

OUTGOING LTR. NO.

80-RF-1991

1202226 x



Rockwell International

Rocky Flats Plant  
Energy Systems Group  
P.O. Box 464  
Golden, Colorado 80401

(303) 497-7000

Contractor to U.S. Department of Energy

DIST.	LTR	ENCL
VILLIAMS, R. O.	X	X
JORR, J. E.		
ENJAMIN, A.	X	X
ROSSLAND, W. D.		
JUNBAR, D. H.		
IABERER, W. V.		
IWEN, F. G.		
EBRO, W. L.		
HANNON, W. M.		
MITH, R. E.		
WEENEY, P. F.		
EJVODA, E.	Y	X
IEDERECHT, D.A.		
ODER, R. E.	X	X
OUNG E. R.		
HIFT SUPTS.		
RMSTEAD, W. E.		
ARNES, W. L.		
JYD, C. W.		
RNE, J. P.		
IANDA, R. N.		
IDERIKSEN, T. F.		
JNN, D. A.		
LIS, H. R.		
ASULO, L. J.		
LOYD, D. R.		
REIDBERG, K. J.		
EALY, T. J.		
ARLSSON, R. H.		
ERN, J. M.		
RIEG, D. M.	X	X
UDENBURG, G. E.		
ARTINEZ, J. L.		
CARTHY, J. D.		
CHOL, W. R.		
ITZIER, E. A.		
JSE, C. R.		
OMAS, S. G.		
OELTZSCH, R. E.		
ELASQUEZ, R. N.		
EIDNER, C. W.		

November 6, 1980

80-RF-1991

Mr. Don Ofte  
Area Manager  
RFAO, USDOE

APPLICATION FOR INTERIM STATUS AS A HAZARDOUS WASTE TREATMENT/  
STORAGE/DISPOSAL (T/S/D) FACILITY

The enclosed forms and attachments contain the information requested by the EPA in order to obtain interim status as a Hazardous Waste T/S/D Facility.

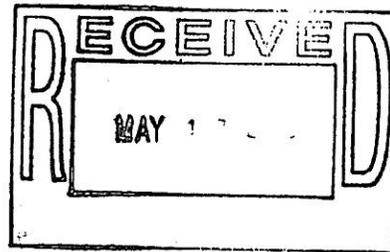
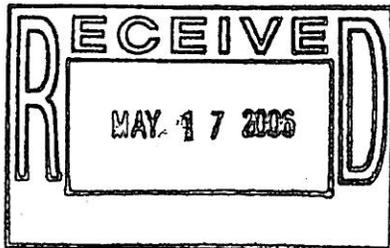
At Rocky Flats, all hazardous wastes are handled as mixed-stream (both radioactive and hazardous) wastes. It is recognized that such waste might not be regulated by the RCRA. However, to assure continued operation after November 19, 1980, we have included a description of this waste under Item IV, Form 3. When a final decision regarding mixed stream waste is made by DOE/EPA, an amended Form 3 will be submitted, if necessary.

A brief description of the coded waste is attached.

*R. O. Williams, Jr.*

R. O. Williams, Jr.  
Vice President and  
General Manager

JAH:lou  
Enc.



Reviewed for Classification/UCNI/OUO  
By: Janet Nesheim, Derivative Classifier  
DOE, EMCBC  
Date: 10-29-08  
Confirmed Unclassified, Not UCNI/Not OUO

0513002

ADMIN RECORD

APPROVALS

*JAH*  
*CV*

CLASSIFICATION

UNCLASSIFIED  
CONFIDENTIAL  
SECRET

CLASSIFICATION SIG.

CLASSIFICATION

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SW-A-005484

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FORM 1



GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear); please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

Labels I-VI: EPA I.D. NUMBER, FACILITY NAME, MAILING ADDRESS, FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

Table with 2 columns of specific questions (A-J) and 3 columns for 'MARK X' (YES, NO, FORM ATTACHED). Questions cover topics like publicly owned treatment works, hazardous wastes, and stationary sources.

