



9513359.2367

Department of Energy

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

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0041695

95-PCA-411

JUL 21 1995

Mr. Moses N. Jaraysi  
200 Area Unit Supervisor  
Nuclear Waste Program  
State of Washington  
Department of Ecology  
1315 West Fourth Avenue  
Kennewick, Washington 99336

Mr. Douglas R. Sherwood  
Hanford Project Manager  
U.S. Environmental Protection Agency  
712 Swift Boulevard, Suite 5  
Richland, Washington 99352

Dear Messrs. Jaraysi and Sherwood:

HANFORD FACILITY DANGEROUS WASTE PART A PERMIT APPLICATION, FORM 3,  
REVISION 1, FOR THE 600 AREA PURGEWATER STORAGE AND TREATMENT FACILITY  
(WA7890008967) (TSD: TS-6-1)

Enclosed is the Hanford Facility Dangerous Waste Part A Permit Application (Part A) Form 3, Revision 1, for the 600 Area Purgewater Storage and Treatment Facility. The 600 Purgewater Storage and Treatment Facility is located in the 600 Area of the Hanford facility and is used for greater-than-90-day storage and treatment of purgewater generated from Hanford Site groundwater monitoring wells.

The 600 Area Purgewater Storage and Treatment Facility Part A, Form 3, has been revised to add a new Dangerous Waste Number for purgewater generated at the Hanford facility. Characteristic Dangerous Waste Number D019 (carbon tetrachloride) has been added because purgewater samples have been identified at concentrations that require designation as characteristic waste. The 600 Area Purgewater Storage and Treatment Facility also has been revised to identify a treatment, storage, and disposal (TSD) unit boundary. All English-based measures have been converted to metric in accordance with the U.S. Department of Energy.

This Part A, Form 3, was revised in compliance with the Washington Administrative Code 173-303. This regulation requires the submittal of a revised Part A, Form 3, that identifies a previously unidentified dangerous waste that is treated, stored, and/or disposed of at a TSD unit under interim status.



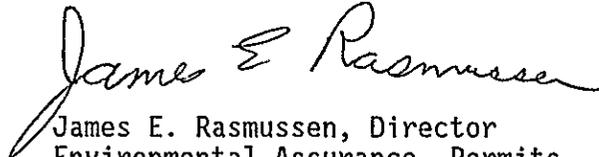
Messrs. Jaraysi and Sherwood  
95-PCA-411

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If you have any questions regarding the 600 Area Purgewater Storage and Treatment Facility Part A, Form 3, please contact Mr. C. E. Clark, of my staff, on (509) 376-9333, or Mr. R. C. Bowman of Westinghouse Hanford Company on (509) 376-4876.

Sincerely,



James E. Rasmussen, Director  
Environmental Assurance, Permits,  
and Policy Division  
DOE Richland Operations Office

EAP:CEC



William T. Dixon, Director  
Environmental Services  
Westinghouse Hanford Company

Enclosure:

cc w/encl:

L. Borneman, WHC  
D. Duncan EPA  
M. Jaraysi, Ecology  
R. Jim, YIN  
S. McKinney, Ecology  
T. Michelena, Ecology  
D. Powaukee, NPT  
S. Price, WHC  
J. Wilkinson, CTUIR

cc w/o encl:

W. Dixon, WHC

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ENCLOSURE

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

<b>FORM 3</b>	DANGEROUS WASTE PERMIT APPLICATION	1. EPA/STATE I.D. NUMBER												
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;">W</td><td style="width: 20px;">A</td><td style="width: 20px;">7</td><td style="width: 20px;">8</td><td style="width: 20px;">9</td><td style="width: 20px;">0</td><td style="width: 20px;">0</td><td style="width: 20px;">0</td><td style="width: 20px;">8</td><td style="width: 20px;">9</td><td style="width: 20px;">6</td><td style="width: 20px;">7</td> </tr> </table>	W	A	7	8	9	0	0	0	8	9	6	7
W	A	7	8	9	0	0	0	8	9	6	7			

FOR OFFICIAL USE ONLY		
APPLICATION APPROVED	DATE RECEIVED <i>(mo., day, &amp; yr.)</i>	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.)*

2. NEW FACILITY *(Complete item below)*

MO.	DAY	YR.

