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MANUAL REVISION INSTRUCTIONS

Date 03/15/90

To: Custodian

SUSAN J WRAY
H4-22

START

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Document No.: DOE/RL 88-21, VOL. 1-3

Title: HANFORD SITE HAZARDOUS WASTE PART A PERMIT APPLICATION

Revision Release No : 4

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E. M. Schroeder, Manager
Management Standards

Date

I have personally received the revisions identified for release in this package and assume full responsibility for updating my manual in accordance with instructions.

P. A. Thurman, Manager
Document Control
P A Thurman

Date 4/23/90

Custodian

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HANFORD SITE DANGEROUS WASTE PART A PERMIT APPLICATION

1.0 INTRODUCTION

This document contains the *Hanford Site Dangerous Waste Part A Permit Application*. The Hanford Site is a 560 square-mile tract of semiarid land operated by the U.S. Department of Energy, Richland Operations Office (DOE-RL). The Hanford Site is used by the DOE-RL for the production and purification of plutonium and for other releated research. The Hanford Site has been in operation since 1943.

The single dangerous waste permit application number issued to the Hanford Site by the U.S. Environmental Protection Agency and the Washington State Department of Ecology is U.S. Environmental Protection Agency/State Identification Number WA 7890008967. This identification number encompasses a number of waste management units within the Hanford Site.

The current *Hanford Site Dangerous Waste Part A Permit Application* consists of two "Dangerous Waste Permit General Information, Form 1's" and 62 "Dangerous Waste Permit Application, Form 3's." Two Form 1's have been submitted because there are two contractors that are co-operators of dangerous waste units with the DOE-RL: the Westinghouse Hanford Company (Westinghouse Hanford) and Pacific Northwest Laboratory (PNL). A Form 3 has been submitted for each treatment storage, and/or disposal unit or group of units located on the Hanford Site.

This document consolidates the current revisions of all Hanford Site Part A Form 1's and Form 3's previously submitted to the EPA and Ecology into a single controlled document. This document has been designed to facilitate the insertion of revised material. The document will be revised in the future in response to regulatory agency comments and as needed to ensure compliance with applicable regulations. Each copy of this controlled document has a unique number to ensure that the recipients receive copies of the subsequent revisions. This document consists of four sections, including the "Introduction," Section 1.0.

Section 2.0 contains a table, titled "Dangerous Waste Regulations Permitting Status," which provides a brief history of the Form 3's. The table shows the initial submittal date of the Form 3's, the latest submittal date, and the current revision number. This table also identifies if, and when, a Part B permit application, closure plan, or postclosure permit application was submitted to Ecology.

Section 3.0 contains the two Form 1's for the Hanford Site.

Section 4.0 is divided into six sections containing Form 3's for the dangerous waste units in the 100, 200, 300, 400, 600, and 1100 Areas of the Hanford Site, respectively.

The "Contents" guides the reader through the document via a series of tab numbers. The "Contents" also identifies the current revision number, the

dangerous waste unit type (treatment, storage, and/or disposal), waste type (dangerous or radioactive mixed waste), and unit status (active or closed) for each Form 3.

2.0 RESOURCE CONSERVATION AND RECOVERY ACT PERMITTING STATUS

This section contains a Resource Conservation and Recovery Act (RCRA) Permitting Status table and an explanation of the contents of the table.

Resource Conservation and Recovery Act (RCRA) Permitting Status. (sheet 1 of 2)

UNIT	ORG	AREA	PERMIT	TYPE	INITIAL	LATEST	REV	PART B	CLOSURE	REV1	COM	CLASS
1324-N SURFACE IMPOUNDMENT	WHC	100	A/C	T	08/01/86	11/16/87	2	11/01/86	/ /	0		H
105-DR SODIUM FIRE FACILITY	WHC	100	A/C	TS	11/01/85	11/16/87	2	11/01/85	/ /	0	B/C	H
1706-KE WASTE TREATMENT SYSTEM	WHC	100	A/C	TS	08/01/86	11/16/87	2	04/01/87	/ /	0	B	M
183-H SOLAR EVAPORATION BASINS	WHC	100	A/C	TS	11/01/85	06/08/88	3	/ /	06/01/88	2		M
1301-N LIQUID WASTE DISPOSAL FAC.	WHC	100	A/C	D	08/01/86	02/02/88	3	/ /	04/01/87	0		M
1325-N LIQUID WASTE DISPOSAL FAC.	WHC	100	A/C	D	02/01/87	02/02/88	3	/ /	06/01/87	0		M
1324-NA PERCOLATION POND	WHC	100	A/C	TD	08/01/86	11/16/87	2	/ /	04/24/87	0		H
100-D PONDS	WHC	100	A/C	TD	08/01/86	11/16/87	2	/ /	04/01/87	0		H
221-T CONTAINMENT SYSTEM TEST FAC.	WHC	200W	A/C	T	11/01/85	11/16/87	2	11/01/85	/ /	0	B	H
ASHPIT SITE	WHC	200W	A/C	T	11/01/85	11/16/87	2	11/01/85	/ /	0	A	H
E-8 BORROW PIT	WHC	200E	A/C	T	11/01/85	11/16/87	2	11/01/85	/ /	0	A	H
242-A EVAPORATOR	WHC	200E	A/B	T	09/01/87	02/26/90	2	/ /	/ /			M
GROUT TREATMENT FACILITY	WHC	200E	A/B	TD	09/01/87	11/23/88	3	01/17/90	/ /	1		M
T-PLANT TREATMENT TANK	WHC	200W	A/B	T	12/01/87	12/03/87	0	/ /	/ /		B	M
241-Z TREATMENT TANK	WHC	200W	A/B	T	12/01/87	12/22/89	1	/ /	/ /		B	M
B PLANT	WHC	200E	A/B	TS	12/01/87	12/22/89	1	/ /	/ /			M
222-S LABORATORIES TANK AND PAD	WHC	200W	A/B	TS	12/01/87	12/03/87	0	/ /	/ /		B	M
204-AR WASTE UNLOADING STATION	WHC	200E	A/B	T	12/01/87	12/03/87	0	/ /	/ /		B	M
PUREX	WHC	200E	A/B	TS	12/01/87	10/18/89	2	/ /	/ /		B	M
HANFORD WASTE VITRIFICATION PLANT	WHC	200E	A/B	TS	05/01/88	10/31/89	2	07/31/89	/ /	0		M
2727-S STORAGE FACILITY	WHC	200W	A/C	S	11/01/85	11/16/87	2	/ /	02/10/89	3		H
DBL SHELL TANK FARMS	WHC	200EW	A/B	TS	09/01/87	02/05/90	3	/ /	/ /			M
HEXONE STORAGE AND TREATMENT	WHC	200W	A/C	TS	12/01/87	05/19/88	1	/ /	/ /			M
2727-WA SRE SODIUM STORAGE BUILDING	WHC	200W	A/B	S	12/01/87	12/03/87	0	/ /	/ /		B	M
PUREX TUNNELS 1 AND 2	WHC	200E	A/B	S	12/01/87	12/03/87	0	/ /	/ /			M
TRUSAF	WHC	200W	A/B	S	12/01/87	12/03/87	0	/ /	/ /			M
HANFORD CENTRAL WASTE COMPLEX	WHC	200W	A/B	TS	05/01/88	05/19/88	0	/ /	/ /			M
SINGLE-SHELL TANKS	WHC	200W	A/C	S	02/01/88	02/26/88	0	/ /	/ /			M
207-A SOUTH RETENTION BASIN	WHC	200E	A/C	S	02/26/90	02/26/90	0	/ /	/ /			M
LIQUID EFFLUENT RETENTION FACILITY	WHC	200E	A/B	S	02/26/90	02/26/90	0	/ /	/ /			M
LOW-LEVEL BURIAL GROUNDS	WHC	200EW	A/B/C	D	11/01/85	10/20/89	5	12/29/89	/ /	0		M

Resource Conservation and Recovery Act (RCRA) Permitting Status. (sheet 2 of 2)

UNIT	ORG	AREA	PERMIT	TYPE	INITIAL	LATEST	REV	PART B	CLOSURE	REV1	COM	CLASS
216-S-10 POND AND DITCH	WHC	200W	A/C	D	02/01/87	11/16/87	2	/ /	06/01/87	0		M
2101-M POND	WHC	200E	A/C	D	08/01/86	11/16/87	2	/ /	09/29/89	0		H
216-A-29 DITCH	WHC	200E	A/C	TD	08/01/86	11/16/87	2	/ /	04/01/87	0		M
216-B-3 POND	WHC	200E	A/C	TD	08/01/86	11/16/87	2	/ /	04/01/87	0		M
216-B-63 TRENCH	WHC	200E	A/C	TD	08/01/86	11/16/87	2	/ /	04/01/87	0		M
216-A-10 CRIB	WHC	200E	A/C	D	08/01/87	02/02/88	2	/ /	/ /		B	M
216-U-12 CRIB	WHC	200W	A/C	D	08/01/87	02/02/88	2	/ /	/ /		B	M
216-A-36B CRIB	WHC	200E	A/C	D	02/01/88	02/02/88	0	/ /	02/01/88	0		M
216-A-37-1 CRIB	WHC	200E	A/C	D	02/26/90	02/26/90	0	/ /	/ /			M
3718-F ALKALI METAL TREATMENT FAC.	WHC	300	A/B	TS	11/01/85	11/16/87	2	11/06/85	/ /	0		H
324 SODIUM REMOVAL PILOT PLANT	PNL	300	A/B	T	11/01/85	05/19/88	3	11/01/85	/ /	0	B	M
304 CONCRETION FACILITY	WHC	300	A/C	TS	08/01/86	02/22/89	3	/ /	/ /			M
300 AREA SOLVENT EVAPORATOR	WHC	300	A/C	T	11/01/85	02/08/89	3	/ /	02/10/89	3		M
300 AREA WASTE ACID TREATMENT	WHC	300	A/B/C	TS	09/01/87	05/19/88	2	/ /	/ /			M
303-M OXIDE FACILITY	WHC	300	A/B	T	05/01/88	05/19/88	0	/ /	/ /			M
325 WASTE TREATMENT FACILITY	PNL	300	A/B	T	05/01/88	05/19/88	0	/ /	/ /			M
BIOLOGICAL TREATMENT TEST FACS.	PNL	300	A/B	0	05/01/88	05/19/88	0	/ /	/ /			M
PHYSICAL & CHEMICAL TREATMENT FACS.	PNL	300	A/B	0	05/01/88	05/19/88	0	/ /	/ /			M
THERMAL TREATMENT TEST FACILITIES	PNL	300	A/B	0	05/01/88	05/19/88	0	/ /	/ /			M
311 TANKS	WHC	300	A/B	S	/ /	11/16/87	1	/ /	/ /		B	M
303-K STORAGE FACILITY	WHC	300	A/C	S	08/01/87	10/31/89	2	/ /	/ /			M
305-B STORAGE FACILITY	PNL	300	A/B	TS	05/01/88	05/19/88	0	01/31/90	/ /	0		M
332 STORAGE FACILITY	PNL	300	A/B	S	05/01/88	05/19/88	0	/ /	/ /			M
300 AREA PROCESS TRENCHES	WHC	300	A/PC	D	11/01/85	11/16/87	2	/ /	11/06/85	0		M
MAINTENANCE AND STORAGE FACILITY	WHC	400	A/B	T	11/01/85	11/16/87	2	11/01/85	/ /	0		M
4843 ALKALI METAL STORAGE FACILITY	WHC	400	A/B	S	09/01/87	11/16/87	1	/ /	/ /			M
HANFORD PAT. ACAD. DEMOLITION SITE	WHC	600	A/B	T	11/01/85	11/16/87	2	11/01/85	/ /	0	A	H
616 STORAGE FACILITY	WHC	600	A/B	S	11/01/85	07/31/89	3	07/31/89	/ /	1		H
600 AREA PURGEWATER	WHC	600	A/B	TS	02/20/90	02/20/90	0	/ /	/ /			M
NONRAD DANGEROUS WASTE LANDFILL	WHC	600	A/C	D	11/01/85	11/16/87	2	11/06/85	/ /	0		H
SIMULATED HLW TREATMENT STORAGE	PNL	1100	A/C	TS	05/01/88	05/19/88	0	/ /	09/29/89			M

Explanation of 'Permitting Status Table'.

UNIT Name of unit that is designated for permitting as part of the Hanford Facility (EPA/State Identification Number WA7890008967).

ORG Name of organization (company) that has a contract to operate unit for the U.S. Department of Energy:

WHC -- Westinghouse Hanford Company.

PNL -- Pacific Northwest Laboratory.

AREA The area of the Hanford Site in which the unit is located:

100 -- 100 Area, includes N Reactor

200E -- 200 East Area, includes chemical processing such as PUREX

200W -- 200 West Area, includes chemical processing such as REDOX

200EW -- Parts of a unit are located in both the 200 East and the 200 West areas

300 -- 300 Area, includes research, development, and fuel fabrication

400 -- 400 Area, includes the Fast Flux Test Facility (FFTF)

500 -- Unused designation

600 -- 600 Area, includes nonradioactive dangerous waste storage and landfill units

1100 -- 1100 Area, includes maintenance and shipping units

PERMIT Type of RCRA permit application that is required to obtain the desired type of permit:

A -- Part A

B -- Part B

C -- Closure plan or permit

PC -- Postclosure plan.

TYPE Waste unit RCRA operational classification:

T -- Treatment

S -- Storage

D -- Disposal

O -- Other.

INITIAL Date the initial Part A permit application was submitted to the Washington State Department of Ecology:

08/01/88 -- month/day/year.

LATEST Date the latest Part A permit application was submitted to the Washington State Department of Ecology.

REV Last revision of the Part A permit application that was submitted to the Washington State Department of Ecology.

PART B Date the last Part B permit application was submitted to the Washington State Department of Ecology:

08/01/88 -- month/day/year.

CLOSURE Date the last closure or postclosure plan permit application was submitted to the Washington State Department of Ecology:

08/01/88 -- month/day/year.

COMMENTS A Three demolition sites formerly combined into one application.

B Application will be withdrawn.

C Subsequently determined that a closure plan would be prepared.

D Currently in design stage.

E Evaluating treatment by generator.

F Application may be withdrawn.

CLASS M Unit contains mixed radioactive waste and dangerous waste.

H Unit contains no radioactive waste. All units on this list contain dangerous waste.

FORM 3

DANGEROUS WASTE PERMIT APPLICATION

I. EPA/STATE I.D. NUMBER: W A 7 8 9 0 0 0 8 9 6 7

FOR OFFICIAL USE ONLY

APPLICATION RECEIVED	DATE RECEIVED	COMMENTS

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 have 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 dates)

☐ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

☐ 2. NEW FACILITY (Complete item below.)

YR.	DAY	YR.
0 3	1 8	7 7

FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (see instructions)

YR.	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)

☒ 1. FACILITY HAS AN INTERIM STATUS PERMIT

☐ 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES — 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. Two 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	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D80	GALLONS OR LITERS
LANDFILL	D81	ACRE-FEET (the volume that would cover one acre one foot in a depth) 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

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER (Use for thermal, chemical, biological or physical 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

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U

UNIT OF MEASURE	UNIT OF MEASURE CODE
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H

UNIT OF MEASURE	UNIT OF MEASURE CODE
ACRE-FEET	A
HECTARE-METER	H
ACRES	B
HECTARES	S

EXAMPLE FOR COMPLETING SECTION III (shown in lines numbered 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. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1		230,000	U		7				
2					8				
3					9				
4					10				

CONTINUE ON REVERSE

Continued from the front.

II. PROCESSES (continued)

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

T04

The 242-A Evaporator (Evaporator) treats radioactive mixed waste from double-shell tanks by removing water and most volatile organics. Two waste streams leave the Evaporator following the treatment process. The first waste stream, the concentrated slurry (approximately 30-40% of water is removed during evaporation along with a significant amount of volatile organics), is pumped back into various double-shell tanks. The second waste stream, process condensate containing a significant amount of the volatile organics (removed from the radioactive mixed waste during the evaporation process), is routed through condensate filters for treatment before release to a retention basin (200 East Area Liquid Effluent Retention Facility scheduled to begin operation on December 3, 1990). Offgases from the process are routed through a deentrainment unit, a prefilter, and HEPA filters before discharge to the environment. The Evaporator is used to treat up to 230,000 gallons per day of radioactive mixed wastes.

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 wastes: 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 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)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 3 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

CONTINUE ON PAGE 3

Continued from page 2.

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

I.D. NUMBER (enter from page 1): WA789008967

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)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	D001	14×10^8	P	T04	EVAPORATION
2	D002				
3	D003				
4	D004				
5	D005				
6	D006				
7	D007				
8	D008				
9	D009				
10	D010				
11	D011				
12	WT01				
13	WT02				
14	WC01				
15	WC02				
16	WP01				
17	WP02				
18	F003				Included with above
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.

The Evaporator is used to treat radioactive mixed waste from double-shell tanks. Two waste streams leave the Evaporator following the treatment process; a concentrated slurry waste stream which is routed to double-shell tanks and a process condensate effluent waste stream routed to the 200 East Area Liquid Effluent Retention Facility scheduled to begin operation on December 3, 1990.

The slurry is a mixed radioactive and hazardous waste due to corrosivity and EP Toxicity, and is an extremely hazardous waste (EHW) due to toxicity under the state mixture rule. The waste is considered corrosive because the pH of the waste exceeds 12.5 standard units. The waste is characterized as EP Toxic due to the concentrations of chromium, lead, cadmium, and silver in the waste. The waste is considered an EHW toxic waste due to the concentrations of nitrite and hydroxide ions in the waste.

The process condensate effluent is regulated as a dangerous waste due to the toxicity of the ammonia and the presence of the F003 constituents. Based on the F003 constituents lacking ignitability characteristics, DOE-RL/WHC will seek "state only" listing of this waste. An investigation is being conducted for final determination on whether other constituents within this waste stream will be regulated under WAC 173-303.

The list of dangerous wastes under item IV.A includes the EP Toxic constituents of cadmium and silver. These constituents have not yet been detected in the wastes, but knowledge of the process providing wastes to the Evaporator indicate the strong possibility that these constituents will be in the wastes. All other wastes listed on this form are based upon actual analytical data. The annual waste quantity listed under item IV.B. was calculated using an operating schedule of 365 days per year, and a specific gravity of 2.0 for the waste. This was done to provide a maximum estimate of annual waste quantity.

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 attached drawings and photos

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)

VIII. FACILITY OWNER

[X] 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

X. 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)	SIGNATURE	DATE SIGNED
M. J. Lawrence Manager, Richland Operations United States Department of Energy	Michael J. Lawrence	2-26-90

XI. 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		

 CONTINUE ON PAGE 5

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 E. Nolan

Co-operator
John E. Nolan, President
Westinghouse Hanford Company

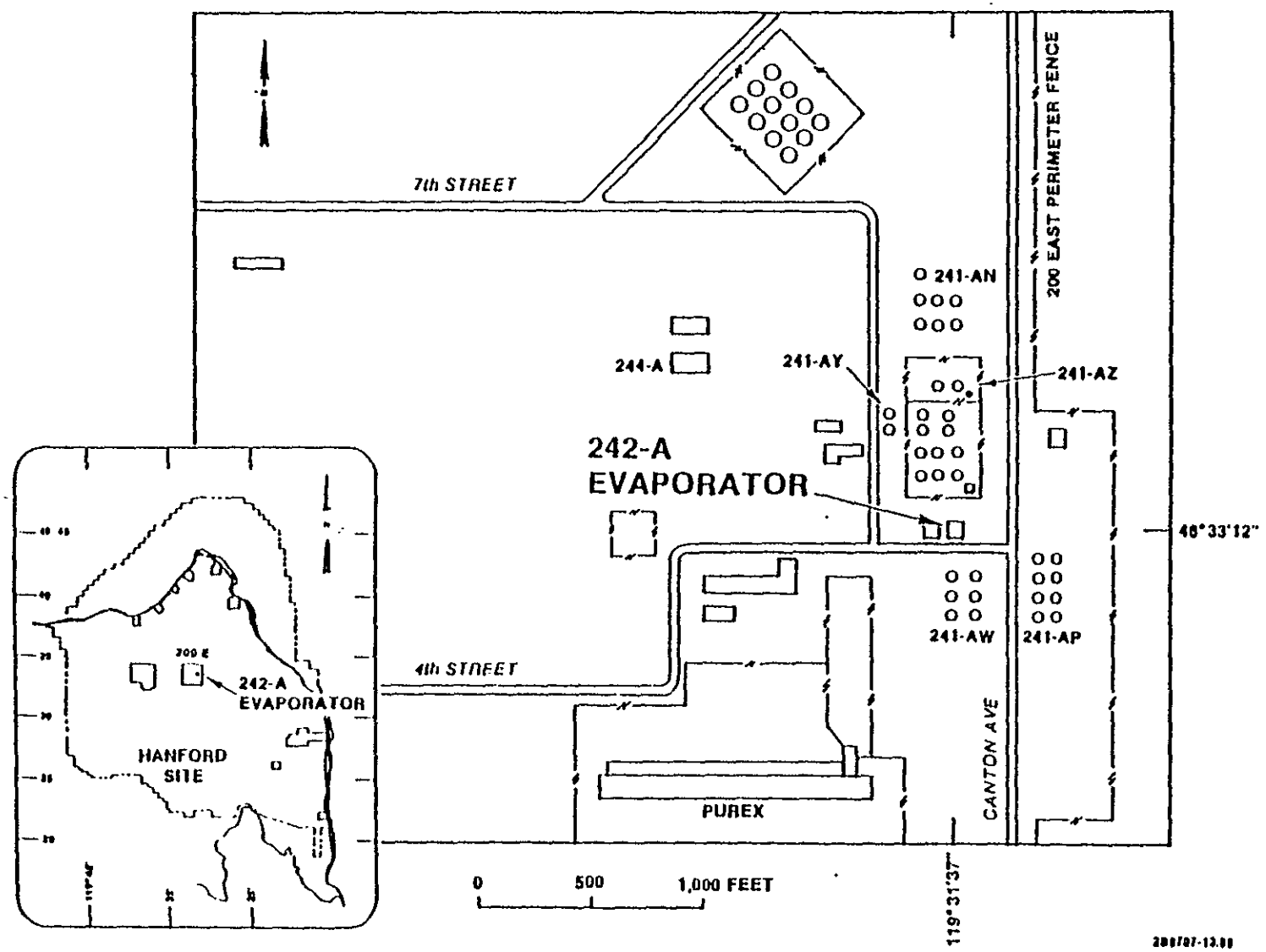
2/16/90
Date

Michael J. Lawrence

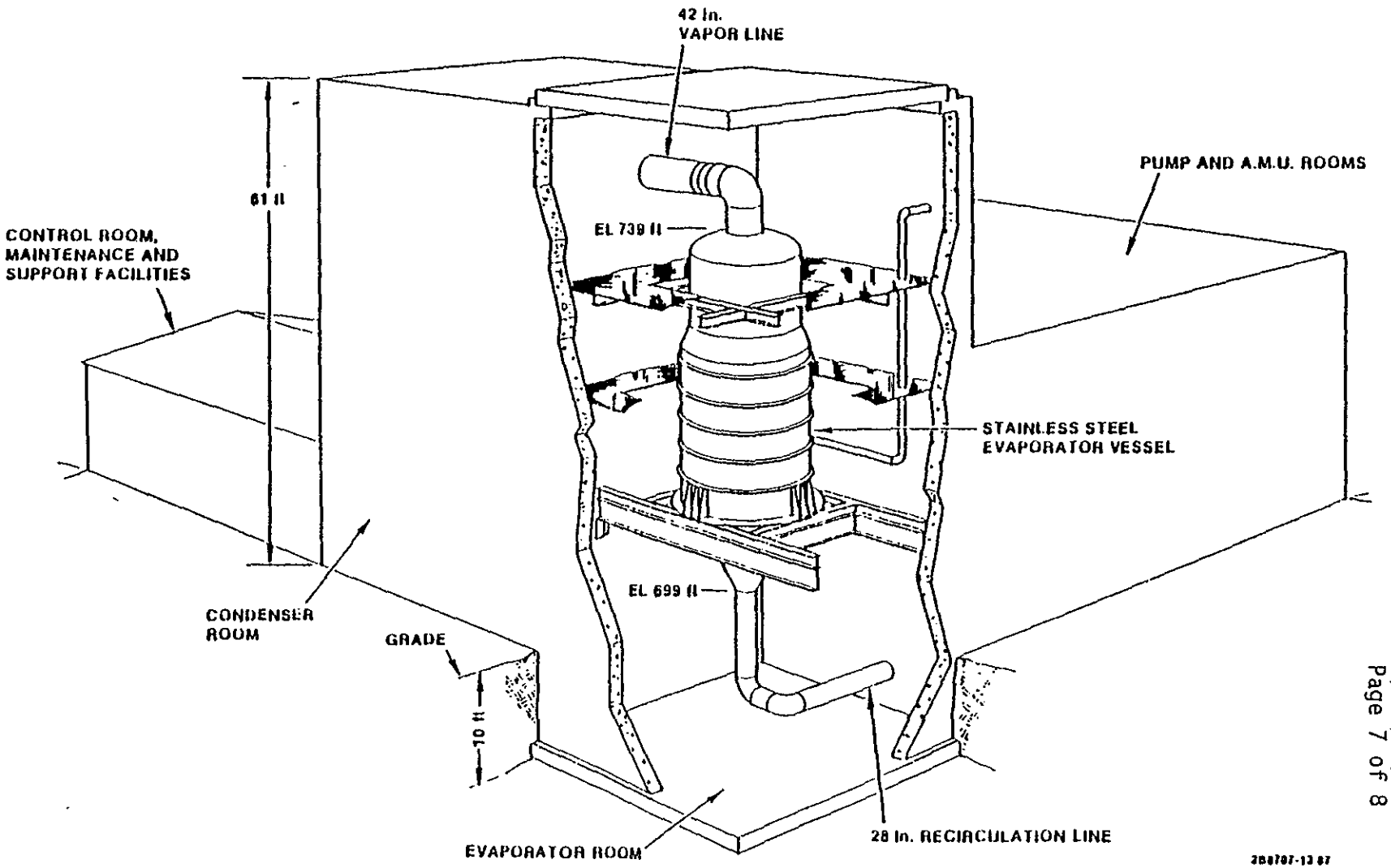
Owner/Operator
Michael J. Lawrence, Manager
U.S. Department of Energy
Richland Operations Office

