUID BED REACTOR AND TALCUM REACTOR BANK 9
P094	PLANT 5-EAST BREAKOUT STATION: FABRIC FILTER
P101	OVERSIZE SLAG MILLING
P108	SLAG BIN NO.'S 250 and 251
P110	PLANT 4-DRUMING STATION: FABRIC FILTER
P111	PLANT 4-DRUM DUMPER: FABRIC FILTER
P112	PLANT 4-REJECT GREEN SALT: FABRIC FILTER
P113	PLANT 2/3-SLAG LEACH DIGESTION: NAR TOWER & VENTURI
P116	PLANT 2/3-SLAG LEACH DIGESTION TANK D1-4: NAR TOWER
P119	PLANT 2/3-STs PROCESSING TANK D1-7: NAR TOWER
P121	PLANT 2/3 NEUT. OF SOLVENT F1-502: TANK VENT ONLY
P122	SLAG LEACH DUMPING STATION W/FABRIC FILTER
P129	PLANT 2/3-EXTRACTION SETTLER (TANK Y-7)
P152	DENITRATION POTS W/VENTURI SCRUBBER & NAR TOWER
P160	PLANT 2/3 DECANTER F2E-103
P163	PINCUTTER AND MILL W/HEPA FILTER
P165	SAFE GEOMETRY FEED DUMPING STATION 2/HEPA FILTER
P166	PLANT 1-SAFE GEOMETRY DIGESTOR D105
P167	TITAN MILL DUMPING STATION W/FABRIC FILTER
P168	TITAN MILL W/FABRIC FILTER
P173	REMELT FURNACE-PILOT PLANT
P174	CRUCIBLE GRIT BLASTER-PILOT PLANT
P177	TITAN MILL PACKAGING STATION W/FABRIC FILTER
P178	EAST PACKAGING STATION - PLANT
P179	SHOT BLASTER - PLANT 1
P180	ROTARY KILN - PLANT 8
P182	PRIMARY CALCINER- PLANT 8
P183	OXIDATION FURNACE #1 - PLANT 8

Fernald Environmental Management Project  
Environmental Compliance  
Air Permit Report for Ohio EPA Premise No. 1431110128  
Listed by Ohio EPA Permit Number

Permit  
Number

Equipment  
Description

P184	OXIDATION FURNACE #2 - PLANT 8
P185	BOX FURNACE W/VENTURI SCRUBBER
P186	ROTEX SCREENING - PLANT 8
P189	A-3 COLUMN (D1-100) - PLANT 2/3
P190	A-4 COLUMN (D1-127) - PLANT 2/3
P194	C-2 COLUMN (D1-112) - PLANT 2/3
P197	NORTH OLIVER FILTER W/CAUSTIC SCRUBBER F1-323
P198	SOUTH OLIVER FILTER W/CAUSTIC SCRUBBER F1-322
P199	NEUTRALIZATION OF FILTER CAKE F1-313
P200	NEUTRALIZATION OF FILTER CAKE F1-318
P201	THICKENER TANK (PROCESS) F2E-602
P202	NORTH PACKAGING STATION:PLANT 2/3
P203	SOUTH PACKAGING STATION:PLANT 2/3
P204	DRUM WASHER - PLANT 8
P227	PROCESS AREA TRASH COMPACTOR
P229	GRAPHITE BAND SAW & TOOL GRINDING W/FABRIC FILTER
P233	PILOT PLANT PLASMA SPRAY PROCESS: FABRIC FILTER
P237	GENERAL SUMP LIME HANDLING
P239	EAST OLIVER FILTER
P240	WEST EIMCO FILTER
P241	OIL TREATMENT TANK SYSTEM I
P242	OIL TREATMENT TANK SYSTEM II
P243	PRECIPITATION TANK SYSTEM I
P244	PRECIPITATION TANK SYSTEM II
P248	EAST EIMCO FILTER
P258	LARGE DRUM SAMPLING STATION
P270	EXISTING DECONTAMINATION AND DECOMMISSIONING FAC.
P272	LIME/ALUM DUMP STATIONS
P273	TEN GALLON DISTILLATION BASED SOLVENT RECOVERY
P276	PLANT 8 NEUTRALIZATION OF SUMP LIQUOR D-101
T001	500 GALLON NITRIC ACID STORAGE TANK
T002	PLANT 8 - CAUSTIC STORAGE TANK A
T003	PLANT 8 - CAUSTIC STORAGE TANK B
T004	CAUSTIC STORAGE TANK (F43-108)
T005	PLANT 2/3 - NITRIC ACID ST (F1-18)
T006	PLANT 2/3 - NITRIC ACID ST (F1-17)
T007	PLANT 2/3 - NITRIC ACID ST TK (F1-23)
T008	PLANT 2/3 - DIL NITRIC ST TK (F1-24)
T009	PLANT 2/3 - NITRIC ACID ST TK (F1-8)
T010	PLANT 2/3 - NITRIC ACID STOR (F2E-501)
T011	PLANT 2/3 - NITRIC ACID STOR (F2E-502)
T012	PLANT 2/3 - NITRIC ACID STOR (F3-2)
T013	PLANT 2/3 - NITRIC ACID STOR (D3-27)
T014	PLANT 2/3 - NITRIC ACID STOR (F3-12)
T015	PLANT 2/3 - NITRIC ACID STOR (F3-19)
T016	PLANT 2/3 - DIL NITRIC STOR (F3-22)
T017	PLANT 2/3 - DIL NITRIC STOR (F3-23)

Fernald Environmental Management Project  
Environmental Compliance  
Air Permit Report for Ohio EPA Premise No. 1431110128  
Listed by Ohio EPA Permit Number

4142

Permit  
Number

Equipment  
Description

T018	PLANT 2/3 - DIL NITRIC STOR (F3-24)
T019	PLANT 2/3 - DIL NITRIC STOR (F3-25)
T020	PLANT 2/3 - COND HOLD TK (F3E-7)
T021	3300 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T022	3300 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T023	3300 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T024	3300 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T025	23,500 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T026	23,500 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T027	2500 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T028	2500 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T029	25,265 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T030	25,265 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T031	25,265 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T032	25,265 GAL. FIXED ROOF URANYL NITRATE STORAGE TANK
T033	14,500 GAL. FIXED ROOF SLOPWATER STORAGE TANK
T034	14,500 GAL. FIXED ROOF SLOPWATER STORAGE TANK
T035	PLANT 2/3 - SLOPWATER ST TK (D1-130)
T036	PLANT 2/3 - SLOPWATER ST TK (D1-129)
T039	PLANT 2/3 - URANYL NITR STOR TK (F2-608)
T040	PLANT 2/3 - URANYL NITR STOR TK (F2-607)
T041	PLANT 2/3 - URANYL NITR STOR TK (F2-606)
T042	PLANT 2/3 - URANYL NITR STOR TK (F2-605)
T044	PLANT 2/3 - SLOPWATER ST TK (D1-131)
T045	PLANT 2/3 - SLOP WATER STORAGE TANK F1-608
T046	PLANT 2/3 - SLOP WATER STORAGE TANK F2E-601
T047	PLANT 2/3 - S.L. STOR TK (F1-301)
T048	PLANT 2/3 - S.L. STOR TK (F1-302)
T049	PLANT 2/3 - S.L. STOR TK (F1-303)
T050	PLANT 2/3 - CAUSTIC STORAGE (D1-174)
T051	PLANT 2/3 - SOLVENT ST TK (F1-506)
T052	PLANT 2/3 - CARBONATE ST TK (F1-500)
T053	PLANT 2/3 - CARBONATE ST TK (F1-501)
T056	PLANT 2/3 - RAFF STOR TK (F1-403)
T057	PLANT 2/3 - RAFF STOR TK (F1-401)
T058	PLANT 2/3 - RAFF STOR TK (F1-402)
T059	PLANT 2/3 - RAFF STOR TK (F1-400)
T061	PLANT 2/3 - RAFF THICKNER SLUR (F1-612)
T062	2,250 GAL. FIXED ROOF DIRTY SOLVENT STORAGE TANK
T063	2,250 GAL. FIXED ROOF DIRTY SOLVENT STORAGE TANK
T064	2,250 GAL. FIXED ROOF DIRTY SOLVENT STORAGE TANK
T065	2,600 GAL. FIXED ROOF DIRTY SOLVENT STORAGE TANK
T066	2,600 GAL. FIXED ROOF DIRTY SOLVENT STORAGE TANK
T067	PLANT 2/3 - SULFURIC ACID STORAGE
T068	25,600 GAL. FIXED ROOF DIRTY SOLVENT STORAGE TANK
T069	30,000 GAL. FIXED ROOF OK LIQUOR STORAGE TANK
T070	30,000 GAL. FIXED ROOF OK LIQUOR STORAGE TANK

Fernald Environmental Management Project  
Environmental Compliance  
Air Permit Report for Ohio EPA Premise No. 1431110128  
Listed by Ohio EPA Permit Number

4142

Permit  
Number

Equipment  
Description

Permit Number	Equipment Description
T071	30,000 GAL. FIXED ROOF OK LIQUOR STORAGE TANK
T072	PLANT 2/3 - OK LIQ STOR TK (F3E-225)
T073	PLANT 2/3 - Filtrate stor tk (F1-308)
T074	PLANT 2/3 - Filtrate stor tk (F1-309)
T075	PLANT 2/3 - LIME STORAGE TANK F1-314
T077	PLANT 2/3 - Filtrate stor (SL) (F1-310)
T078	PLANT 2/3 - Condensate stor tk (F1-208)
T079	PLANT 2/3 - Filtrate stor (SL) (F1-311)
T080	PLANT 2/3 - Filtrate stor (SL) (F1-312)
T081	PLANT 2/3 - Filtrate stor (SL) (F1-317)
T082	PLANT 2/3 - Acid cond stor (F1-407)
T083	PLANT 2/3 - Nitric acid washstor (F1-613)
T085	PLANT 2/3 - Filtrate stor (SL) (F3E-408)
T087	PLANT 2/3 - Nitric acid stor tk (F1-201)
T088	PLANT 2/3 - Nitric acid stor tk, WS-PILOT PLANT
T092	Fresh acid receiving tank - PLANT 6
T093	Plant 6 - Spent Acid Tank (06-B056A TNK)
T094	Plant 6 - Spent Acid Tank (06-F036-TNK)
T095	Plant 6 - Spent Acid Tank (06-F035-TNK)
T096	6,192 GAL. FIXED ROOF FILTRATE STORAGE TANK
T097	6,192 GAL. FIXED ROOF FILTRATE STORAGE TANK
T098	22,100 GAL. FIXED ROOF FILTRATE STORAGE TANK
T099	6,192 GAL. FIXED ROOF FILTRATE STORAGE TANK
T100	3,700 GAL. FIXED ROOF ACCOUNTABILITY TANK
T101	PLANT 2/3 - Filtrate stor (SL) (F3E-409)
T102	5800 GAL FIXED ROOF URANYL NITRATE STORAGE TANK EP
T103	5800 GAL FIXED ROOF URANYL NITRATE STORAGE TANK EP
T104	5800 GAL FIXED ROOF URANYL NITRATE STORAGE TANK EP
T106	7,833 GAL FIXED ROOF SUMP ACCUMULATOR STORAGE TANK
T107	7,833 GAL FIXED ROOF SUMP ACCUMULATOR STORAGE TANK
T109	PLANT 2/3 - Solvent storage tk (G2-4)
T111	K-65 SILO #1 STORAGE TANK-RADIUM CAKE
T112	K-65 SILO #2 STORAGE TANK-RADIUM CAKE
T113	RAILROAD ENGINE HOUSE DIESEL FUEL STORAGE TANK
T116	No.3 well Pumphouse strge tk
T117	MAINTANCE SHOP DIESEL FUEL STORAGE TANK
T118	WASTE PIT AREA DIESEL FUEL STORAGE TANK
T120	S. SPENT SOLVENT STORAGE TANK (CB), PILOT PLANT
T121	N. SPENT SOLVENT STORAGE TANK (AX), PILOT PLANT
T124	30,500 GAL. DILUTE HYDROFLORIC ACID STORAGE TANK
T125	30,500 GAL. DILUTE HYDROFLORIC ACID STORAGE TANK
T126	4,200 Sulfuric acid-93% STORAGE tank
T127	50,000 GAL. METHANOL STORAGE TANK W/I.F.R.
T128	36,000 GAL. CAP. AHF STORAGE TANK: HF SCRUBBER
T129	36,000 GAL. CAP. AHF STORAGE TANK: HF SCRUBBER
T130	36,000 GAL. CAP. AHF STORAGE TANK: HF SCRUBBER
T131	36,000 GAL. CAP. AHF STORAGE TANK: HF SCRUBBER

Fernald Environmental Management Project  
Environmental Compliance  
Air Permit Report for Ohio EPA Premise No. 1431110128  
Listed by Ohio EPA Permit Number

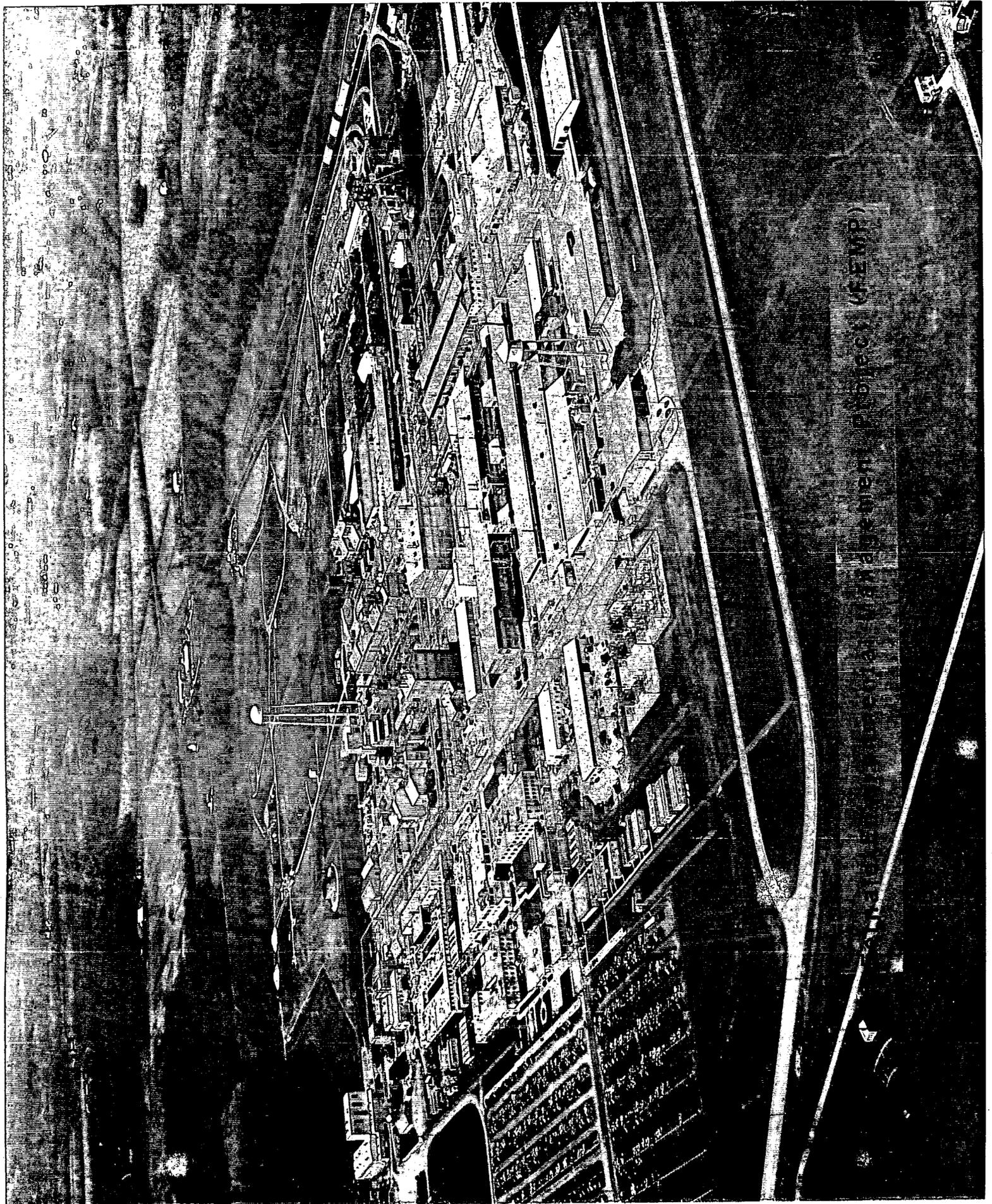
4142

Permit  
Number

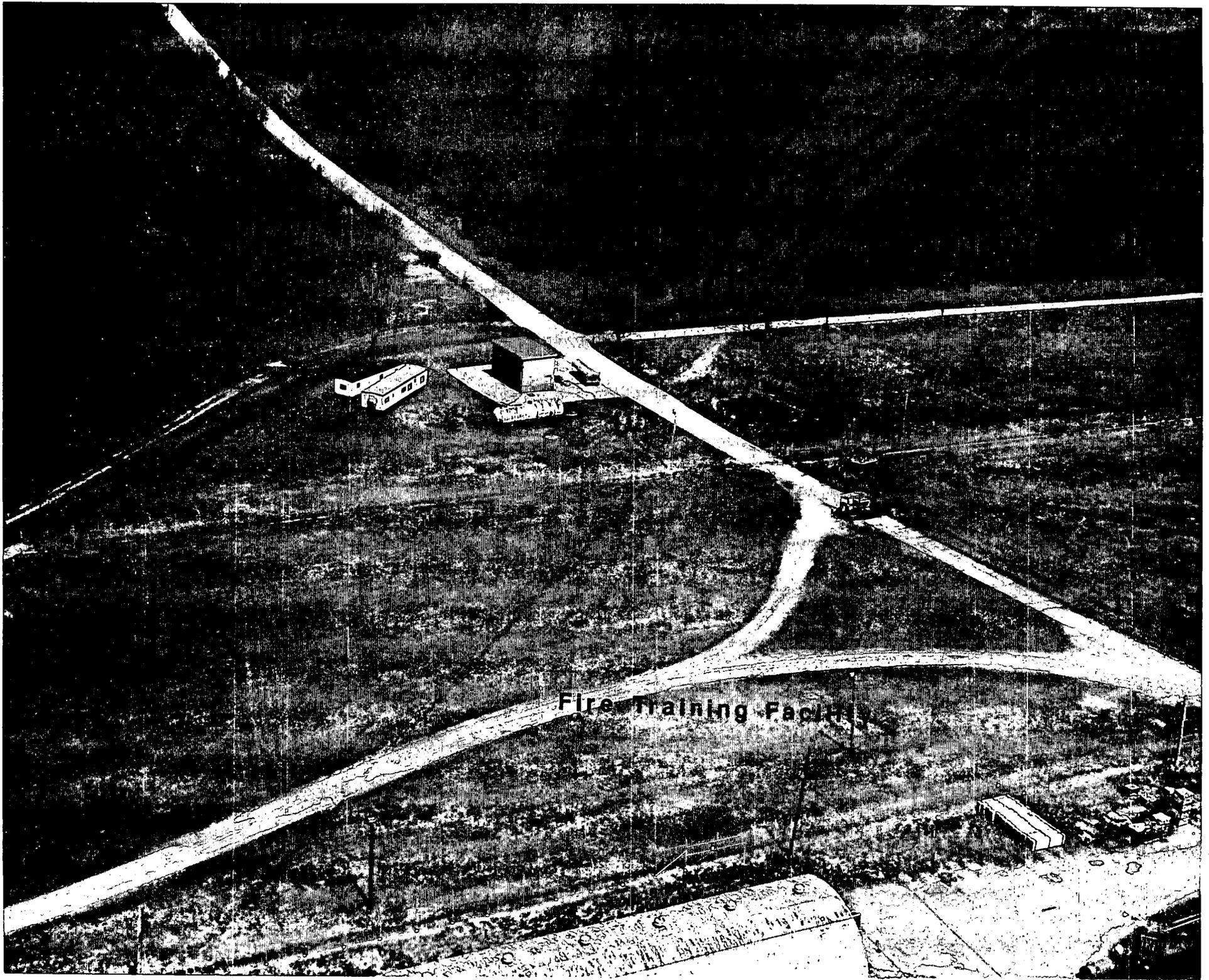
Equipment  
Description

T141  
T142  
T143  
T158

INGOT PICKLING  
ACID WATER TANK  
1000 GALLON NITRIC ACID STORAGE TANK  
CONCENTRATED SULFURIC ACID STORAGE TANK



United States Forest Service (USFS)



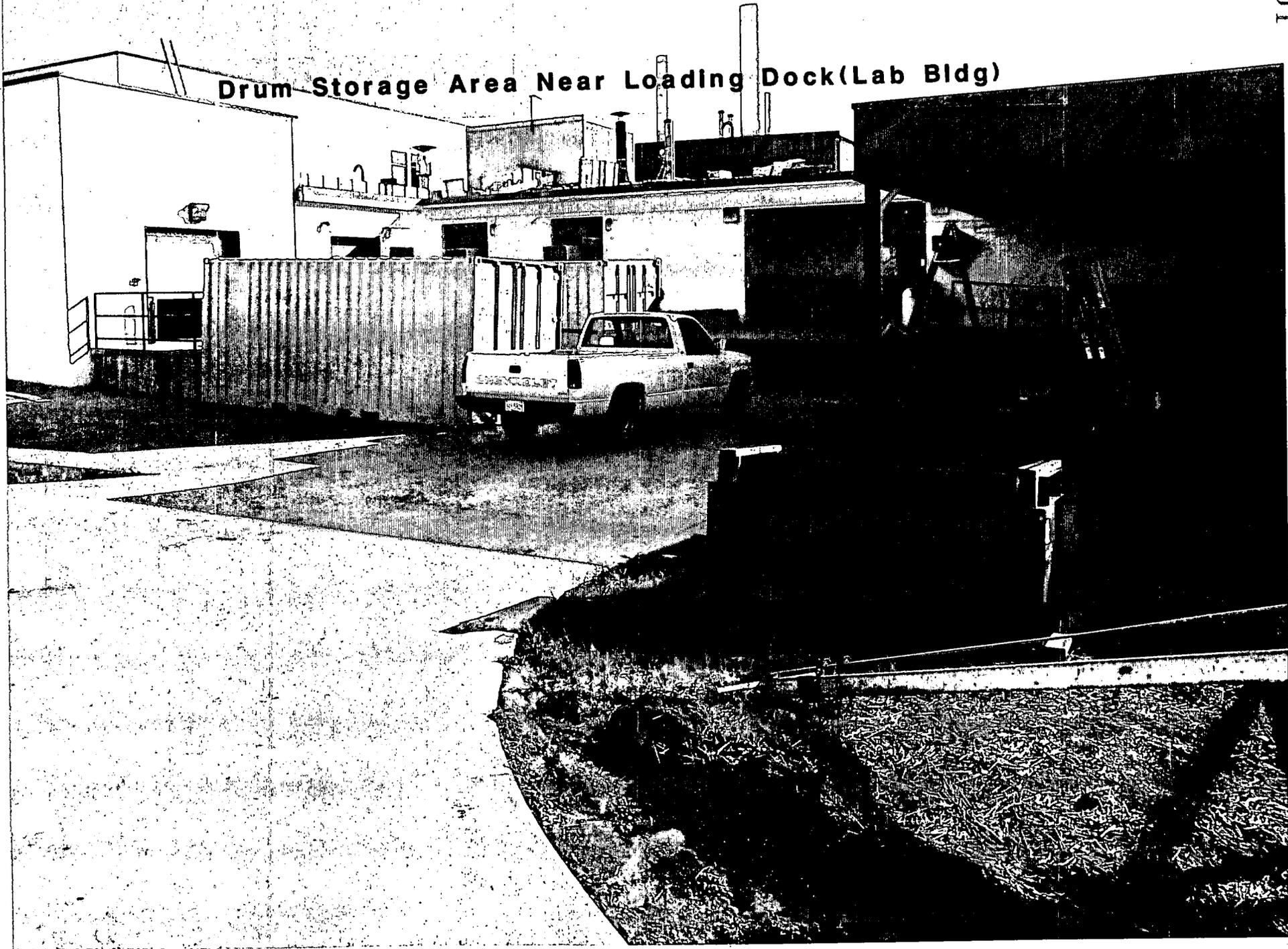
Fire Training Facility

Hazardous Waste Management Unit #2  
Parts Cleaner in Welding Shop (Bldg. 12)  
has been removed