III. NAME OF FACILITY

1 SKIP U.S. DOE ROCKY FLATS PLANT

IV. FACILITY CONTACT

2 OFTE DON AREA MANAGER 303 497 2025

V. FACILITY MAILING ADDRESS

3 P O BOX 928 4 GOLDEN CO 80401

VI. FACILITY LOCATION

5 SEC 2 RANGE 70W TOWNSHIP 2S 6 GOLDEN CO 80401 N/A

0513003

VII. SIC CODES (4-digit, in order of priority)			
A. FIRST		B. SECOND	
7 9 7 1 1 (specify)	NATIONAL SECURITY		7 3 4 9 9 (specify)
C. THIRD		D. FOURTH	
7 2 8 9 9 (specify)	CHEMICALS AND CHEMICAL PREPARATIONS (NEC)		7 8 9 9 9 (specify)
		SERVICES (NEC)	

VIII. OPERATOR INFORMATION	
A. NAME	B. Is the name listed in Item VIII-A also the owner?
8 ROCKWELL INTERNATIONAL ESG	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other", specify.)	D. PHONE (area code & no.)
F = FEDERAL S = STATE P = PRIVATE M = PUBLIC (other than federal or state) O = OTHER (specify)	3 0 3 4 9 7 7 0 0 0
0 (specify) DOE PRIME CONTRACTOR	

E. STREET OR P.O. BOX
P O B O X 4 6 4

F. CITY OR TOWN	G. STATE	H. ZIP CODE	IX. INDIAN LAND
B GOLDEN	C O	8 0 4 0 1	Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

X. EXISTING ENVIRONMENTAL PERMITS			
A. NPDES (Discharges to Surface Water)		D. PSD (Air Emissions from Proposed Sources)	
9 N	C O 0 0 0 1 3 3 3	9 P	
B. UIC (Underground Injection of Fluids)		E. OTHER (specify)	
9 U		9	SEE ATTACH # 1 (specify)
C. RCRA (Hazardous Wastes)		E. OTHER (specify)	
9 R	C O D 0 7 8 3 4 3 4 0 7 9		(specify)

**XI. MAP**  
 Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

**XII. NATURE OF BUSINESS (provide a brief description)**  
 The Rocky Flats Plant is a Government-owned facility with a primary mission of producing plutonium components for nuclear weapons. Production activities involve the fabrication of plutonium, uranium, beryllium and stainless steel parts. Other activities include chemical processing to recover plutonium from scrap material, R&D work in metallurgy, machining, assembly, nondestructive testing, coatings, remote engineering, chemistry and physics. Parts made at the plant are shipped elsewhere for final assembly.

**XIII. CERTIFICATION (see instructions)**  
 I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the 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.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
Don Ofte Area Manager, RFAO, US DOE		

EPA I.D. NUMBER: COD 078343407

Item X, E, Existing Environmental Permits (Continued)

E. Other (Specify)

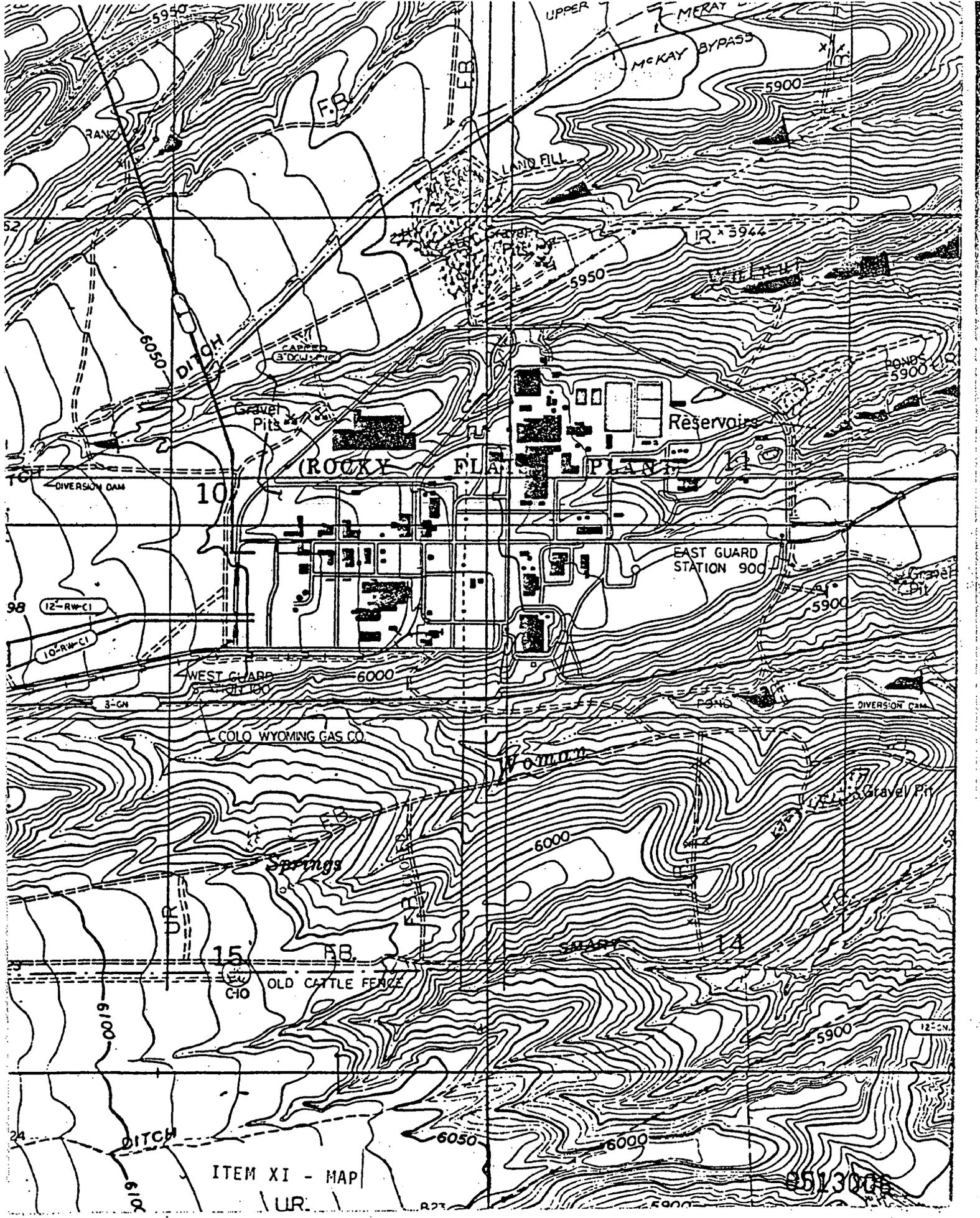
C - 13,022	Incinerator	Colorado Department of Health
C - 12,930	Incinerators (2)	Colorado Department of Health
N/A	Incinerator	Colorado Department of Health