2-26-90
Date

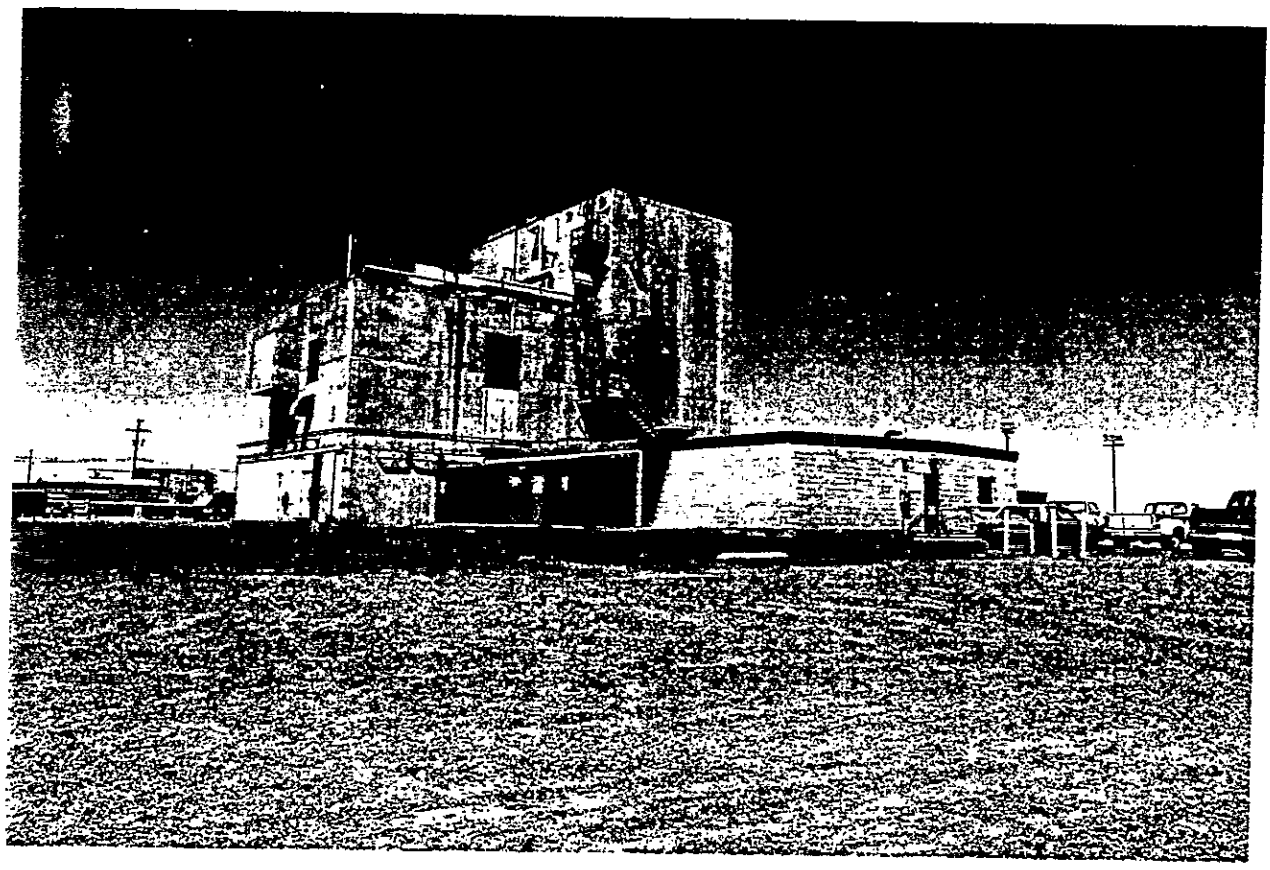
242-A EVAPORATOR
SITE PLAN



242-A EVAPORATOR



242-A EVAPORATOR



46°33'12"
119°31'37"

8704135-13CN
(PHOTO TAKEN 1987)

(Write in areas are spaced for data type, i.e., 12 characters/inch).

FORM 3

DANGEROUS WASTE PERMIT APPLICATION

I. EPA/STATE I.D. NUMBER: WA789008967

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (mo., day, yr.)	COMMENTS

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)

☐ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

* MO. DAY YR. — FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (see the items to the left)

☐ 2. NEW FACILITY (Complete item below.)

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)

☒ 1. FACILITY HAS AN INTERIM STATUS PERMIT * See Attached Tank List Table

☐ 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES — 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. 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	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
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

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
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

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

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. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G		5				
X-2	T03	20	E		6				
1	S02	33,400,000	G		7				
2	T01	33,400,000	U		8				
3					9				
4					10				

CONTINUE ON REVERSE

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.

Hanford Site Double-Shell Tanks are used for the interim storage (S02) of mixed wastes from the Hanford facilities. Several operating plants in the 200 East and 200 West areas of the Hanford Site transfer mixed wastes from the facility through buried double-encased transfer lines to the million gallon double-shell underground tanks. The liquid waste is accumulated in the million gallon double-shell tanks until it is transferred for treatment to the Grout Treatment Facility and then disposed of in a Near-Surface Vault. In the future the waste from the double-shell tanks will be also treated at the Hanford Waste Vitrification Plant (HWVP) then shipped for disposal to the proposed national repository. Interim treatment may also be performed at 8 Plant and the 242-A Evaporator.

Other types of liquid mixed wastes are received in the double-shell tanks from rail car transfers, tank truck transfers, single-shell tanks, and smaller temporary storage tanks.

A list of these tanks is shown in the attached Tank List Table. The tank numbers, locations, design capacities, and operational dates are included in this table.

The tanks are considered treatment units (T01) since chemicals can be added for corrosion control and/or water can be evaporated from the aging waste tanks by adding heat. It is possible that up to 33,400,000 gallons can be treated in a day.

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 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)	D. PROCESSES 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

 CONTINUE ON PAGE 3

TANK LIST TABLE

1. There are twenty-four 1,200,000 million gallon non-aging double-shell tanks.

TANK NUMBER	LOCATION	DESIGN CAPACITY (GALLONS)	OPERATION DATE
241-AN-101	200 East Area	1,200,000	09/81
241-AN-102	200 East Area	1,200,000	09/81
241-AN-103	200 East Area	1,200,000	09/81
241-AN-104	200 East Area	1,200,000	09/81
241-AN-105	200 East Area	1,200,000	09/81
241-AN-106	200 East Area	1,200,000	09/81
241-AN-107	200 East Area	1,200,000	09/81
241-AP-101	200 East Area	1,200,000	10/86
241-AP-102	200 East Area	1,200,000	10/86
241-AP-103	200 East Area	1,200,000	10/86
241-AP-104	200 East Area	1,200,000	10/86
241-AP-105	200 East Area	1,200,000	10/86
241-AP-106	200 East Area	1.200,000	10/86
241-AP-107	200 East Area	1,200,000	10/86
241-AP-108	200 East Area	1,200,000	10/86
241-AW-101	200 East Area	1,200,000	08/80
241-AW-102	200 East Area	1,200,000	08/80
241-AW-103	200 East Area	1,200,000	08/80
241-AW-104	200 East Area	1,200,000	08/80
241-AW-105	200 East Area	1,200,000	08/80
241-AW-106	200 East Area	1,200,000	08/80
241-SY-101	200 West Area	1,200,000	04/77
241-SY-102	200 West Area	1,200,000	04/77
241-SY-103	200 West Area	1,200,000	04/77

2. There are four 1,000,000 million gallon aging waste double-shell tanks.

TANK NUMBERS	LOCATION	DESIGN CAPACITY (GALLONS)	OPERATION DATE
241-AY-101	200 East Area	1,000,000	04/71
241-AY-102	200 East Area	1,000,000	04/76*
241-AZ-101	200 East Area	1,000,000	11/76
241-AZ-102	200 East Area	1,000,000	11/76

* Estimated date the tank became operational.

3. There are six tanks in the waste transfer vaults.

TANK NUMBER	LOCATION	DESIGN CAPACITY (GALLONS)	OPERATION DATE
244-AR-001	200 East Area	40,000	1977
244-AR-002	200 East Area	41,230	1977
244-AR-003	200 East Area	4,530	1977
244-AR-004	200 East Area	4,472	1977
244-CR-003	200 East Area	14,660	1946
244-CR-011	200 East Area	45,000	1946

4. There is one 800 gallon tank in a transfer building.

TANK NUMBER	LOCATION	DESIGN CAPACITY (GALLONS)	OPERATION DATE
241-EW-151	200 East-West Vent Station	800	11/55*

* Estimated date the tank became operational.

5. There are five double-contained receiver tanks.

TANK NUMBER	LOCATION	DESIGN CAPACITY (GALLONS)	OPERATION DATE
244-TX	200 West Area	31,000	12/81
244-BX	200 East Area	31,000	1983
244-U	200 West Area	31,000	1987
244-S	200 West Area	20,280	1987
244-A	200 East Area	16,280	1975

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

I.D. NUMBER (enter from page 1): WA7890008967

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)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	D001	720,000,000	P	S02 T01	Storage/Chemical Treatment/ Evaporation
2	D002				
3	D003				
4	D004				
5	D005				
6	D006				
7	D007				
8	D008				
9	D009				
10	D010				
11	D011				
12	WT01				
13	WT02				
14	WC01				
15	WC02				
16	WP01				
17	WP02				
18	F003				Included With Above
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 1.

SEE ATTACHMENT

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 attached drawings and photographs

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. STATE	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)	SIGNATURE	DATE SIGNED
Michael J. Lawrence Manager, Richland Operations United States Department of Energy	Michael J. Lawrence	2-5-90

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		

DANGEROUS WASTE PERMIT APPLICATION
EPA/STATE IDENTIFICATION NUMBER WA7890008967

Section IV.E, Description of Dangerous Wastes Listed in Section IV.D.

The types of mixed wastes that are stored, chemically treated, and evaporated in the double-shell tanks are as follows:

1. Dilute miscellaneous waste generated at the 100-N, 200 East, 200 West, 300 Area,and 400 Area of the Hanford Site;

2. Supernate and transuranic sludge that consist of neutralized cladding removal waste generated during PUREX headend operations, and waste generated during Plutonium Finishing Plant processing;

3. Double-shell slurry and double-shell slurry feed, which is dilute waste that has been concentrated in the 242-A Evaporator;

4. Concentrated complexed wastes and complexed wastes generated from B-Plant processing; and

5. Neutralized Current Acid Waste from the first extraction column at PUREX.

It is possible that any of the above waste types could be stored/treated in any of the non-aging or aging double-shell tanks.

The list of dangerous wastes under item IV.A includes the EP Toxic constituents of cadmium and silver. These constituents have not been detected in the wastes, but knowledge of the processes providing wastes to the double-shell tanks indicates the strong possibly that these constituents will be in the wastes. All other wastes listed on this form are based upon actual analytical data.

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 E. Nolan

Co-operator
John E. Nolan, President
Westinghouse Hanford Company

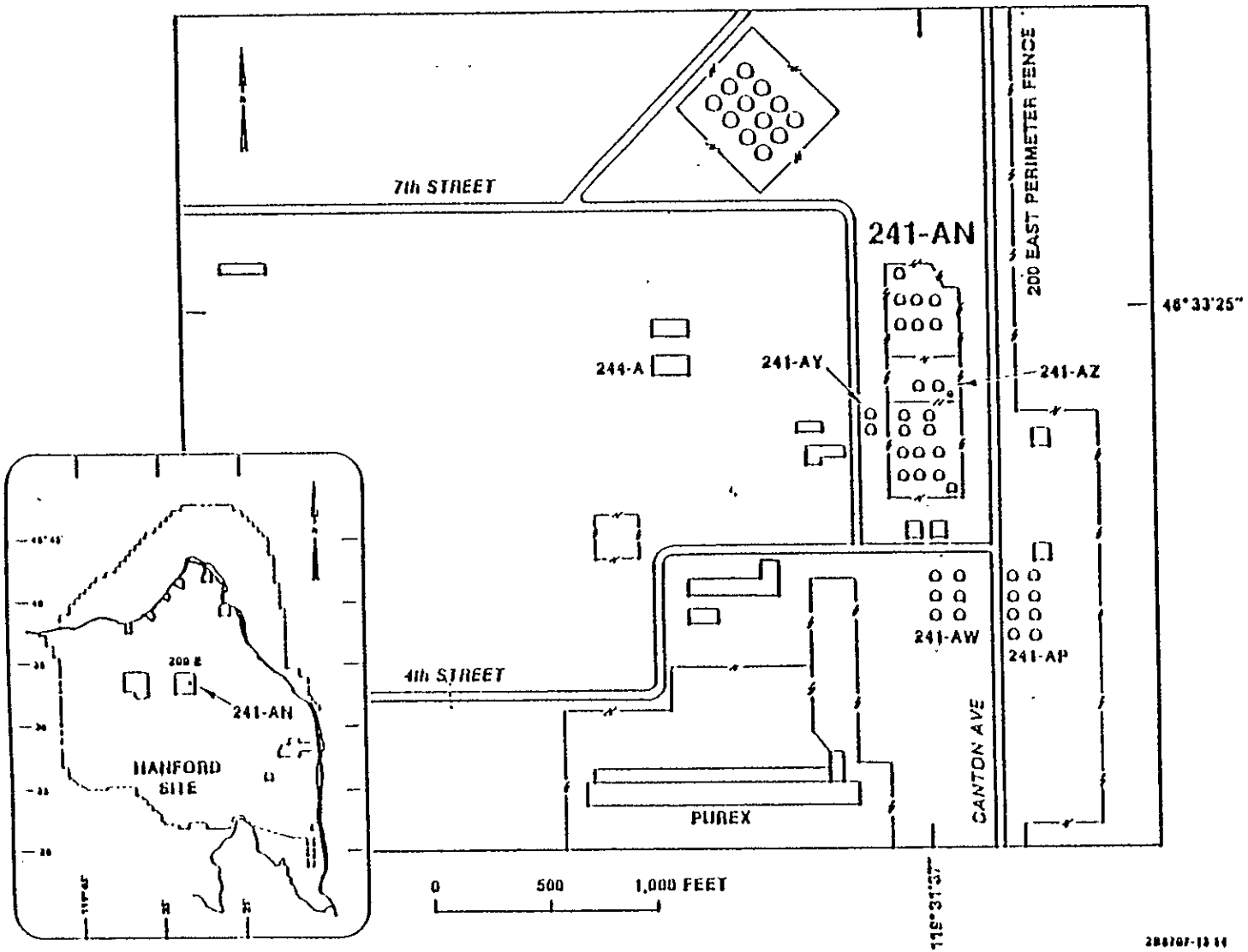
1/25/90
Date

Michael J. Lawrence

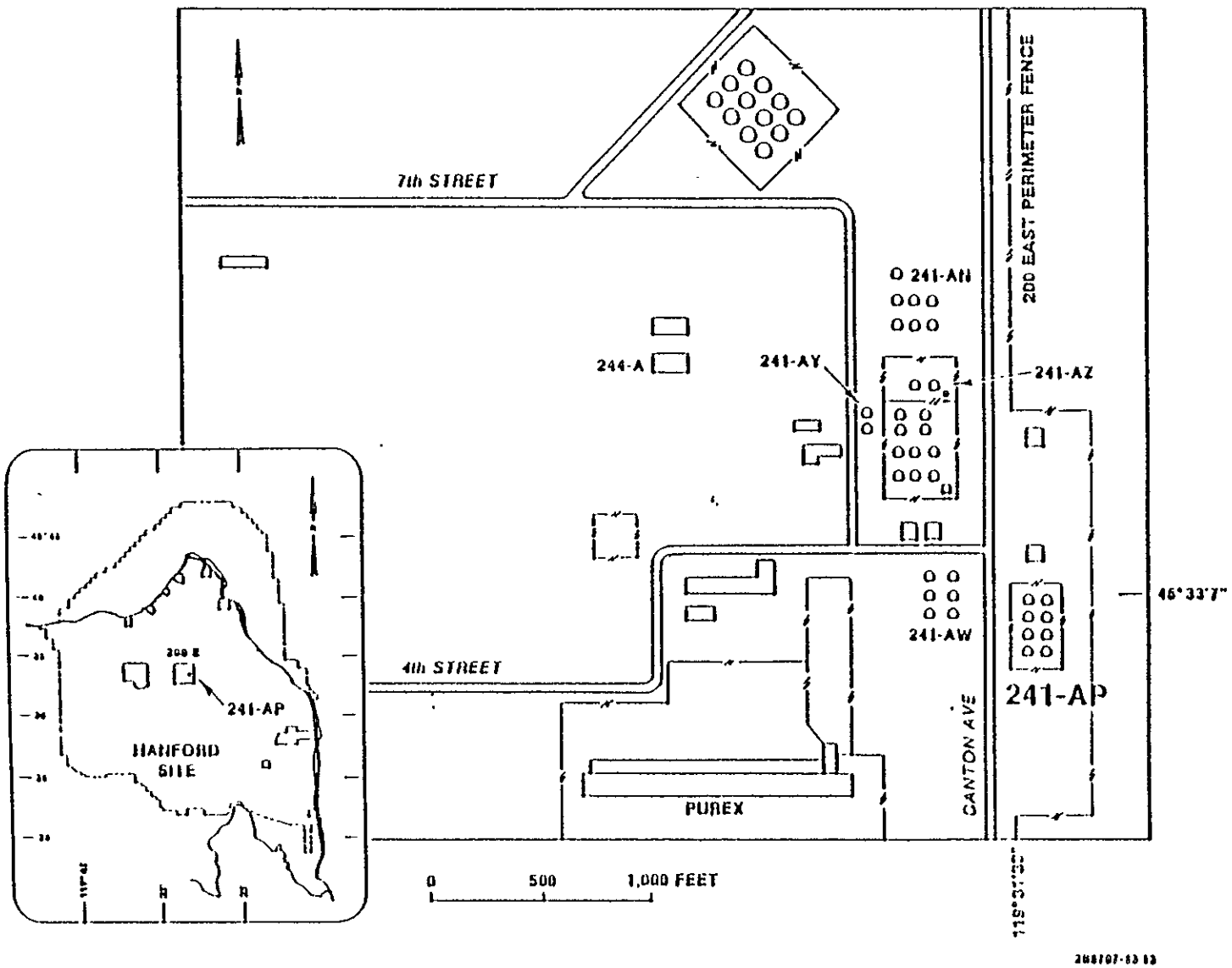
Owner/Operator
Michael J. Lawrence, Manager
U.S. Department of Energy
Richland Operations Office