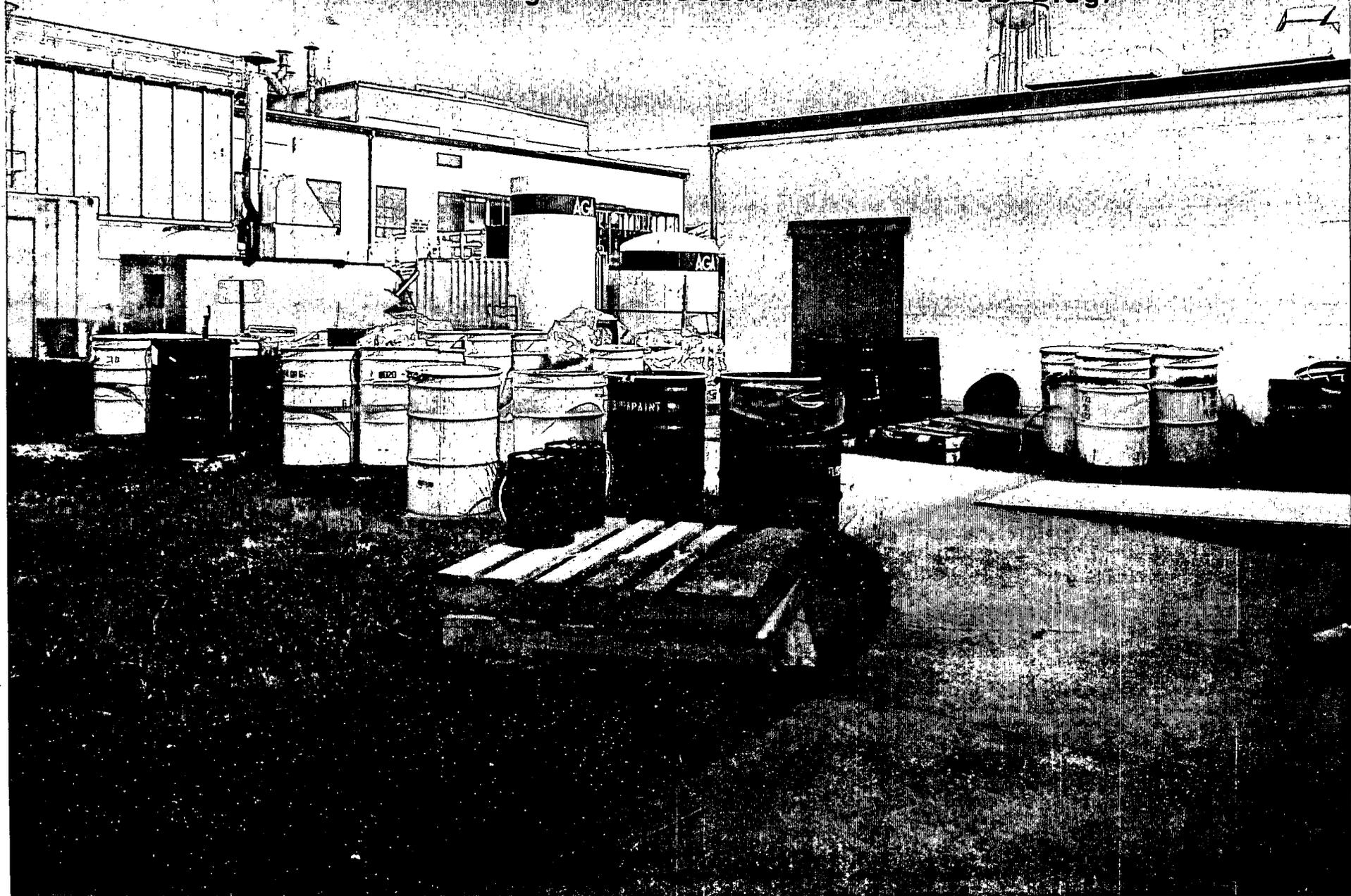
Waste Oil Storage In Garage

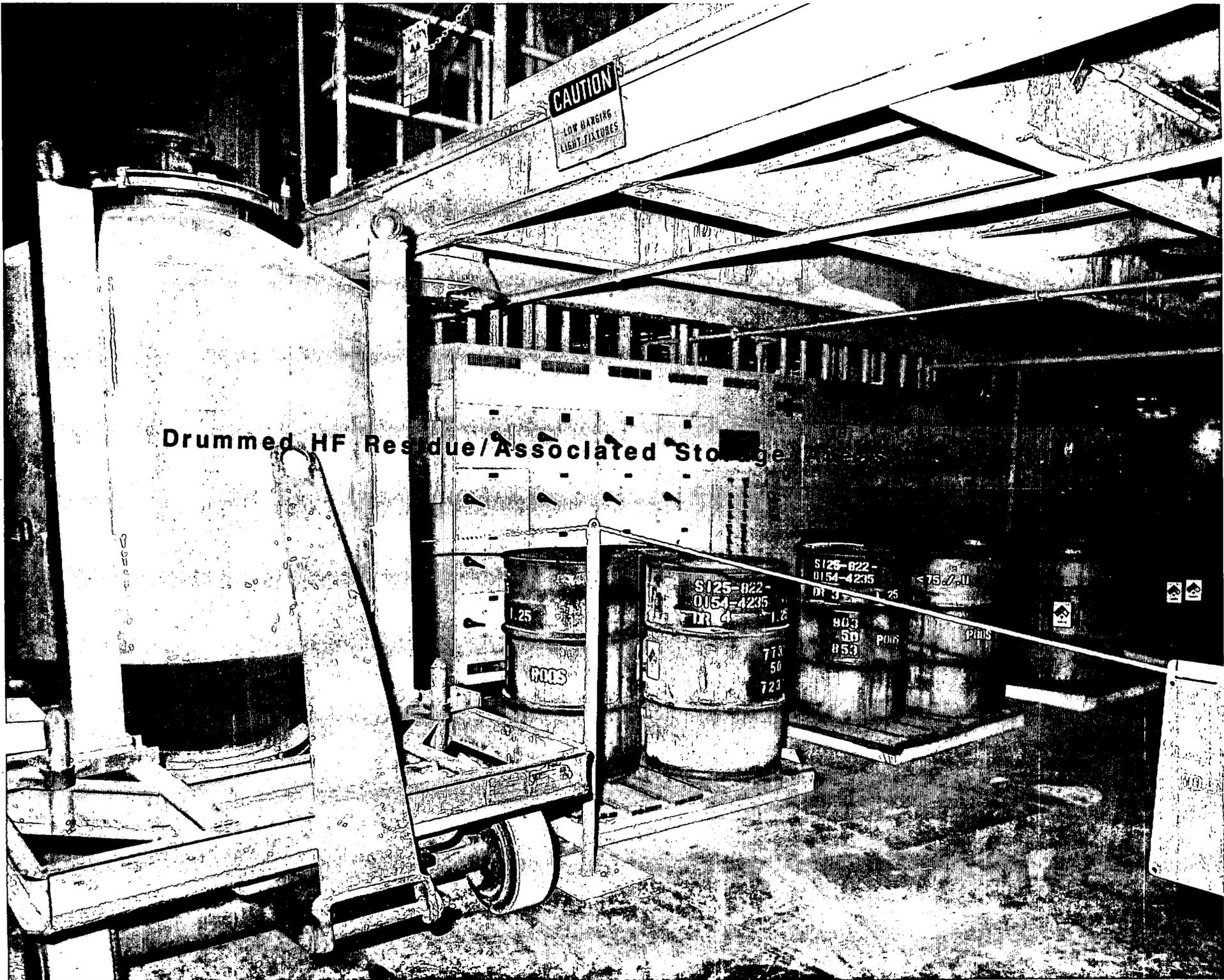
Drum Storage Area Near Loading Dock (Lab Bldg)



**Drum Storage Area South of W-26 (Lab Bldg)**

52





**CAUTION**  
LOW HANGING  
LIGHT FIXTURES

**Drummed HF Residue/Associated Storage**

1.25  
P005

S125-022-  
0054-4235  
TR 4  
1.25  
773  
50  
723

S125-022-  
0154-4235  
DR 3  
903  
50  
853  
P005

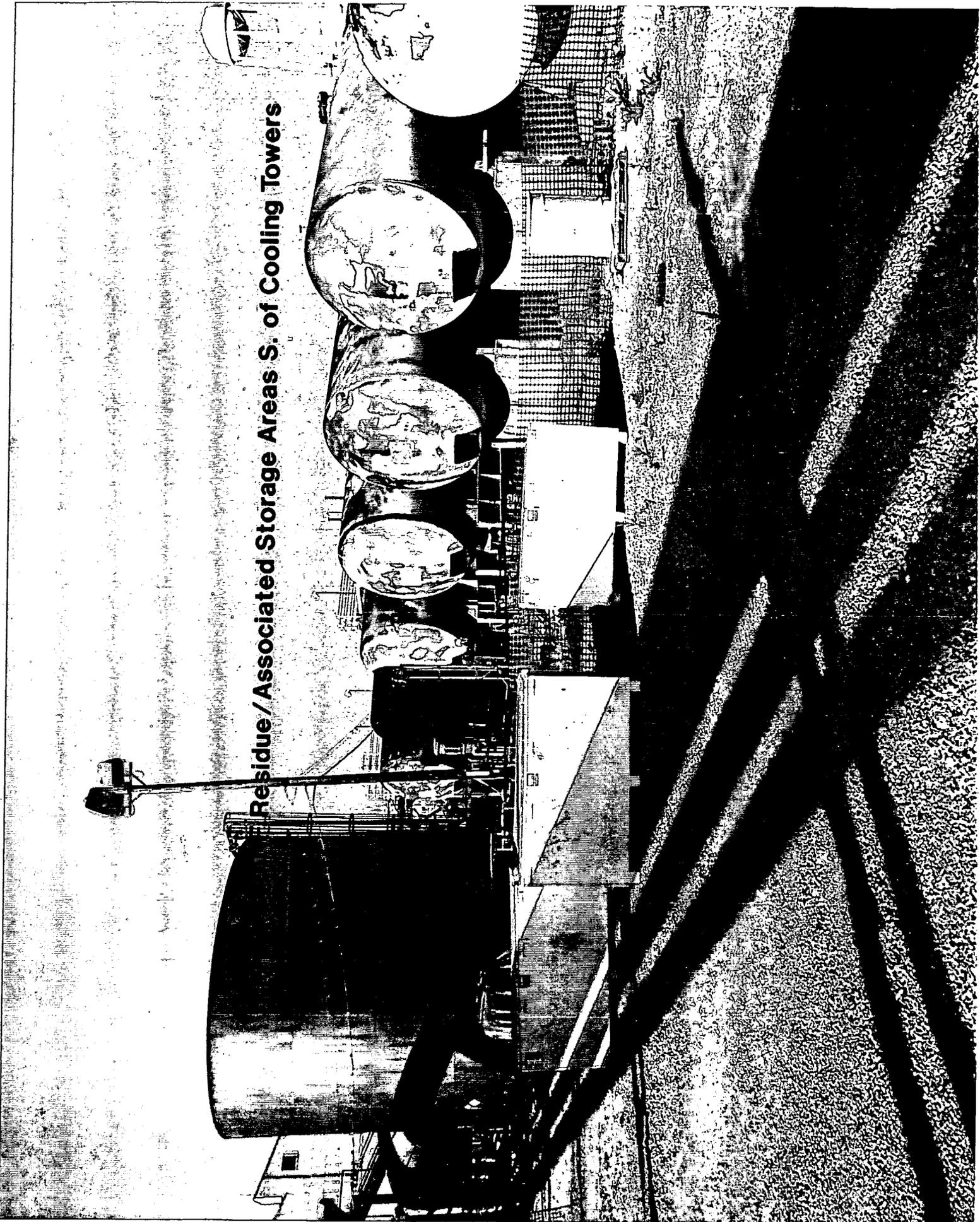
< 75%  
P005



F Residue/Associated Storage Areas, NW of Plant 4



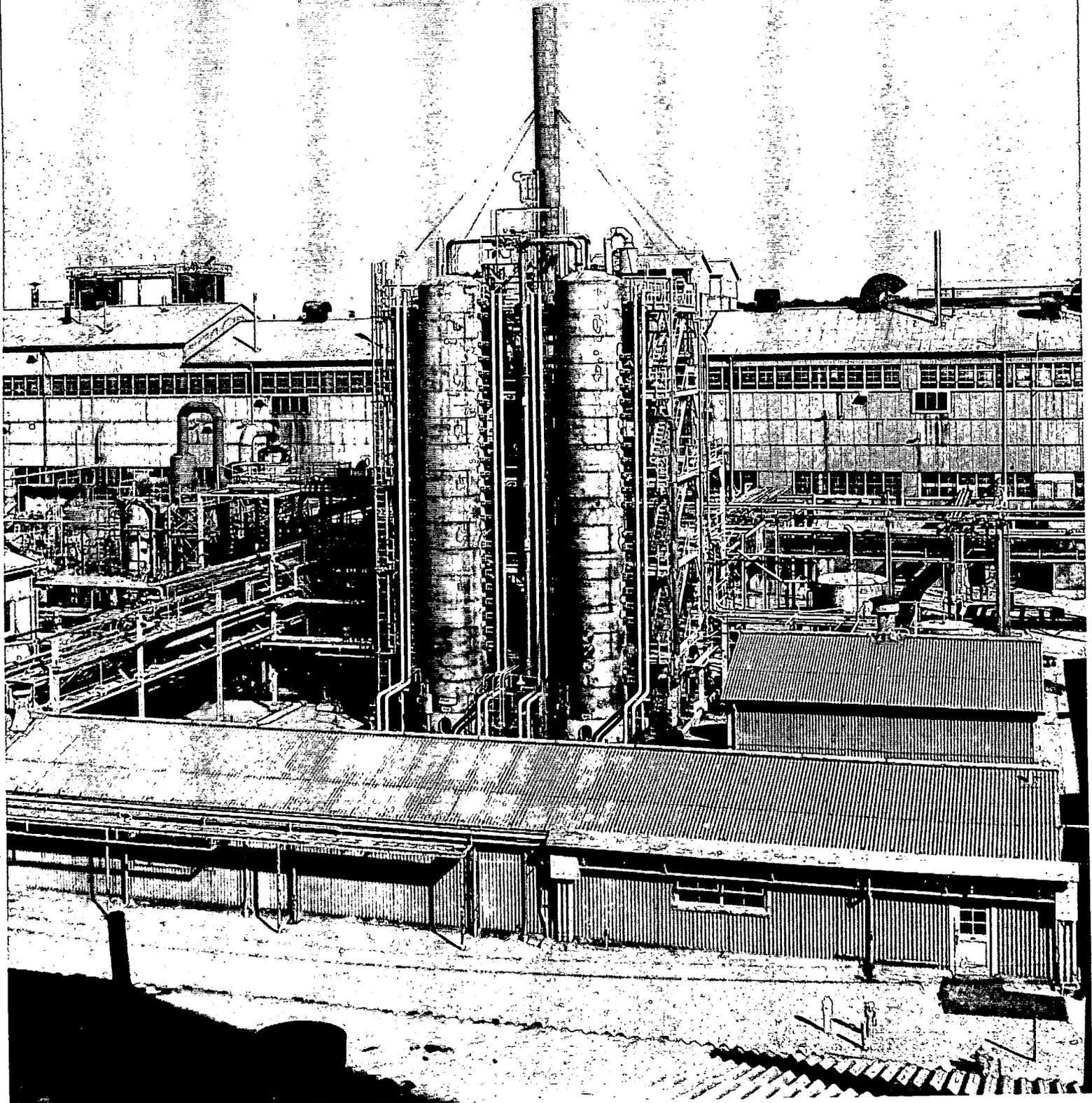
Residue / Associated Storage Areas S. of Cooling Towers