Other plant incinerators not expected to be used for hazardous waste:

C - 12,115	Incinerator	Colorado Department of Health
C - 12,896	Incinerator	Colorado Department of Health
N A	Incinerator	Colorado Department of Health

N A = Not available; application pending

0513005



ITEM XI - MAP

UR.

851300

(fill-in areas are spaced for elite type, i.e., 12 characters/inch.)

FORM 3 RCRA EPA U.S. ENVIRONMENTAL PROTECTION AGENCY HAZARDOUS WASTE PERMIT APPLICATION Consolidated Permits Program (This information is required under Section 3005 of RCRA.) I. EPA I.D. NUMBER F C O D 0 7 8 3 4 3 4 0 7

APPLICATION APPROVED DATE RECEIVED (yr., mo., & day) 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 I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item 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.)
 FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN
 B. REVISED APPLICATION (place an "X" below and complete item I above)
 1. FACILITY HAS INTERIM STATUS
 2. FACILITY HAS A RCRA 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 form (Item 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; Item III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY
<b>Disposal:</b>					
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			

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

LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
		1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)				1. AMOUNT	2. UNIT OF MEASURE (enter code)	
X-1	S02	600	G		5	T04	20,415	U	
X-2	T03	20	E		6	S02	257,875	G	
*	S02	278,800	G		7	T01	79,358	G	
2	T01	21,114	G		8	T04	25,200	U	
3	T04	96,480	U		9	T04	4,800	U	
4	T04	7,480	U		10	T02	13,200	U	

**III. PROCESSES (continued)**

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

Line No.	Code	Amount	Unit of Measure	Line	Code	Process
11	T 0 3	11.5	E			
12	T 0 4	60	U	3	T04	Thermal Evaporator
13	T 0 4	12	U	4	T04	Spray Dryer
				5	T04	Rotary Drum Filter
				8	T04	Vacuum Filter
				9	T04	Thermal Evaporator
				12	T04	Pan Evaporator
				13	T04	Silver Recovery Unit

**NOTES:**

- \* Lines 1 through 5 refer to the new process waste system (Building 374)
- \*\* Lines 6 through 10 refer to the old process waste system which is slated for closure and retrofitting in 1982.

**IV. DESCRIPTION OF HAZARDOUS WASTES**

A. EPA HAZARDOUS WASTE NUMBER - Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

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

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

**D. PROCESSES**

**1. PROCESS CODES:**

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

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous 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: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:**

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

**EXAMPLE FOR COMPLETING ITEM 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. EPA HAZARD. 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	0513008
X-4	D 0 0 2				included with above