2-5-90
Date

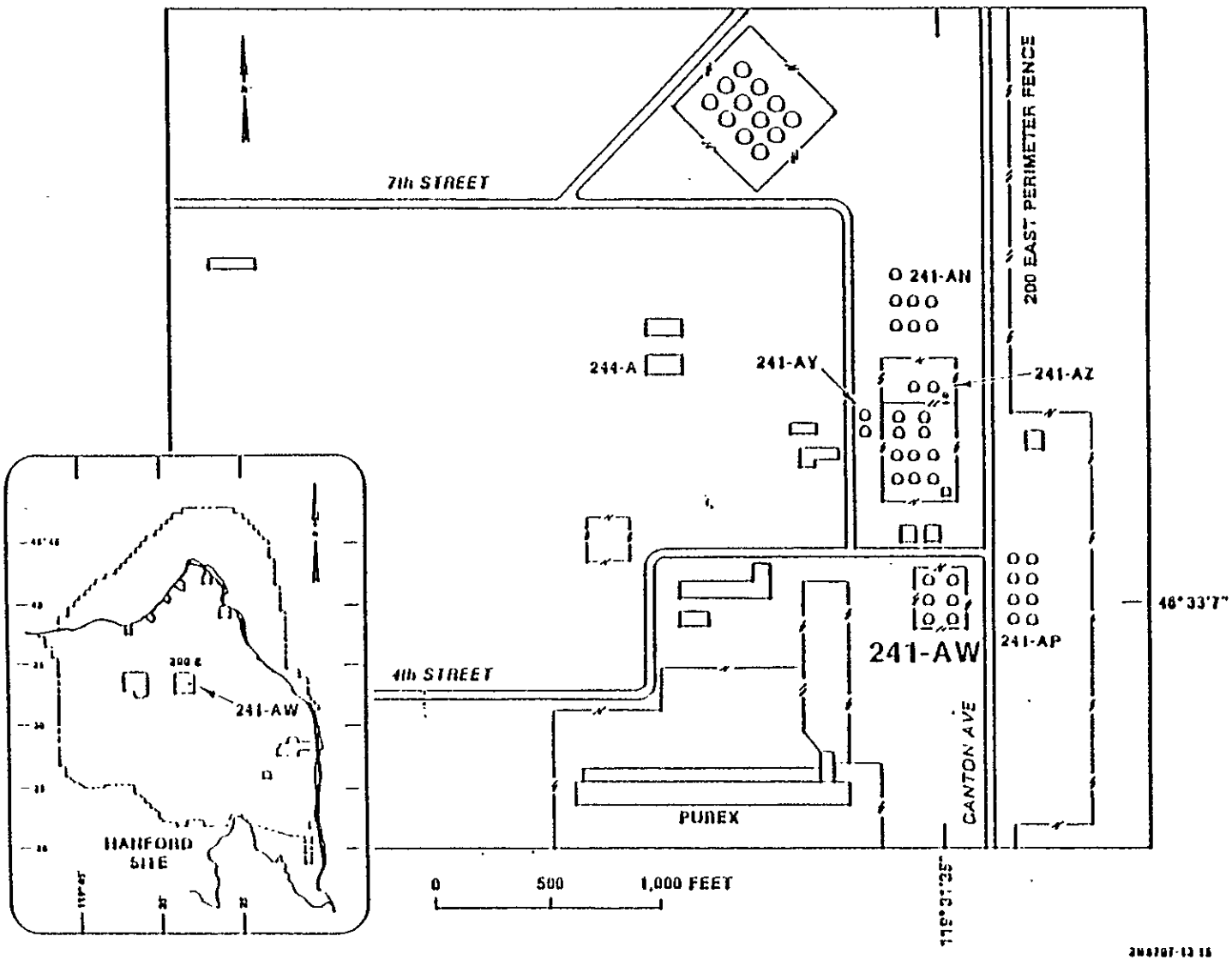
241-AN DOUBLE SHELL TANK
SITE PLAN



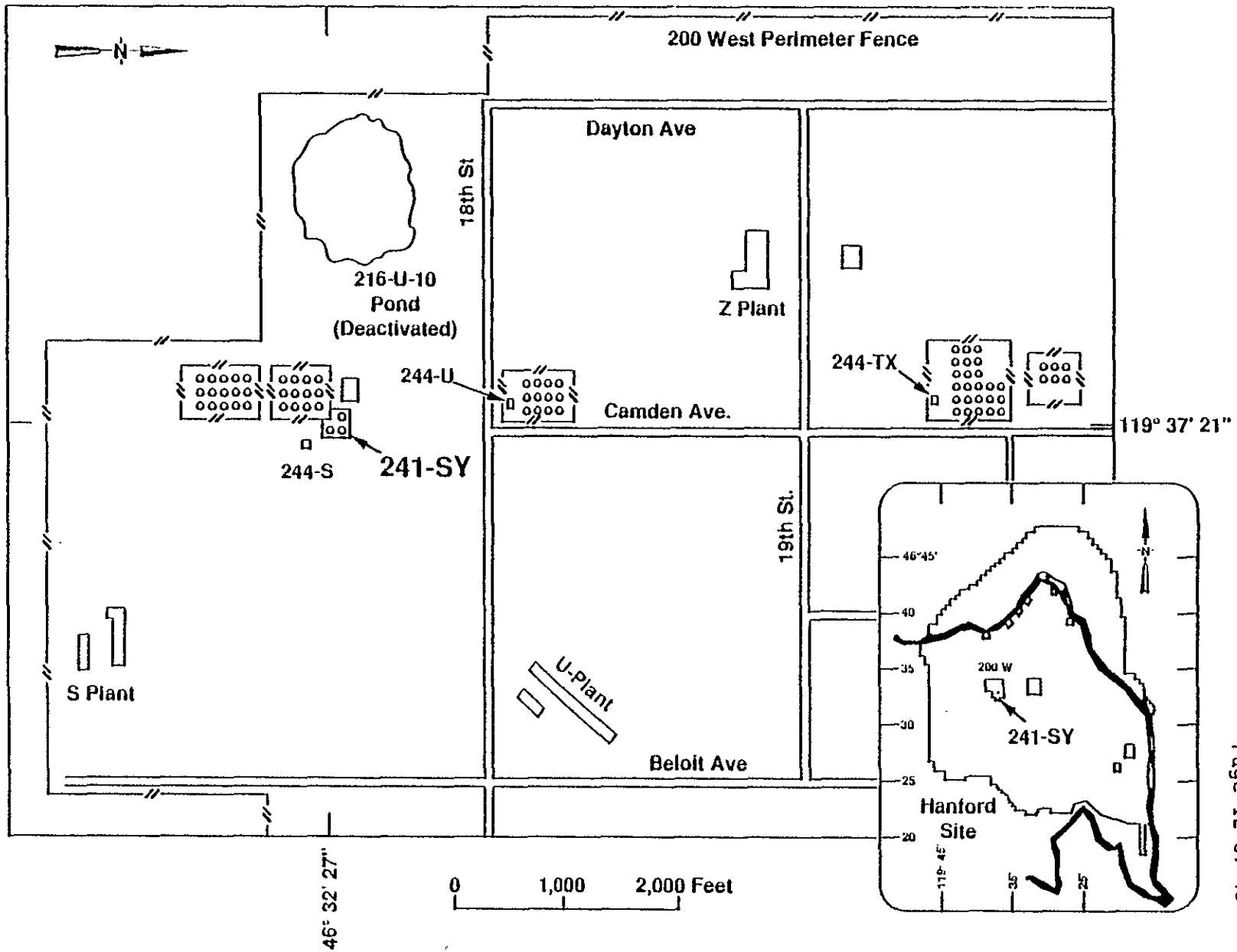
241-AP DOUBLE SHELL TANK
SITE PLAN



241-AW DOUBLE SHELL TANK
SITE PLAN

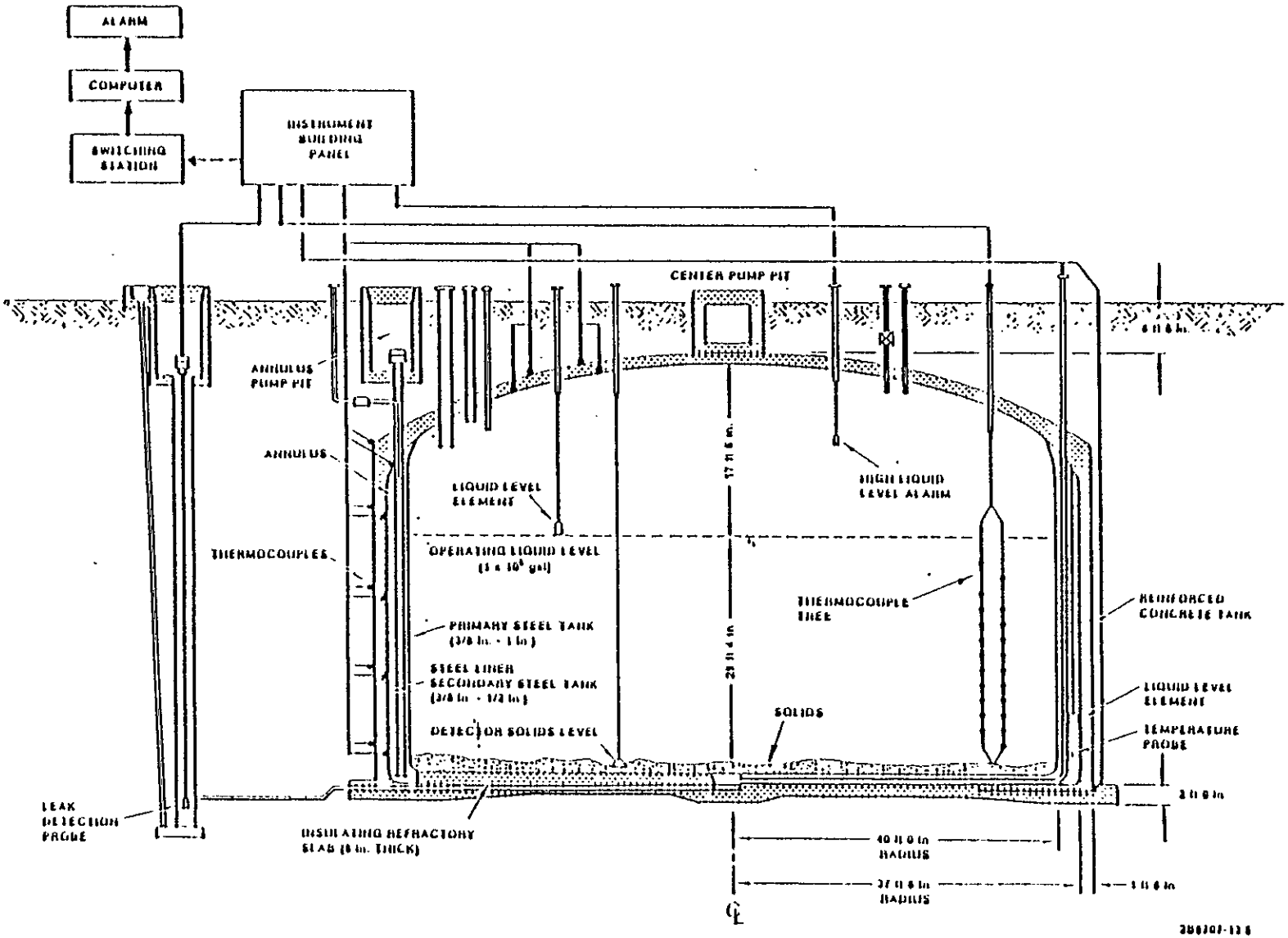


241-SY Double Shell Tank
Site Plan

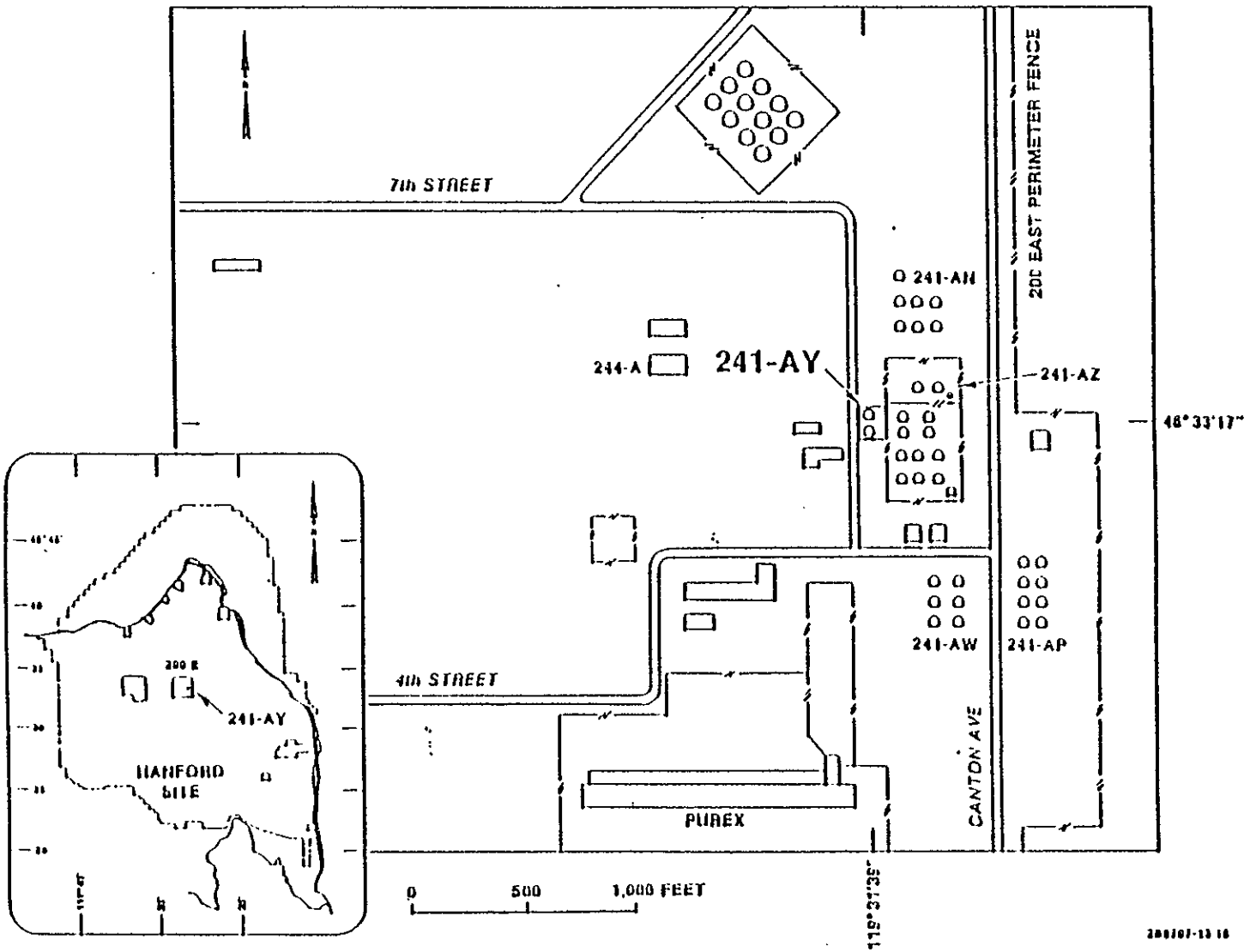


78910127.3

TYPICAL DOUBLE SHELL TANK

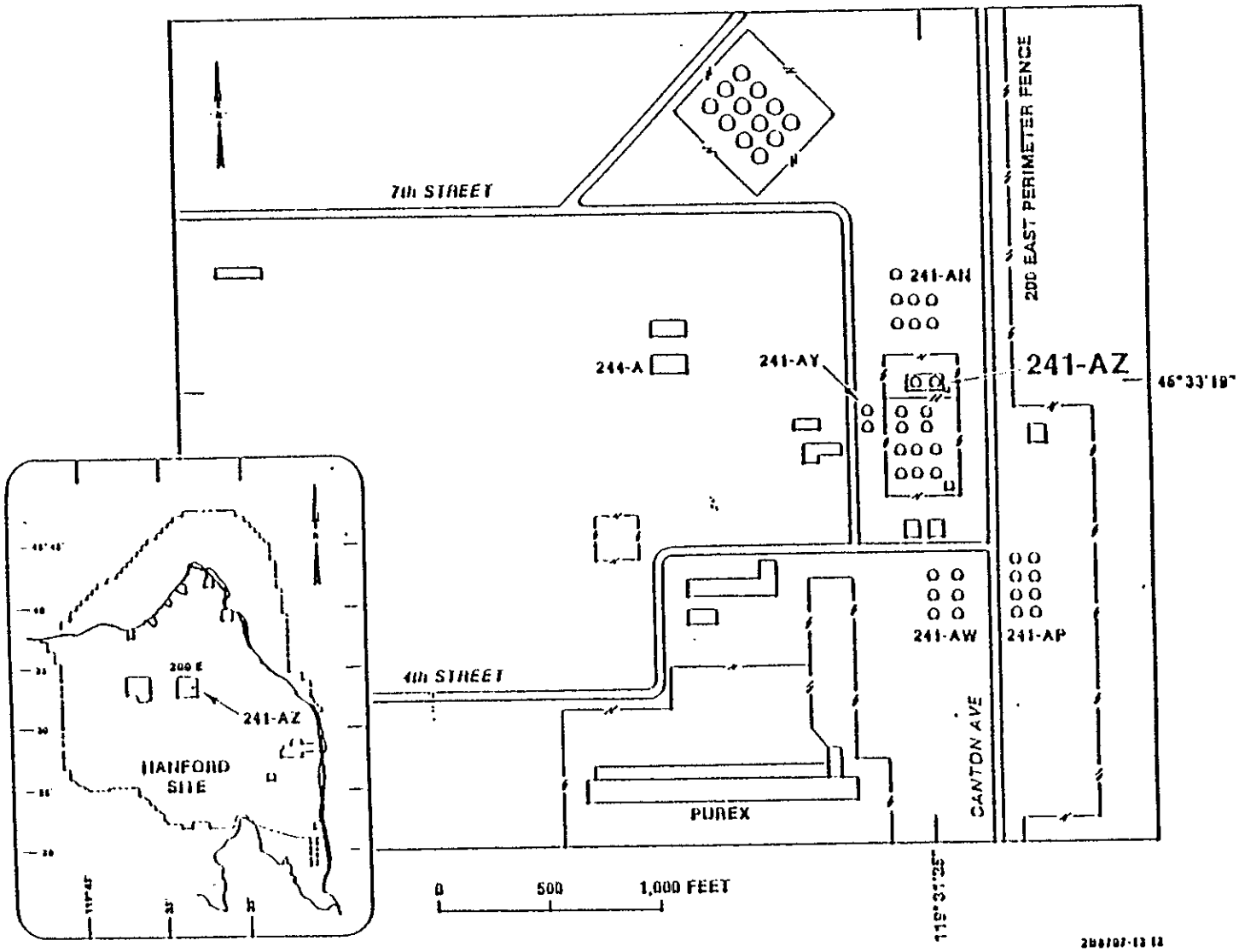


241-AY AGING WASTE DOUBLE SHELL TANK
SITE PLAN

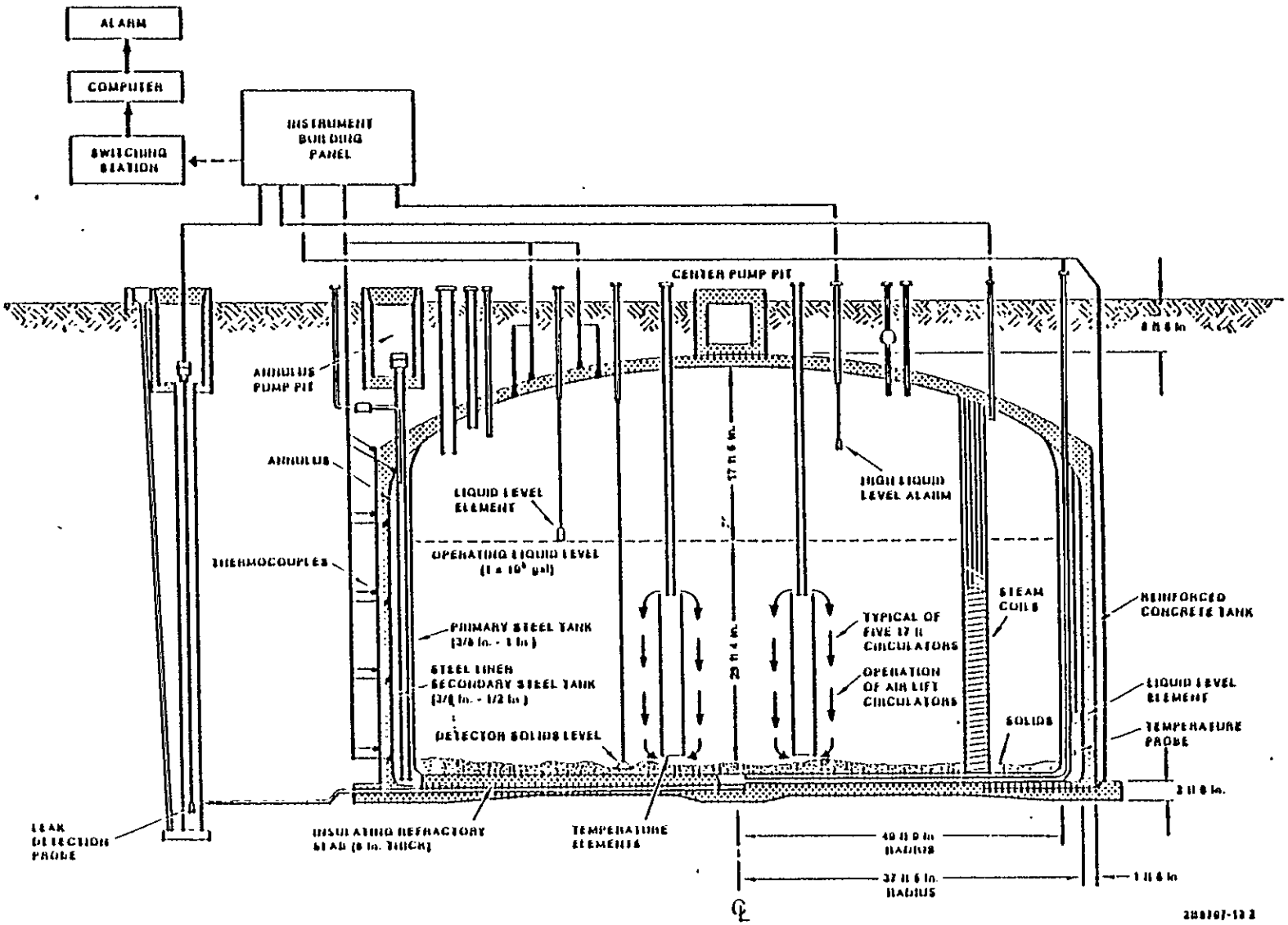


241-AZ AGING WASTE DOUBLE SHELL TANK

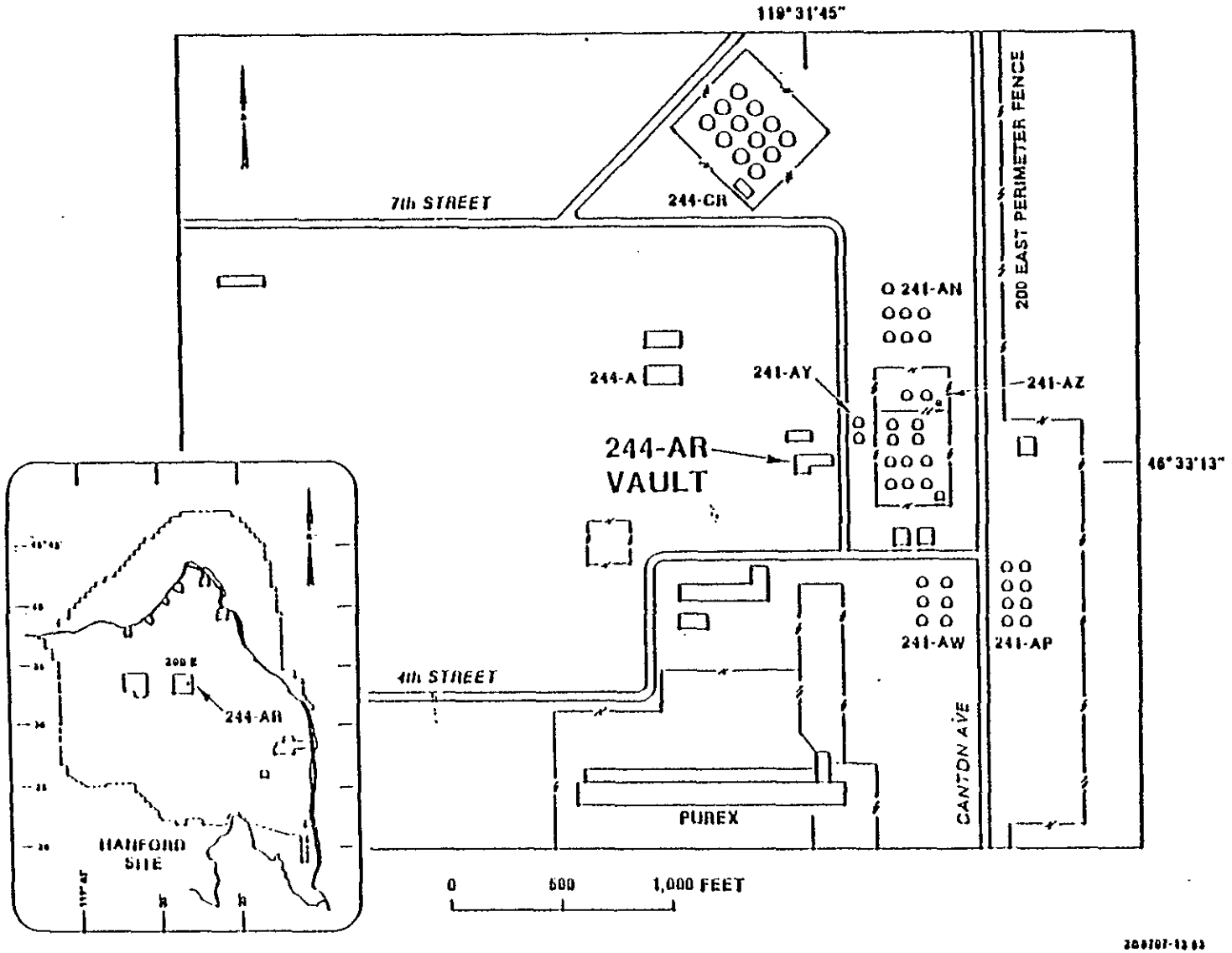
SITE PLAN



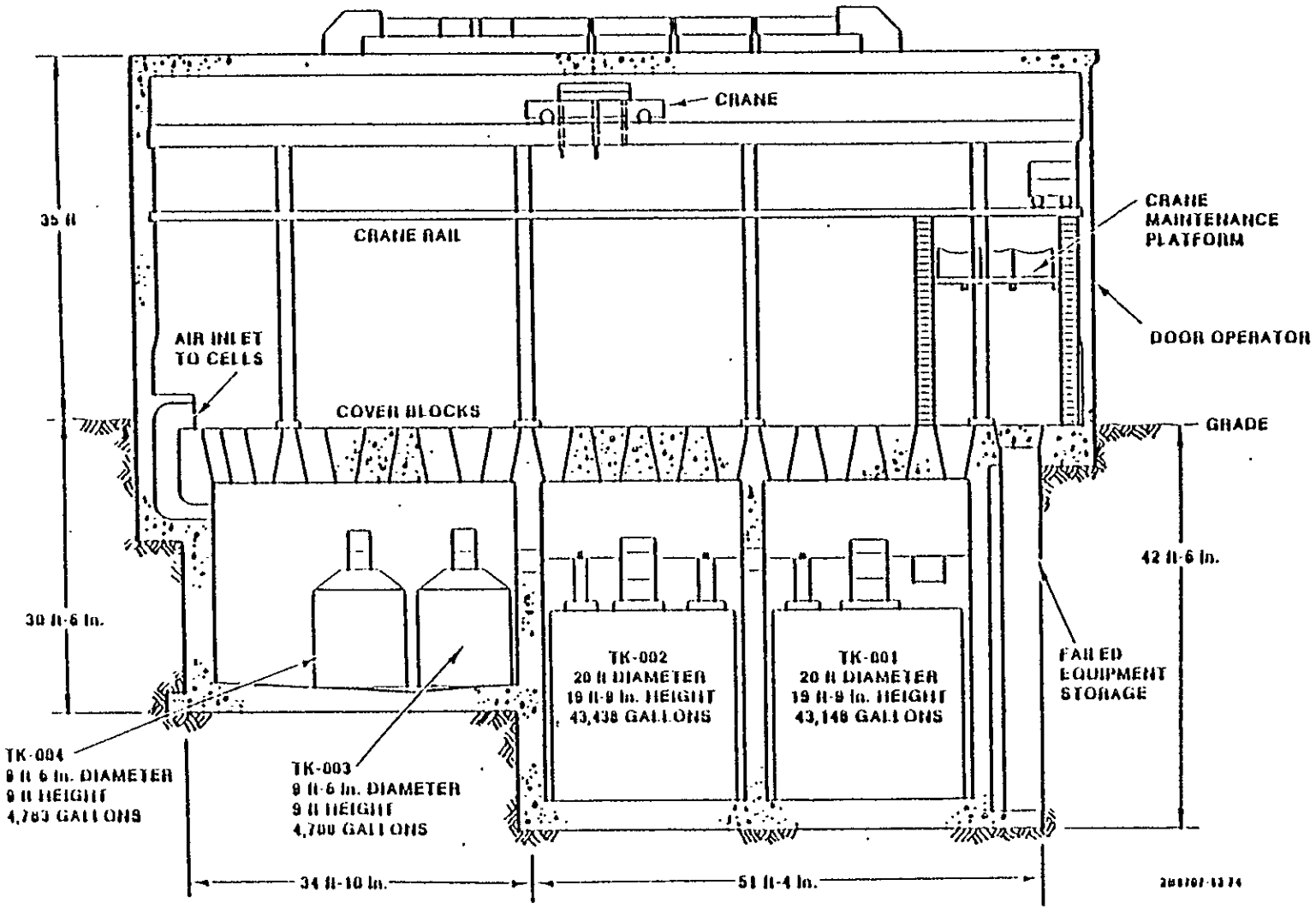
TYPICAL AGING WASTE DOUBLE SHELL TANK



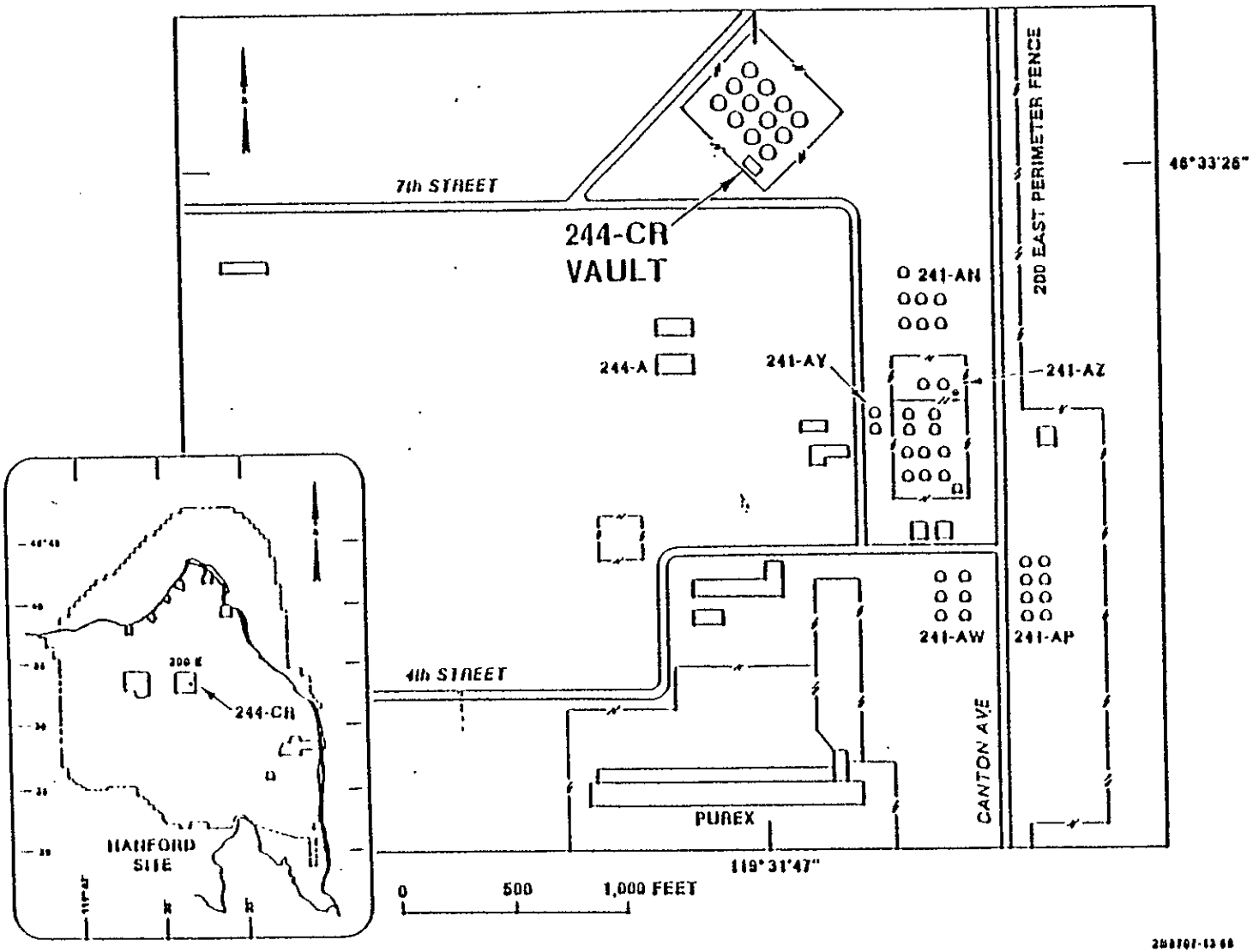
244-AR VAULT
SITE PLAN



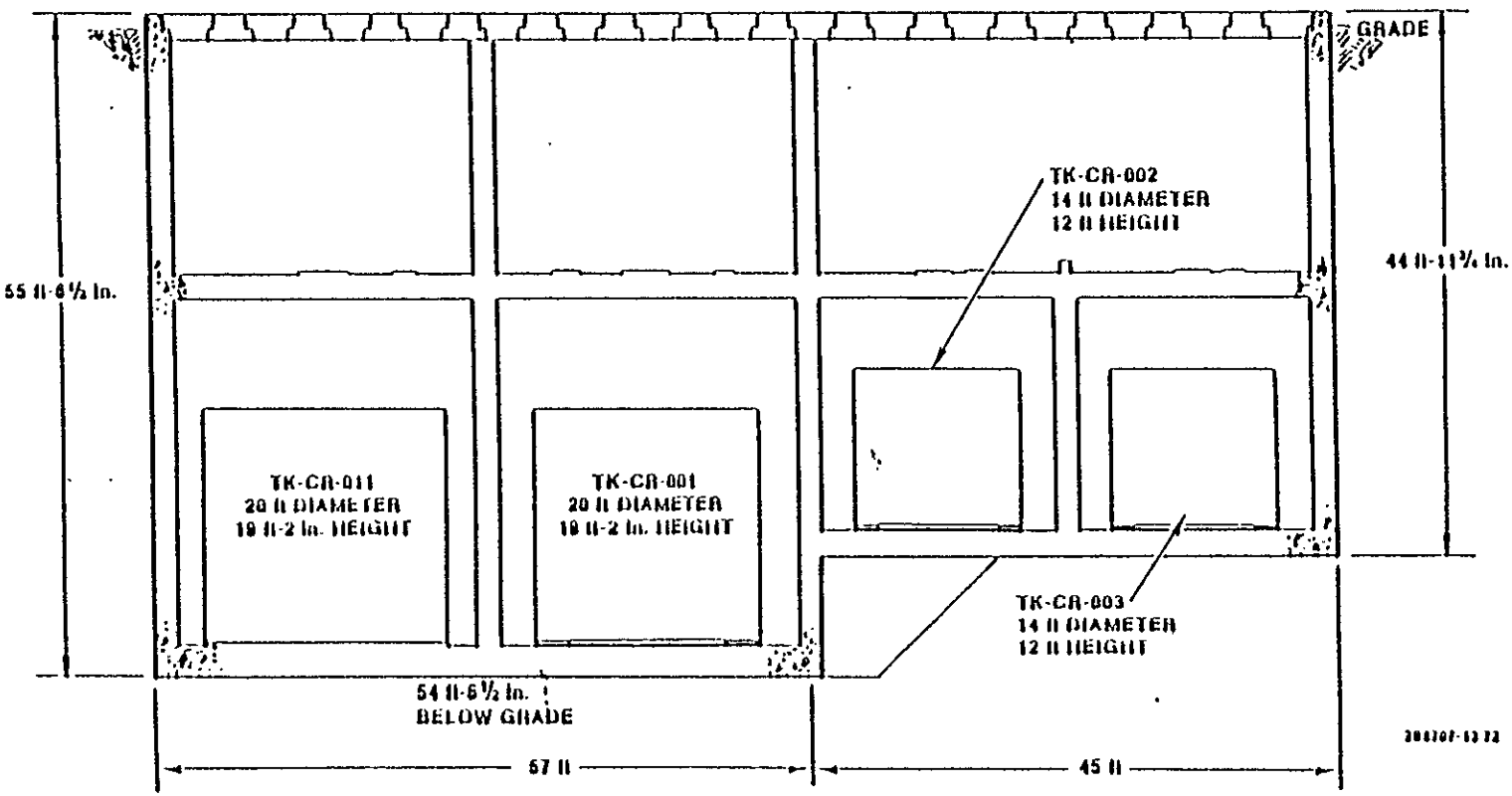
244-AR VAULT


CRANE
CRANE RAIL