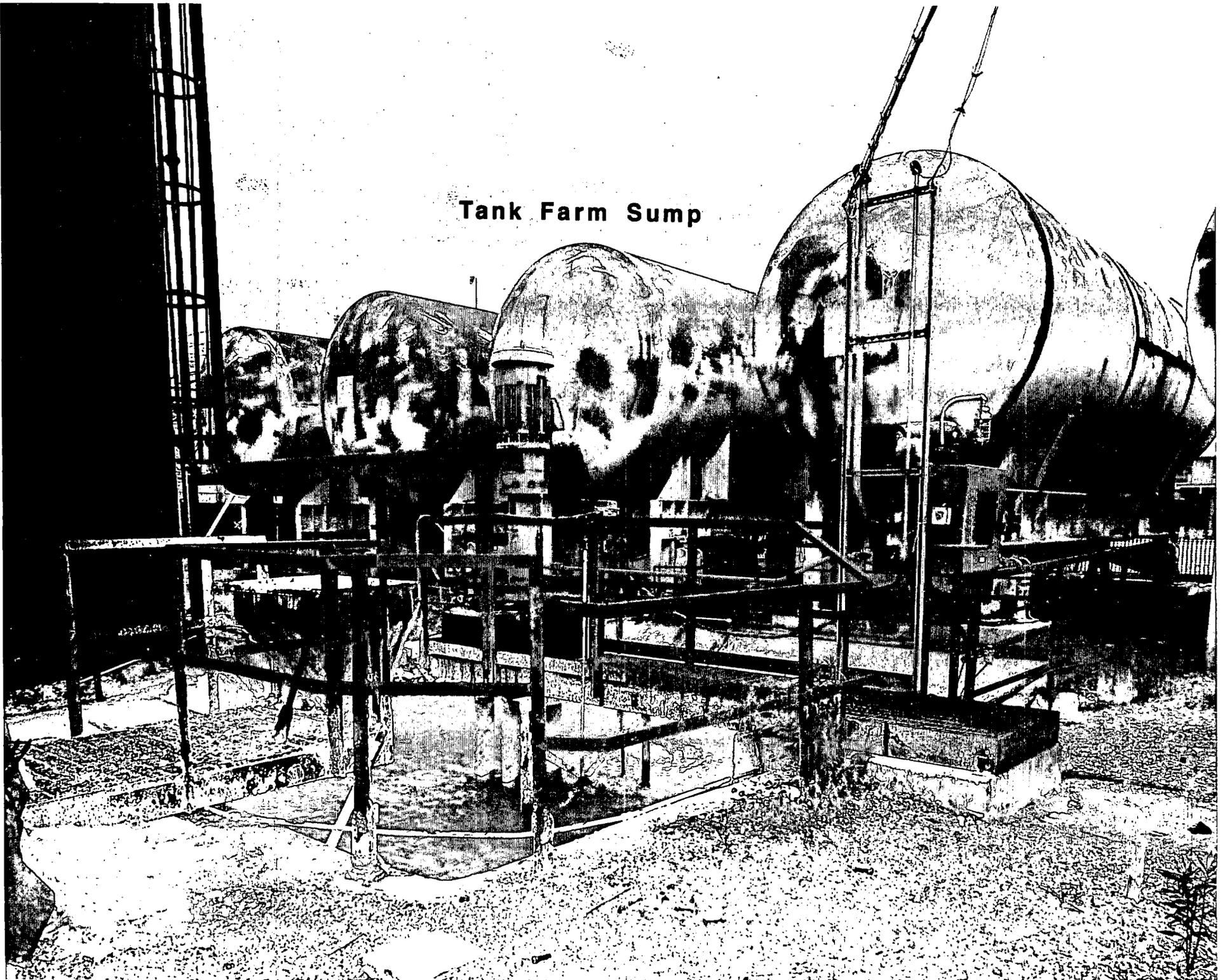
**Nitric Acid Rail Car and Area**

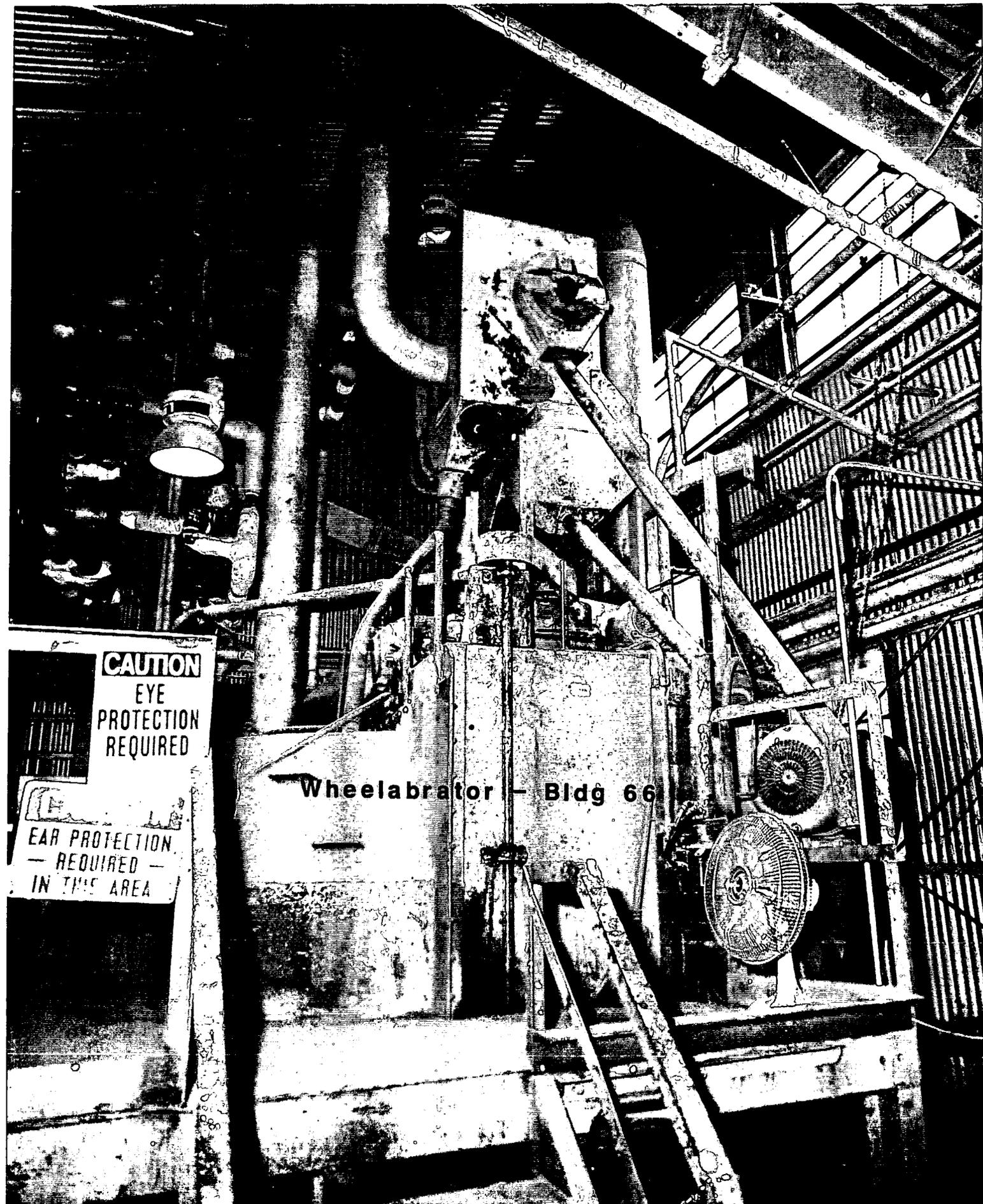


# NAR System Components



Tank Farm Sump

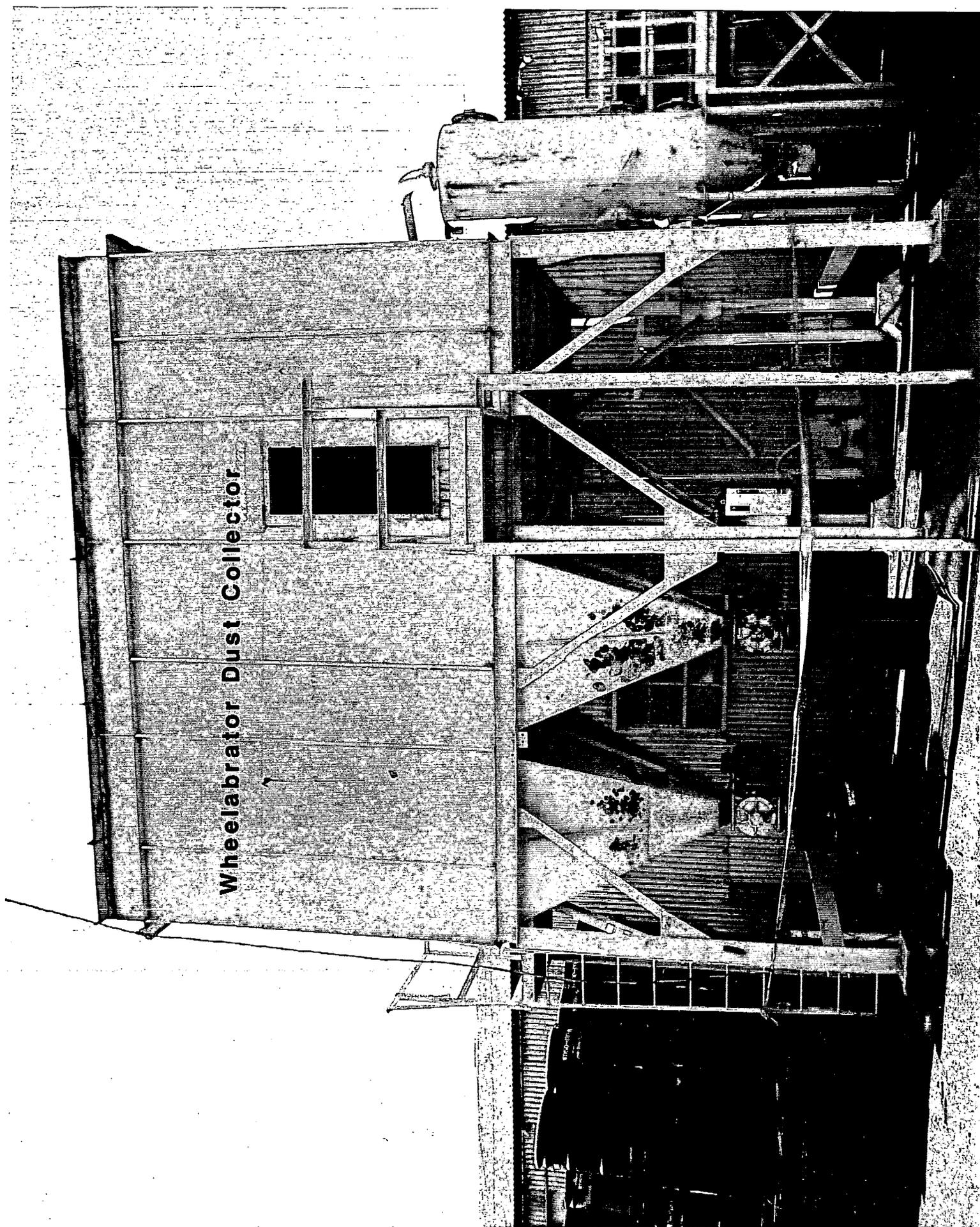




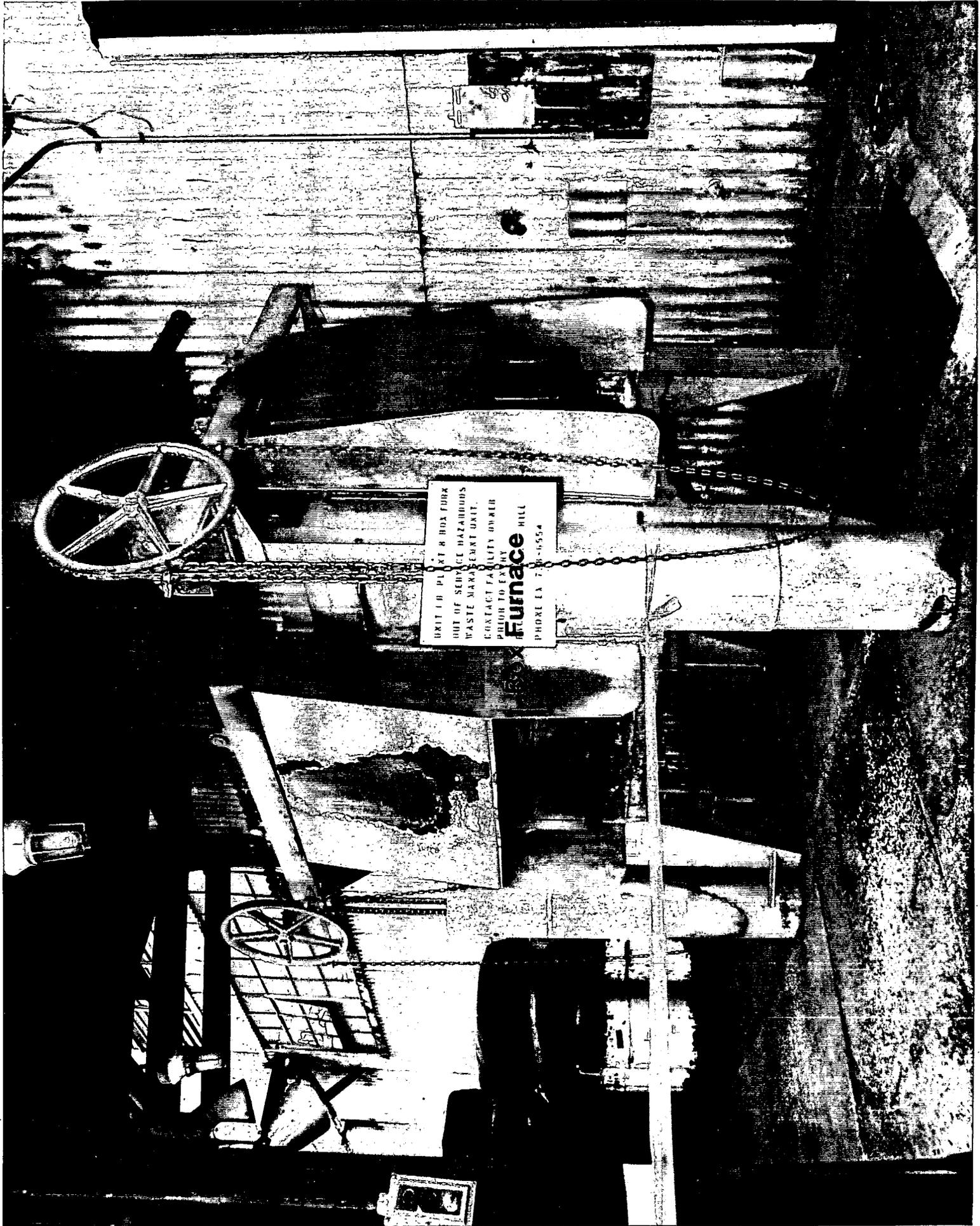
**CAUTION**  
EYE  
PROTECTION  
REQUIRED

Wheelabrator - Bldg 66

**EAR PROTECTION**  
— REQUIRED —  
IN THIS AREA



Wheelabrator Dust Collector



EXIT TO PLANT B BOX FURK  
 EXIT OF SERVICE HAZARDOUS  
 WASTE MATERIALS EXIT  
 CONTACT FACILITY DIRECTOR  
 PRIOR TO EXIT BY  
**Furnace** HILL  
 PHONE EA 781-4554



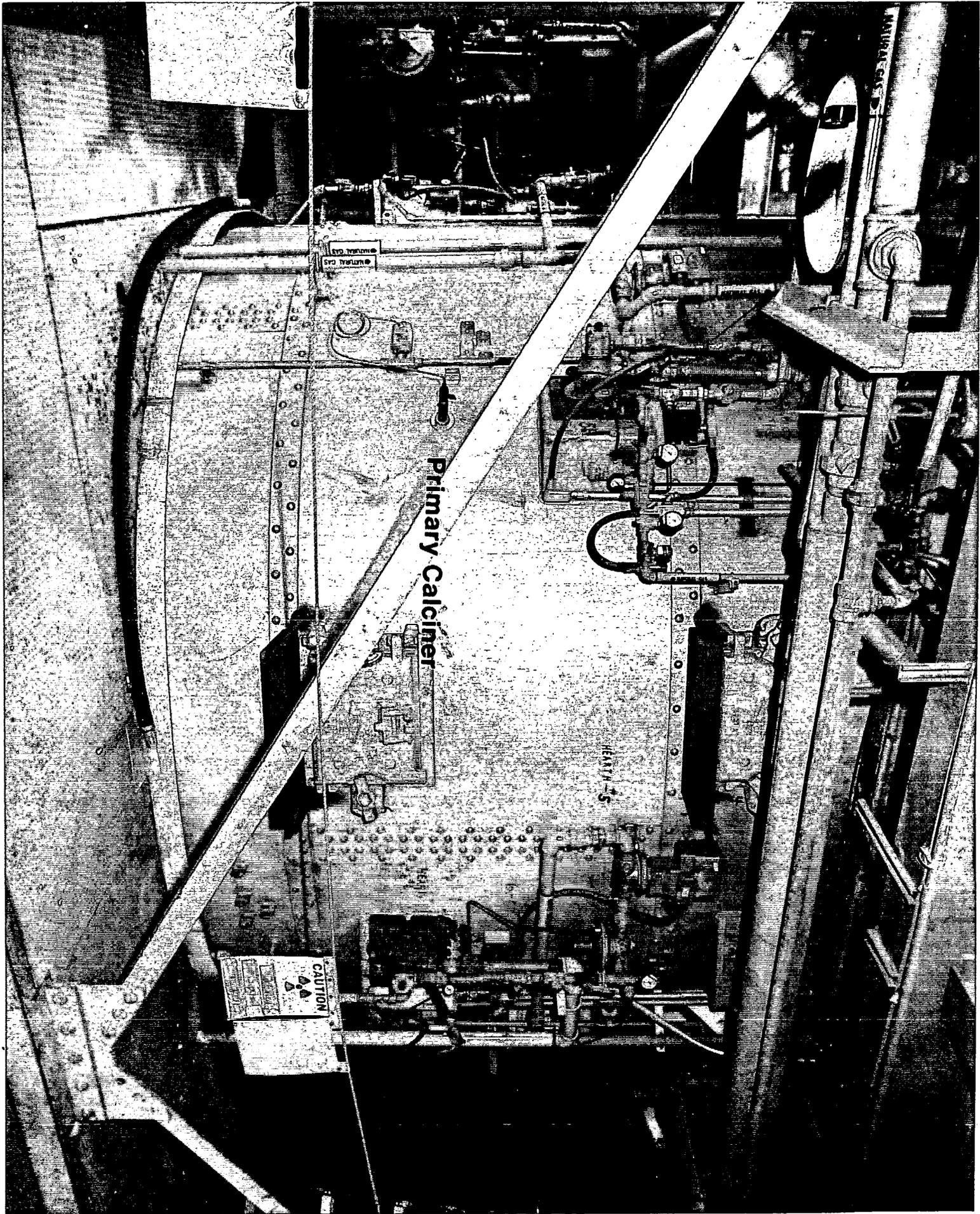
CAUTION

# Oxidation Furnace

UNIT ID PLY 8017 FURN.  
OUT OF SERVICE HAZARDOUS  
WASTE MANAGEMENT UNIT  
CONTACT FACILITY OWNER  
PRIOR TO ENTRY.  
FACILITY OWNER C HILL  
PHONE ES 738-6554