EPA I.D. NUMBER (enter from page 1)													FOR OFFICIAL USE ONLY																							
W	C	0	D	0	7	8	3	4	3	4	0	7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
													DUP																							
													DUP																							
IV. DESCRIPTION OF HAZARDOUS WASTES (continued)																																				
LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)			B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES																														
	21	22	23			1. PROCESS CODES (enter)						2. PROCESS DESCRIPTION (if a code is not entered in D(1))																								
1	D	0	0	1	0.2	T	S	0	1	T	0	3	S	0	1	Residue shipped to INEL or NTS																				
2	D	0	0	1	2,293	T	T	0	2	T	0	1	T	0	4	S	0	1	Salts shipped to NTS																	
3	F	0	0	7												Included with above (2)																				
4	D	0	0	1	2.4	T	T	0	1	T	0	4	S	0	1	0	0	0	Cement or ash shipped to INEL or NTS																	
5	D	0	0	2												Included with above (4)																				
6	D	0	0	3												Included with above (4)																				
7	D	0	0	2	365	T	T	0	1	T	0	4	S	0	1	Sludge shipped to INEL																				
8	D	0	1	1	5	T	S	0	1	T	0	1	T	0	4	Silver Recycled																				
9	F	0	0	T	73	T	S	0	1	S	0	2	T	0	1	S	0	1	Calcium silicate/organic (solid) shipped to INEL																	
10	F	0	0	6	10	T	S	0	1	T	0	4	S	0	1	Sludge shipped to NTS																				
11	F	0	1	0	0.25	T	S	0	1							Shipped to NTS																				
12	F	0	1	1												Included with above (11)																				
13	F	0	1	2												Included with above (11)																				
14	P	0	0	1	0.05	T	T	0	1	T	0	4	S	0	1	0	0	0	Cement (or ash) shipped to NTS																	
15	P	1	2	2												Included with above (14)																				
16	D	0	0	1	7.5	T	T	0	4							Lubricating oil (recycle)																				
17	B	e			54	T	S	0	1							Shipped to NTS																				
18	P	C	B		43	T	S	0	2	S	0	1																								
19																																				
20																																				
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25																																				
26																																				

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**IV. DESCRIPTION OF HAZARDOUS WASTES (continued)**

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

- Line
- 2 Code T04 indicates thermal evaporator and drum or spray dryer.
  - 4 T03, S01. Code T04 indicates aqueous material is set up with cement in a glove box. Alternately, organics and non-compatibles are solidified with CaSiO<sub>3</sub>, drummed and shipped.
  - 7 Code T04 indicates an enclosed vacuum filtration unit
  - 8 Code T04 indicates silver recovery unit
  - 10 Code T04 indicates thermal evaporating pan
  - 14 & 15 - T03, S01. Code T04 indicates compatible chemicals are added to the process waste stream, non-compatible aqueous material is set up with cement in a glove box. Alternately, organics are incinerated, the residue drummed and shipped. \*
  - 16 Code T04 indicates used lubricating oil is recycled for use as process coolant oil. It eventually is disposed of as described in Line 9 (included because EPA is now considering the status of waste oil).
  - 17 Process equipment and scrap that may be contaminated with beryllium dust is packaged and shipped to NTS. This waste is not described by the listed EPA code numbers. It is included in this application because of the toxic nature of beryllium dust.
  - 18 While PCB's are not covered by the RCRA, the applicant has included them in this application to acknowledge the presence of an additional hazardous waste on the plant site.
- \*Hazardous chemicals are disposed of on a bi-annual basis. A variety of pure chemicals from plant R&D operations may be included. Therefore, future disposals may include Codes P001 to P122.

EPA I.D. NO. (enter from page 1)

F	C	D	0	7	8	3	4	3	4	0	7	E
---	---	---	---	---	---	---	---	---	---	---	---	---

**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**

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)
39 53 30 N	105 11 30 W

**VIII. FACILITY OWNER**

- A. If the facility owner is also the facility operator as listed in Section VIII 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 VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER		2. PHONE NO. (area code & no.)	
U. S. Department of Energy		303-497-2025	
3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
P. O. Box 928	Golden	CO	80401

**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.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
Don Ofte		

**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.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
R. O. Williams, Jr.		0513010