CRANE MAINTENANCE PLATFORM
DOOR OPERATOR
AIR INLET TO CELLS
COVER BLOCKS
GRADE
35 ft
30 ft-6 in.
42 ft-6 in.
TK-002
20 ft DIAMETER
19 ft-9 in. HEIGHT
43,438 GALLONS
TK-001
20 ft DIAMETER
19 ft-9 in. HEIGHT
43,148 GALLONS
FAILED EQUIPMENT STORAGE
TK-004
9 ft 6 in. DIAMETER
9 ft HEIGHT
4,783 GALLONS
TK-003
9 ft-6 in. DIAMETER
9 ft HEIGHT
4,700 GALLONS
34 ft-10 in.
51 ft-4 in.

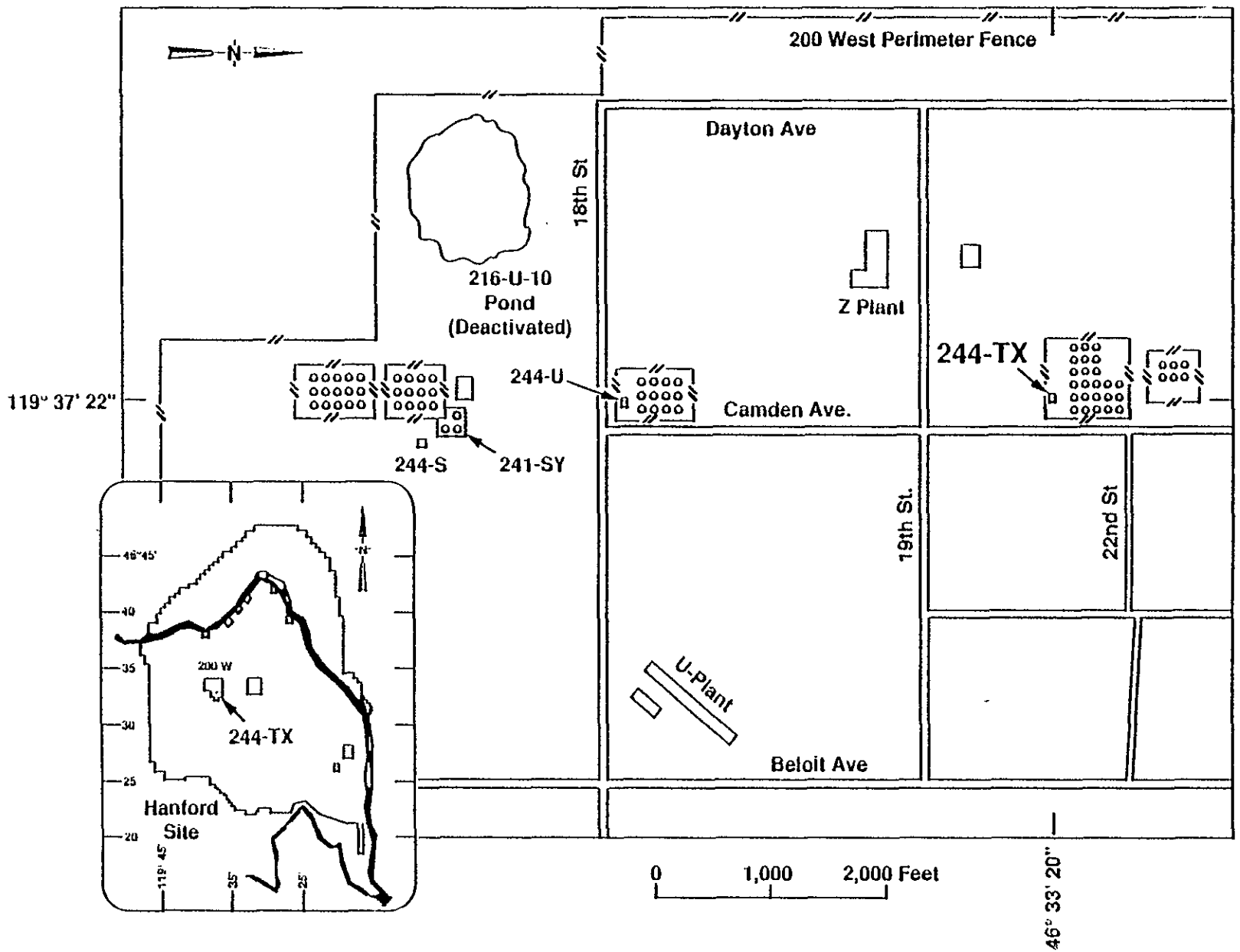
244-CR VAULT
SITE PLAN



244-CR VAULT

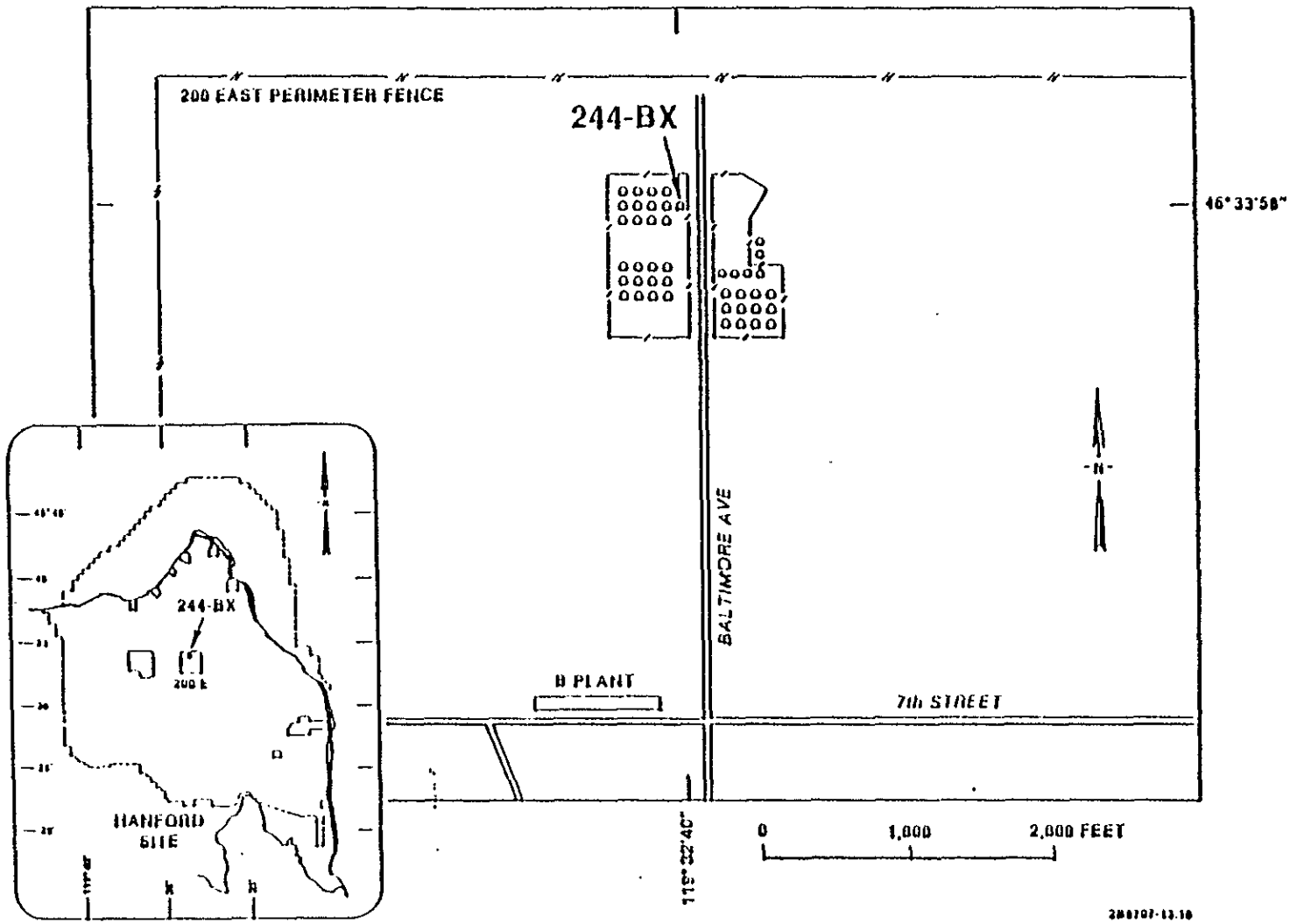

GRADE
TK-CR-002
14 ft DIAMETER
12 ft HEIGHT
44 ft-11¾ in.
55 ft-6½ in.
TK-CR-011
20 ft DIAMETER
19 ft-2 in. HEIGHT
TK-CR-001
20 ft DIAMETER
19 ft-2 in. HEIGHT
TK-CR-003
14 ft DIAMETER
12 ft HEIGHT
54 ft-6½ in.
BELOW GRADE
57 ft
45 ft

244-TX Double Contained Receiver Tank
Site Plan

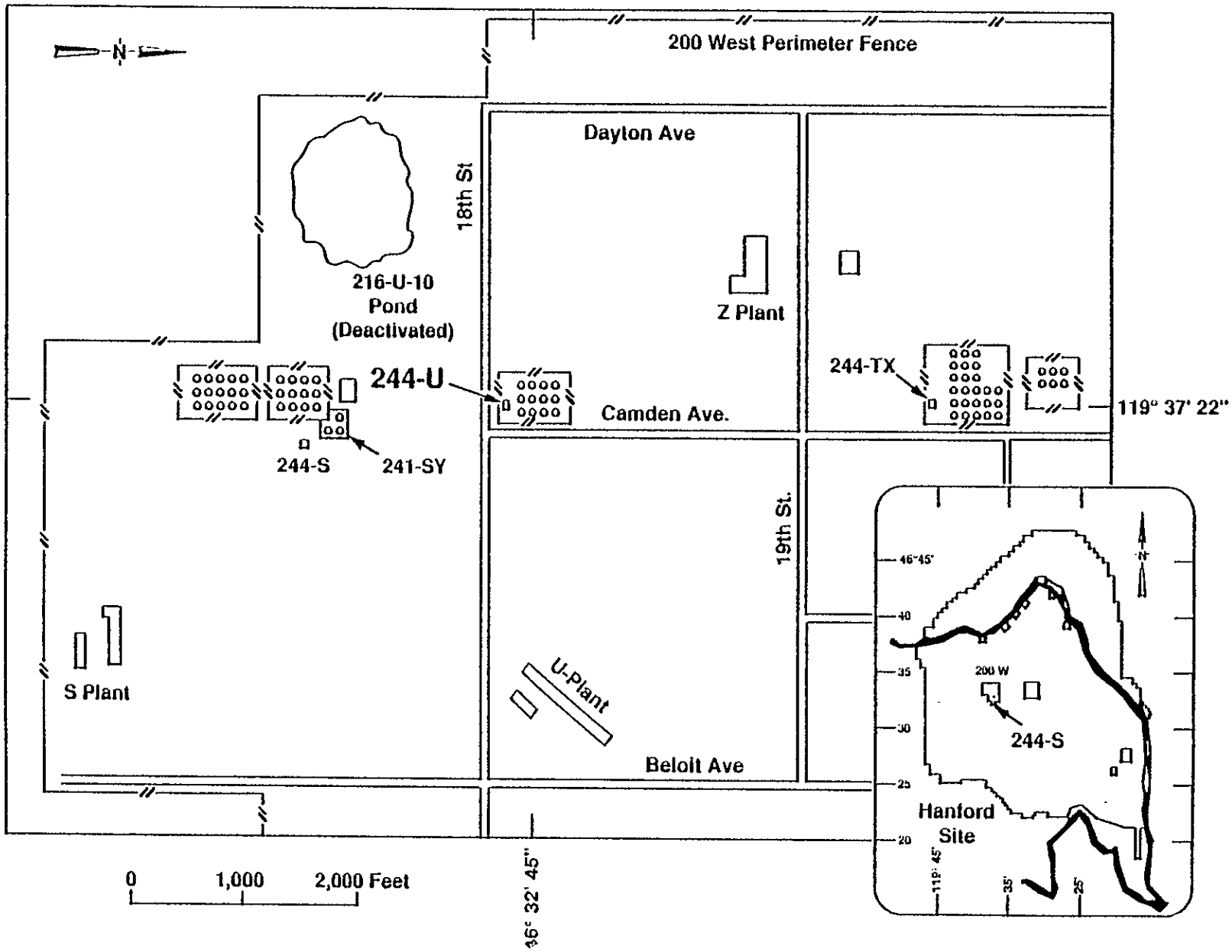


78910127.