DANGER  
AUTHORIZED  
PERSONS ONLY

RE A  
BE ELIN



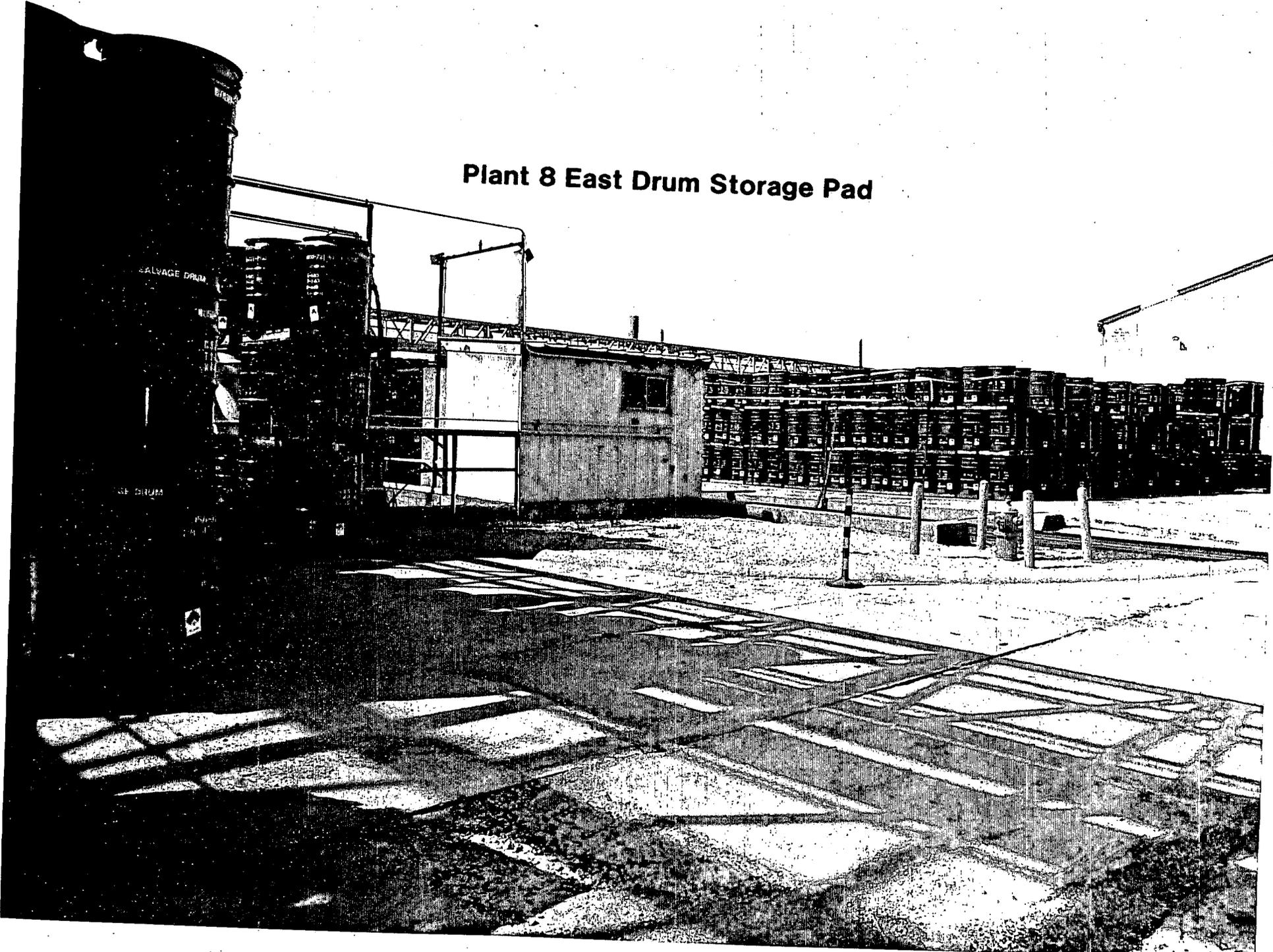
Primary Calcliner

HEAT-5

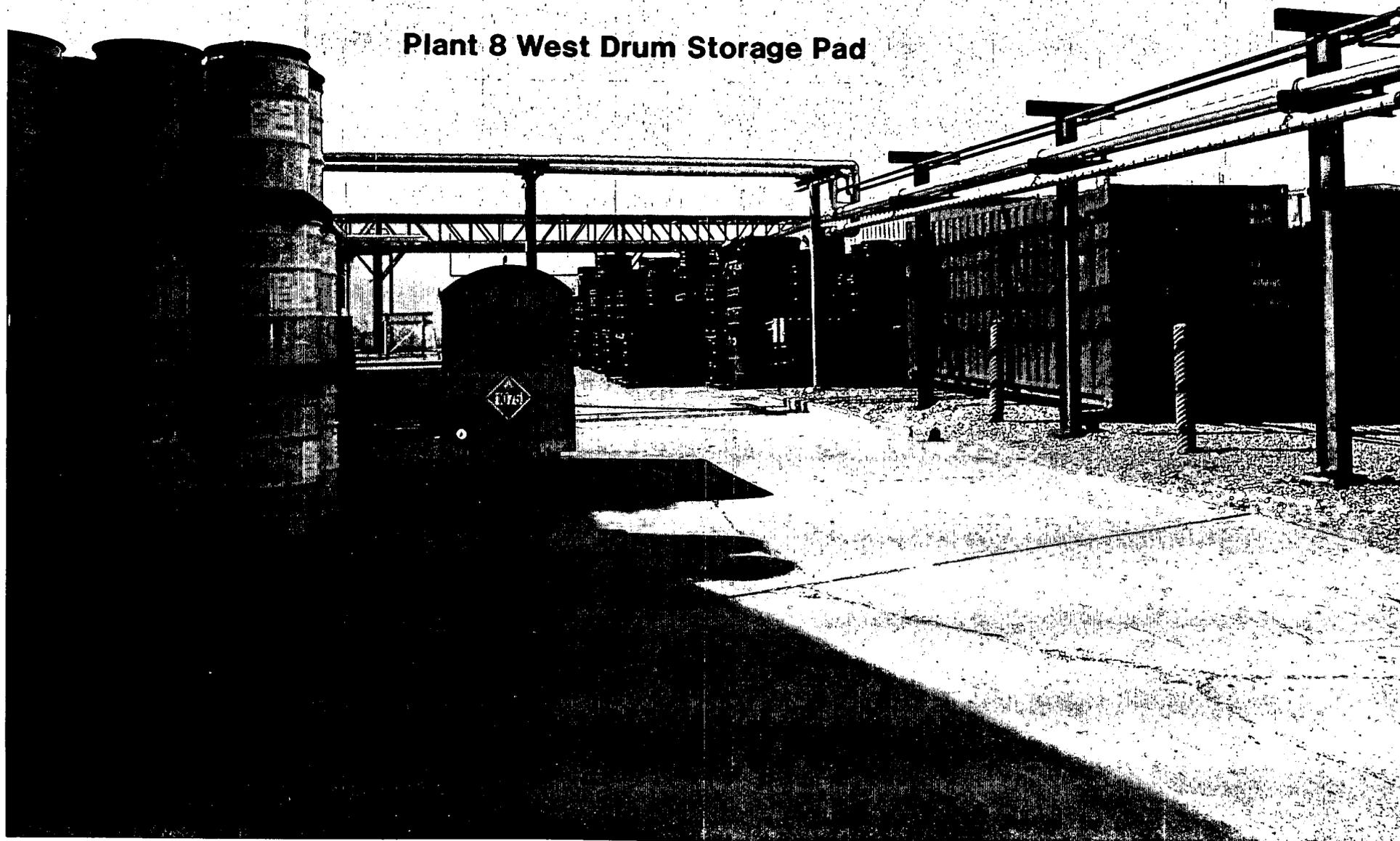
CAUTION  
RADIOACTIVE

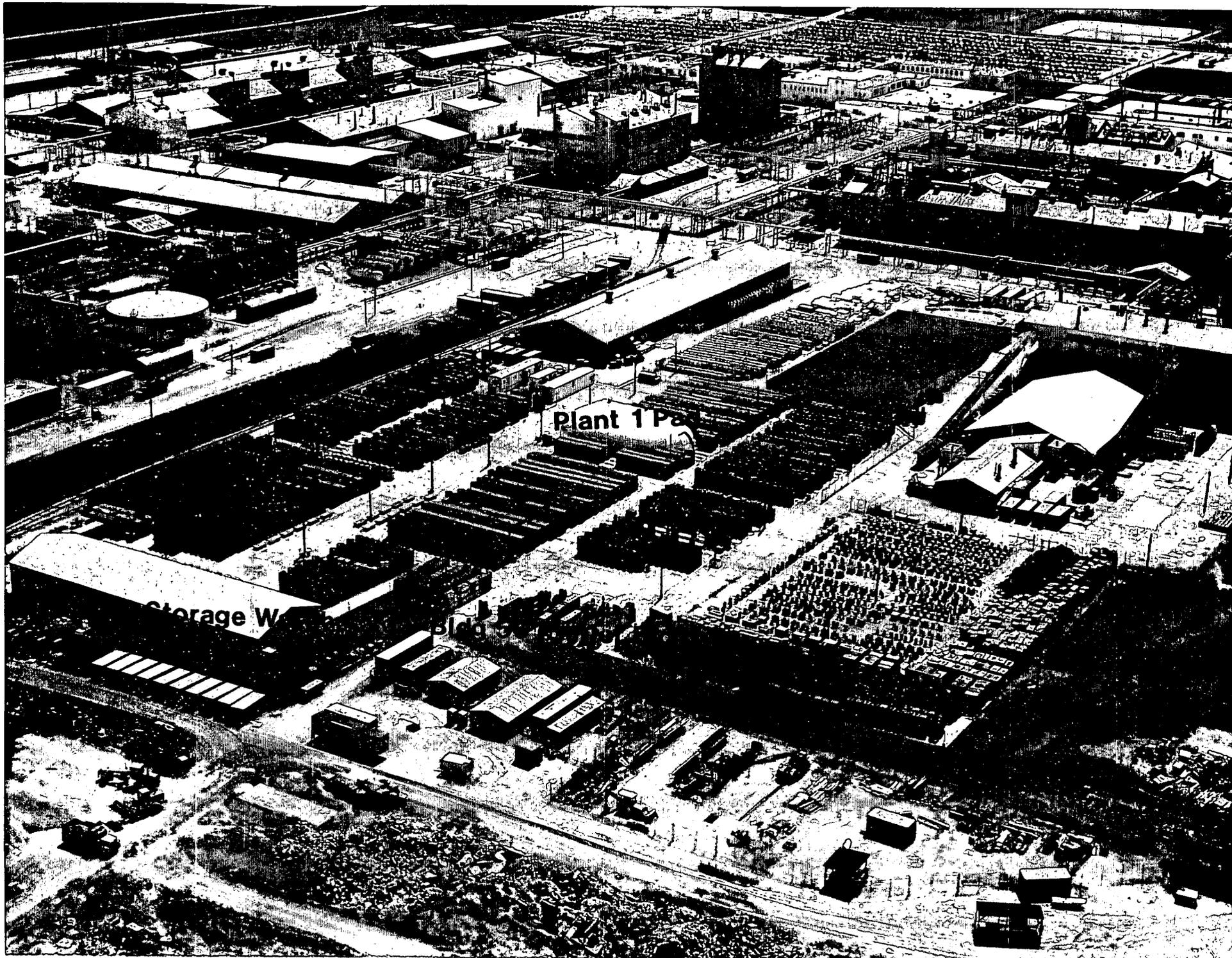
NAVAL CAS

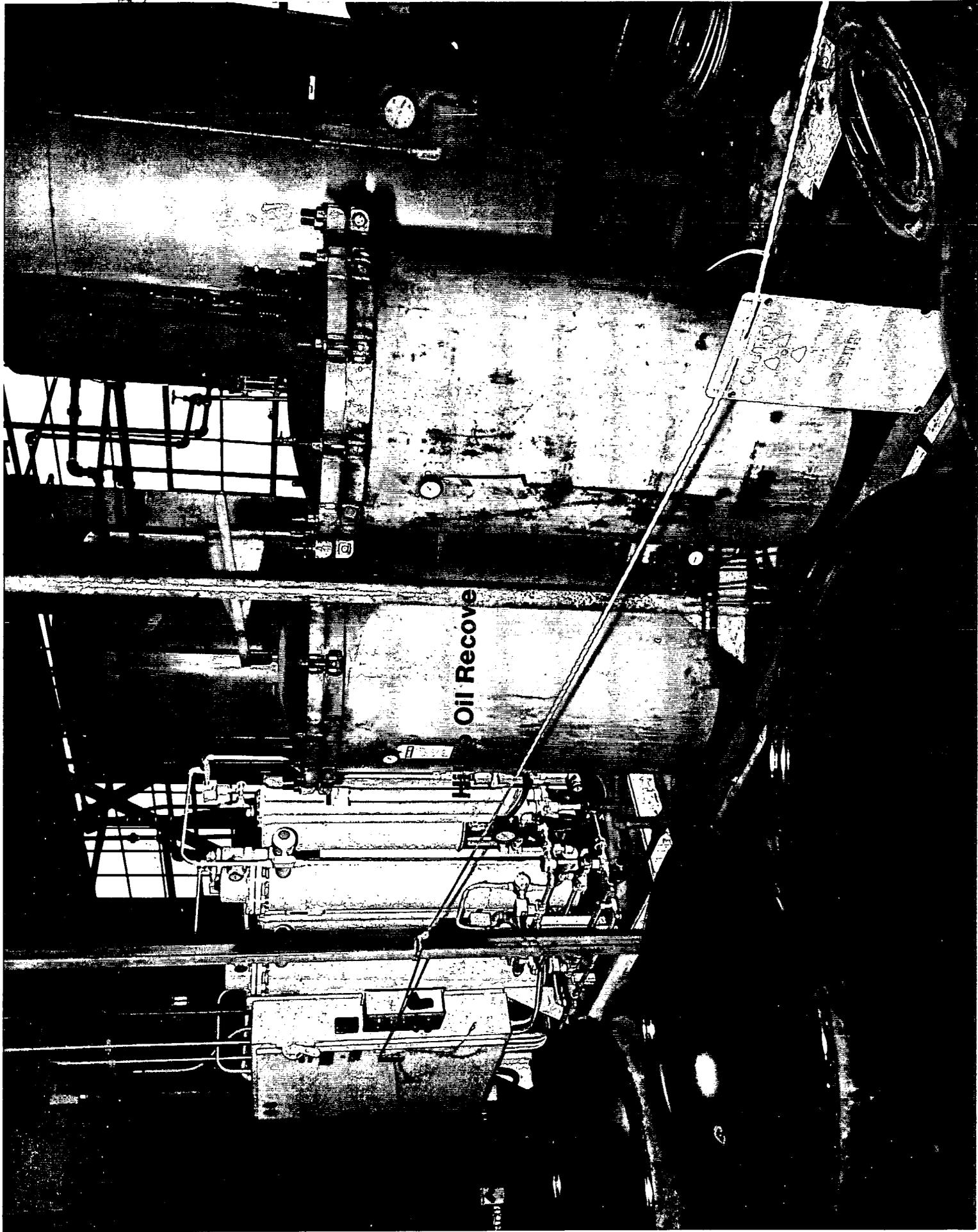
# Plant 8 East Drum Storage Pad



**Plant 8 West Drum Storage Pad**



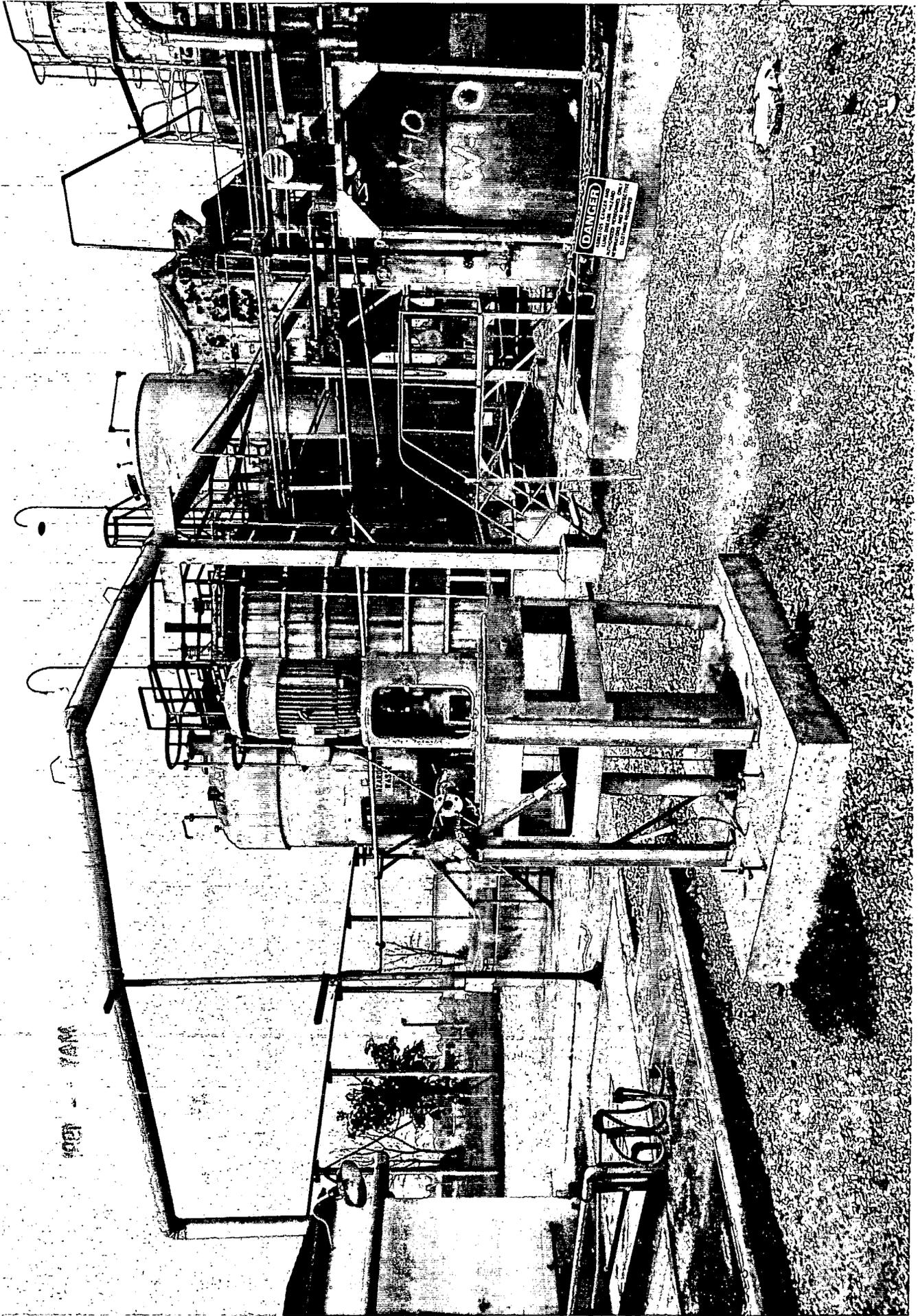




Oil Recover

CAUTION  
DO NOT TOUCH  
DANGER

Abandoned Sump West of Pilot Plant





Equipment Storage Area

Wall Forming Storage Area

69

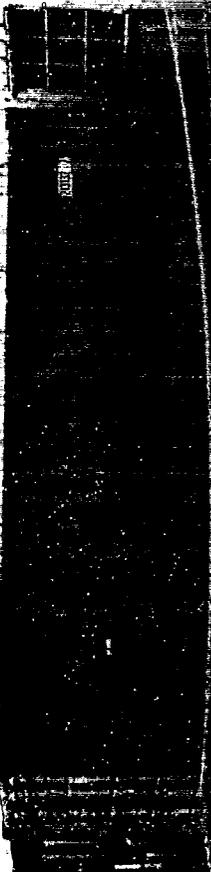
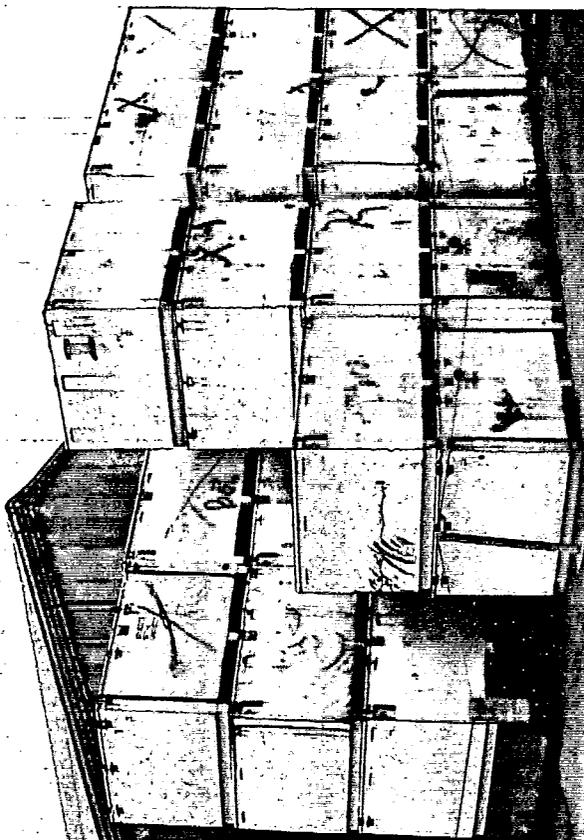
4142

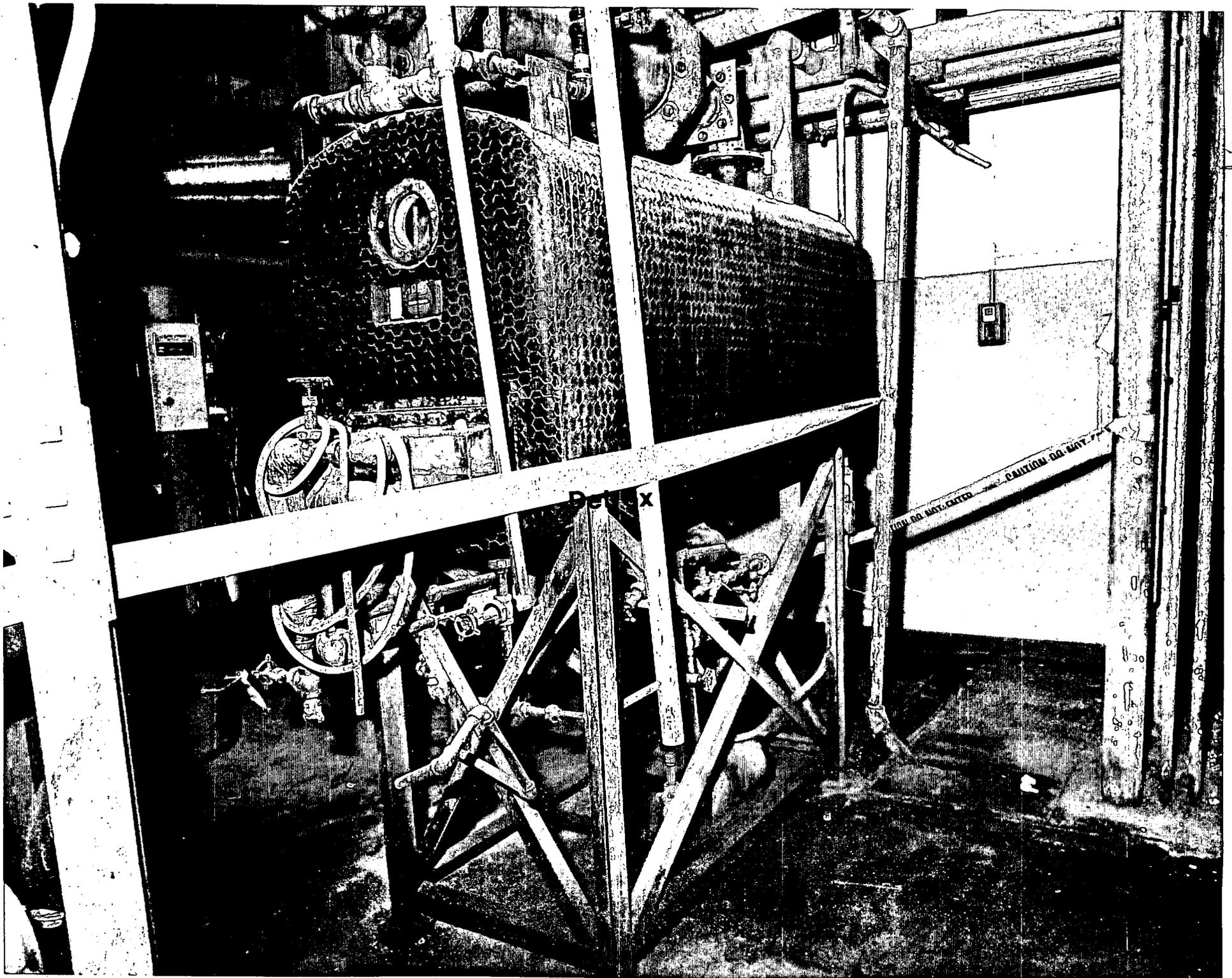
07 70

Plant 1 Storage Bldg (Bldg 67)