EXPLANATION OF CODED WASTEITEM IV

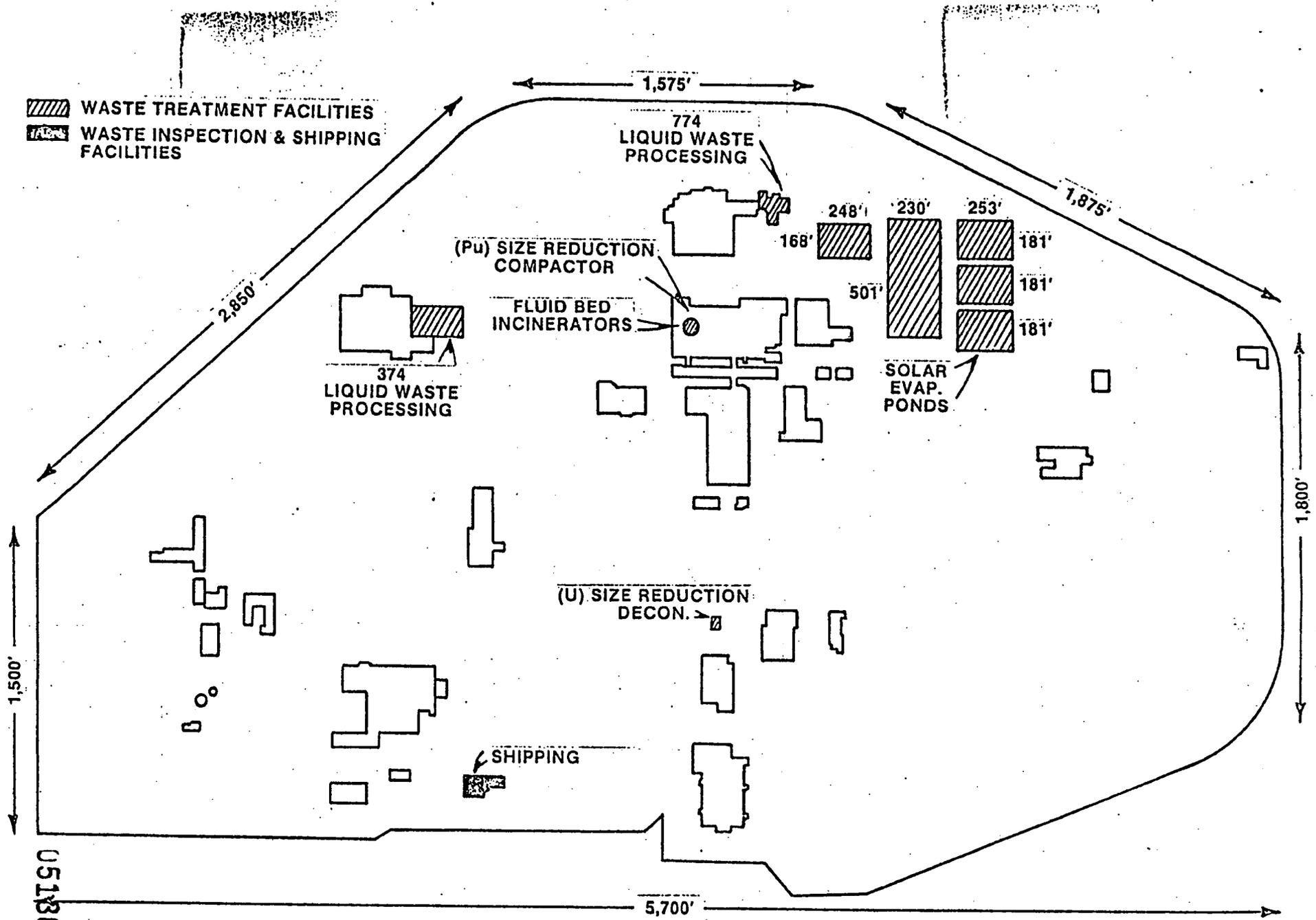
<u>Line No.</u>	<u>EPA Hazardous Waste No.</u>	<u>DESCRIPTION</u>
1	D 001	<u>Paint Thinner (residue):</u> Material collected in 30-gallon drums, incinerated, the ash is placed in drums for shipment to INEL or NTS.
2	D 001	<u>Evaporator Salts:</u> Process liquid wastes and chemically-contaminated liquid wastes are transferred from the evaporation ponds (or collection containers) to the evaporator feed tanks, then to the evaporator and drum or spray dryer. The evaporator salts are placed in boxes and sent to the NTS.
3	F 007	<u>Spent Plating Bath Solutions and Waste Waters:</u> The solutions are neutralized and processed as described above (line 2).
4	D 001)	<u>Mixed Laboratory Waste:</u> The wastes are collected in appropriate containers. The aqueous waste is set up with cement. The organic waste is solidified, drummed and shipped.
5	D 002)	
6	D 003)	
7	D 002	<u>First and Second Stage Sludge:</u> Process liquids are neutralized, precipitated, flocculated, filtered, drummed and shipped to INEL.
8	D 011	<u>Used Photographic Solutions:</u> The solutions are collected in plastic-lined drums and stored for later processing through the silver recovery unit.
9	F 001	<u>Spent Halogenated Solvents used in Degreasing:</u> The waste is collected in drums and tanks, mixed with calcium silicate in a treatment tank, collected in drums and shipped to INEL.
10	F 006	<u>Electrochemical Milling Sludge:</u> The waste material is collected in drums, dried in a pan evaporator. The solids are placed in drums and shipped to the NTS.
11	F 010	<u>Metal Heat Treating Salt and Sludge:</u> About one drum of CN-salt per year is generated. Sludge generation has been nil for the past five years. The salt is collected in a drum and shipped to the NTS.
12	F 011	
13	F 012	