244-BX DOUBLE CONTAINED RECEIVER TANK
SITE PLAN

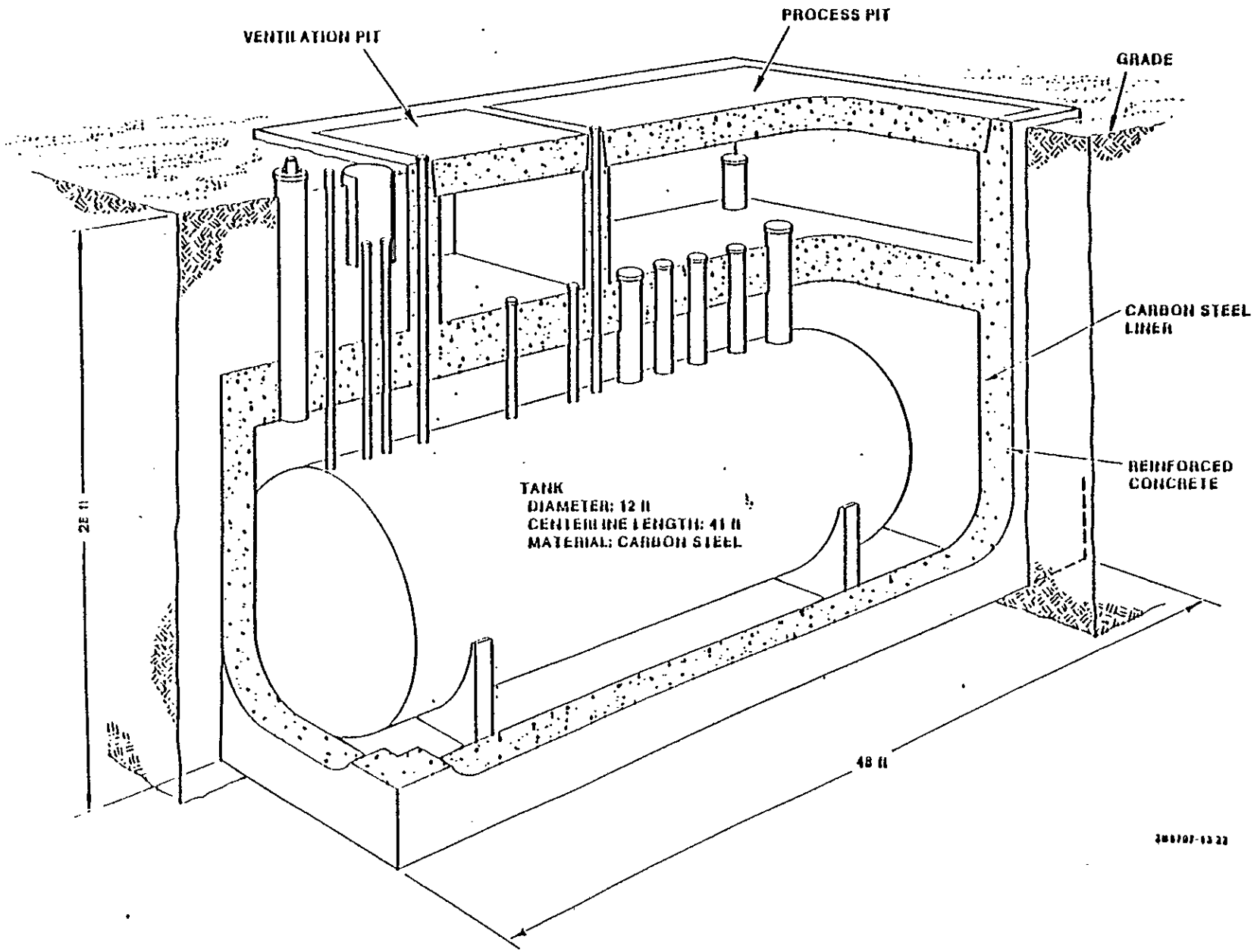


244-U Double Contained Receiver Tank
Site Plan

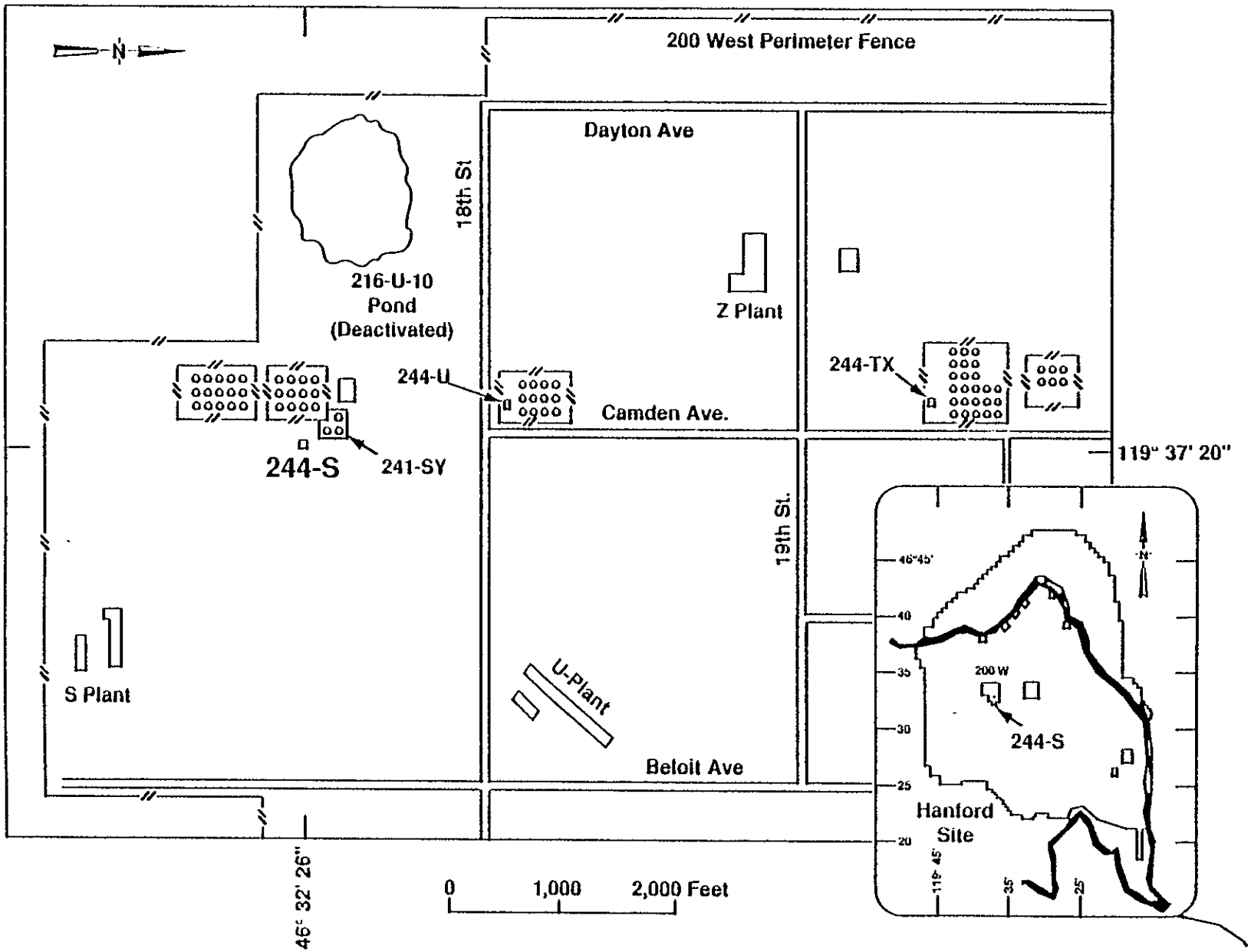


78910127.5

TYPICAL DOUBLE CONTAINED RECEIVER TANK

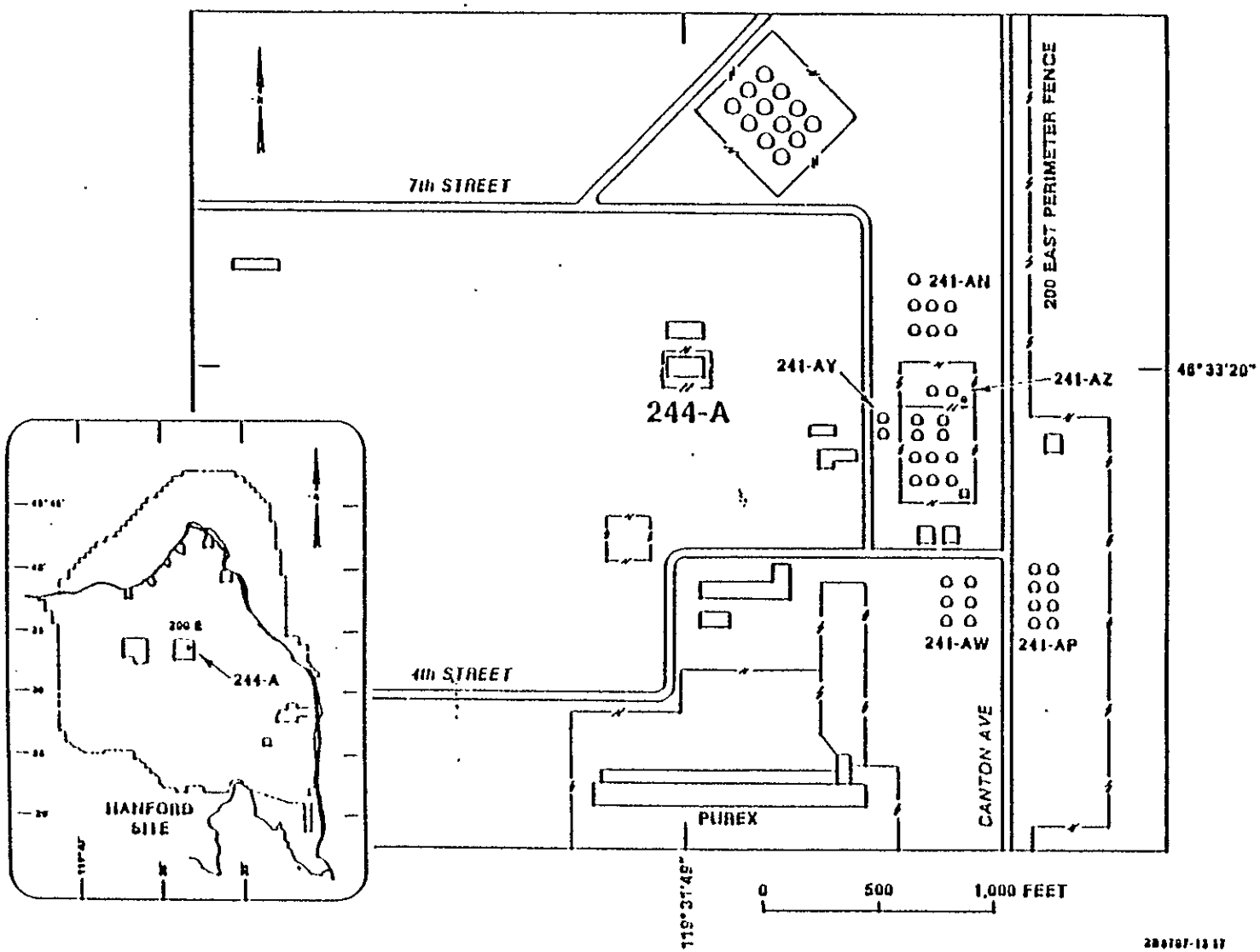


244-S Double Contained Receiver Tank
Site Plan

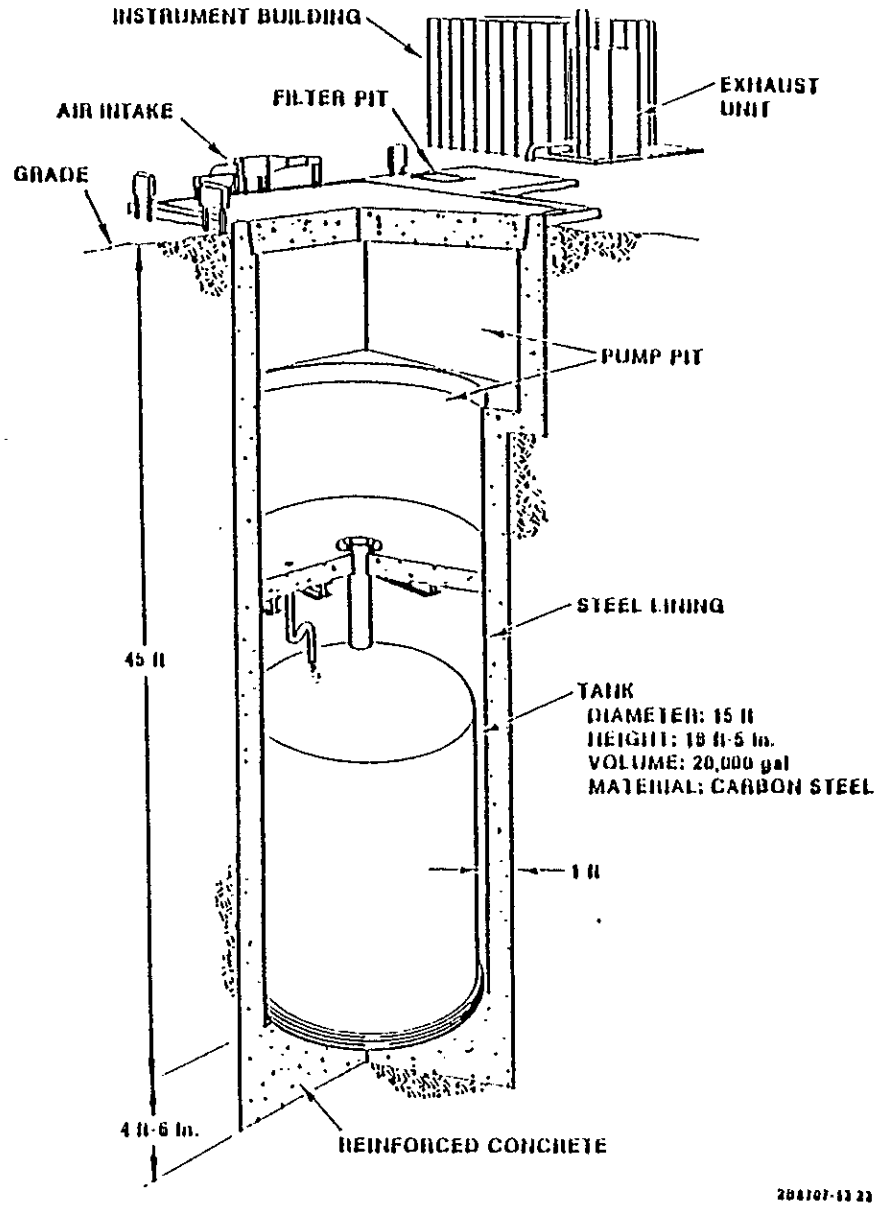


78910127.4

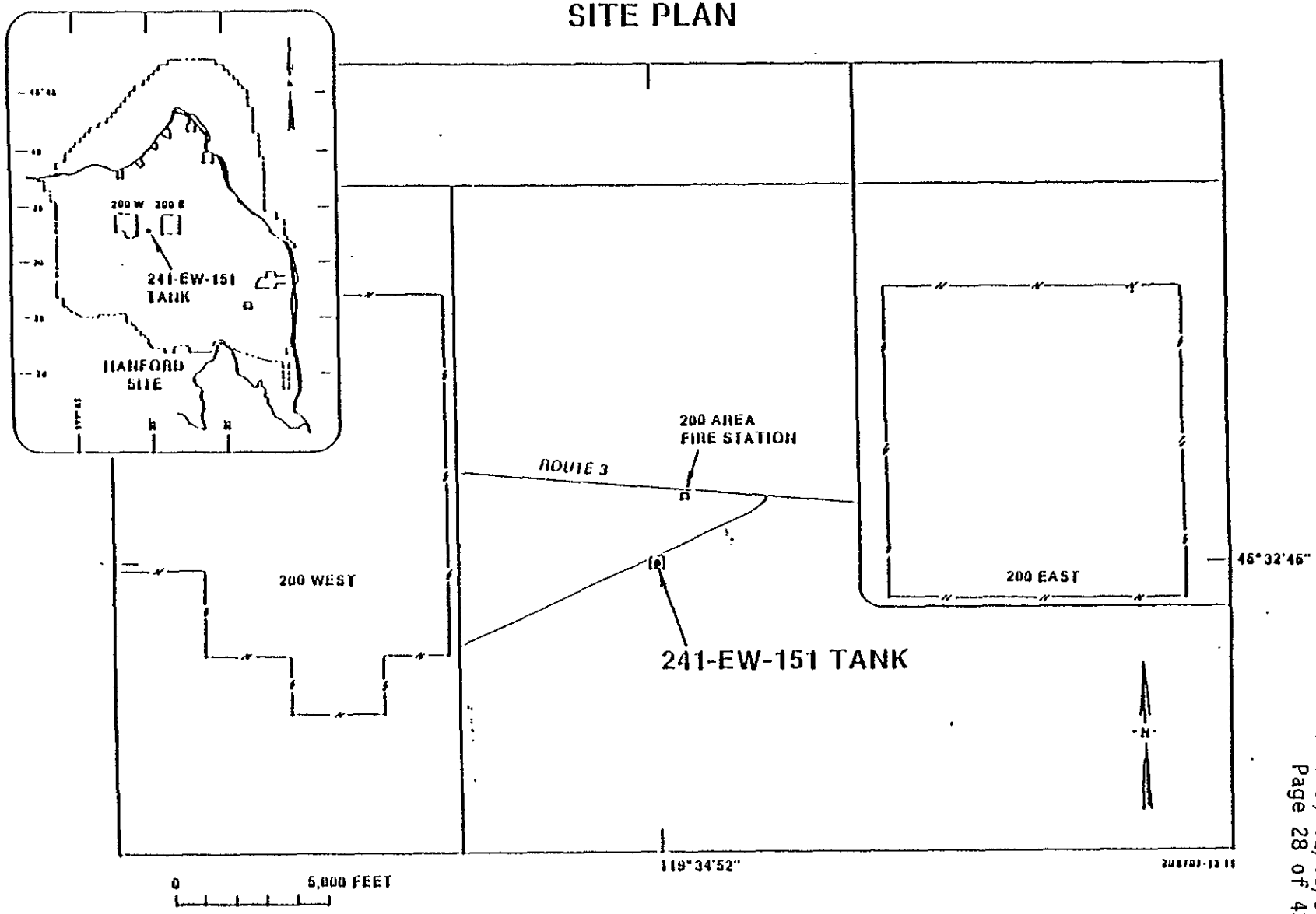
244-A DOUBLE CONTAINED RECEIVER TANK
SITE PLAN



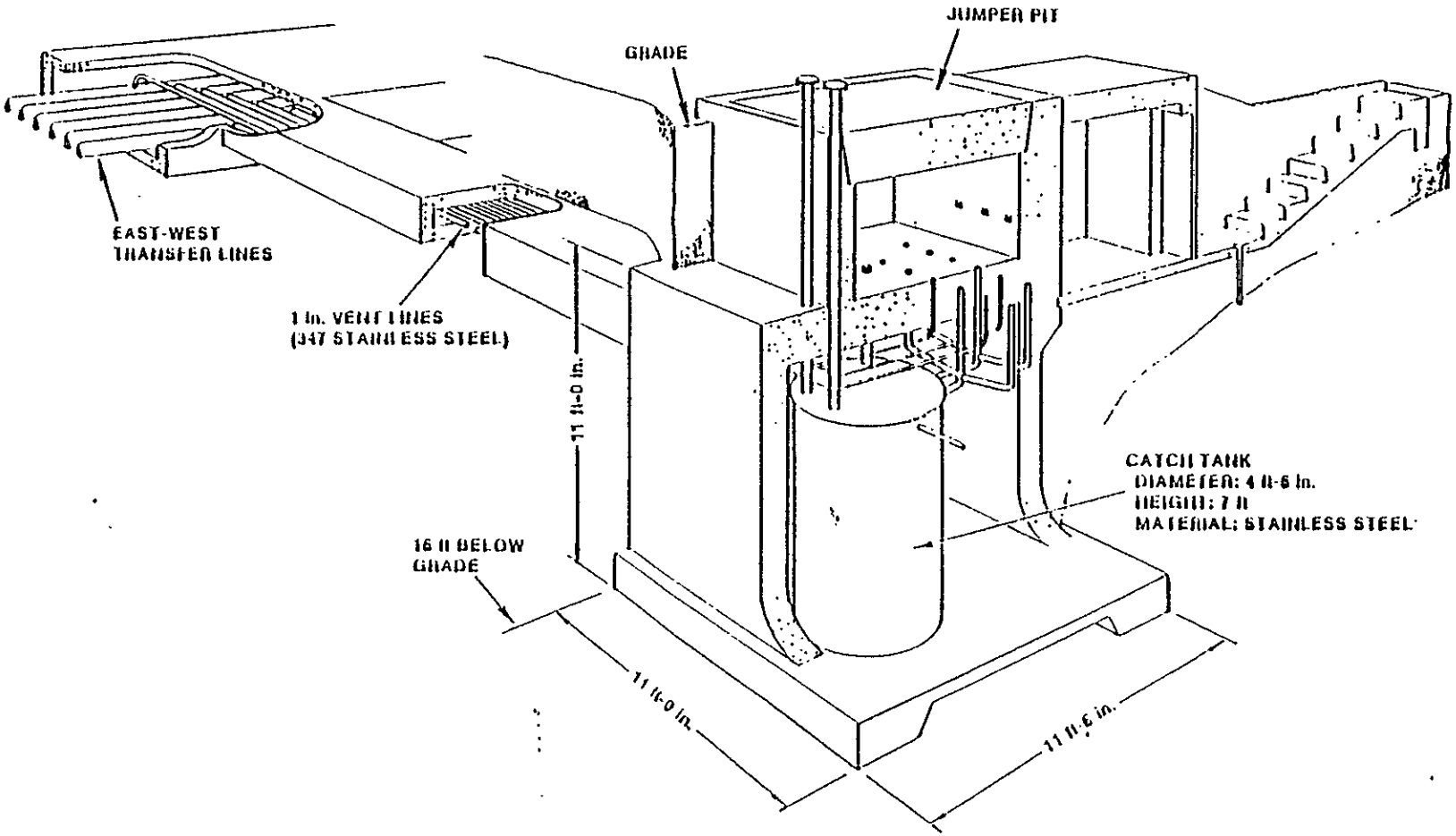
TYPICAL DOUBLE CONTAINED RECEIVER TANK



241-EW-151 TANK
(200 AREA EAST-WEST VENT STATION)
SITE PLAN



241-EW-151 TANK
(200 AREA EAST-WEST VENT STATION)

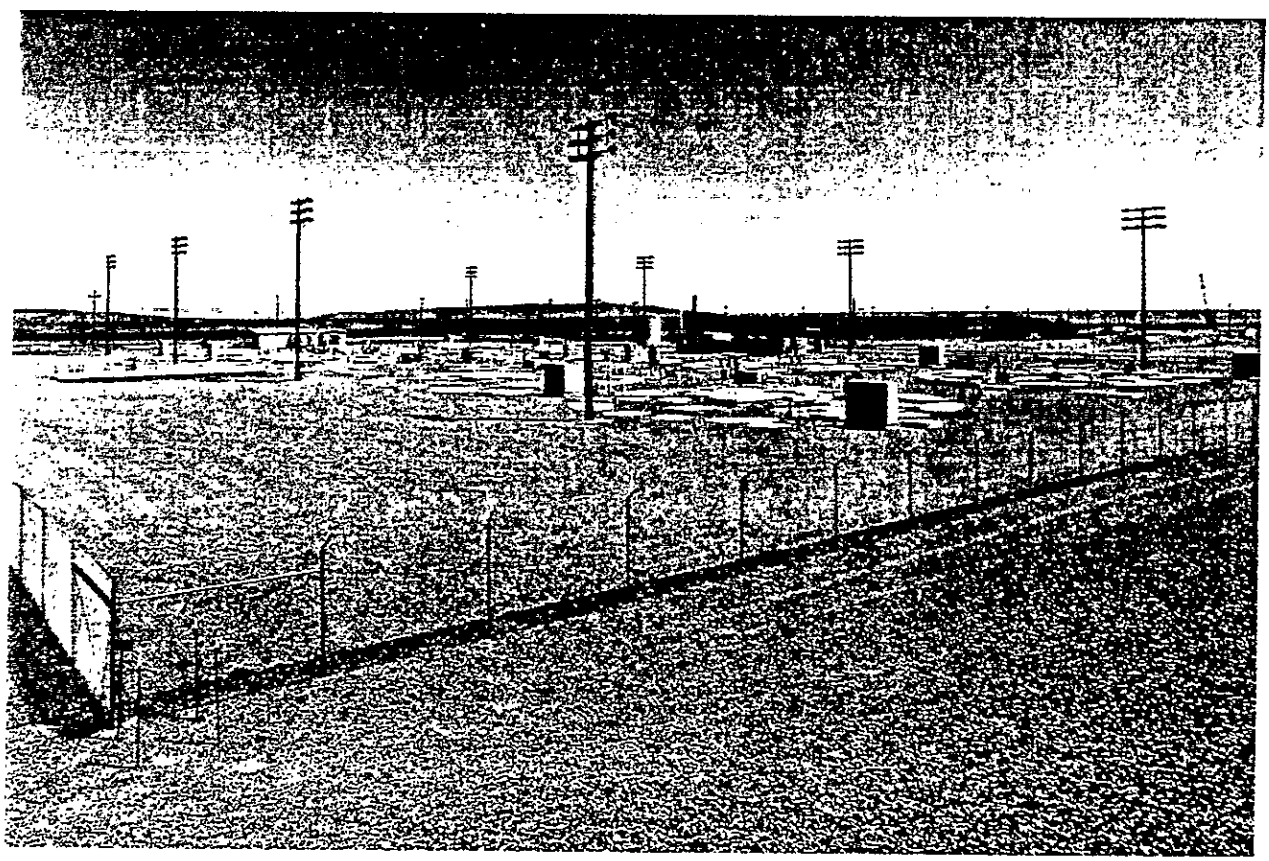


241-AN DOUBLE SHELL TANK

46°33'25"
119°31'37"

8704135-8CN
(PHOTO TAKEN 1987)

241-AP DOUBLE SHELL TANK



46°33'7"
119°31'38"

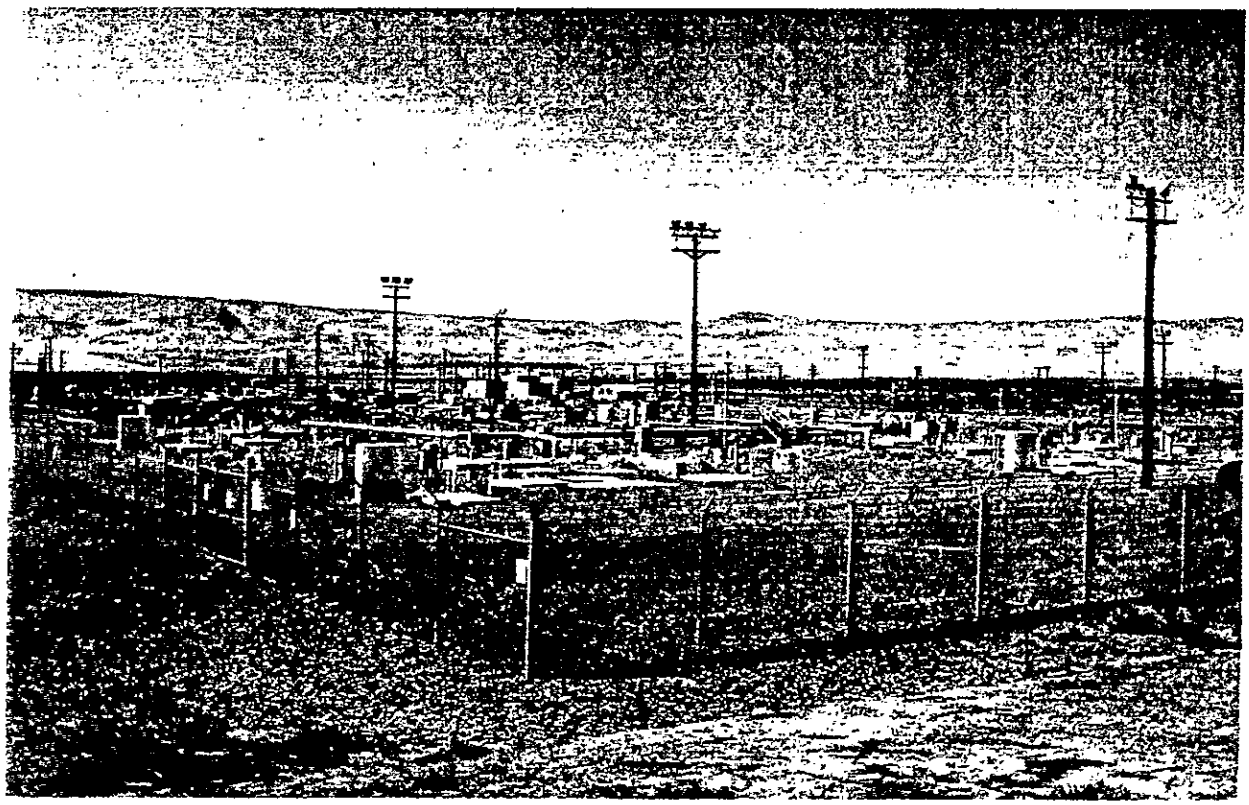
8704135-12CN
(PHOTO TAKEN 1987)

241-AW DOUBLE SHELL TANK

46°33'7"
119°31'35"

8704135-11CN
(PHOTO TAKEN 1987)

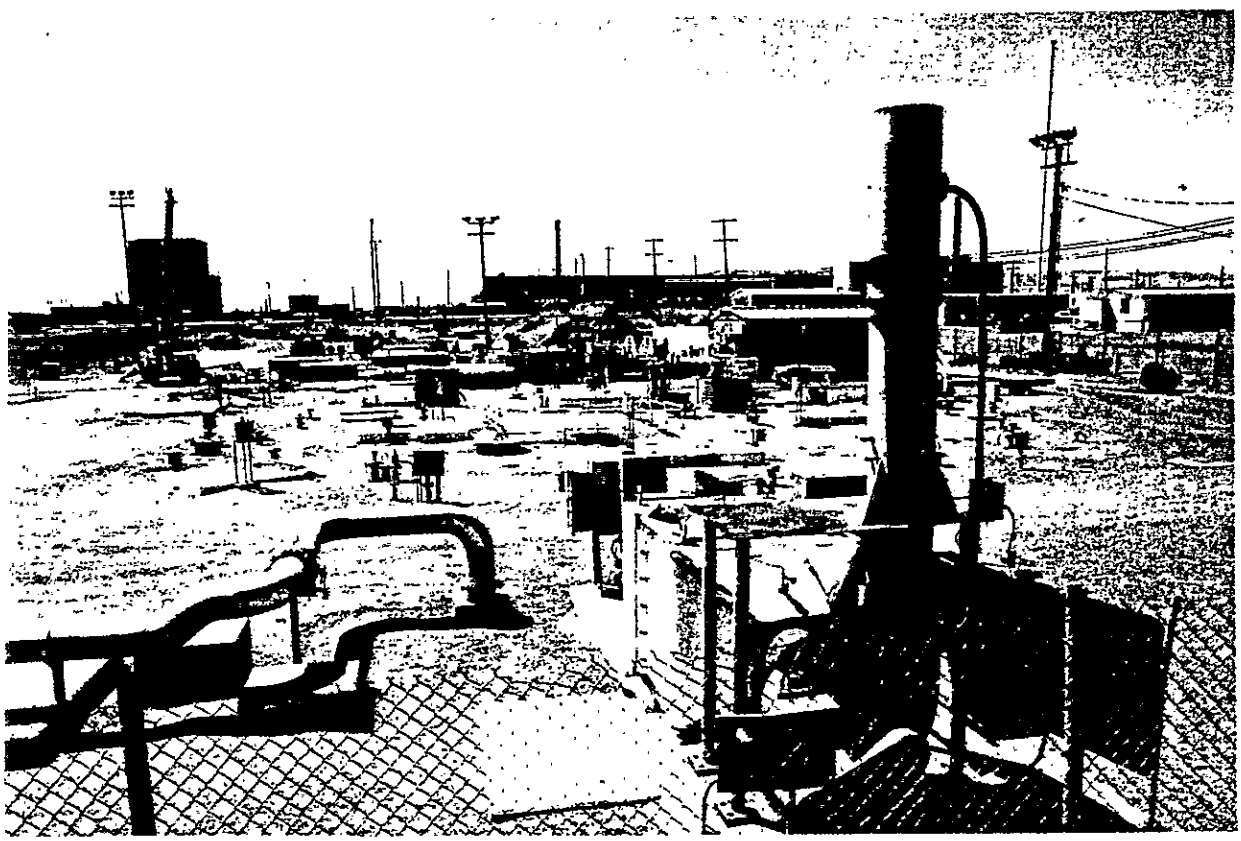
241-SY DOUBLE SHELL TANK



46°32'27"
119°37'21"