FOR EXISTING FACILITIES, PROVIDE THE DATE *(mo., day, & yr.)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

MO.	DAY	YR.
0	1	2
5	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 CAPACITIES**

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

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

1. AMOUNT - Enter the amount.

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

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

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

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

LINE NUMBER	A. PRO-CESS CODE <i>(from list above)</i>	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PRO-CESS CODE <i>(from list above)</i>	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
		1. AMOUNT <i>(specify)</i>	2. UNIT OF MEASURE <i>(enter code)</i>				1. AMOUNT <i>(specify)</i>	2. UNIT OF MEASURE <i>(enter code)</i>	
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 5 *	22,712,400	L		7				
2	T 0 4	52,996	V		8				

\* Process Code S05 is being used to designate the 600 Area Purgewater Storage and Treatment Facility as 'miscellaneous units' per the requirements of 40 CFR 264, Subpart X.

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 Purgewater Storage and Treatment Facility (600 PSTF) is located in the 600 Area of the Hanford Facility, north of the 216-B-3 Pond. The 600 PSTF is designated as a miscellaneous unit (S05) and is subject to the requirements of 40 CFR 264, Subpart X. The 600 PSTF may consist of up to six aboveground 3,785,400 liter (1,000,000 gallon) miscellaneous units. The miscellaneous units are used for storage and treatment of purgewater generated from groundwater monitoring wells located throughout the Hanford Facility. The purgewater is generated when a groundwater monitoring well is developed or groundwater samples are taken. The purgewater from groundwater monitoring wells is transported by tank truck and pumped directly into the miscellaneous units. The total process design capacity for the storage of purgewater at the 600 PSTF is 22,712,400 liters (6,000,000 gallons).

**T04**  
Treatment of purgewater by solar evaporation takes place in miscellaneous units. Approximately 52,996 liters (14,000 gallons) per day of purgewater can be treated by solar evaporation based on evaporation rates calculated for the Hanford Facility and assuming all six miscellaneous units are in use. Raw water is added periodically to the miscellaneous units to provide a means for dust control when the units are dry. The total process design capacity for treatment of purgewater at the 600 PSTF is 52,996 liters (14,000 gallons) per 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)	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

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

I.D. NUMBER (entered from page 1)

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

LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES									
				1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))					
1	D 0 1 9	22,712,434	K	S05									Storage/Miscellaneous
2	F 0 0 1												↓
3	F 0 0 2												↓
4	F 0 0 3												Included With Above
5	D 0 1 9	19,343,423	K	T04									Treatment-Other/Evaporation
6	F 0 0 1												↓
7	F 0 0 2												↓
8	F 0 0 3												Included With Above
9													
10													
11													
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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.

Purgewater that is stored and treated in the 600 Area Purgewater Storage and Treatment Facility comes from groundwater monitoring wells located throughout the Hanford Facility.

The Estimated Annual Quantity of Waste (Section IV.B.) is based upon the maximum projected storage and treatment capacities of the miscellaneous units. The volumes of purgewater resulting from well sampling and well development activities can be estimated; however, the volumes resulting from aquifer testing are still unknown.

Purgewater stored and treated in the 600 Area Purgewater Storage and Treatment Facility may designate as characteristic waste D019 (carbon tetrachloride).

Materials stored and treated in these units may potentially include nonspecific waste numbers F001, F002, and F003.

The 600 Area Purgewater Storage and Treatment Facility also is used to store and treat nonregulated purgewater.

V. FACILITY DRAWING Refer to attached 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 Refer to attached photographs.

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

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

LATITUDE (degrees, minutes, & seconds)

LONGITUDE (degrees, minutes, & seconds)