<u>Line No.</u>	<u>EPA Hazardous Waste No.</u>	<u>DESCRIPTION</u>
14 15	P 001) P 122)	<u>Discarded Commercial Chemicals:</u> The material is sent to waste processing in original containers. Compatible chemicals are added to the process waste stream. Non-compatible material is set up with cement. Organics are incinerated. The resulting solids are drummed and shipped.
16	D 001	<u>Used Lubricating Oil:</u> Used oil is not now included in the EPA regulations, but it is expected to be included in the future. Rocky Flats used oil is recycled when possible. It eventually is solidified with calcium silicate.
17	Be Dust	<u>444 Building Hard Waste:</u> This is mostly process equipment that may be contaminated with Be dust which is packaged for shipment to NTS. It does not fit the EPA code numbers. The EPA Region VIII contact advised that we include it at the end of our list. (Initially we included it with F 010, F 011 and F 012.)
18	PCB	<u>PCB Transformer Fluid:</u> PCB's are covered by TSCA and not by RCRA. The EPA contact advised that we include it at the end of our list. This material is now stored in drums, tanks and transformers.

V. FACILITY DRAWING (see page 4)

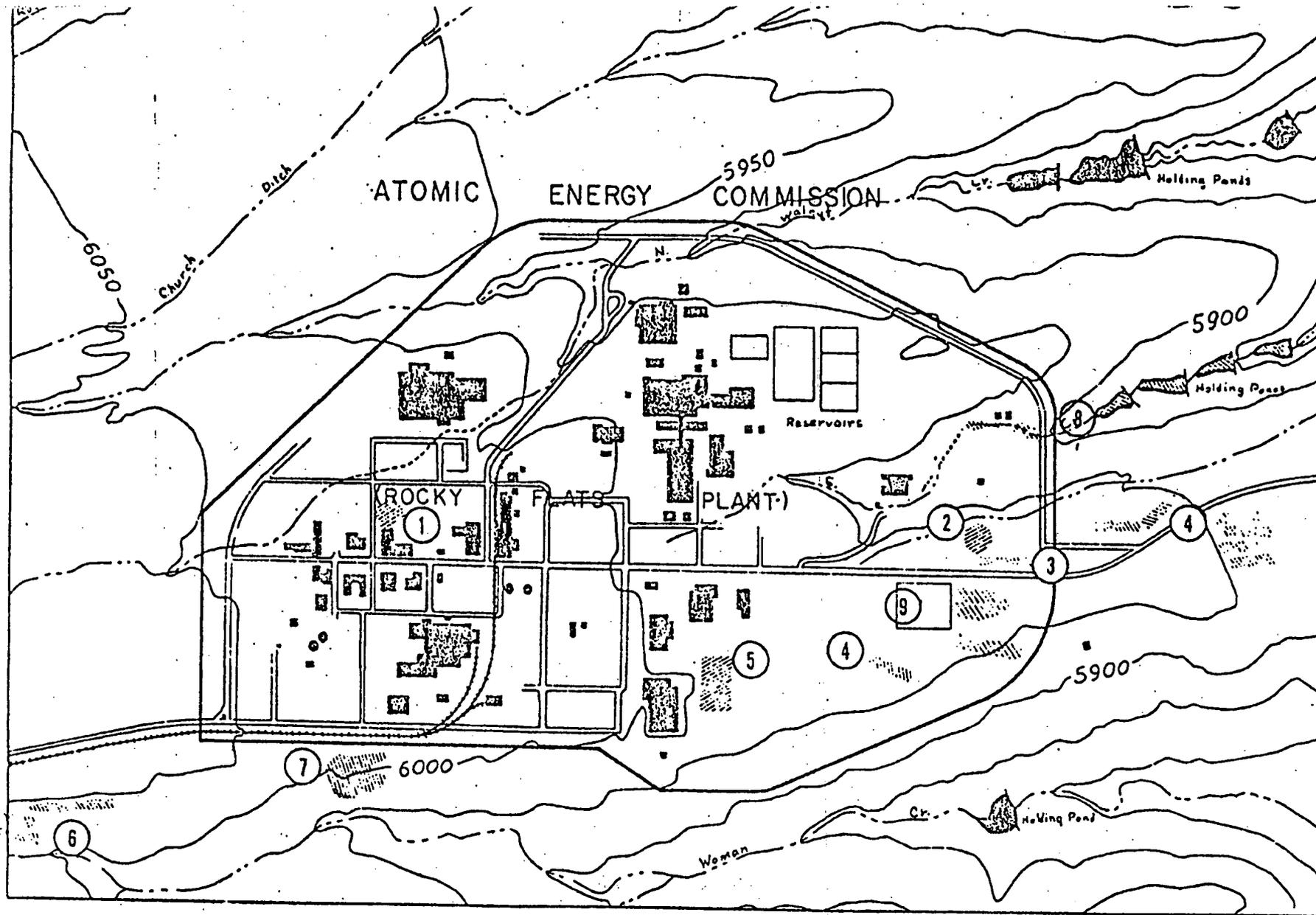
SEE ATTACHED

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V. FACILITY DRAWING



Past Disposal Areas ① through ⑨

5513015

#1 Oil Burning Pit #1 (1956)

Ten drums of oil containing depleted uranium were burned in August 1956, and the residue covered with backfill. This area is now under Building 335 and involves approximately 70 cubic feet (ft<sup>3</sup>) of depleted uranium residue.

#2 Oil Burning Pit #2 (1957 and 1961-1965)

A total of 1,082 drums of oil containing uranium were burned. The residues and some flattened drums were covered with fill. The residue, mostly depleted uranium, amounts to about 10,000 ft<sup>3</sup>. This area was excavated during the summer of 1978 to remove all contaminated residues.

#3 Trench T-1 (1954-1962)

Approximately 25,000 kilograms (kg) of depleted uranium chips in 125 drums were deposited in this trench and covered with 2 feet (ft) of fill dirt. The volume of material involved is 12,000 ft<sup>3</sup>.