8704135-2CN
(PHOTO TAKEN 1987)

241-AY AGING WASTE DOUBLE SHELL TANK



46°33'17"
119°31'39"

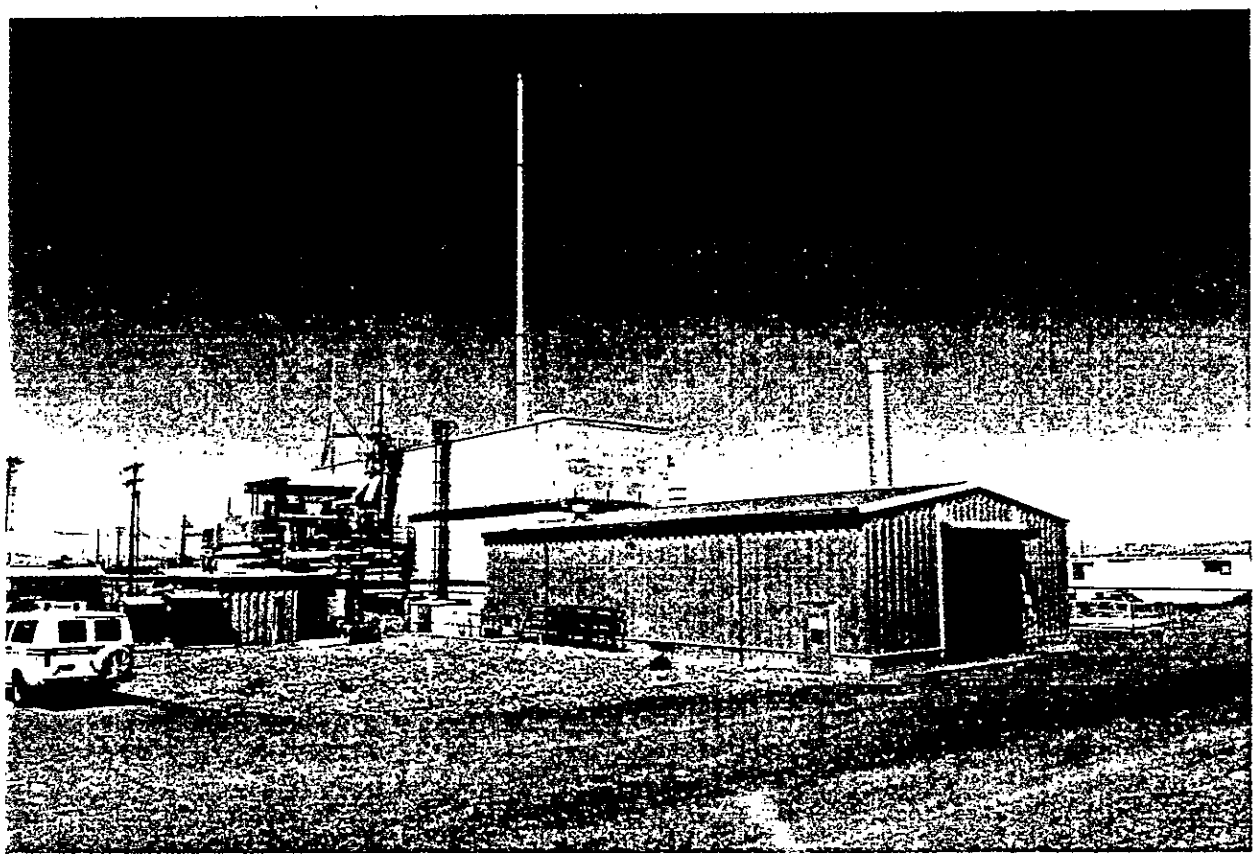
8704135-10CN
(PHOTO TAKEN 1987)

241-AZ AGING WASTE DOUBLE SHELL TANK

46°33'19"
119°31'35"

8704135-9CN
(PHOTO TAKEN 1987)

244-AR VAULT



46°33'13"
119°31'45"

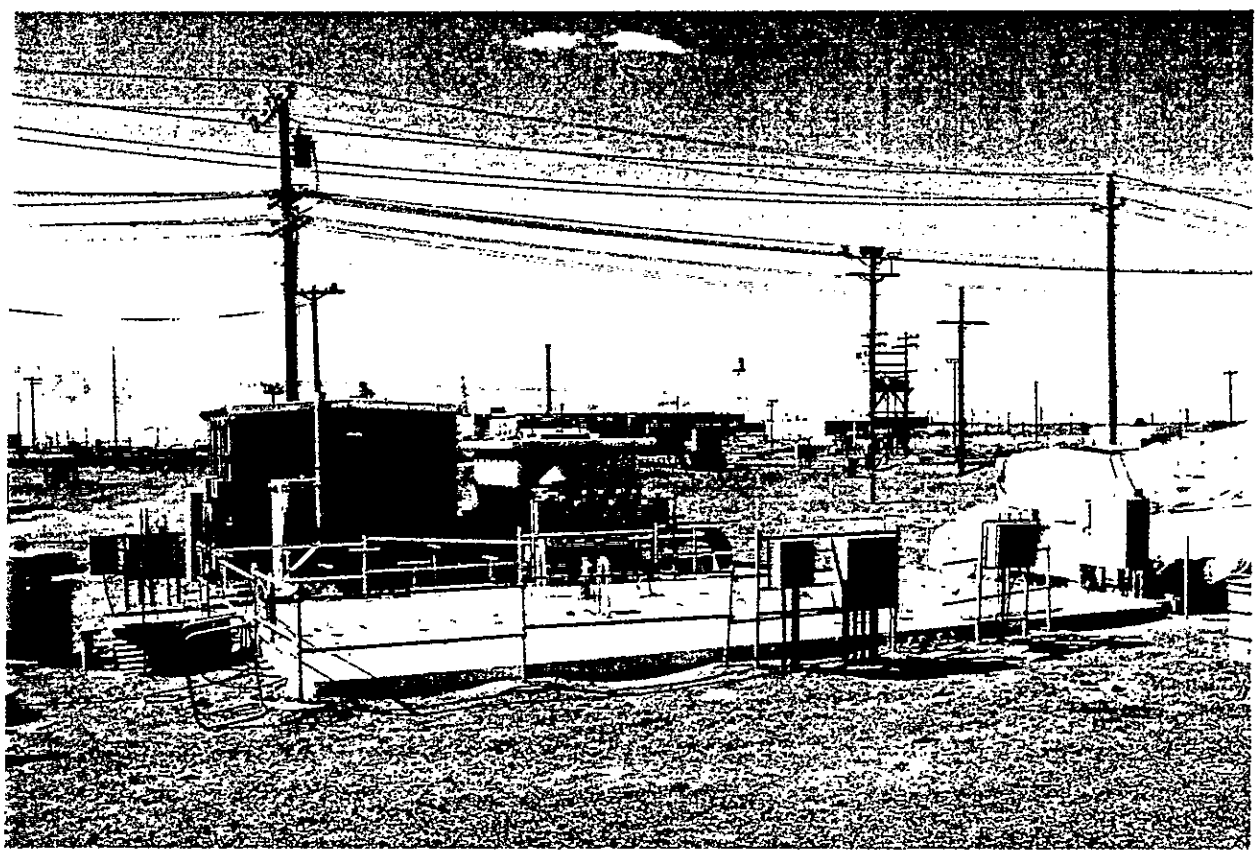
8704135-16CN
(PHOTO TAKEN 1987)

244-CR VAULT

46°33'26"
119°31'47"

8704135-14CN
(PHOTO TAKEN 1987)

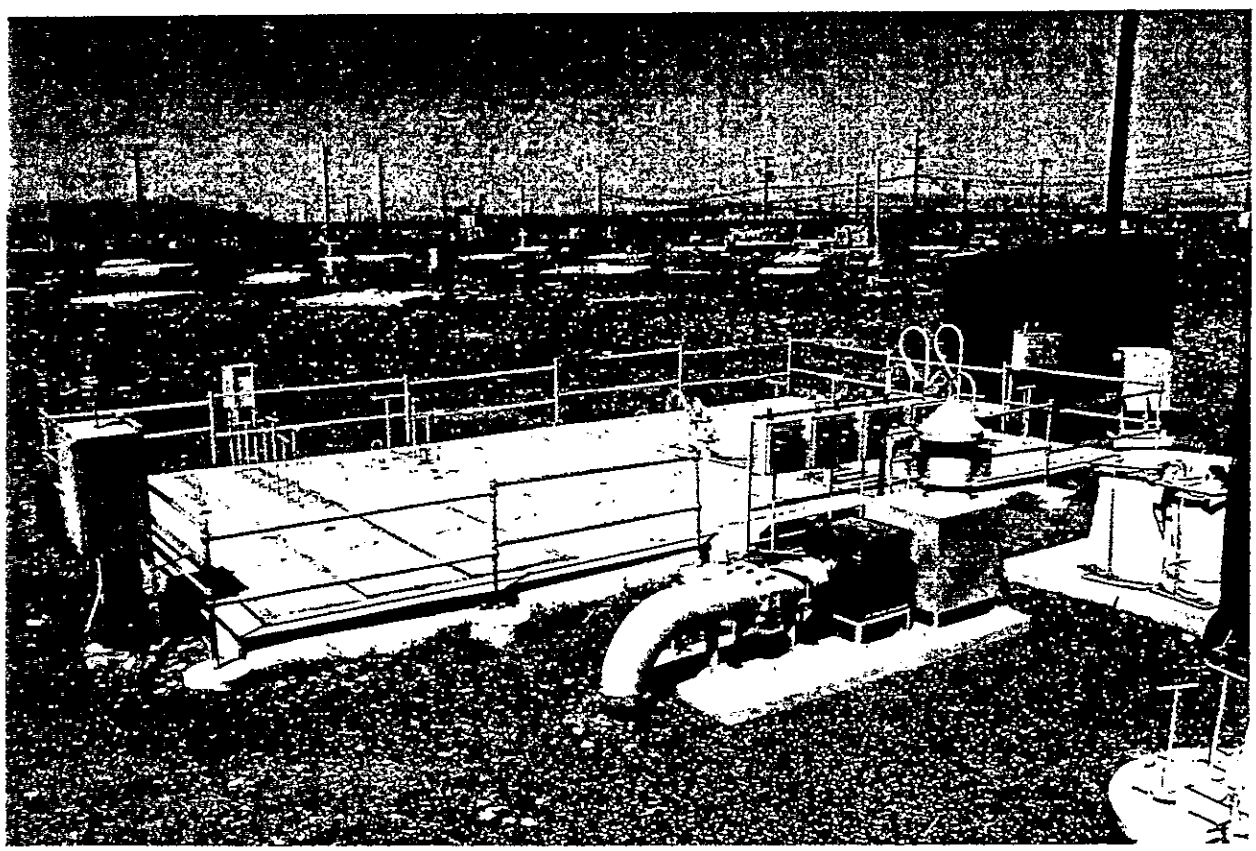
244-TX DOUBLE CONTAINED RECEIVER TANK



46°33'20"
119°37'22"

8704433-7CN
(PHOTO TAKEN 1987)

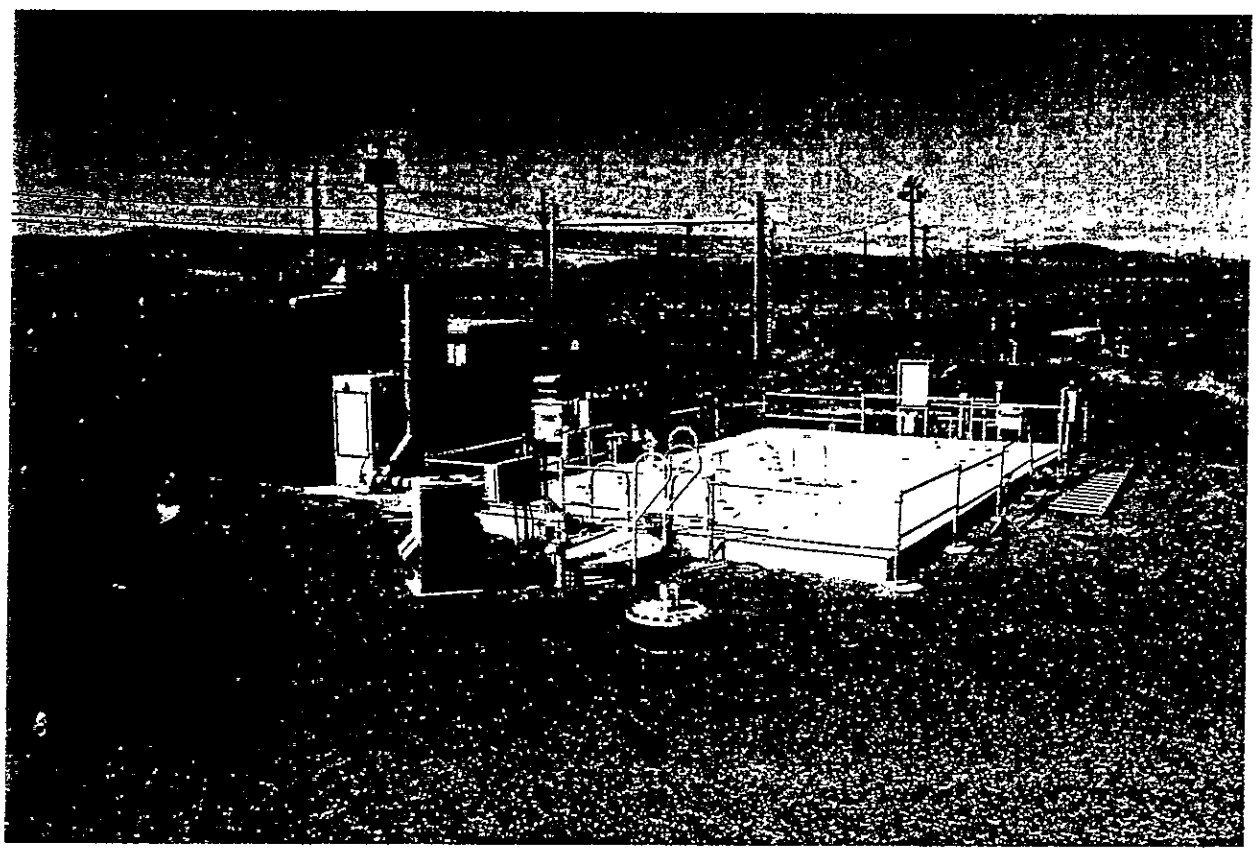
244-BX DOUBLE CONTAINED RECEIVER TANK



46°33′58"
119°32′40"

8704433-18CN
(PHOTO TAKEN 1987)

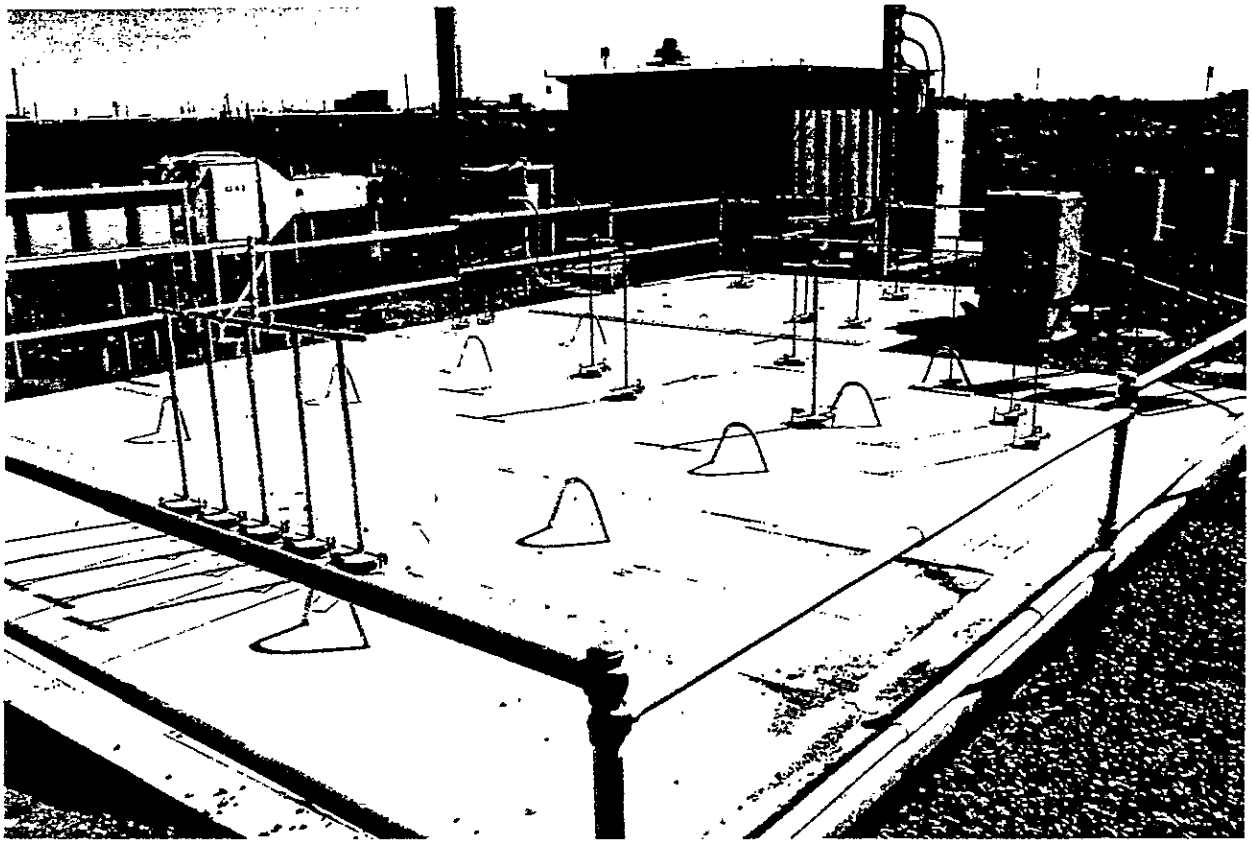
244-U DOUBLE CONTAINED RECEIVER TANK



46°32'45"
119°37'22"

8704433-4CN
(PHOTO TAKEN 1987)

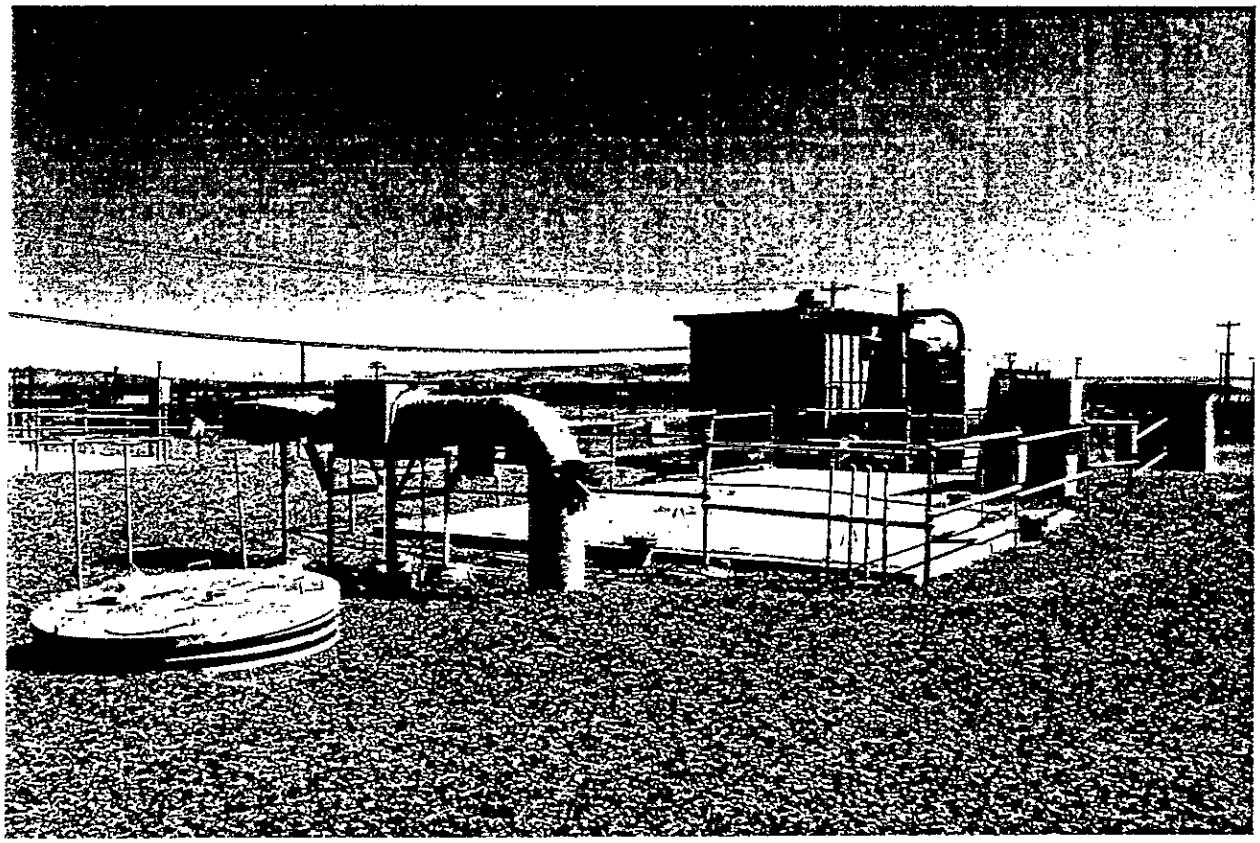
244-S DOUBLE CONTAINED RECEIVER TANK



46°32′26"
119°37′20"

8704433-2CN
(PHOTO TAKEN 1987)

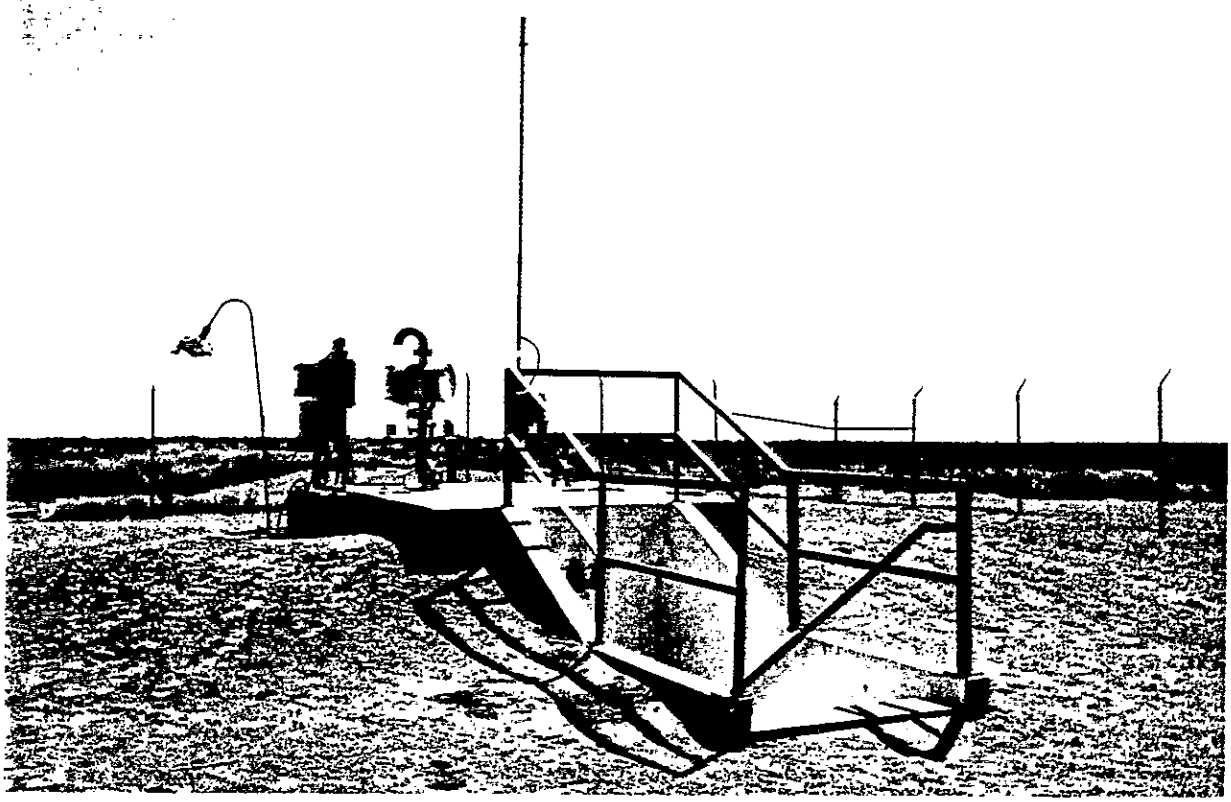
244-A DOUBLE CONTAINED RECEIVER TANK



46°33'20"
119°31'49"

8704433-15CN
(PHOTO TAKEN 1987)

241-EW-151 TANK



46°32'46"
119°34'52"

8704433-17CN
(PHOTO TAKEN 1987)

FORM 3

DANGEROUS WASTE PERMIT APPLICATION

I. EPA/STATE I.D. NUMBER: W A 7 8 9 0 0 0 8 9 6 7

FOR OFFICIAL USE ONLY

APPLICATION ASSIGNED	DATE RECEIVED	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one 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 complete the appropriate items)

☒ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete also item below.)