VIII. FACILITY OWNER

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

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

1. NAME OF FACILITY'S LEGAL OWNER

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

3. STREET OR P.O. BOX

4. CITY OR TOWN

5. ST.

6. ZIP CODE

IX. OWNER CERTIFICATION

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

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

SIGNATURE  
*John D. Wagoner*

DATE SIGNED  
7/21/95

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)  
SEE ATTACHMENT

SIGNATURE

DATE SIGNED

X. OPERATOR CERTIFICATION

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

*John D. Wagoner*

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

*7/21/95*

Date

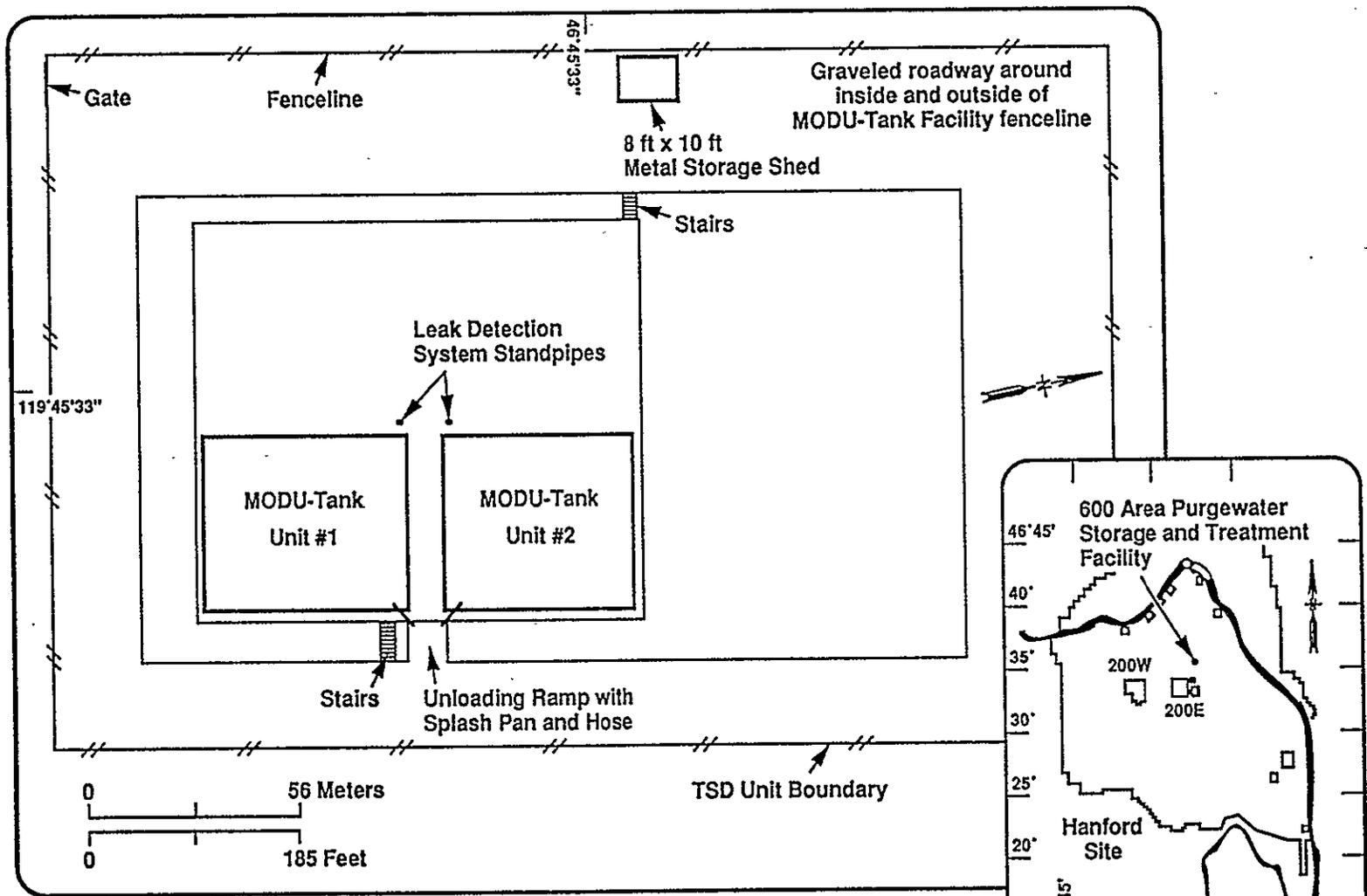
*A. LaMar Trego*

for Co-operator  
A. LaMar Trego, President  
Westinghouse Hanford Company

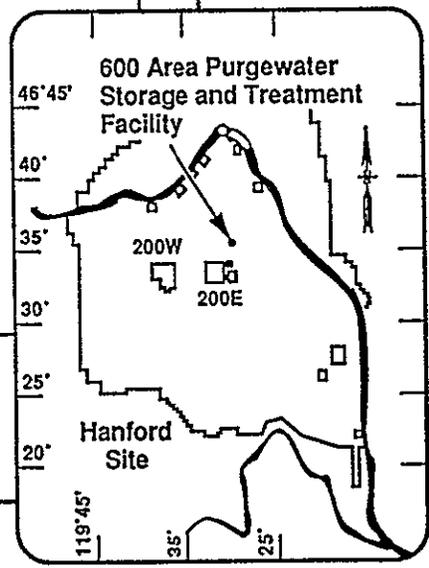
*5/26/95*

Date

# 600 Area Purgewater Storage and Treatment Facility Site Plan

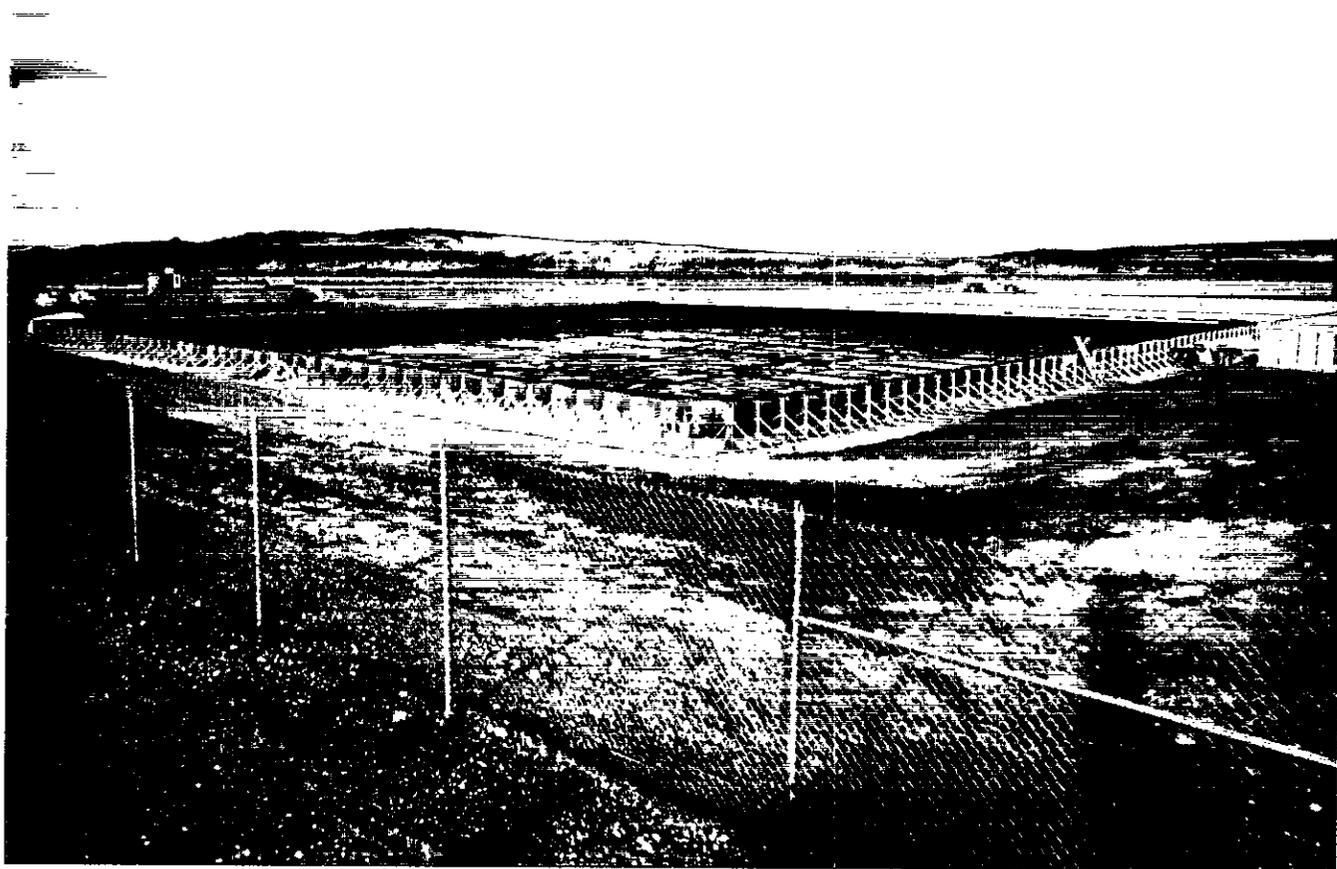


For conversions, apply the following:  
Feet to meters-multiply meters by 0.3048



H9502037.1

# 600 AREA PURGEWATER STORAGE AND TREATMENT FACILITY



MISCELLANEOUS UNIT (TYPICAL)  
46°45'33"  
119°45'33"

89122121-3CN  
(PHOTO TAKEN 1989)