#4 Trenches T-2 through T-8 (1954-1968)

These trenches were disposal sites for 100,000 kg of sanitary sewage sludge and 275 flattened, empty drums. Earliest trenches involved mostly uranium with an increasing plutonium fraction in larger pits. Total alpha activity ranges from 800 to 8,000 disintegrations per minute per gram. Trench T-4 also contains a quantity of uranium-plutonium contaminated asphalt planking from the solar evaporation ponds. The estimated volume involved is 84,000 ft<sup>3</sup> with total alpha radioactivity between 100 and 105 millicuries.

Just recently, several burial sites near Trenches T-2 to T-8 have been discovered. Although they may be extensions of the previously identified trenches, they are now considered as separate entities. Work is in progress to characterize them for permanent record.

#5. Asphalt and Soil Disposal Areas (1969 and 1972)

Approximately 320 tons of asphalt and soil, containing 14 milligrams (mg) of plutonium, were disposed of in this area following a fire in a plutonium building in May 1969. Eight thousand cubic feet of materials are involved, buried under 2 ft of fill dirt. In 1972, 1,600 ft<sup>3</sup> of soil, presumed contaminated because of its origin although no radioactivity was actually detected, was deposited on top of the fill, leveled and covered with 3 ft of dirt. Total volume (including fill) is about 15,000 ft<sup>3</sup> of material with low concentration of plutonium.

#6 Incinerator Ash Pits I-1 through I-4 (1952-1968)

These pits contain ashes from an incinerator used from 1952 through 1968. About 100 grams (g) of depleted uranium were burned with general combustible waste over the 16-year period. About 30,000 ft<sup>3</sup> of soil and ashes are involved.

#7 Original Sanitary Landfill (1952-1968)

Twenty kilograms of depleted uranium are buried at this location along with normal plant waste, including small quantities of various chemicals. The 20 kg of depleted uranium ash resulted from an inadvertent incident in which 60 kg of depleted uranium sheet was burned and only 40 kg recovered. The volume of material is about 2,000,000 ft<sup>3</sup>.