YR	DAY	YR
0 1 3	1 8	7 7

FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED

☐ 2. NEW FACILITY (Complete also item below.)

YR	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)

☐ 1. FACILITY HAS AN INTERIM STATUS PERMIT

☐ 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES — 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. Two 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 Continuation Sheet.

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	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
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

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR GALLONS PER HOUR OR LITERS PER HOUR
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

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	H
ACRES	B
HECTARES	C

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. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 4	210,000	G		7				
2					8				
3					9				
4					10				

CONTINUE ON REVERSE

Continued from the front.

II. PROCESSES (continued)

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

S04

The 207-A South Retention Basin (Basin) began operation in March 1977. The Basin consists of three concrete cells (S04) of 70,000 gallon capacity each for a total combined capacity of 210,000 gallons. All three cells are coated to prevent constituents from penetrating the concrete. The Basin was used for the interim storage of the 242-A Evaporator (Evaporator) process condensate effluent to allow for sampling and analysis before it was discharged to the 216-A-37-1 Crib for final disposition. Discharge of Evaporator process condensate effluent to the Basin was terminated on April 12, 1989, when it was determined the Evaporator process condensate contained dangerous waste regulated under WAC 173-303. The Basin will remain out of service and will be closed under interim status. A closure plan for the decommissioning and final disposition of this waste management unit is planned.

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 wastes: 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 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)	D. PROCESSES 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

Continued from page 2.

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

I.D. NUMBER (enter from page 1): WA789000897

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)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	WT02	1,749,300	P	S04	Storage
2	F003				Included with above
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

Continued from the front

V. DESCRIPTION OF DANGEROUS WASTES (continued)

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

The Basin was taken out of service on April 12, 1989 and will no longer receive dangerous waste. A closure plan for the decommissioning and final disposition of this waste management unit is planned. A description of the dangerous wastes temporarily stored by the Basin follows.

The Evaporator process condensate effluent is regulated as a dangerous waste under WAC 173-303 due to the toxicity of the ammonia as indicated by WT02 and the presence of the F003 constituents. Based on the F003 constituents lacking ignitability characteristics, DOE-RL/WHC will seek "state only" listing of this waste. An investigation is being conducted for final determination on whether other constituents within this waste stream will be regulated under WAC 173-303. The approximate value of 1,749,300 pounds for estimated annual quantity of dangerous waste represents the maximum capacity of the Basin during its operation.

VI. 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).

VII. 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).

VIII. FACILITY GEOGRAPHIC LOCATION This information is provided on attached drawings and photos.

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)

IX. FACILITY OWNER

[X] 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

X. 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)	SIGNATURE	DATE SIGNED
M. J. Lawrence Manager, Richland Operations United States Department of Energy	Michael J. Lawrence	2-26-90

XI. 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 E. Nolan

Co-operator
John E. Nolan, President
Westinghouse Hanford Company

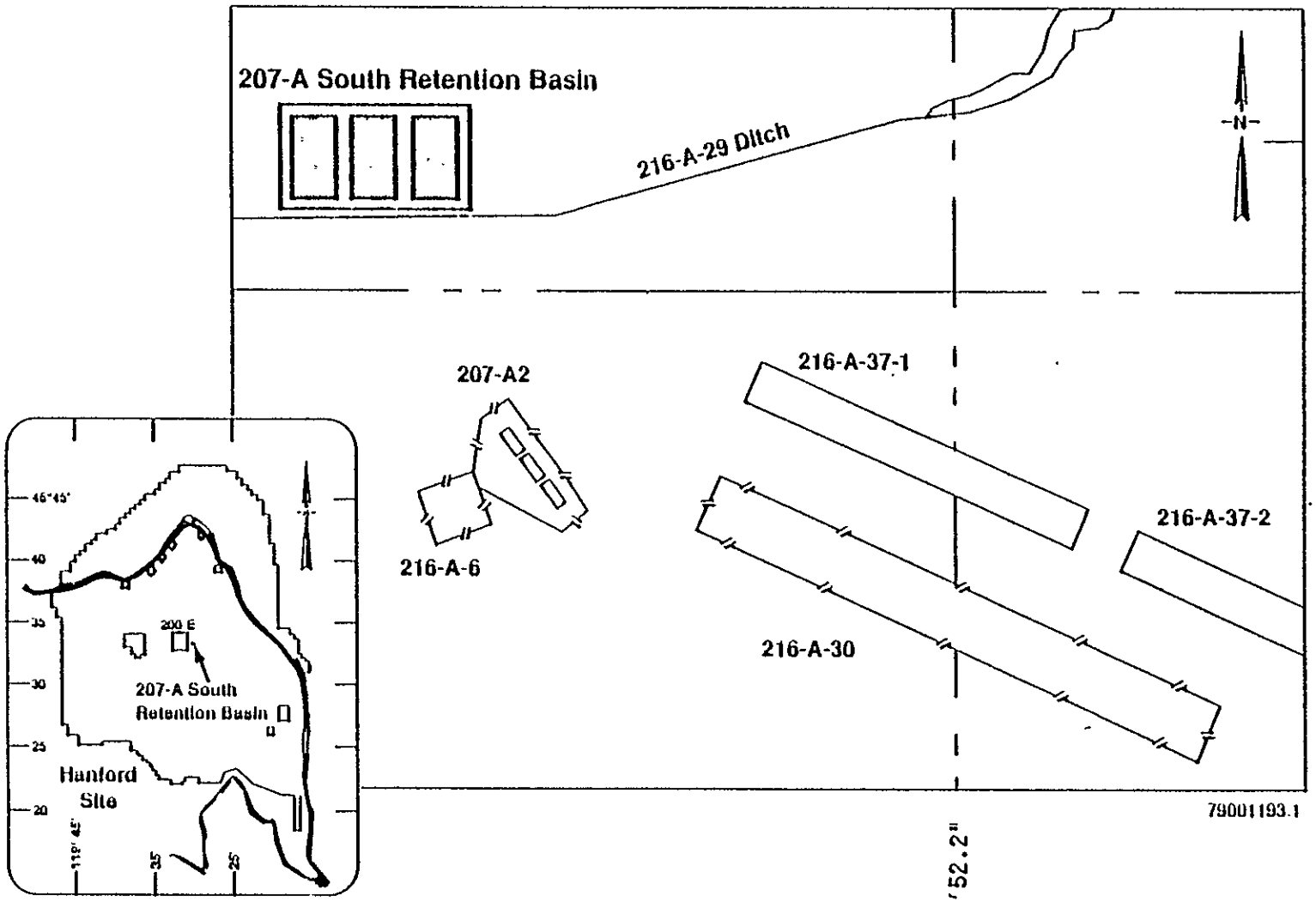
3/16/90
Date

Michael J. Lawrence

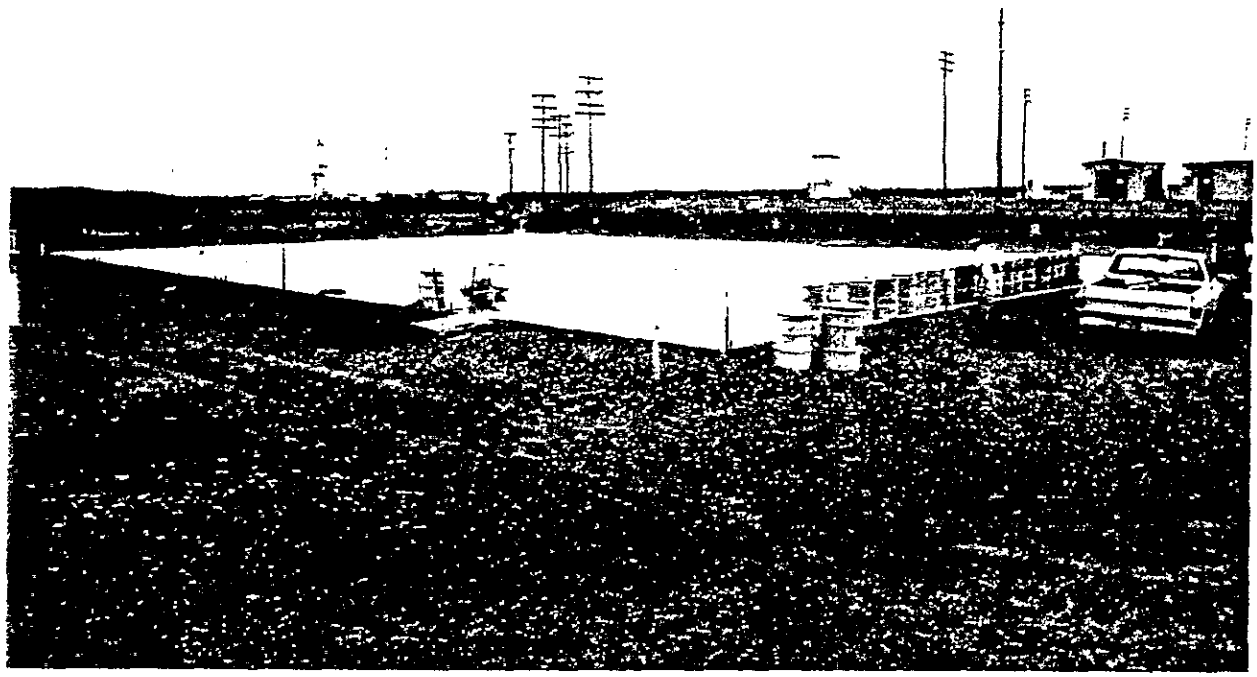
Owner/Operator
Michael J. Lawrence, Manager
U.S. Department of Energy
Richland Operations Office

2-26-90
Date

207-A South Retention Basin
Site Plan



207-A SOUTH RETENTION BASIN



46°33'09"
119°30'52.2"

90012349-3CN
(PHOTO TAKEN 1990)

FORM 3

DANGEROUS WASTE PERMIT APPLICATION

I. EPA/STATE I.D. NUMBER: W A 7 8 9 0 0 0 3 9 5 7

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (check 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 dates)

☐ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete one section.)

MO. DAY YR. — FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED

☒ 2. NEW FACILITY (Complete one section.)

MO. 1 2 DAY 0 3 YR. 9 0 — 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)

☐ 1. FACILITY HAS AN INTERIM STATUS PERMIT

☐ 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES — 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. 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 Checklist 49-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	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (Barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET (The volume that would cover one acre to a depth of one foot) OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER (Describe the processes in the space provided. Section 49-C.)	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	S
HECTARES	Z

EXAMPLE FOR COMPLETING SECTION III (shown on 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. PROCESS CODE (Enter one code)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (Specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (Enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (Enter one code)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (Specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (Enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 4	52,000,000	G		7				
2	S 0 5	10,000,000	G		8				
3					9				
4					10				

Continued from the front.

II. PROCESSES (continued)

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

S04, S05

The 200 East Area Liquid Effluent Retention Facility (200 E LERF) is being constructed under interim status expansion, to meet state and federal regulations governing dangerous waste, to provide interim storage of the 242-A Evaporator (Evaporator) process condensate effluent until treatment is available for compliance with dangerous waste regulations for disposal. The 200 E LERF will consist primarily of a retention basin (SO4) with four cells (surface impoundments) of 6.5 million gallon capacity each for a total combined capacity of 26 million gallons. This initial capacity of 26 million gallons may be augmented through the construction of a second set of cells (SO4) configured in a similar manner for a total combined capacity of 52 million gallons. Ten prefabricated storage units also may be constructed and permitted (anticipated by the spring of 1990) under WAC 173-303 "Miscellaneous Units" (SO5) to provide one or both of the following: (1) the temporary storage of the Evaporator process condensate effluent while the basins are constructed, and (2) additional storage capacity for augmentation of the basins. Prefabricated storage units, if constructed, will have a storage capacity of 1 million gallons each for a combined total capacity of 10 million gallons.

In summary, the 62-million gallon storage capacity for the 200 E LERF will consist of 26 million gallons for the initial basin (SO4), 10 million gallons for the contingent prefabricated storage units (SO5), and the final 26 million gallons for the second set of cells (SO4) to be constructed, based on need.

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 wastes: 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 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)	D. PROCESSES 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	200	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

CONTINUE ON PAGE 3

Continued from page 2.

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

I.D. NUMBER (enter from page 1): WA789000089 67

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter codes)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	WT02	516,460,000	P	S04 S05	Storage
2	F003				Included with above
3					
4					
5					
6					
7					
8					
9					
10					
11					
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Continued from the front

V. DESCRIPTION OF DANGEROUS WASTES (continued)

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

The 200 E LERF will receive and store Evaporator process condensate effluent, a radioactive mixed waste. The Evaporator process condensate effluent is regulated as a dangerous waste under WAC 173-303 because of the toxicity of the ammonia and the presence of the F003 constituents. Based on the F003 constituents lacking ignitability characteristics, the DOE-RL/WHC will seek "state only" listing of this waste. An investigation is being conducted for final determination on whether other constituents within this waste stream will be regulated under WAC 173-303. The approximate value of 516 million pounds for estimated annual quantity of dangerous waste represents the capacity of the 200 E LERF under maximum contingency expansion.

VI. 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).

VII. 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).

VIII. FACILITY GEOGRAPHIC LOCATION This information is provided on attached drawings and photos

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)

IX. FACILITY OWNER

[X] 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

X. 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)	SIGNATURE	DATE SIGNED
M. J. Lawrence Manager, Richland Operations United States Department of Energy	Michael J. Lawrence	2-26-90

XI. 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		

CONTINUE ON PAGE 5

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 E. Nolan

Co-operator
John E. Nolan, President
Westinghouse Hanford Company

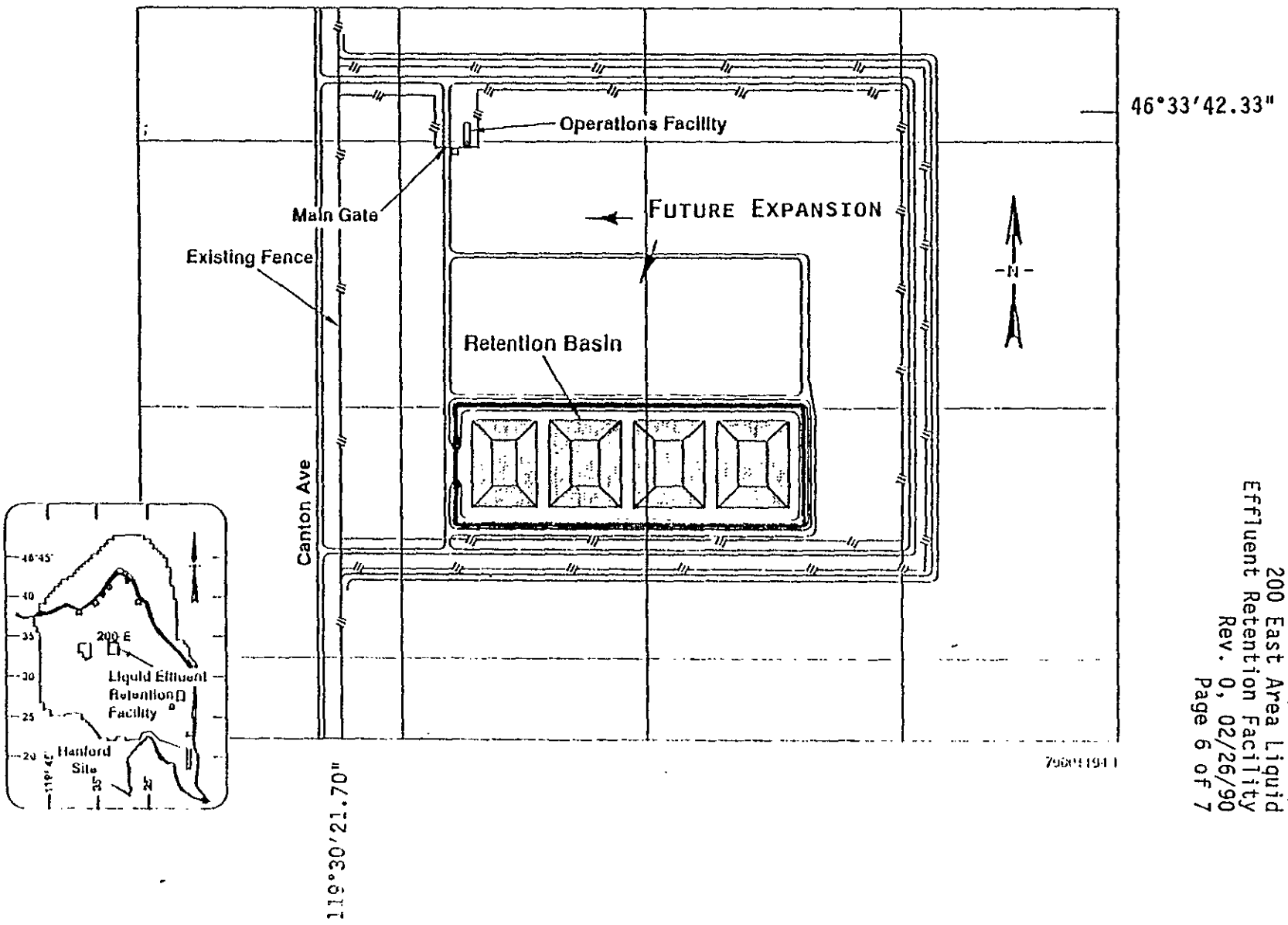
2/16/90
Date

Michael J. Lawrence

Owner/Operator
Michael J. Lawrence, Manager
U.S. Department of Energy
Richland Operations Office

2-26-90
Date

200 East Area Liquid Effluent Retention Facility Site Plan



200 EAST AREA LIQUID EFFLUENT RETENTION FACILITY

46°33′42.33"
119°30′21.70"

90010930-2CN
(PHOTO TAKEN 1990)

FORM 3

DANGEROUS WASTE PERMIT APPLICATION

I. EPA/STATE I.D. NUMBER: W A 7 8 9 0 0 0 8 9 6 7

FOR OFFICIAL USE ONLY

APPLICATION ACCEPTED	DATE RECEIVED (MO., DAY, & YR.)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below 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 complete item below)

☒ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

MO.	DAY	YR.
0 3	1 8	7 7

FOR EXISTING FACILITIES, PROVIDE THE DATE (MO., DAY, & YR.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED

☐ 2. NEW FACILITY (Complete item below.)

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)

☐ 1. FACILITY HAS AN INTERIM STATUS PERMIT

☐ 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES — 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. Two 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 attachment (II-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	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D80	GALLONS OR LITERS
LANDFILL	D81	ACRE-FEET (the volume equal to one acre of surface area one foot deep) 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

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
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

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	V
LITERS PER DAY	W
TONS PER HOUR	D
METRIC TONS PER HOUR	T
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	S

EXAMPLE FOR COMPLETING SECTION III (shown on 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. PROCESS CODE (from code above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from code above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	D 8 1	86,400	U		7				
2					8				
3					9				
4					10				

CONTINUE ON REVERSE

Continued from the front.

II. PROCESSES (continued)

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

D81

The 216-A-37-1 Crib (Crib) began operation in March 1977 and was used for the percolation of the 242-A Evaporator (Evaporator) process condensate effluent to the soil column. The process design capacity of 86,400 gallons per day is based on the daily output of the 242-A Evaporator process condensate effluent discharged to the Crib. Discharge of the Evaporator process condensate effluent to the Crib was terminated on April 12, 1989, when it was determined the Evaporator process condensate effluent contained dangerous waste regulated under WAC 173-303. The Crib will remain out of service and will be closed under interim status. A closure plan for the final disposition of this waste management unit is planned.

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 wastes: 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 "includes 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 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)	D. PROCESSES 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

CONTINUE ON PAGE 3

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

I.D. NUMBER (enter from page 1)
WA789000897

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter codes)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	WT02	108,290,000	P	D81	Percolation
2	F003				Included with above
3					
4					
5					
6					
7					
8					
9					
10					
11					
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Continued from the front

V. DESCRIPTION OF DANGEROUS WASTES (continued)

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

The Crib was taken out of service on April 12, 1989, and will no longer receive dangerous waste. A closure plan for the final disposition of this waste management unit is planned. A description of the dangerous wastes discharged to the Crib follows.

The Evaporator process condensate effluent is regulated as a dangerous waste under WAC 173-303 due to the toxicity of the ammonia and the presence of the F003 constituents. Based on the F003 constituents lacking ignitibility characteristics, DOE-RL/WHC will seek "state only" listing of this waste. An investigation is being conducted for final determination on whether other constituents within this waste stream will be regulated under WAC 173-303. The approximate value of 108,290,000 pounds for estimated annual quantity of dangerous waste discharged to the Crib represents the maximum annual output of the Evaporator process condensate effluent during operating campaigns.

VI. FACILITY DRAWING

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

VII. 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 attached drawings and photos

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)

VIII. FACILITY OWNER

[X] 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. STATE	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)	SIGNATURE	DATE SIGNED
M. J. Lawrence Manager, Richland Operations United States Department of Energy	Michael J. Lawrence	2-26-90

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		

CONTINUE ON PAGE 5

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 E. Nolan

Co-operator
John E. Nolan, President
Westinghouse Hanford Company

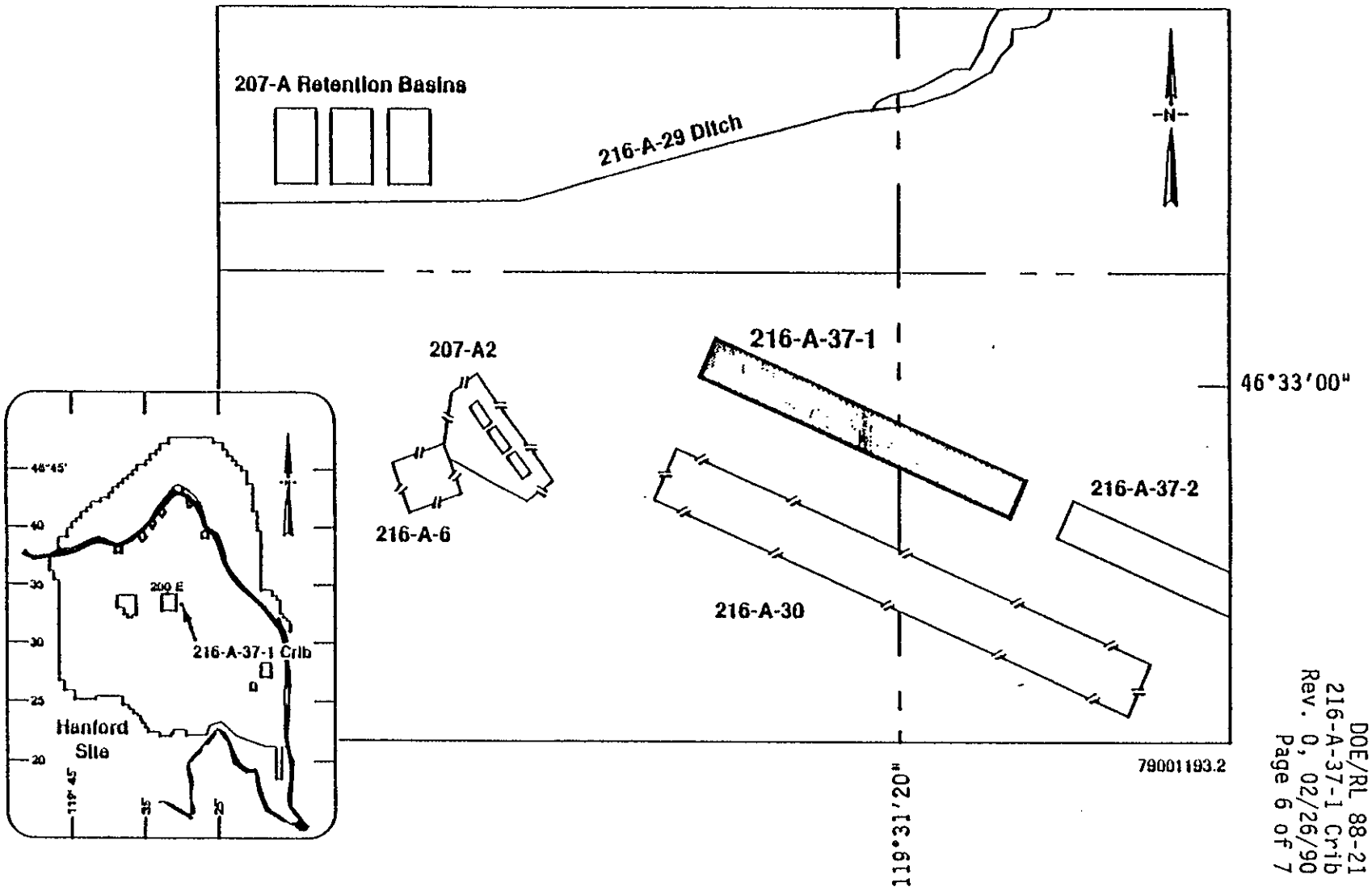
3/16/90
Date

Michael J. Lawrence

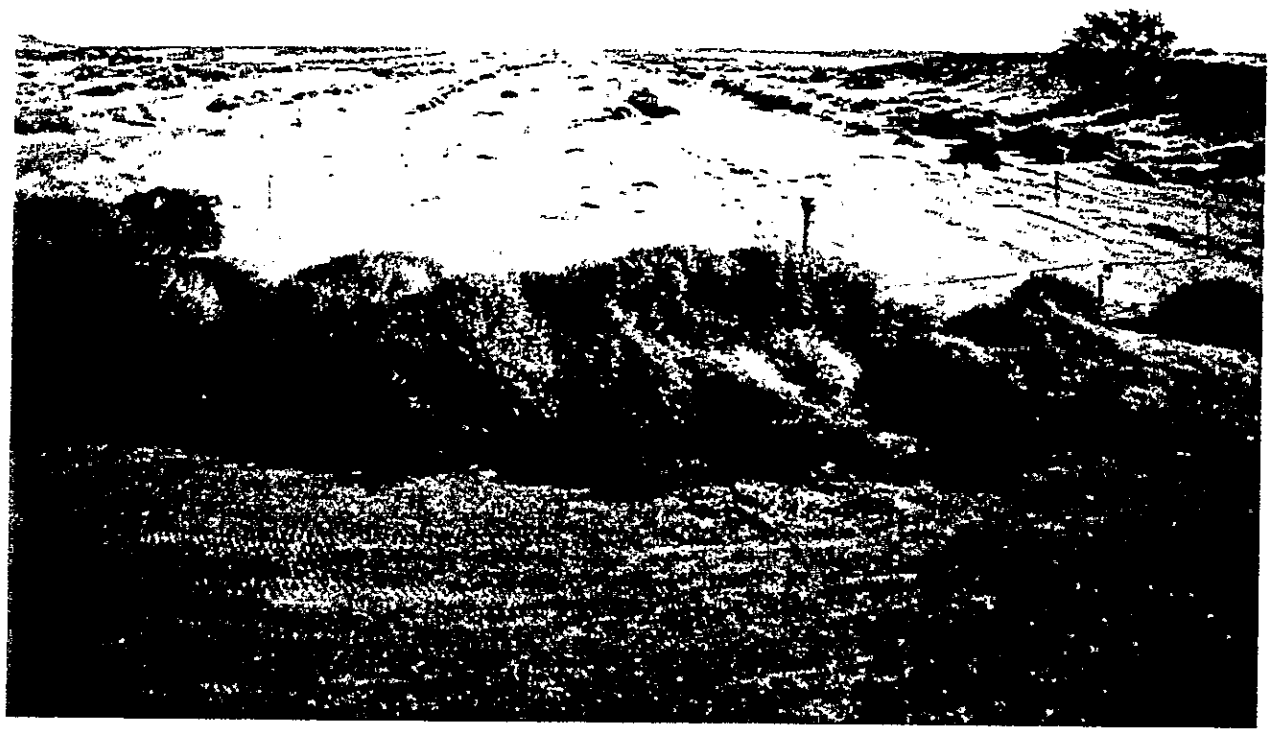
Owner/Operator
Michael J. Lawrence, Manager
U.S. Department of Energy
Richland Operations Office

2-26-90
Date

216-A-37-1 Crib
Site Plan



216-A-37-1 CRIB



46°33'00"
119°31'20"

8706421-25CN
(PHOTO TAKEN 1987)

FORM 3

DANGEROUS WASTE PERMIT APPLICATION

I. EPA/STATE I.D. NUMBER: W A 7 8 9 0 0 0 8 9 6 7

FOR OFFICIAL USE ONLY

APPLICATION NUMBER	DATE RECEIVED	COMMENTS

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)

☐ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

MO 01 DAY YR 86 — FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)

☐ 2. NEW FACILITY (Complete item below.)