1000 11AM



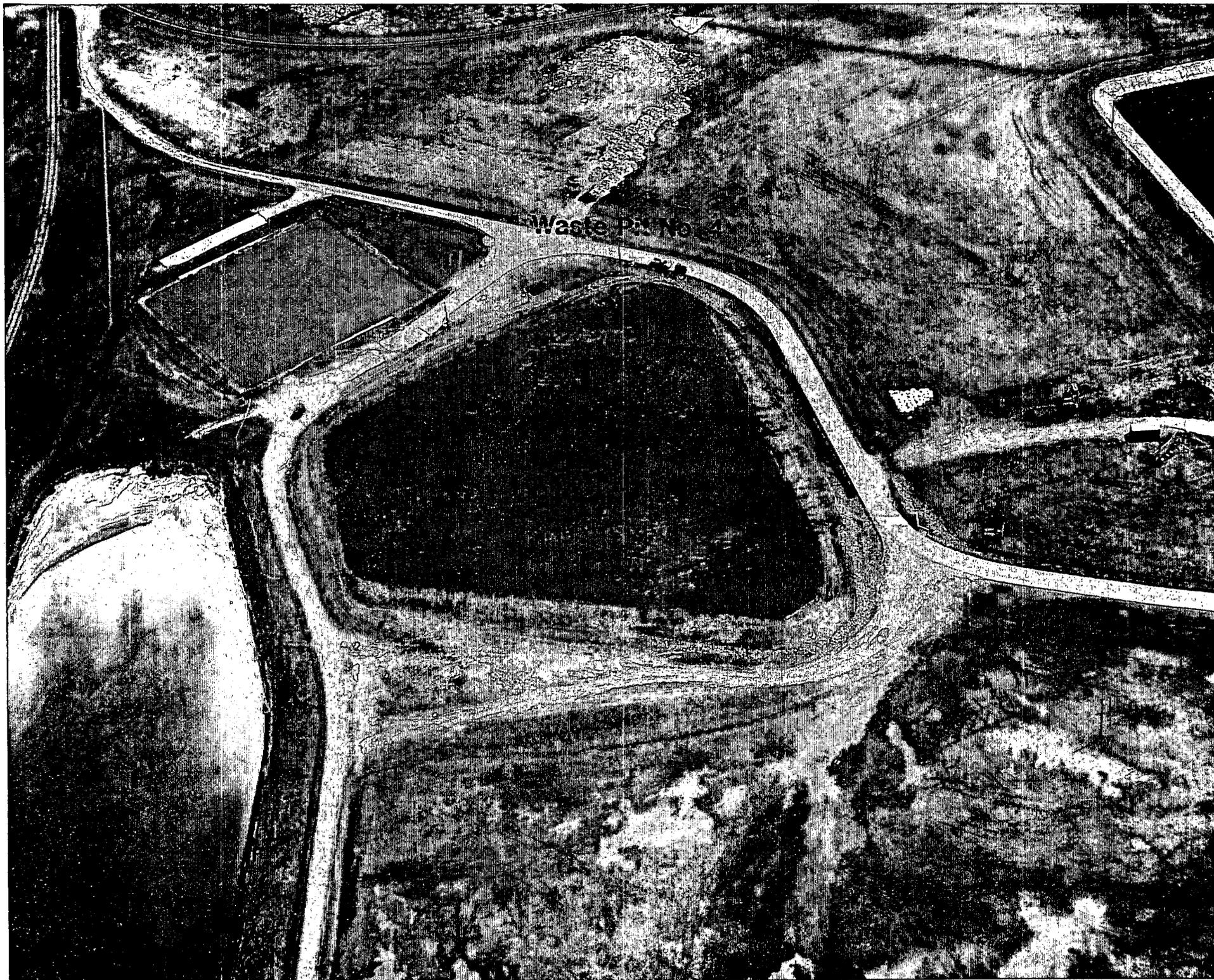


71

DANGER

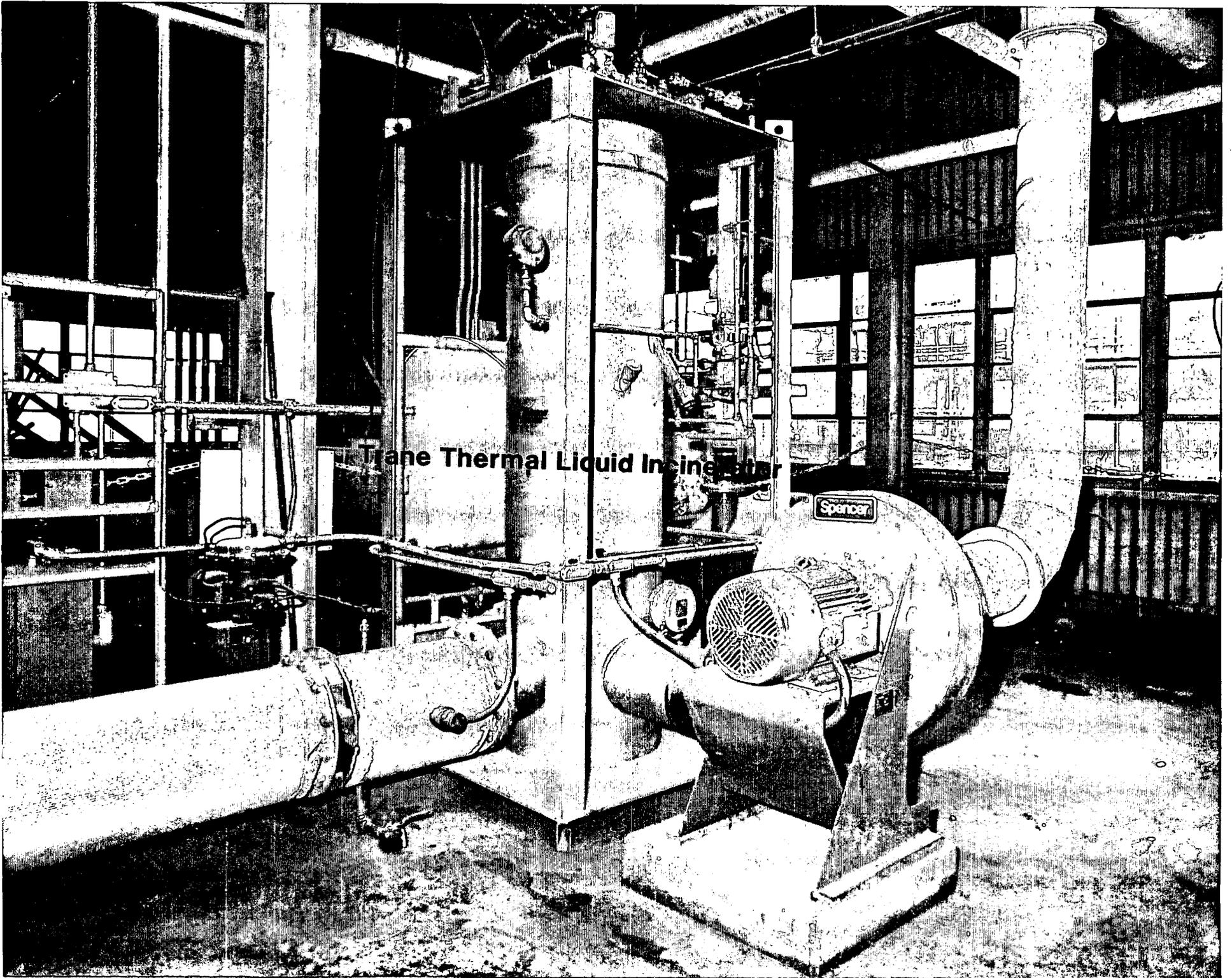
CAUTION DO NOT TOUCH

4142



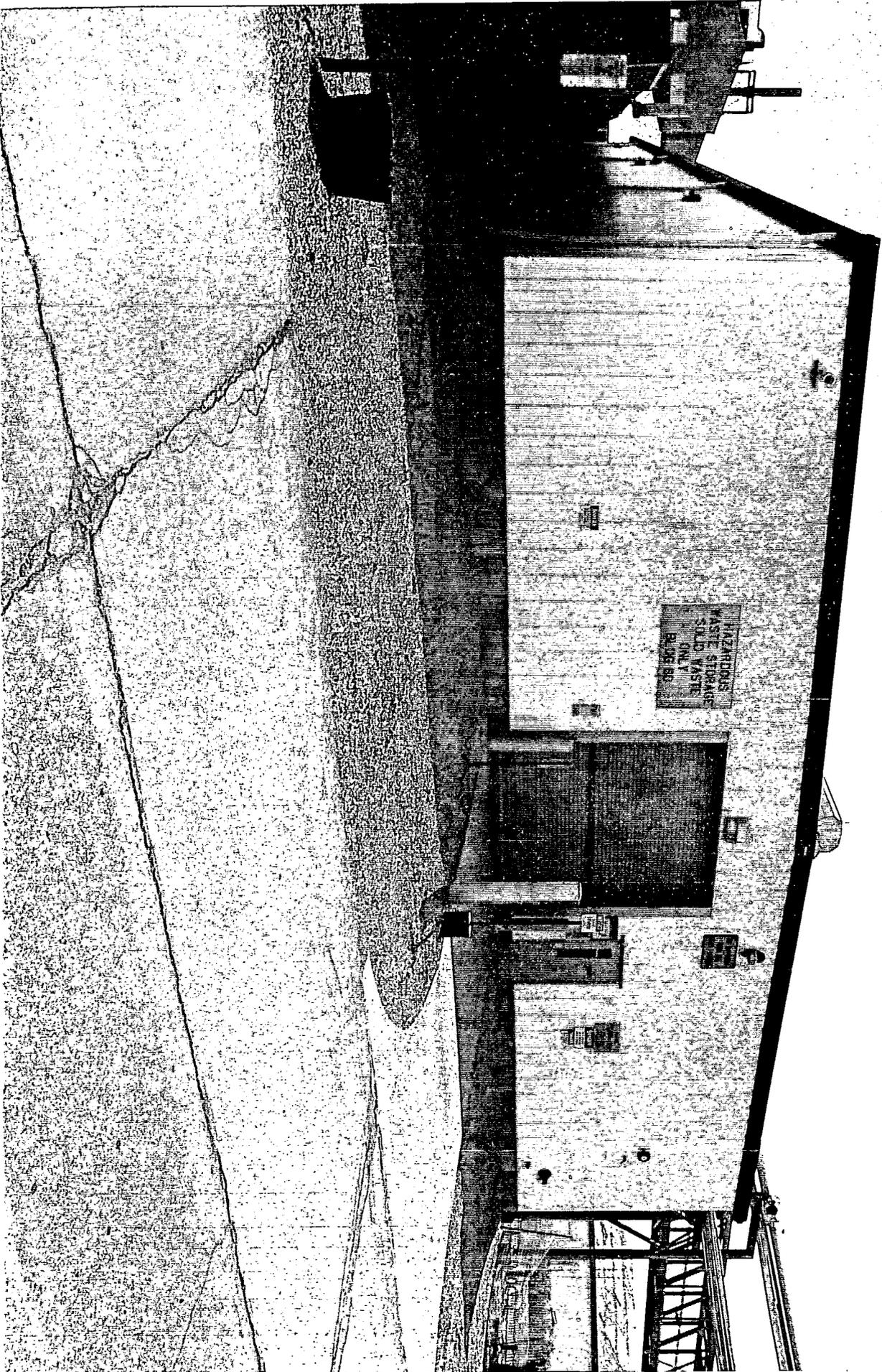
Waste Pond No. 4

34

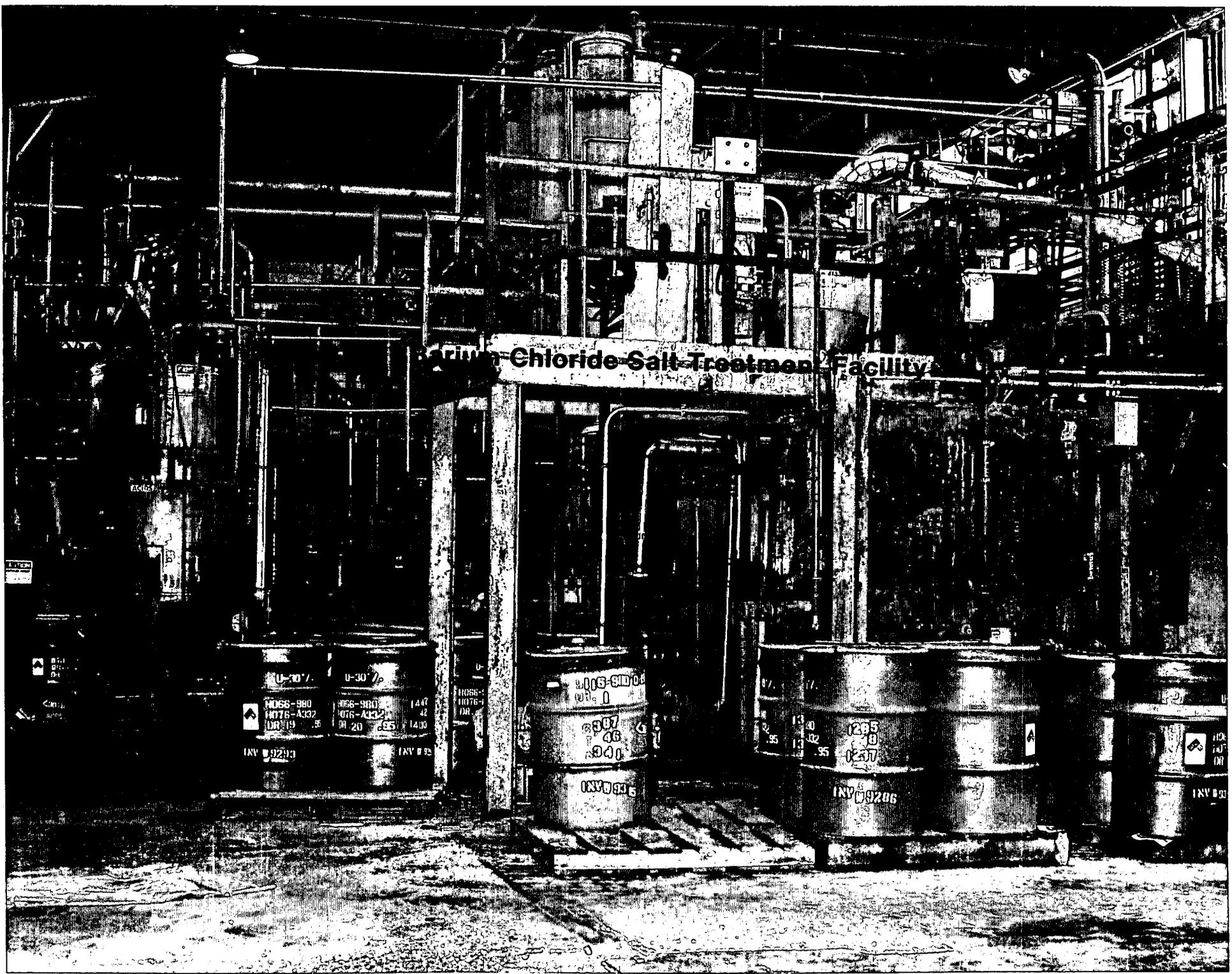


Trane Thermal Liquid Incinerator

**Plant 8 Warehouse (Bldg 80)**



Barium-Chloride-Salt-Treatment-Facility



U-20 / U-30  
1066-980 1447  
1076-A332 42  
1087-19 55 1400  
INV 92293 INV 92293

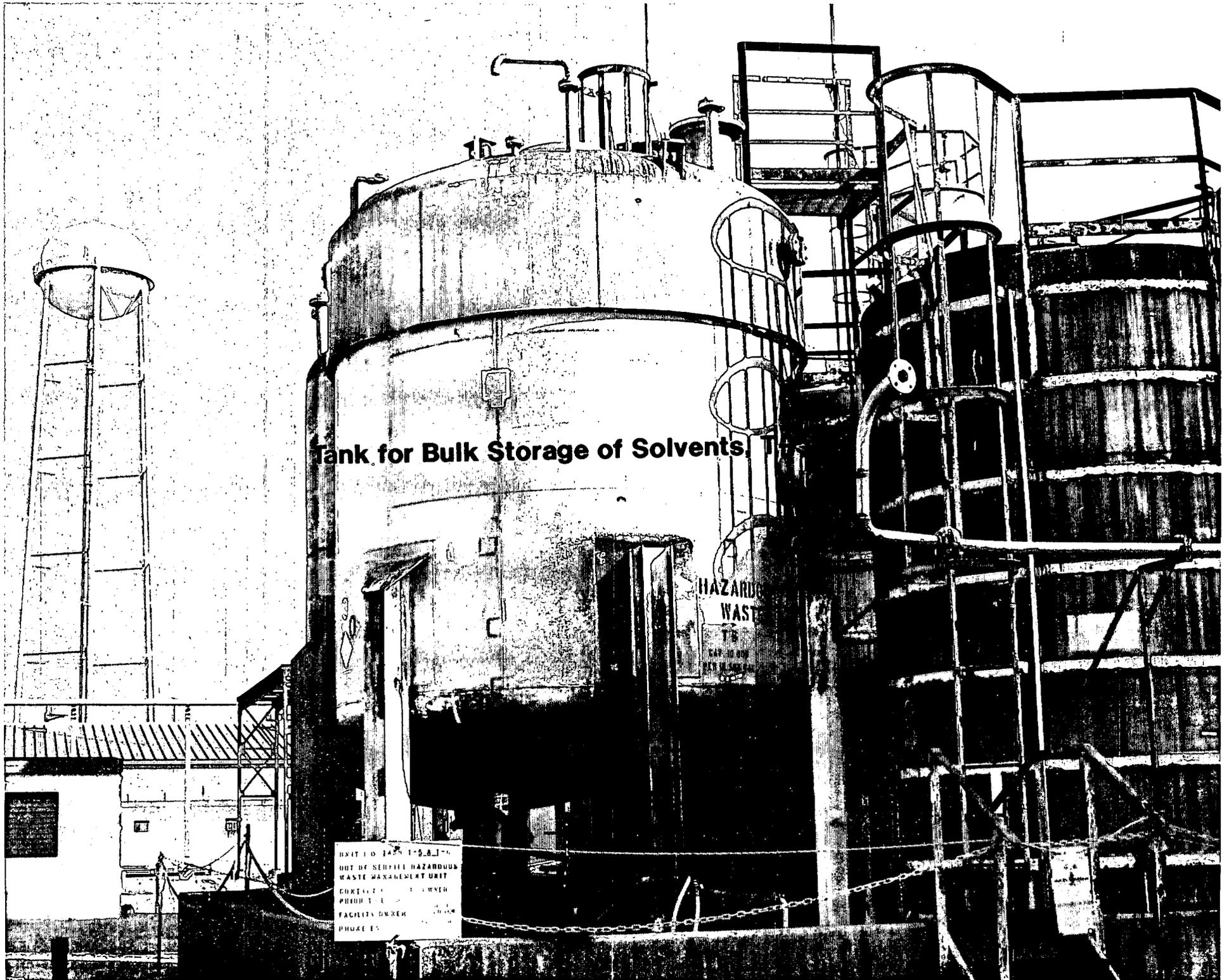
1016-8100  
1035 0  
1037 48  
1040  
INV 92293

1295  
1030  
1032  
1035  
INV 92206

1030  
1031  
1032  
1033  
1034  
1035  
INV 92293

77

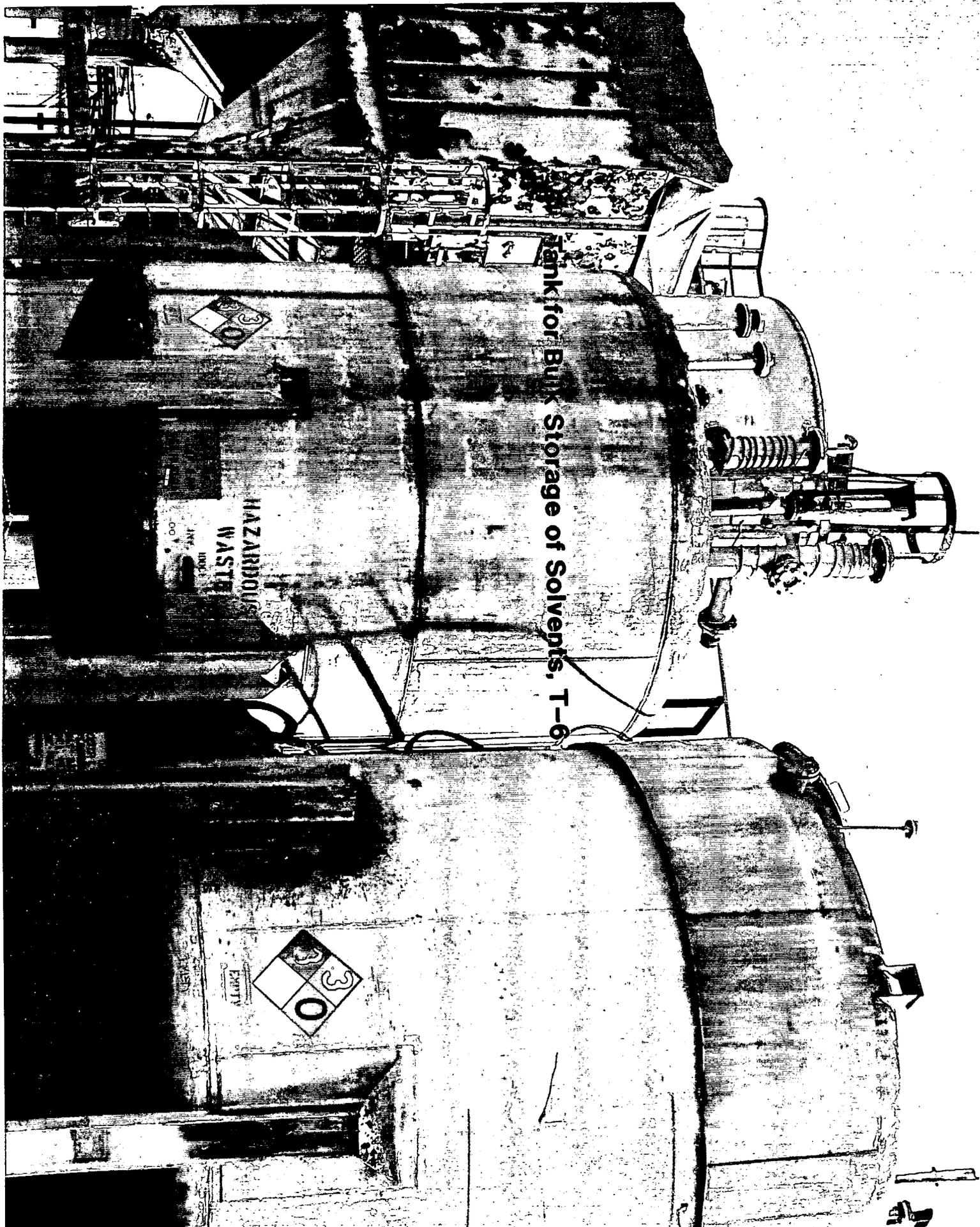
4142



Tank for Bulk Storage of Solvents, Tank

HAZARDOUS  
WASTE

UNIT 10 1-9-81  
UNIT OF SEATTLE HAZARDOUS  
WASTE MANAGEMENT UNIT  
EUREKA, CALIFORNIA  
PHONE 1-415-435-1111  
FACILITY OWNER  
PHONE 1-415-435-1111