#8 South Walnut Creek

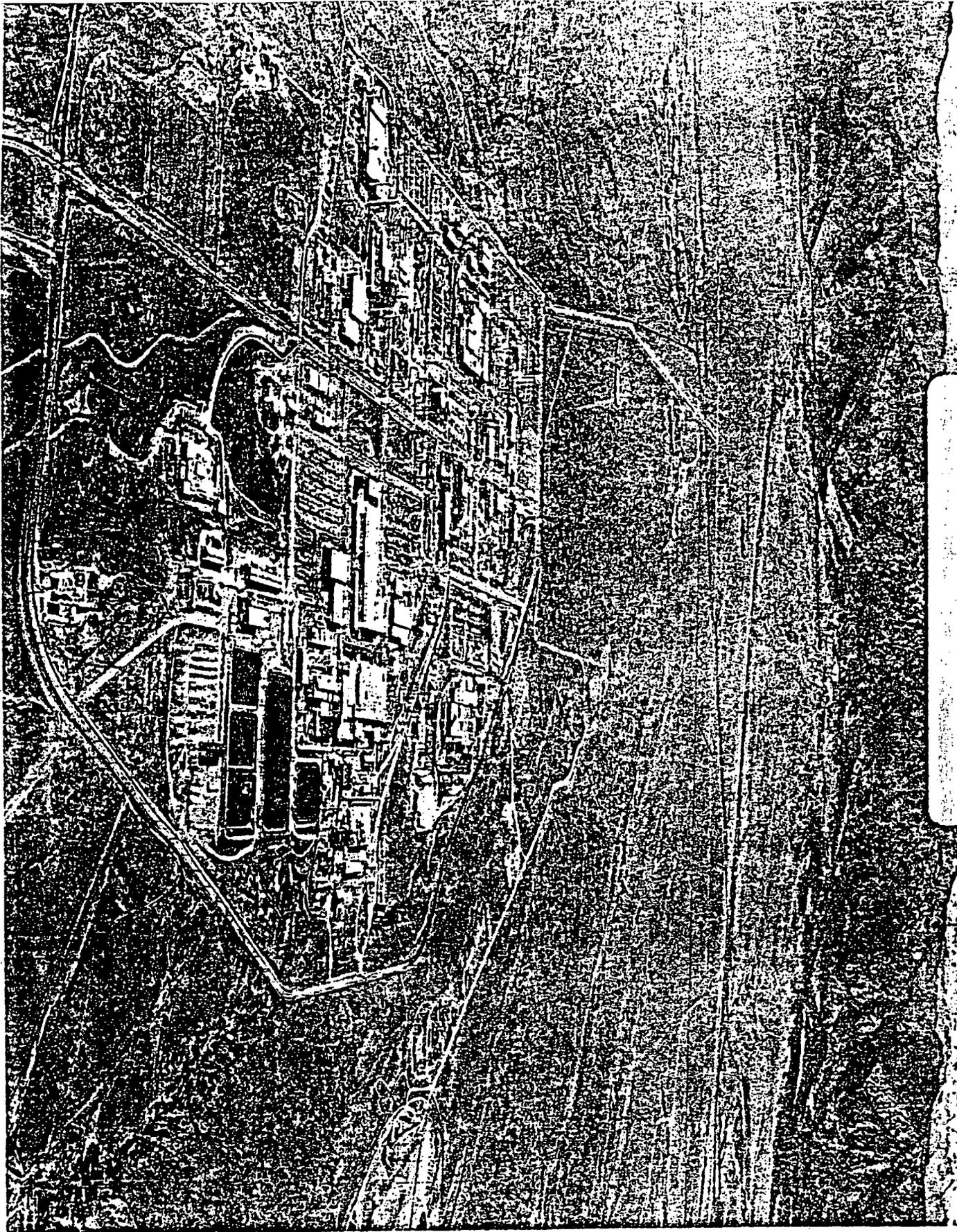
The area from the original process waste treatment outfall on South Walnut Creek east, to and including the B-series holding ponds, must also be considered due to accumulation of chemical and radioactive material in the stream bed and holding ponds. About 225,000 ft<sup>3</sup> of sludge containing plutonium and uranium are involved.

#9 903 Area (1958-1967)

From 1958 through 1967, approximately 5,240 drums of oil containing radioactivity were stored in this location. About 3,570 of the drums contained plutonium. Leakage from the drums resulted in about 85g of plutonium being deposited in the soil.

Of the original 85g, an estimated 68g were confined to an area of about 368,000 square feet ( $\text{ft}^2$ ), of which 146,000  $\text{ft}^2$  were covered with an asphalt pad in 1968. Roughly 7g are contained in an area of about 12,000  $\text{ft}^2$  southeast of the asphalt pad, and the remainder has been distributed by wind, generally to the east of the area, with the majority remaining on USDOE property. Results of the environmental monitoring program in the Rocky Flats vicinity indicate the average environmental concentrations of  $^{239}\text{Pu}$  in air and water during 1973 through 1975 were less than two percent of the concentration guidelines set forth in USDOE Manual Chapter 0524.

The work to remove the contaminated soil southeast of the asphalt pad began June 1976 and was completed in October 1976. The activity level of the removed soil was over the 2,000 counts per minute (counts/min.) on a FIDLER (Field Instrument for the Detection of Low Energy Radiation.)



ITEM VI - PHOTOGRAPHS

0513019



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