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)

☒ 1. FACILITY HAS AN INTERIM STATUS PERMIT

☐ 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES — 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. 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	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
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

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
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

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	O
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	[illegible]
HECTARE-METER	[illegible]
ACRES	S
HECTARES	Q

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. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G	
X-2	T 0 3	20	E	
1	S 0 1	11,000	G	
2				
3				
4				

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
5				
6				
7				
8				
9				
10				

CONTINUE ON REVERSE

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.

S01
The 303-K Storage Facility is used for the storage of radioactive mixed wastes in DOT-specification steel drums. Both liquid and solid wastes are stored in this 303-K Storage Facility. The liquid wastes are stored on a 600 square foot pad within the building. The building provides secondary containment for the contents of the containers. The solid wastes are stored outside the building on a 3500 square foot asphalt and concrete pad. The storage area is surrounded by a chain link fence. Approximately 200 55-gallon containers (or more containers if smaller sized) can be stored at the 303-K Storage Facility.

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 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)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
X-1	K054	900	P	T03 D80	
X-2	D002	400	P	T03 D80	
X-3	D001	100	P	T03 D80	
X-4	D002			T03 D80	included with above

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

I.D. NUMBER (enter from page 1): WA7890008967

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)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F001	15,000	P	S01	Container Storage
2	F003				Included with above
3	WC01				Included with above
4	WP01				Included with above
5	WT01				Included with above
6	D001	40,000	P	S01	Container Storage
7	WT01				Included with above
8	WT02	40,000	P	S01	Container Storage
9	D002	1,700	P	S01	Container Storage
10					
11					
12					
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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

The 303-K storage area is used for the storage of radioactive mixed wastes in DOT-specification steel drums. These wastes consist of the following:

1) approximately 15,000 pound per year of spent degreasing solvents (occasionally mixed with ethyl acetate).

2) approximately 80,000 pounds per year of waste heat treat salts contaminated with naturally occurring levels of potassium-40. The heat treat salts are generated from both the main bath (40,000 pound per year) and the quench bath (40,000 pounds per year). The main bath salts consist of potassium chloride and sodium chloride, and are toxic dangerous wastes. The quench bath salts consist of potassium nitrate, sodium nitrate, sodium nitrite, potassium chloride, and sodium chloride. The quench bath salts are toxic extremely hazardous wastes.

3) approximately 1,700 pounds per year of copper-flurozirconate waste acid crystals from the bottom of the waste acid tanks in the 334-A Building.

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 areas of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION * This information is provided on the attached drawing and doc

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)	SIGNATURE	DATE SIGNED
Michael J. Lawrence Manager, Richland Operations United States Department of Energy	Edward A. Goldberg	10/31/89

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 E. Nolan — 8/23/89

Co-operator
John E. Nolan, President
Westinghouse Hanford Company

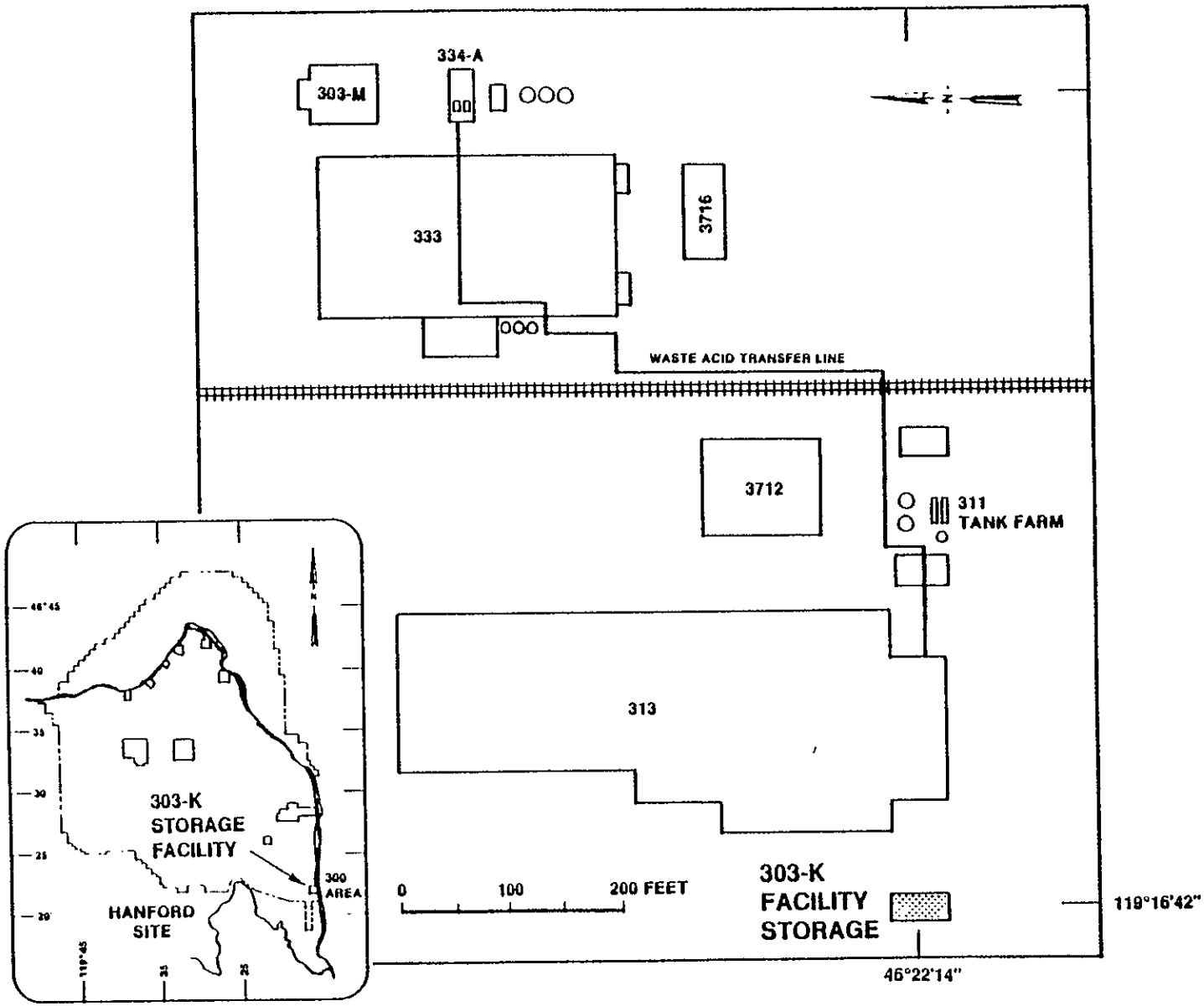
Date

Edward J. Feldberg — 10/31/89

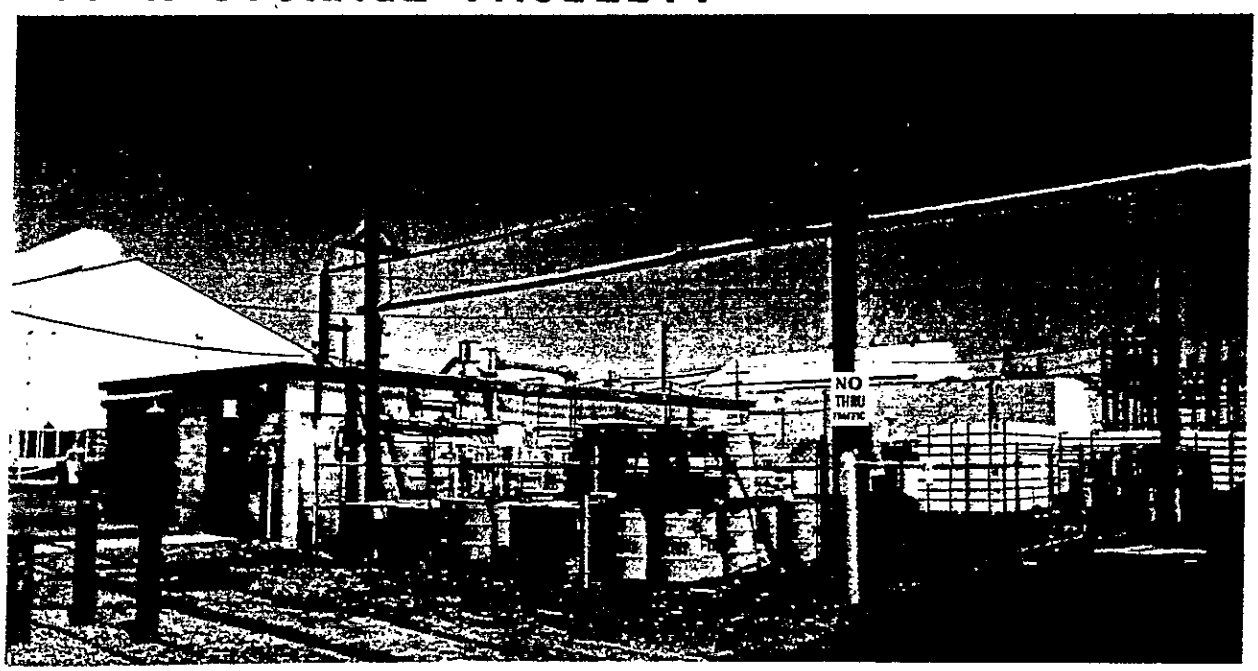
Owner/Operator
Michael J. Lawrence, Manager
U.S. Department of Energy
Richland Operations Office

Date

303-K STORAGE FACILITY SITE PLAN



303-K STORAGE FACILITY



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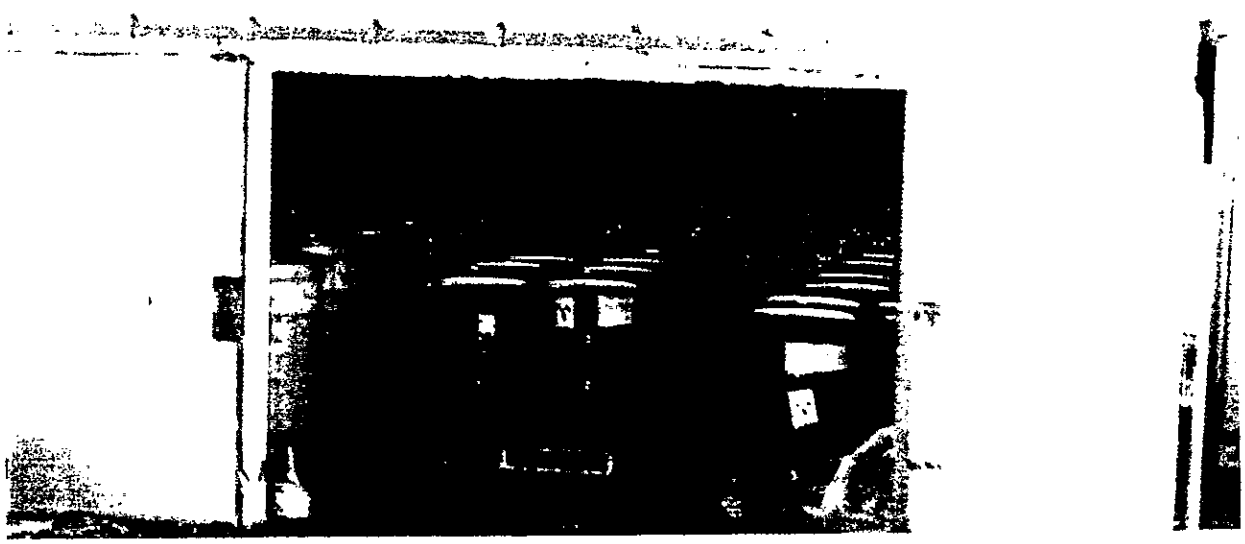

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119°16'42"

8704479-11CN
(PHOTO TAKEN 1987)

FORM 3

DANGEROUS WASTE PERMIT APPLICATION

I. EPA/STATE I.D. NUMBER: W A 7 8 9 0 0 0 8 9 6 7

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (mo., day, & yr.)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (check 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)

☐ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

MO. DAY YR. — FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (see the above in the mail)

☒ 2. NEW FACILITY (Complete item below.)

MO. 01 DAY 25 YR. 90 — 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)

☐ 1. FACILITY HAS AN INTERIM STATUS PERMIT

☐ 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES — 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. 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	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
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

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
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

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

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. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G	
X-2	T03	20	E	
1	S05	6,000,000 *	G	
2	T04	14,000	U	
3				
4				

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
5				
6				
7				
8				

* Process Code S05 is being utilized to designate the 600 Area Purgewater Storage and Treatment Facility as 'miscellaneous units' per the proposed Washington State Dangerous Waste Regulation 173-303 'Subpart X'.

CONTINUE ON REVERSE

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

S05 - The 600 Area Purge Water Storage and Treatment Facility consists of six above ground 1,000,000 gallon miscellaneous units, with a combined total capacity of 6,000,000 gallons. These units are located in the 600 Area, north of the 216-B-3 Pond. The purgewater storage and treatment miscellaneous units are used for interim storage and treatment of purgewater generated from the groundwater monitoring wells located throughout the Hanford Site. The purgewater is generated when a groundwater monitoring well is developed or groundwater samples are obtained. The purgewater from a groundwater monitoring well is transported by tank truck and pumped directly into the 600 Area miscellaneous units.

T04 - Treatment of the purgewater by evaporation is carried out in the six 600 Area miscellaneous units. Approximately 14,000 gallons per day of purgewater can be treated by solar evaporation based upon the evaporation rates calculated for the Hanford Site and assuming all six miscellaneous units are in use.

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 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)	D. PROCESSES 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

CONTINUE ON PAGE 3

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

I.D. NUMBER (enter 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 codes)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F001	50,072,346	P	S05	Storage/Miscellaneous Units
2	F002	↓	↓	↓	↓
3	F003	↓	↓	↓	Included With Above
4					
5					
6					
7					
8					
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 (enter from page 1): WA7890008967

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter codes)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
1	F001	42,644,948	P	T04	Treatment/Other/Evaporation (Miscellaneous Units)
2	F002	↓	↓	↓	↓
3	F003	↓	↓	↓	Included With Above
4					
5					
6					
7					
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IV. DESCRIPTION OF DANGEROUS WASTES *(continued)*

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

The purgewater that is stored and treated in the 600 Area miscellaneous units comes from groundwater monitoring wells located throughout the Hanford Site.

The estimated annual quantity of waste indicated is based upon the maximum projected storage and treatment capacities of the miscellaneous units. The volumes resulting from well sampling and well development activities can be estimated, however the volumes resulting from aquifer testing are still unknown.

Materials stored in this facility may potentially include the nonspecific waste codes F001, F002, and F003.

This Part A permit application is being submitted as a protective filing in order that this facility may be authorized to store regulated waste. This facility will also be used to store non-regulated purgewater.

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 attached drawings and photographs

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*

VIII. FACILITY OWNER

[X] 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)*	SIGNATURE	DATE SIGNED
Michael J. Lawrence Manager, Richland Operations United States Department of Energy	Michael J. Lawrence	2-20-90

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 E. Nolan

Co-operator
John E. Nolan, President
Westinghouse Hanford Company

1/18/90
Date

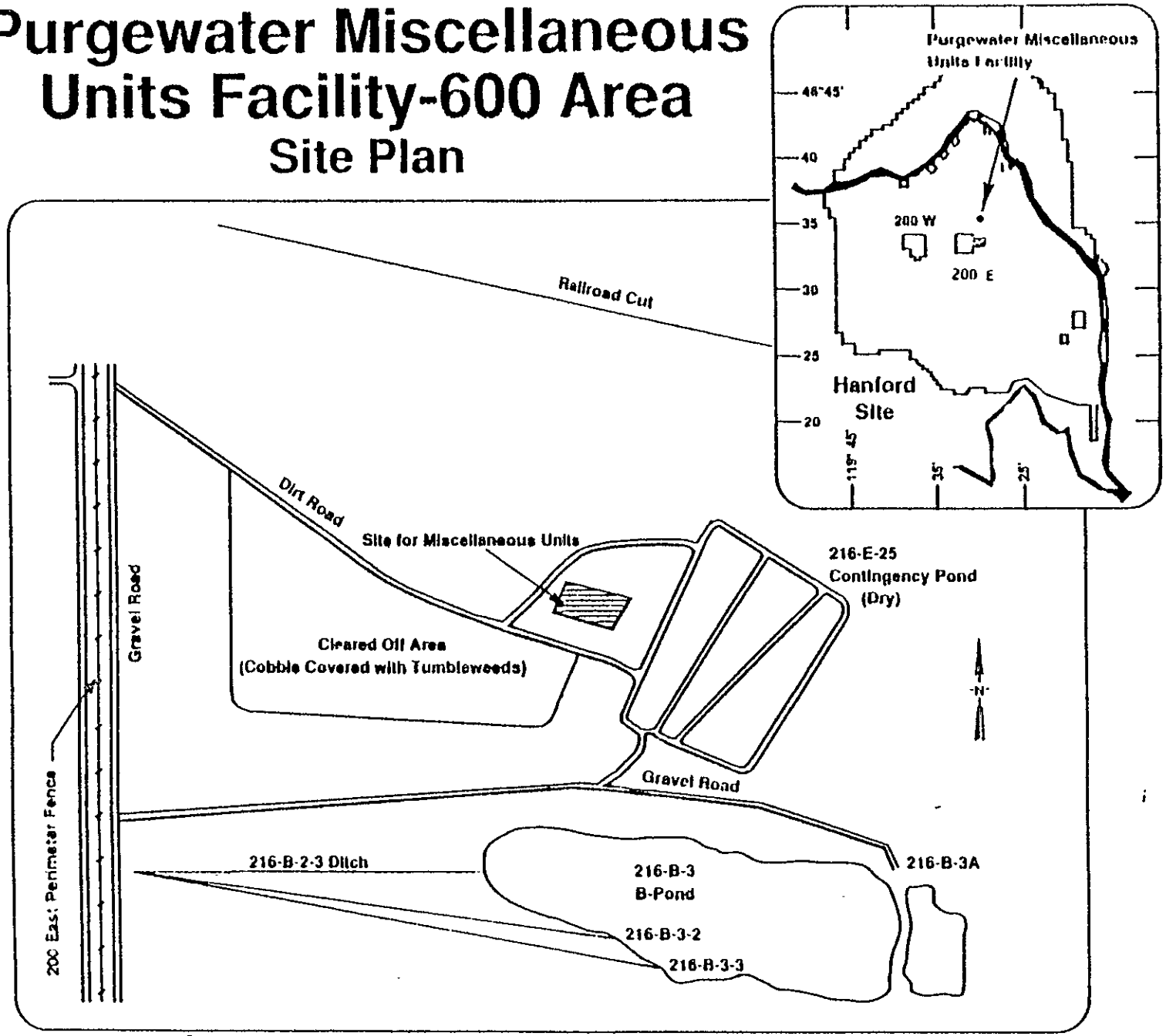
Michael J. Lawrence

Owner/Operator
Michael J. Lawrence, Manager
U.S. Department of Energy
Richland Operations Office

2-20-90
Date

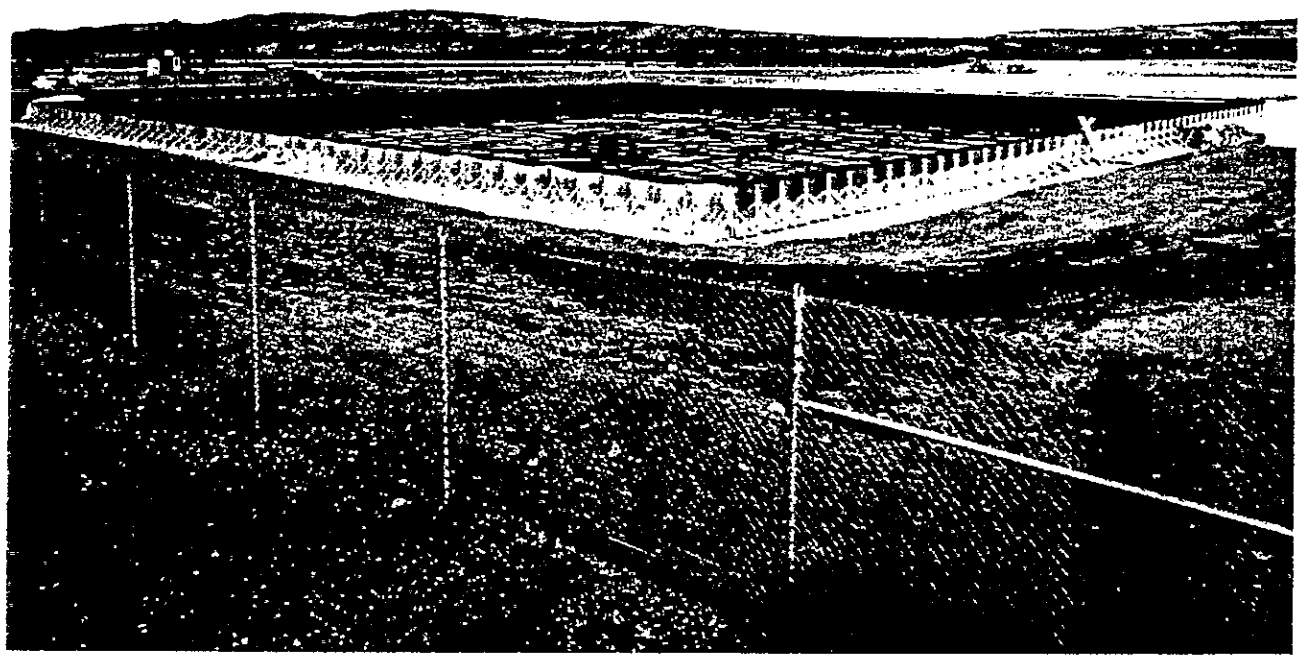
Purgewater Miscellaneous Units Facility-600 Area

Site Plan



78911068.2

600 AREA PURGEWATER STORAGE AND TREATMENT FACILITY MISCELLANEOUS UNIT (TYPICAL)



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119°45′33"

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(PHOTO TAKEN 1990)