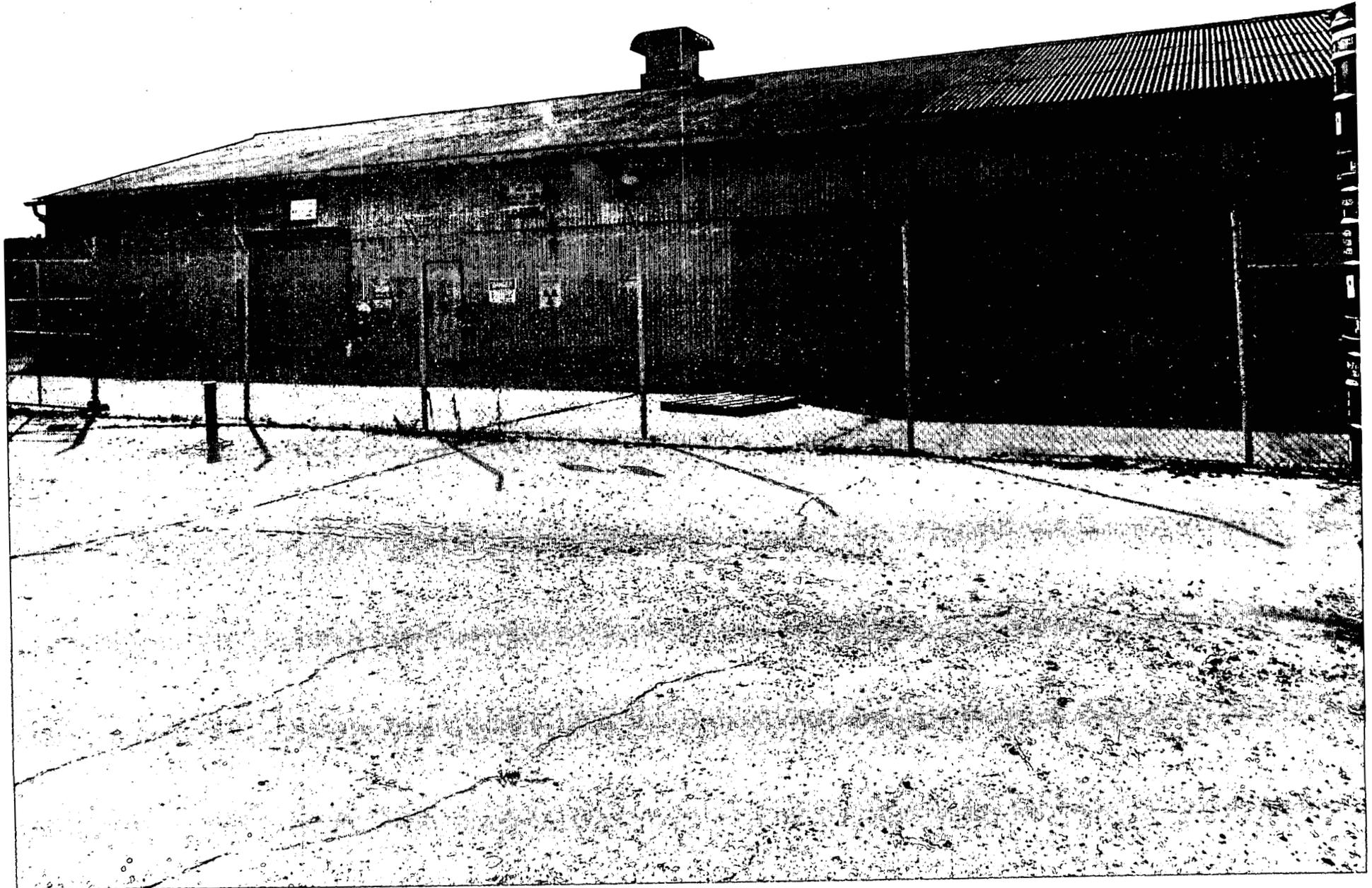


Tank for Bulk Storage of Solvents, T-6

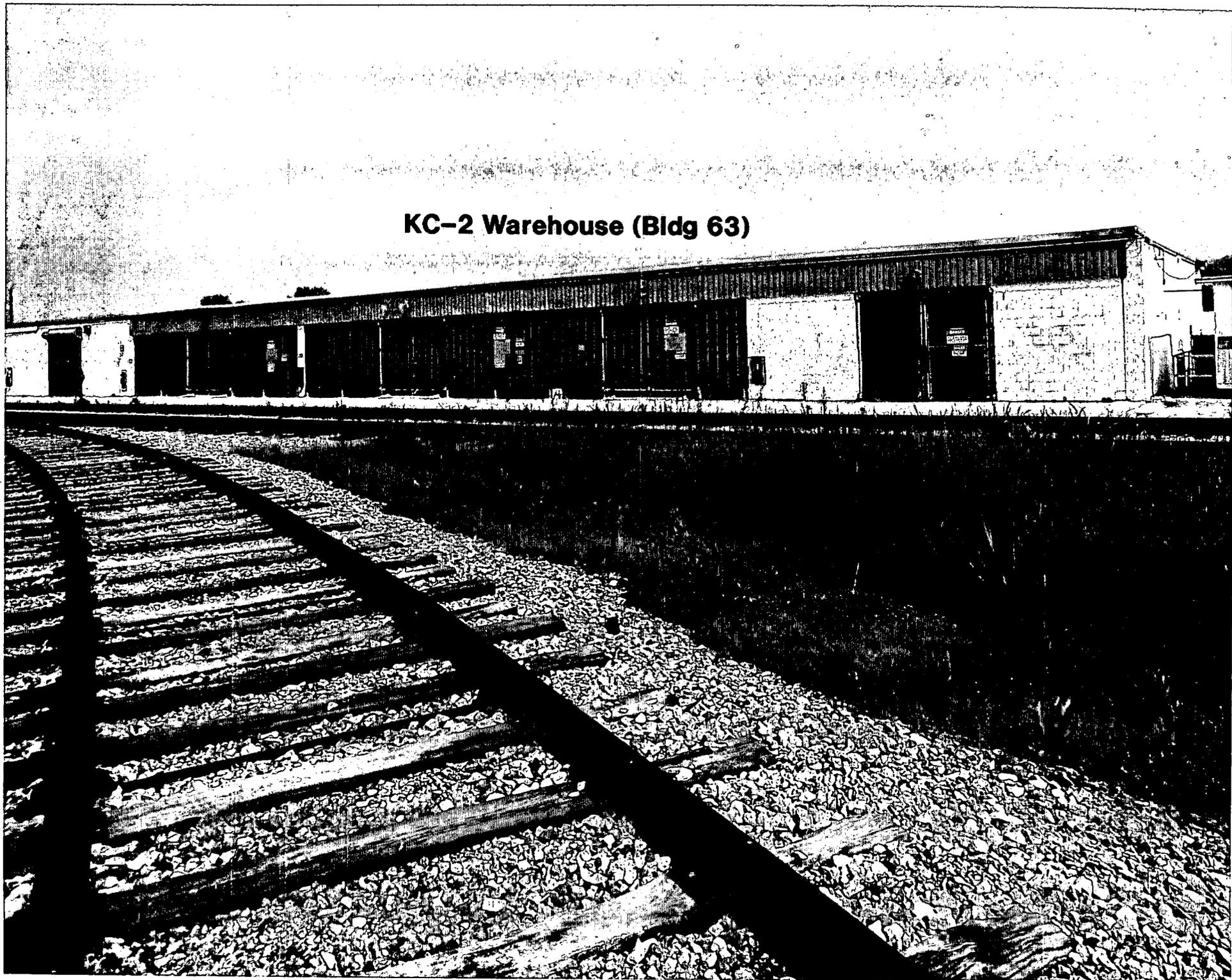
HAZARDOUS  
WASTE  
UNCL. LIQ. 3

EXPLOSIVE  
3

**Pilot Plant Warehouse (Bldg 68)**

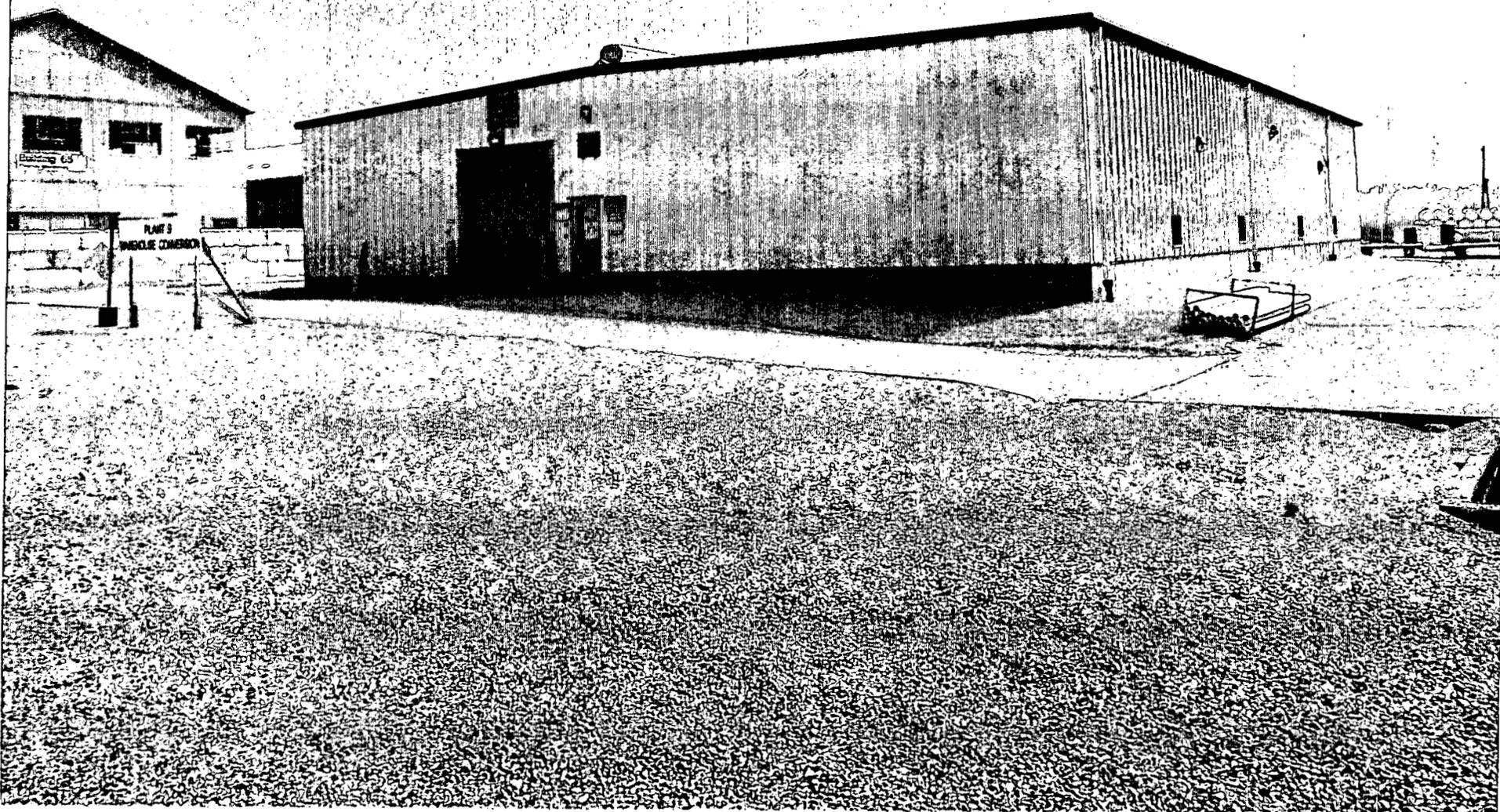


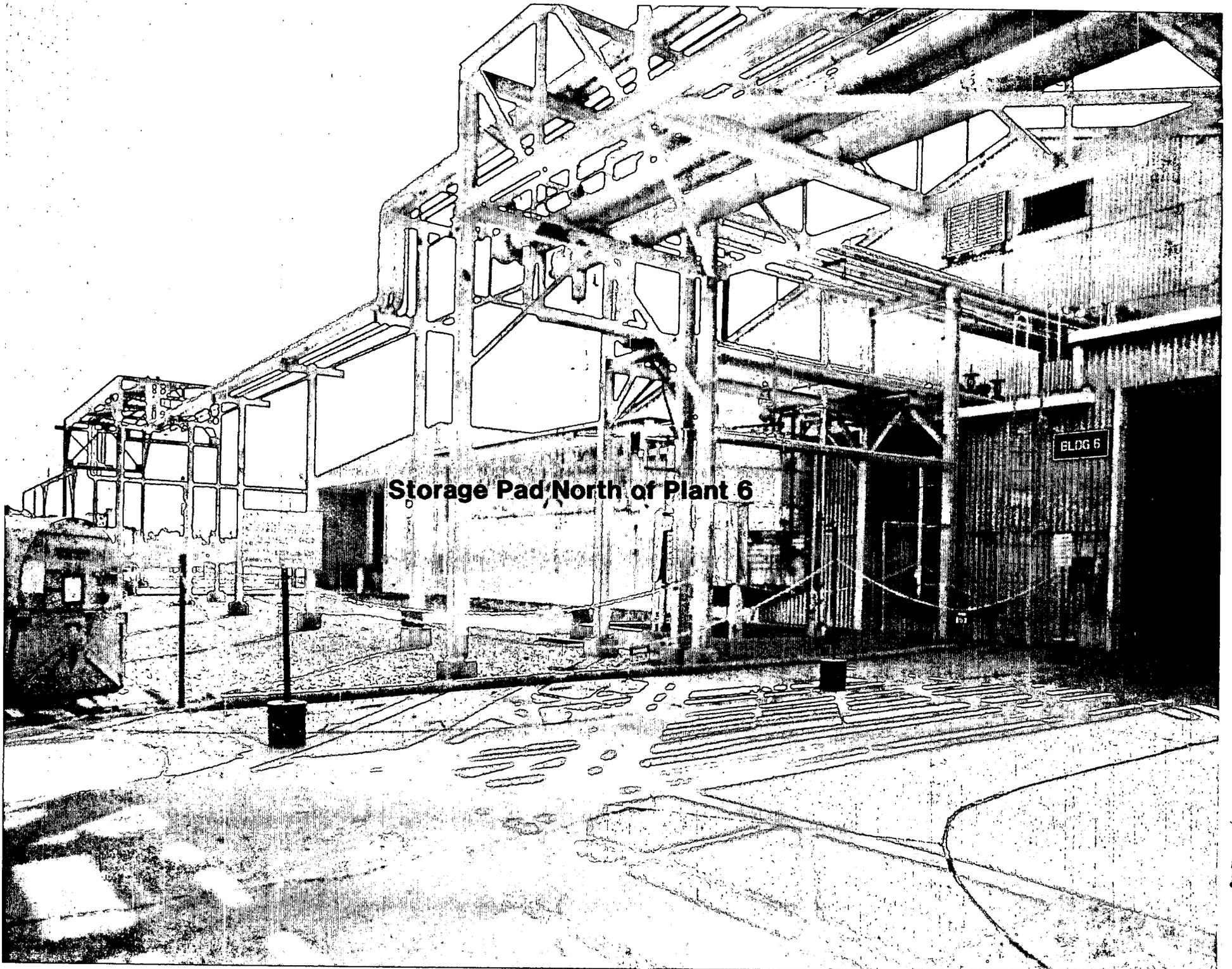
**KC-2 Warehouse (Bldg 63)**



**Plant 9 Warehouse (Bldg 81)**

03

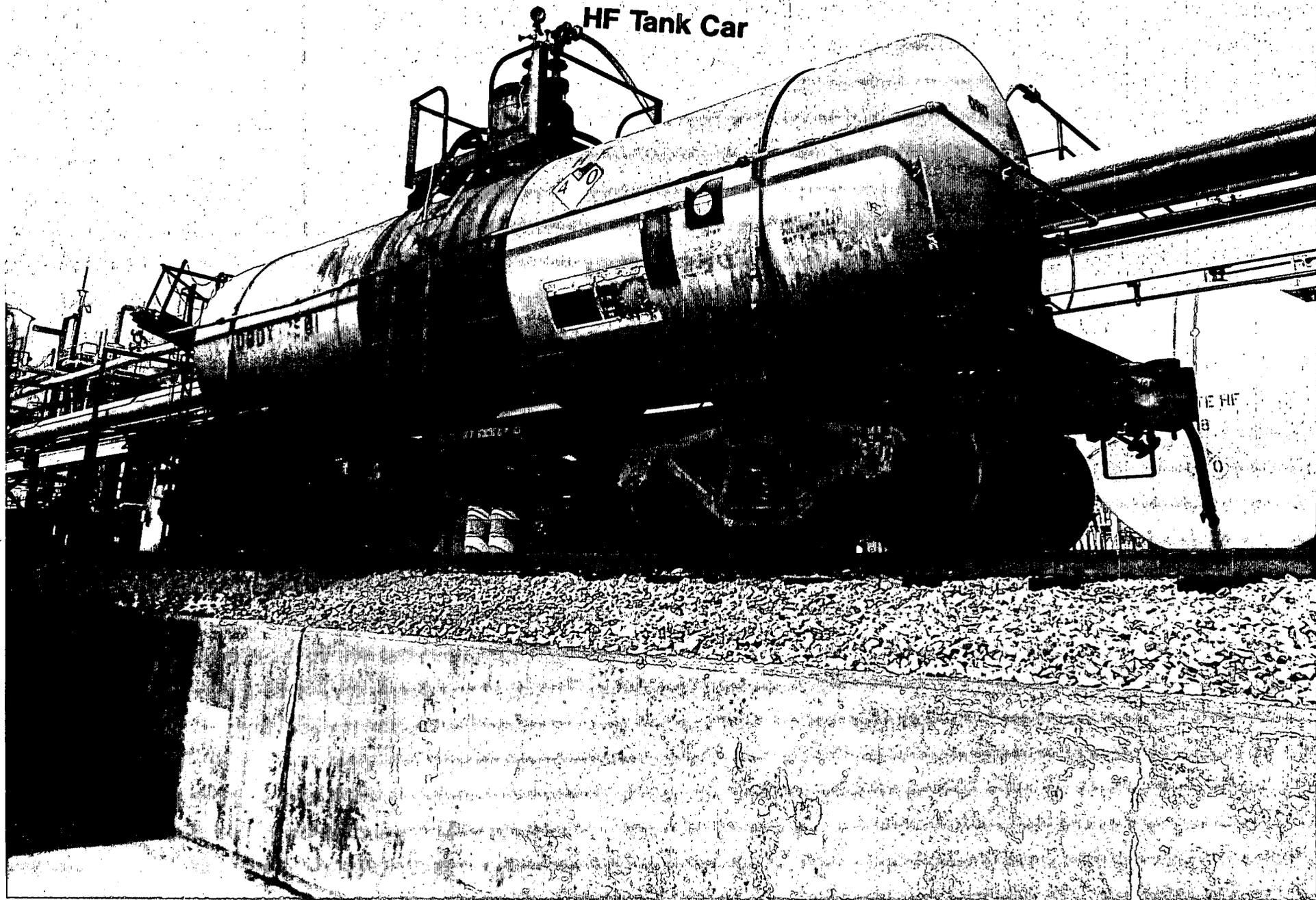


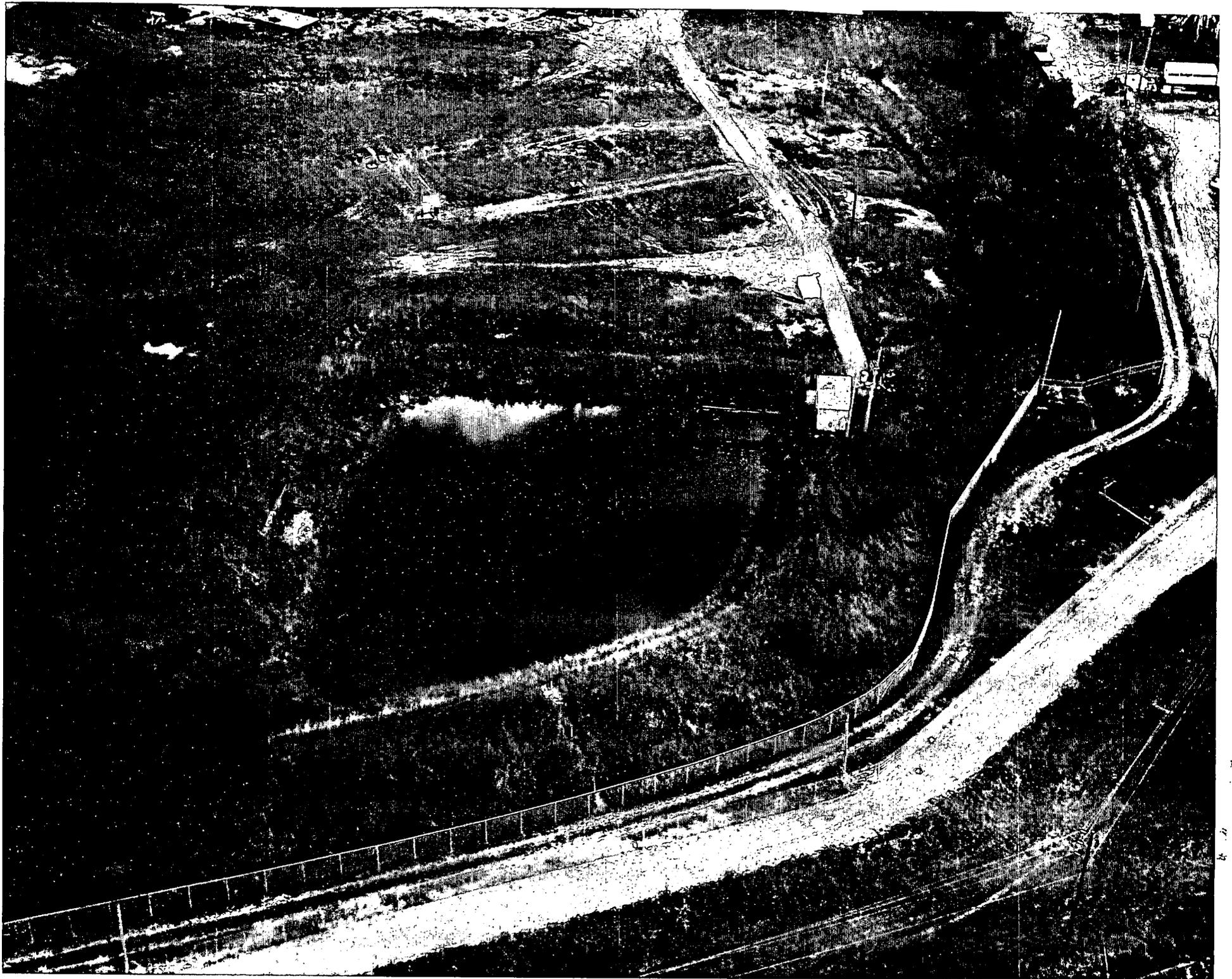


**Storage Pad North of Plant 6**

**Plant 6 Warehouse (Bldg 79)**





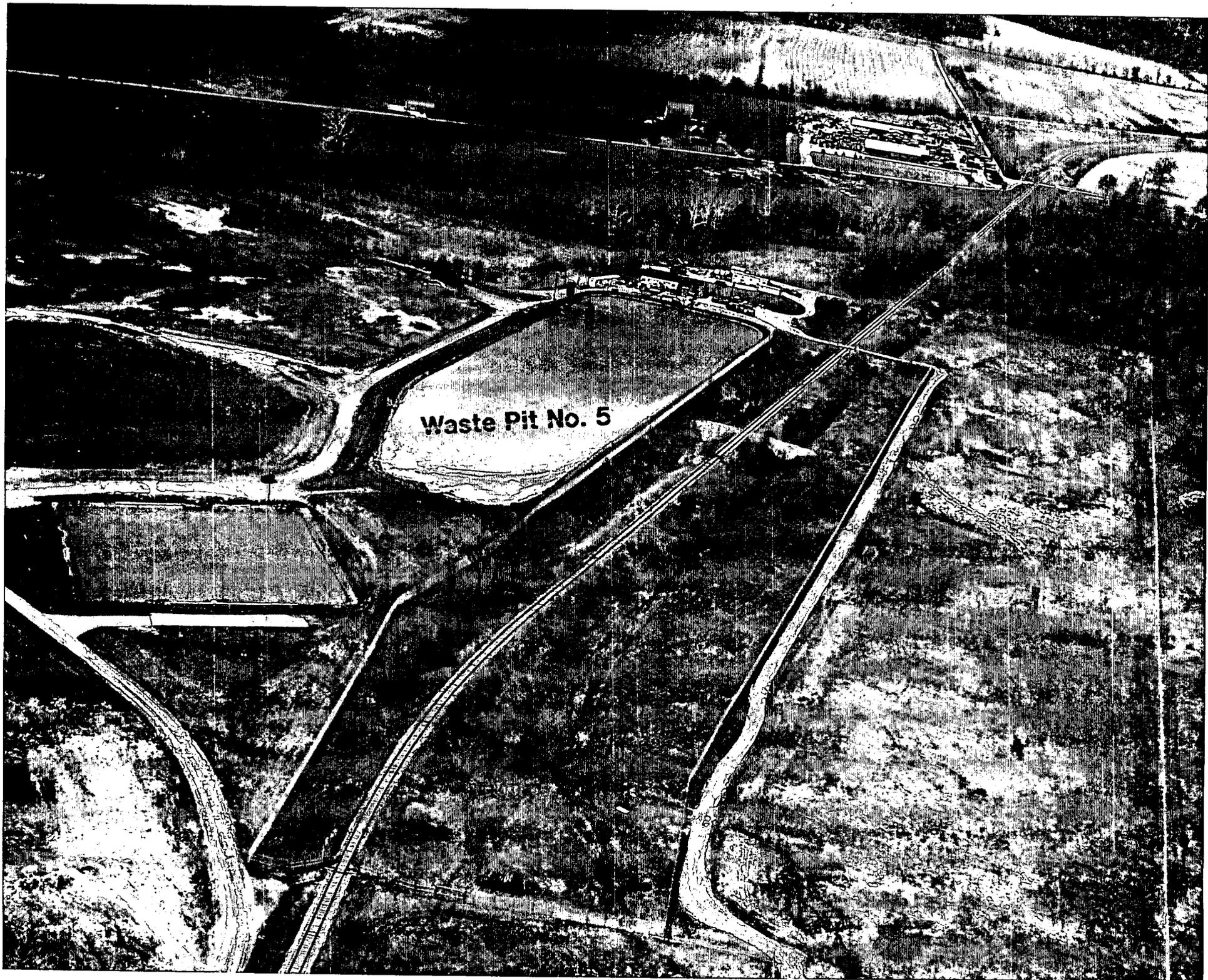




05

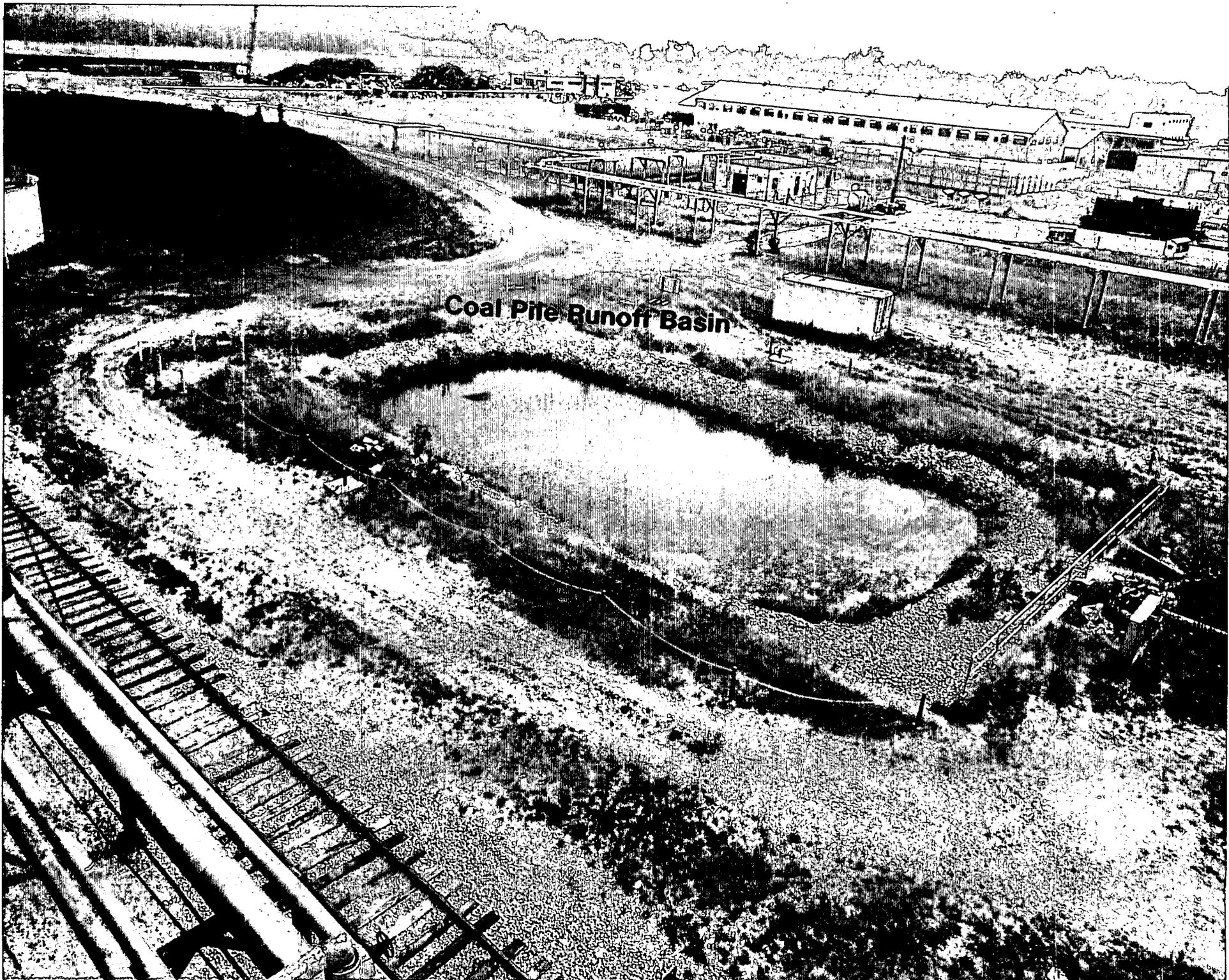
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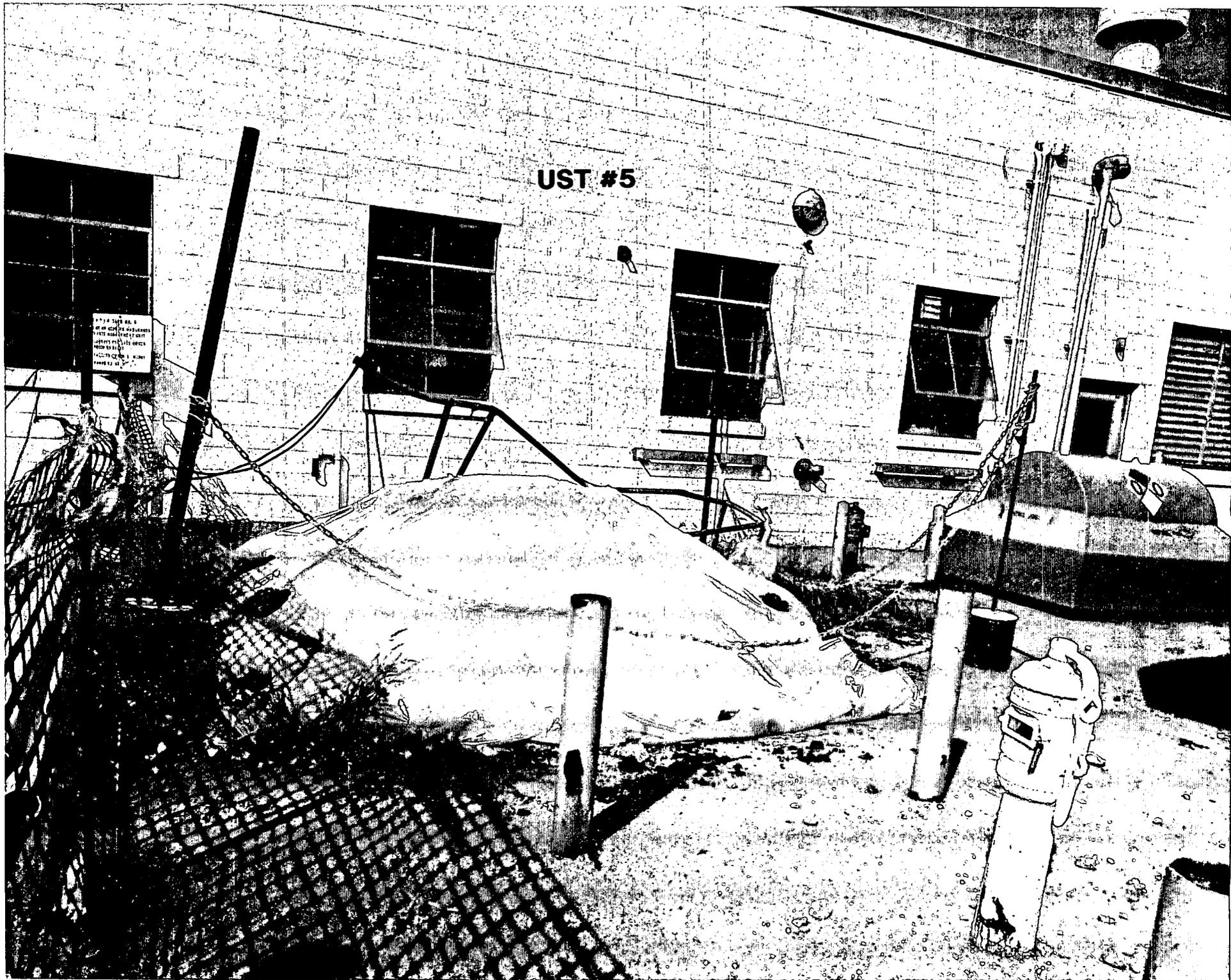


Waste Pit No. 5

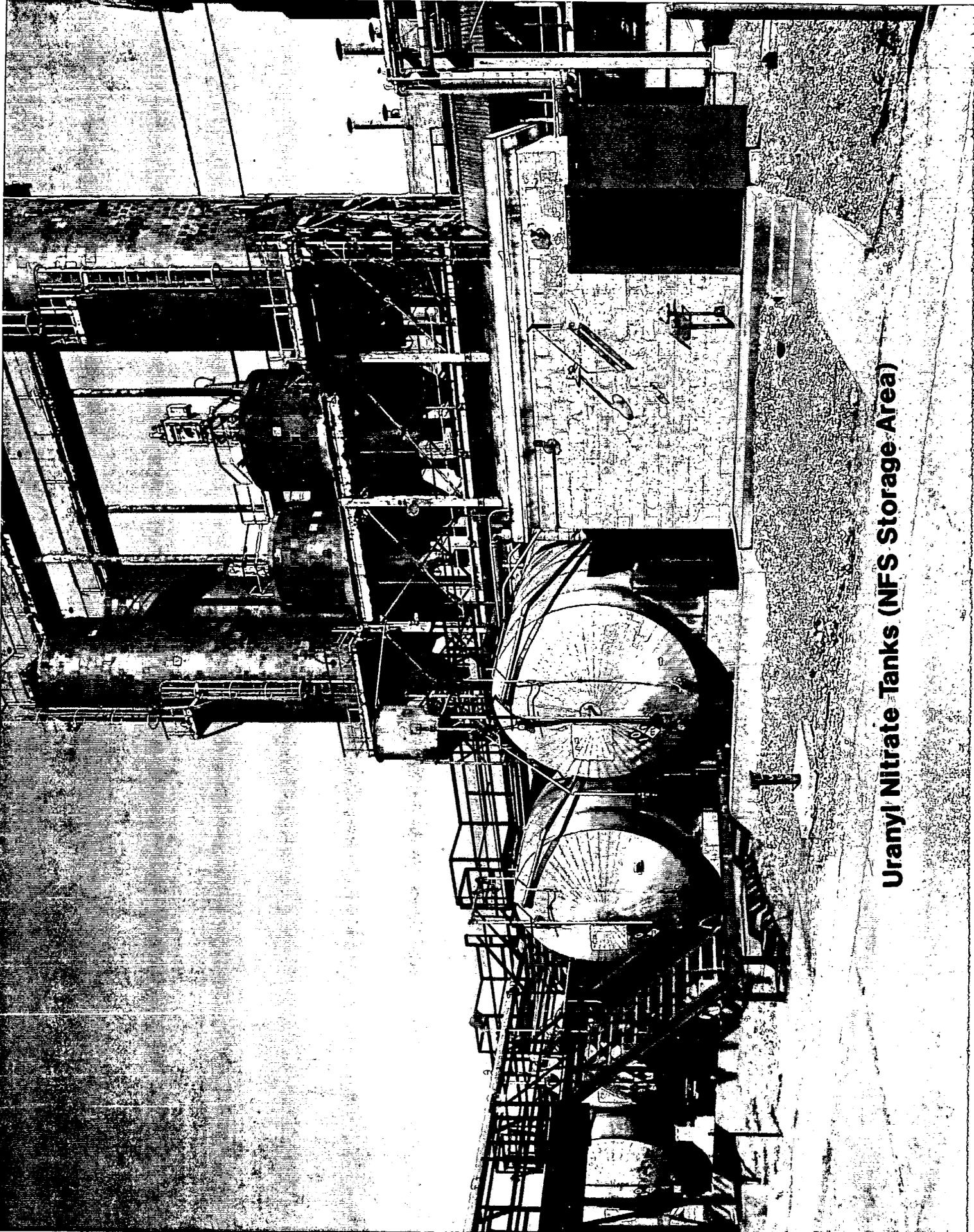




Coal Pile Runoff Basin

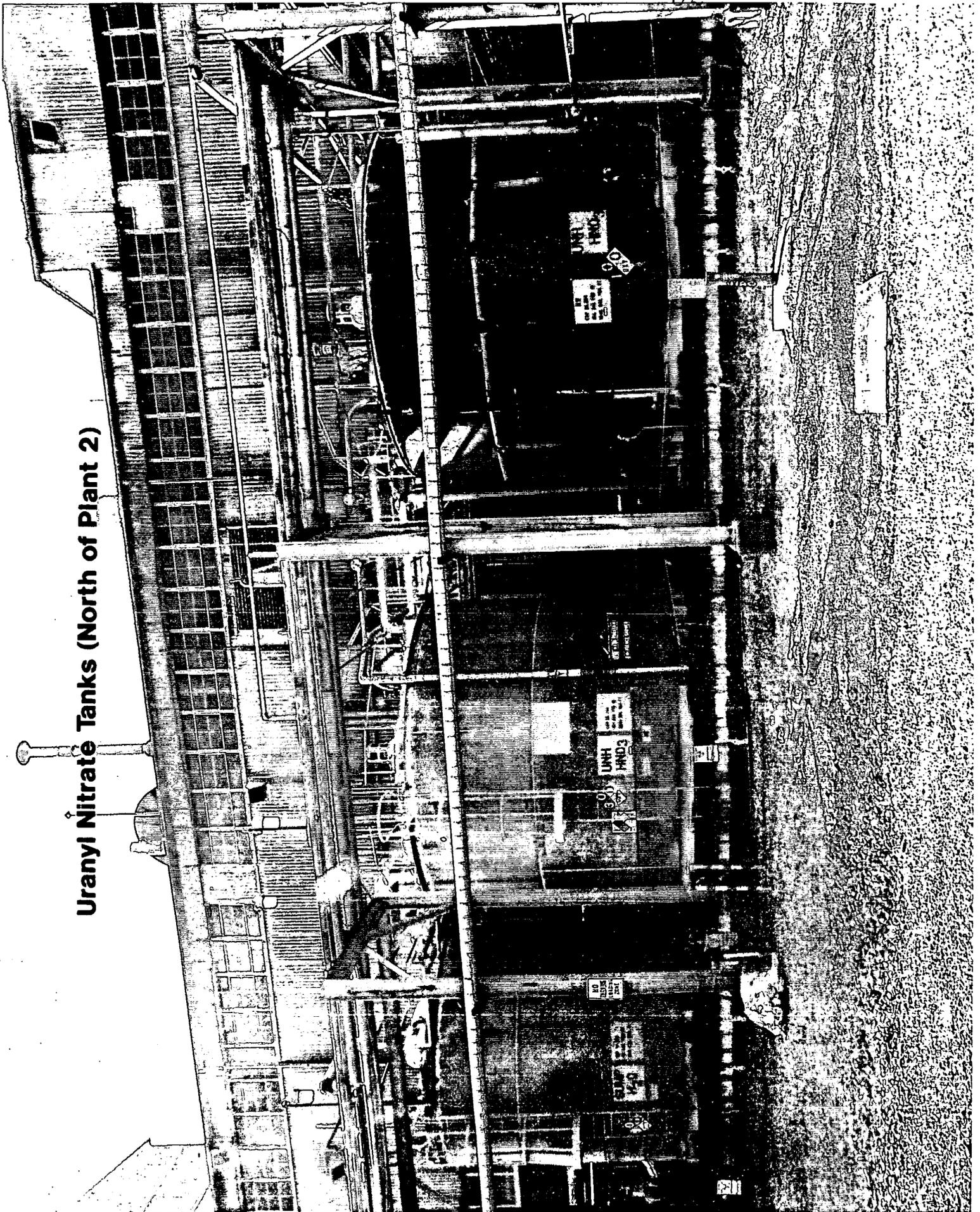


UST #5

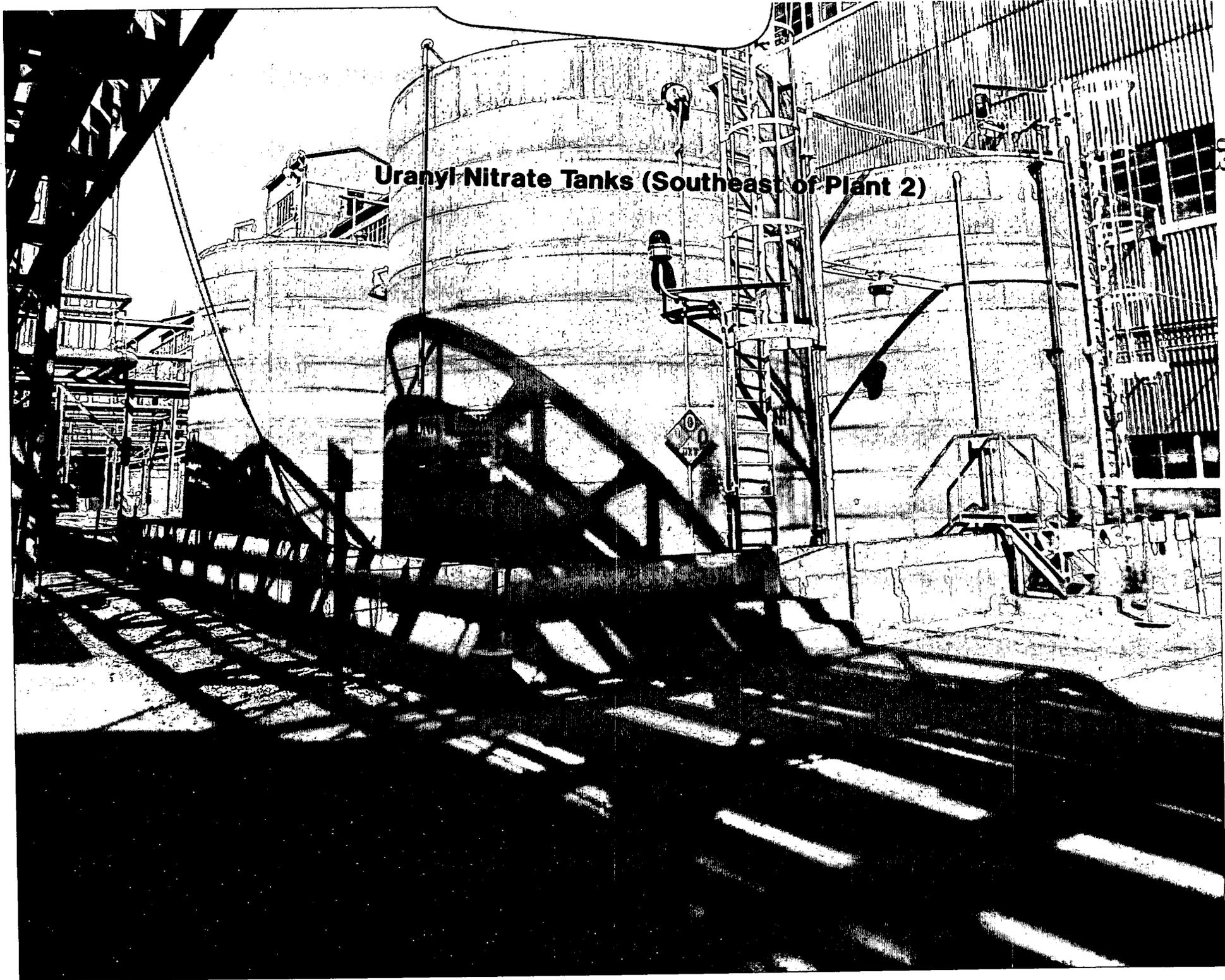


Uranyl Nitrate Tanks (NFS Storage Area)

Uranyl Nitrate Tanks (North of Plant 2)

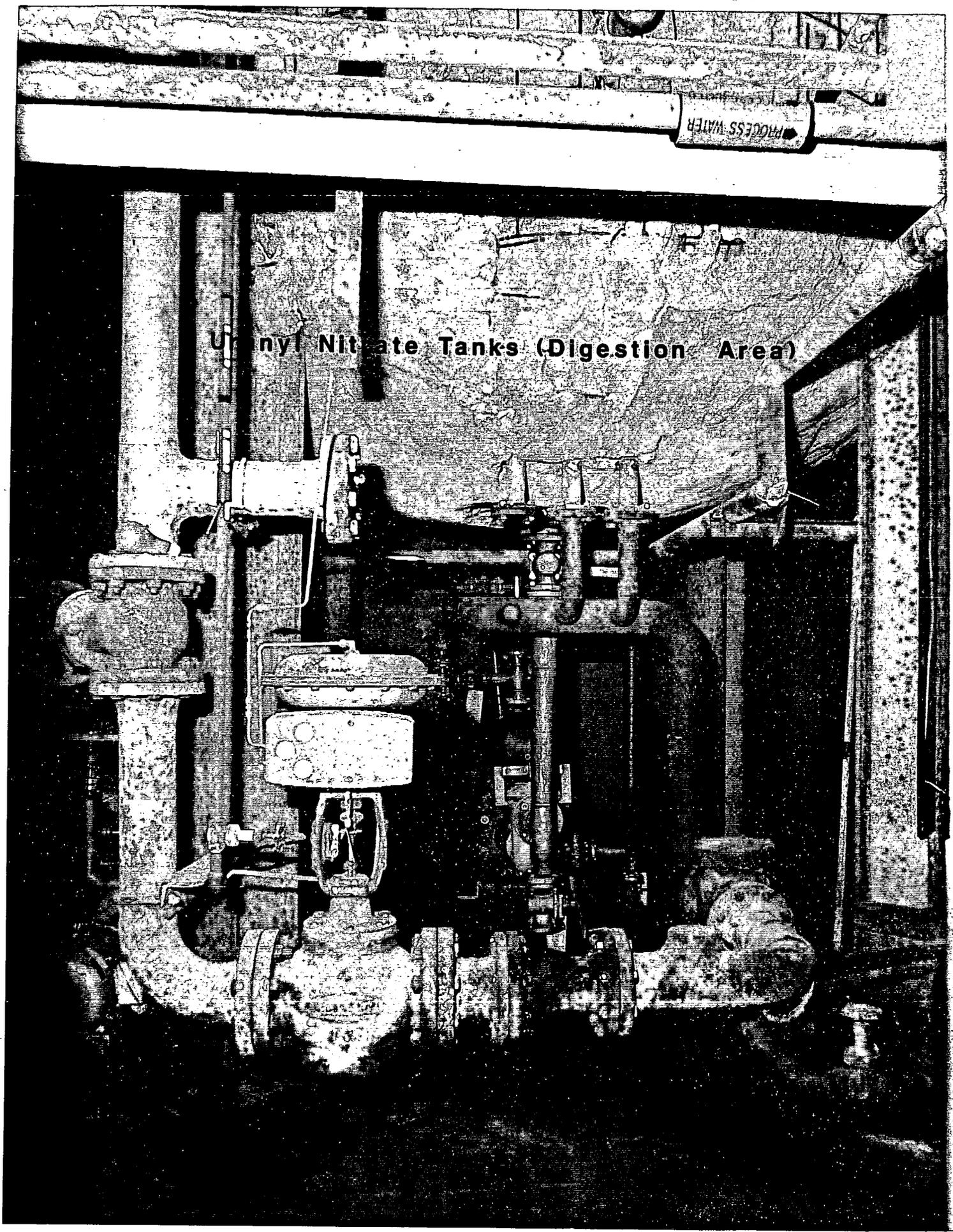


**Uranyl Nitrate Tanks (Southeast of Plant 2)**

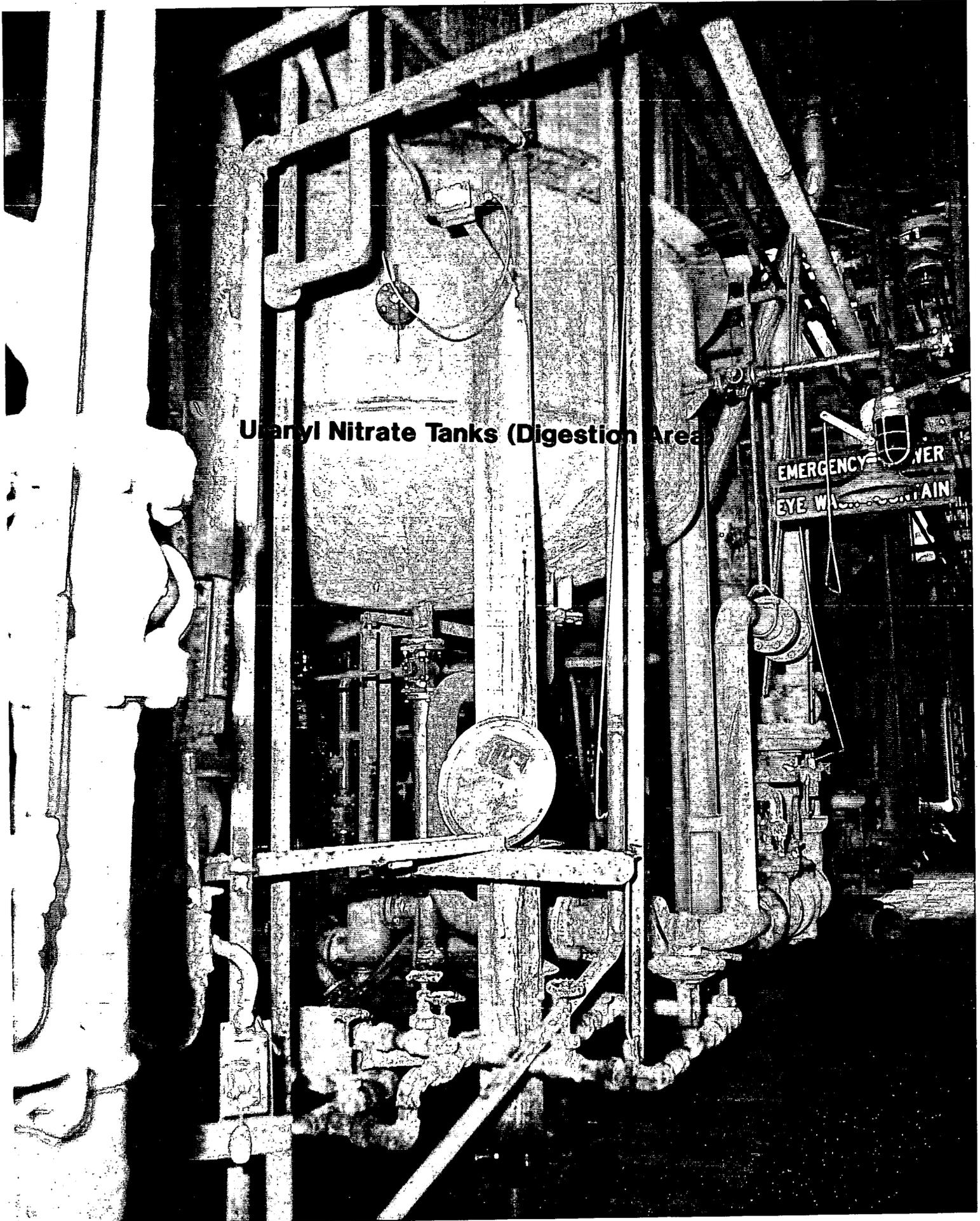


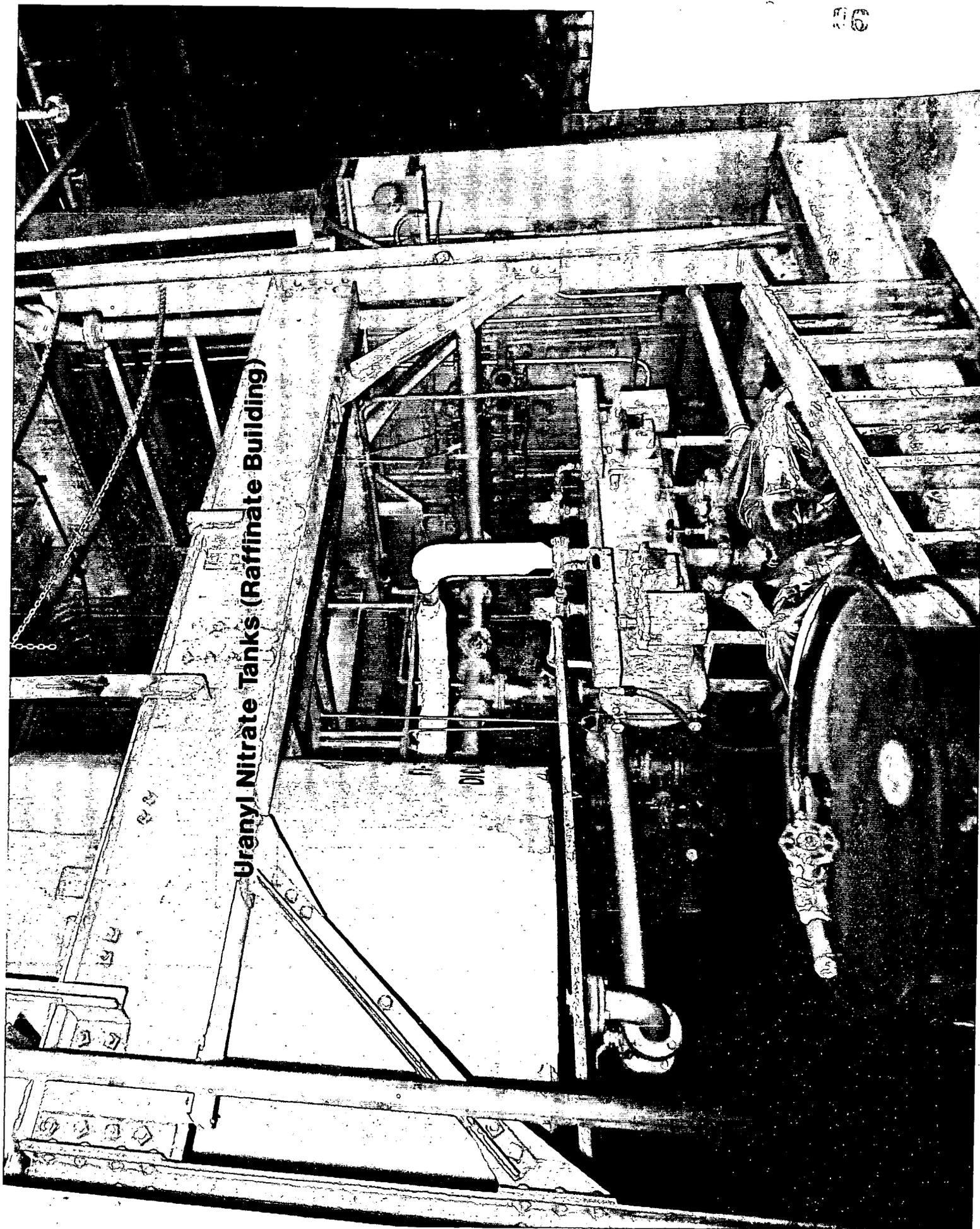
PROCESS WATER

Ureanyl Nitrate Tanks (Digestion Area)



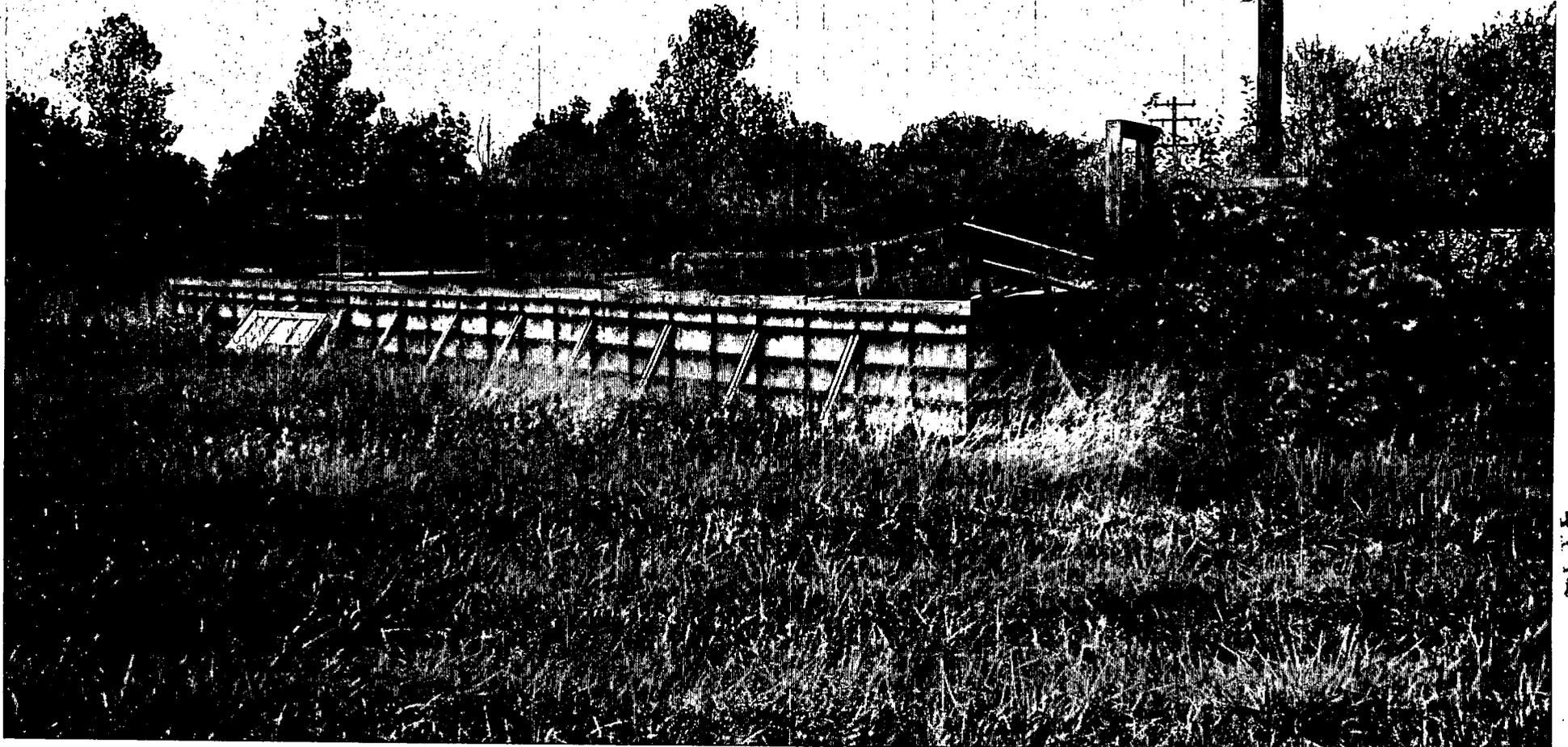
Uranyl Nitrate Tanks (Digestion Area)

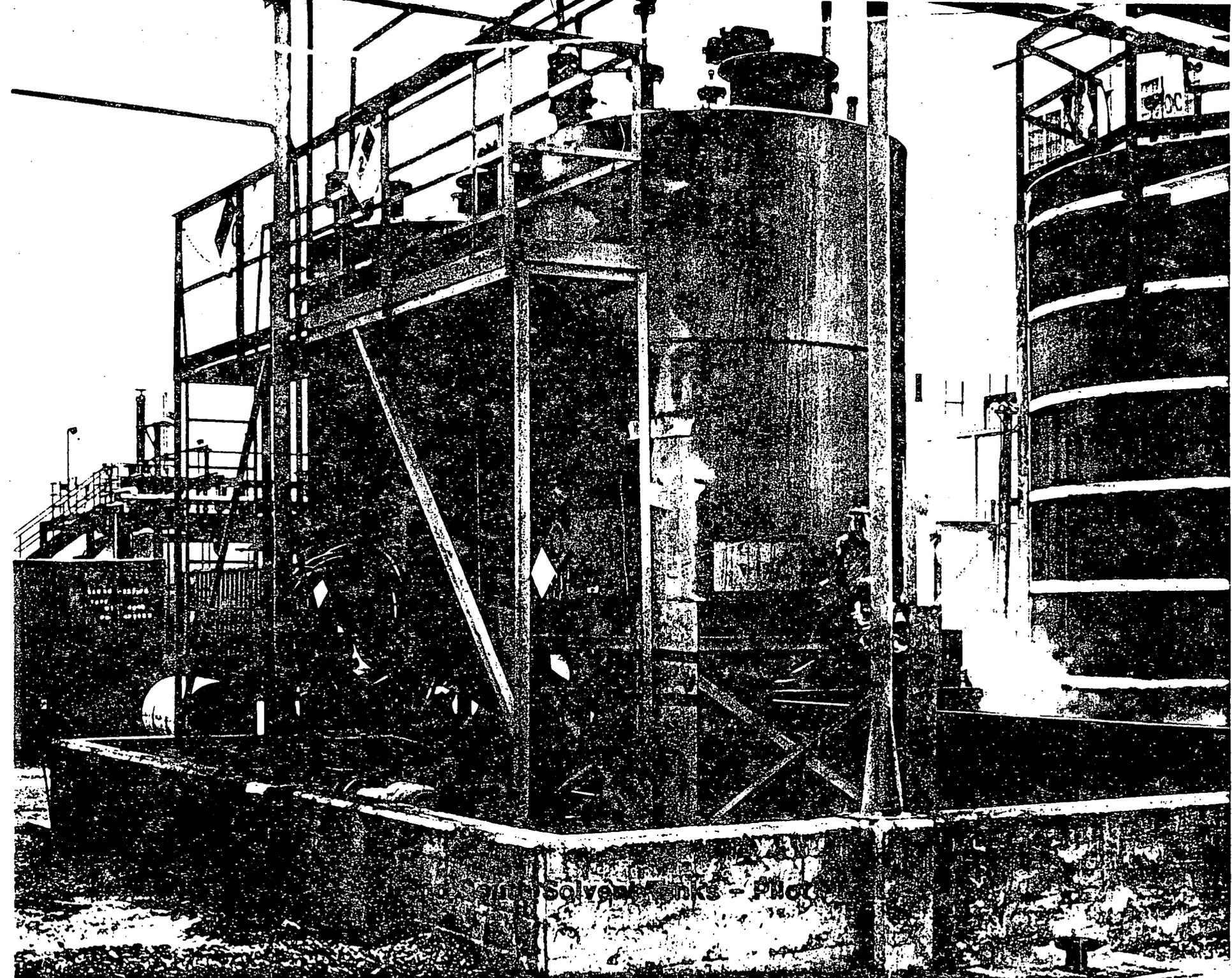




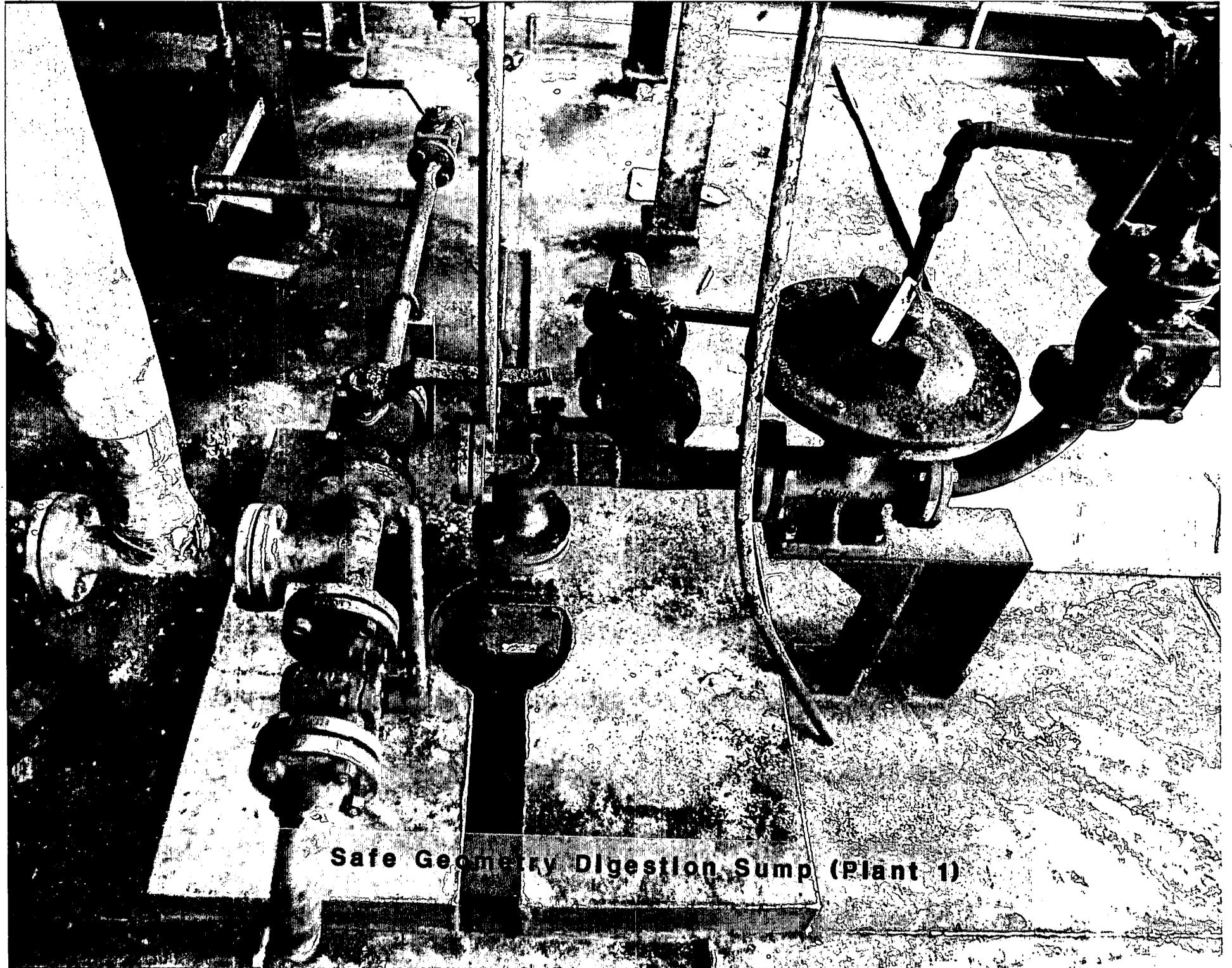
Urenyl Nitrate Tanks (Raffinate Building)

**Experimental Treatment Facility (ETF)**





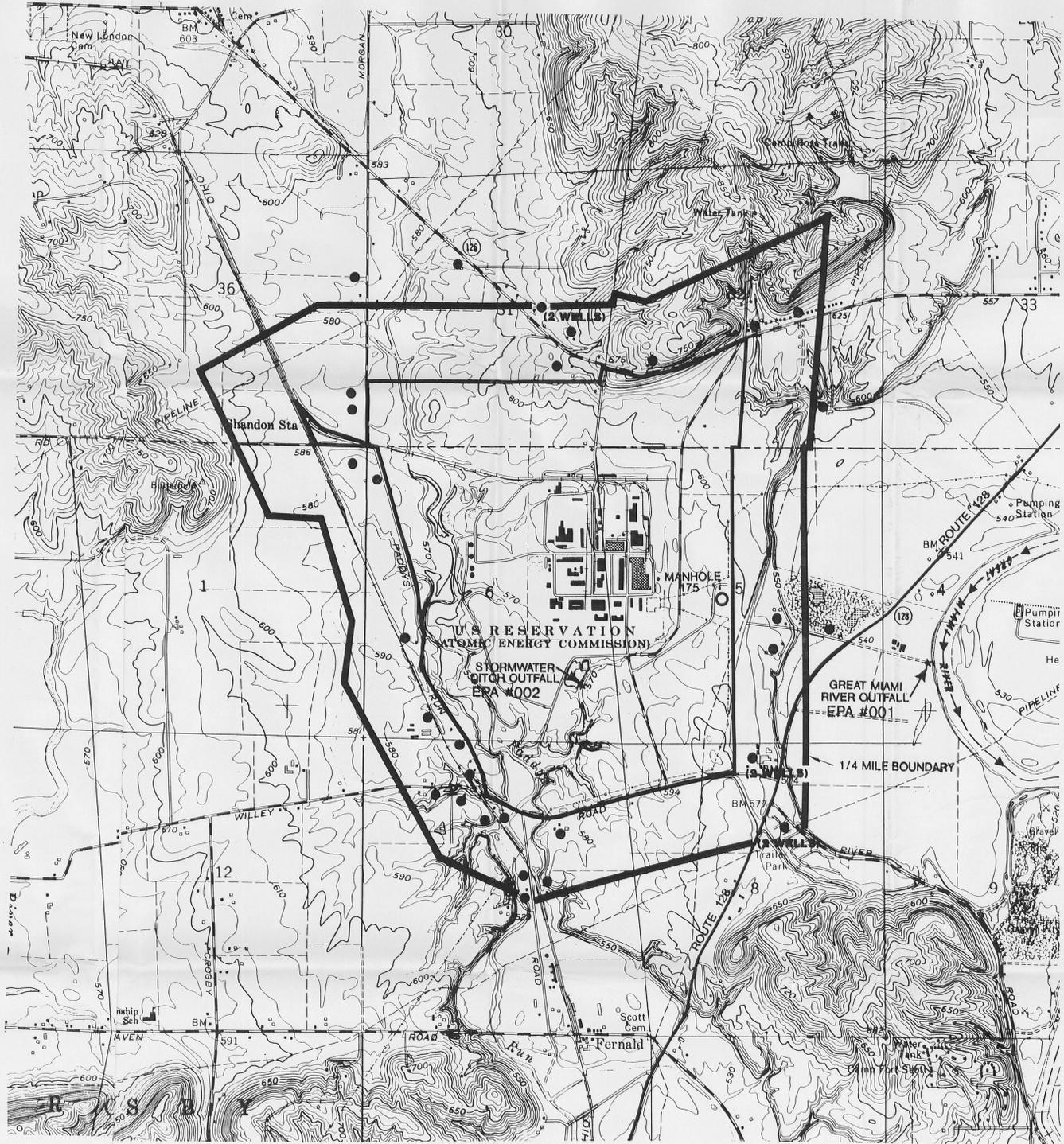
solvent tanks - Pilot



**Safe Geometry Digestion Sump (Plant 1)**



0' 1/2" 1" 2" 3" 4" 5" 6"



RCRA PART A  
TOPOGRAPHIC MAP

LEGEND:

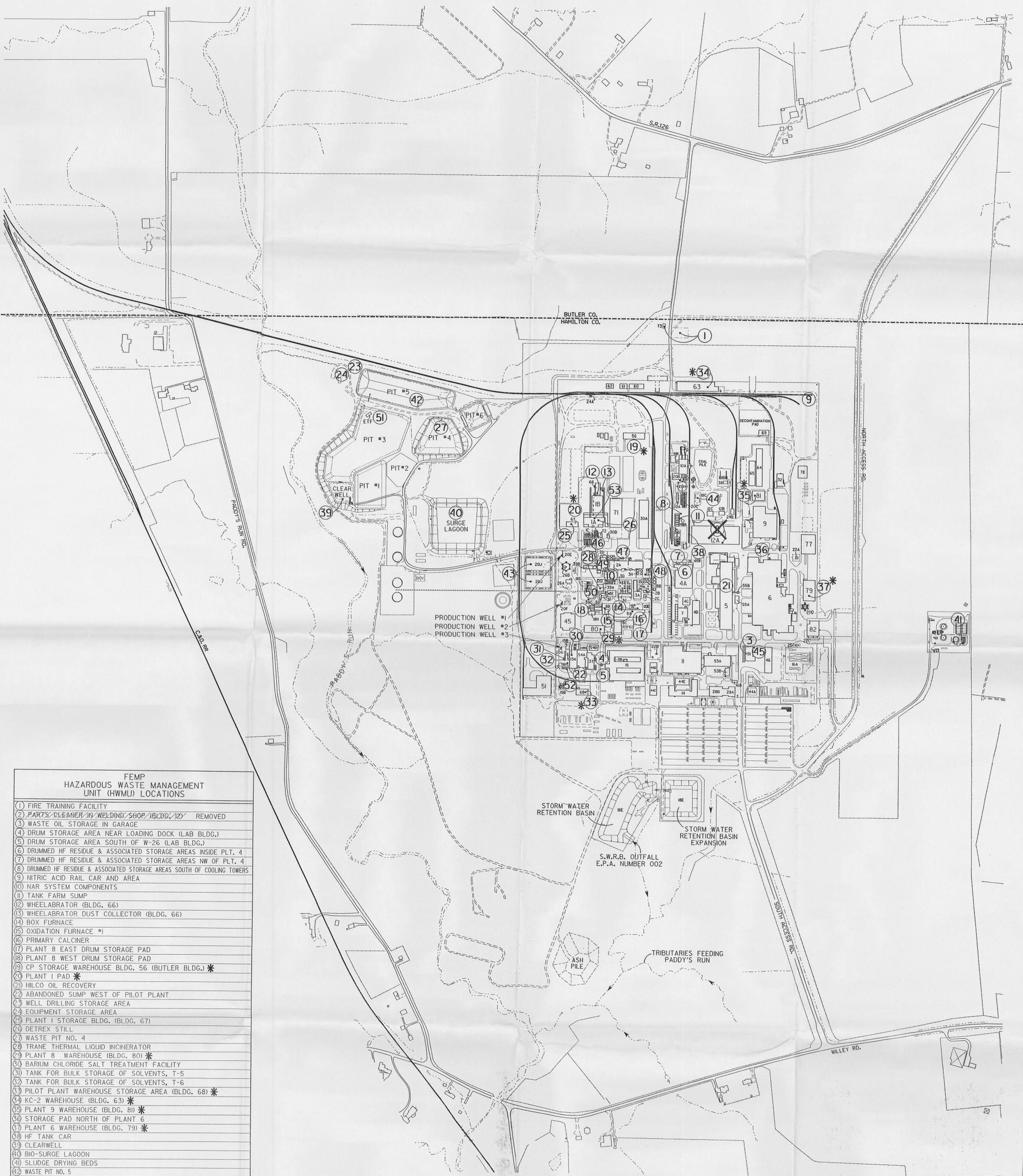
- RESIDENTIAL WATER WELLS
- ★ NPDES DISCHARGE POINT
- ← RIVER FLOW
- PROPERTY BOUNDARY
- - - INTERMITTENT STREAM
- MANHOLE

NOTE:

M:AP SOURCE - USGS STANLON QUADRANGLE, REV. 1974

FIGURE A-2 4142

NO.		REVISIONS	DATE DWN. BY	APPD.	REF. DWG. NO.	NOTE: WMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE FRACTIONS ± 1/32 ANGLES ± 0° - 30' DECIMALS .X ± .04 .XX ± .03 .XXX ± .02 .XXXX ± .01 UNCL. RELEASE DATE	APPROVALS CHEMICAL CIVIL & STR. ELECTRICAL ENGINEER INSTRUMENT MECHANICAL CHECKED APPROVED		E.S. & H. MAINTENANCE NU. SAFETY O.A. PRODUCTION PROD. TECH. WASTE MANAGE. APPROVED		WESTINGHOUSE MAT'LS. CO. OF OHIO FERNALD, OHIO FEED MATERIALS PRODUCTION CENTER U.S. DEPARTMENT OF ENERGY		SITE-PLAN RCRA PART A SCALE: 1" = 1000' HES 1826 DATE 8-13-91 DRAWN D. HILFF		75X-5500-X-00172 0	



**FEMP  
HAZARDOUS WASTE MANAGEMENT  
UNIT (HWMU) LOCATIONS**

1	FIRE TRAINING FACILITY
2	PARTS CLEANER IN WELDING SHOP (BLDG. 12) REMOVED
3	WASTE OIL STORAGE IN GARAGE
4	DRUM STORAGE AREA NEAR LOADING DOCK (LAB BLDG.)
5	DRUM STORAGE AREA SOUTH OF W-26 (LAB BLDG.)
6	DRUMMED HF RESIDUE & ASSOCIATED STORAGE AREAS INSIDE PLT. 4
7	DRUMMED HF RESIDUE & ASSOCIATED STORAGE AREAS NW OF PLT. 4
8	DRUMMED HF RESIDUE & ASSOCIATED STORAGE AREAS SOUTH OF COOLING TOWERS
9	NITRIC ACID RAIL CAR AND AREA
10	NAR SYSTEM COMPONENTS
11	TANK FARM SUMP
12	WHEELABRATOR (BLDG. 66)
13	WHEELABRATOR DUST COLLECTOR (BLDG. 66)
14	BOX FURNACE
15	OXIDATION FURNACE #1
16	PRIMARY CALCINER
17	PLANT 8 EAST DRUM STORAGE PAD
18	PLANT 8 WEST DRUM STORAGE PAD
19	CP STORAGE WAREHOUSE BLDG. 56 (BUTLER BLDG.) *
20	PLANT 1 PAD *
21	HILCO OIL RECOVERY
22	ABANDONED SUMP WEST OF PILOT PLANT
23	WELL DRILLING STORAGE AREA
24	EQUIPMENT STORAGE AREA
25	PLANT 1 STORAGE BLDG. (BLDG. 67)
26	DETREX STILL
27	WASTE PIT NO. 4
28	TRANE THERMAL LIQUID INCINERATOR
29	PLANT 8 WAREHOUSE (BLDG. 80) *
30	BARIUM CHLORIDE SALT TREATMENT FACILITY
31	TANK FOR BULK STORAGE OF SOLVENTS, T-5
32	TANK FOR BULK STORAGE OF SOLVENTS, T-6
33	PILOT PLANT WAREHOUSE STORAGE AREA (BLDG. 68) *
34	KC-2 WAREHOUSE (BLDG. 63) *
35	PLANT 9 WAREHOUSE (BLDG. 81) *
36	STORAGE PAD NORTH OF PLANT 6
37	PLANT 6 WAREHOUSE (BLDG. 79) *
38	HF TANK CAR
39	CLEARWELL
40	BIO-SURGE LAGOON
41	SLUDGE DRYING BEDS
42	WASTE PIT NO. 5
43	LIME SLUDGE PONDS
44	COAL PILE RUNOFF BASIN
45	UST #5
46	URANYL NITRATE TANKS (NFS STORAGE AREA)
47	URANYL NITRATE TANKS (NORTH OF PLANT 2)
48	URANYL NITRATE TANKS (SOUTHEAST OF PLANT 2)
49	URANYL NITRATE TANKS (DIGESTION AREA)
50	URANYL NITRATE TANKS (RAFFINATE BLDG.)
51	EXPERIMENTAL TREATMENT FACILITY (ETF)
52	NORTH & SOUTH SOLVENT TANKS (PILOT PLANT)
53	SAFE GEOMETRY DIGESTION SUMP

\*-HWMU'S THE FEMP IS SEEKING TO PERMIT

NO.	REVISIONS	DATE	BY	APPD.	REF. DWG. NO.
1	REVISED PER RES #1841	1/29/92	S.J.S.		

NOTE:  
WEMCO C.A.D.  
DRAWING NOT  
TO BE REVISED  
MANUALLY

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES

TOLERANCES ARE
FRACTIONS ± 1/32
DECIMALS ± 0.01
ANGLES ± 0° - 30'

CHECKED \_\_\_\_\_  
APPROVED \_\_\_\_\_

**APPROVALS**

CIVIL & STR. ENGINEER	SAFETY ENG. MAINTENANCE
ELECTRICAL ENGINEER	O.A.
INSTRUMENT MECHANICAL	FIRE PROTECT. WASTE MANAGE.
	D.O.E. SECURITY

**WESTINGHOUSE ENVIRONMENTAL  
MANAGEMENT CO. OF OHIO**

**FERNALD, OHIO**

FERNALD  
ENVIRONMENTAL MANAGEMENT PROJECT  
U.S. DEPARTMENT OF ENERGY

SITE PLAN

RCRA PART A  
FIGURE A-1 4142  
FACILITY LOCATION MAP  
SCALE: 1" = 300'

RES #1626  
DATE 5-24-91  
DRAWN S.J.SMOCK

75X-5500-X-00171