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ROCKETDYN CNPK



Rockwell  
International

In Reply Refer To 92RC07299

July 9, 1992

U.S. Environmental Protection Agency  
Region IX  
75 Hawthorne Street  
San Francisco, California 94105

Attention: Mr. Stan Brown

Subject: Changes To Part A. ISD Document - EPA CA3890090001

Gentlemen:

Enclosed is a revised Part A Application for the Radioactive Materials Disposal Facility (RMDF) located at Rockwell International Rocketdyne Division's Santa Susana Field Laboratory. This facility stores and treats low level radioactive and mixed wastes and is owned by the U.S. Department of Energy (DOE). It is co-operated by DOE and Rockwell International Corporation, Rocketdyne Division - ETEC Operations.

The purpose of this re-application is to modify the existing Part A Permit issued by the EPA to allow for the additional storage and treatment of mixed wastes which will be generated as part of remediation and decommissioning activities at this location under the direction of the appropriate regulatory authority.

In the original application, two treatment activities were identified. These included the amalgamation of mercury and chemical neutralization of an electropolishing solution. In this application, those activities have been restated. The amalgamation treatment however has been expanded to incorporate additional process steps necessary for treatment of the mercury which would be found in soil.

In addition, two other treatment activities have been listed. The first is a treatment process involving the use of molten salt on contaminated oils. We have included this for convenience and future reference in this application even though it is currently operating under a treatability study.



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Page 2.

The second new treatment activity a nitrogen - water misting procedure to be used on any sodium which may be encountered during remediation activities. It has been included as a safety precaution in the event small amounts of unreacted radioactive contaminated sodium is encountered at the site.

The storage and treatment volumes identified in this application are conservative estimates and have been included as a way to ensure that remediation activities would continue if significant quantities of mixed wastes are encountered.

If there are any questions in this matter, please contact Paul Costa at (818) 773-5319. Your prompt attention in this matter is appreciated.

Very truly yours,

ROCKWELL INTERNATIONAL CORPORATION  
Rocketdyne Division



S.R. Lafflam  
Director, Environmental Protection Department


cc: Department of Energy, San Francisco Operations  
Cal-EPA, Dept. of Toxic Substances Control - Burbank

enclosure: Part A Application



BNA01122549

HDMSE00611047

For EPA Regional Use Only   Date Received Month Day Year 07 08 92	 United States Environmental Protection Agency Washington, DC 20460 <h1 style="margin: 0;">Hazardous Waste Permit Application</h1> <h2 style="margin: 0;">Part A</h2> <p><i>(Read the Instructions before starting)</i></p>	For State Use Only
I. ID Number(s)		
A. EPA ID Number C A 3 8 9 0 0 9 0 0 0 1		B. Secondary ID Number (if applicable)
II. Name of Facility E N E R G Y T E C H N O L O G Y E N G R C E N T E R		
III. Facility Location (Physical address not P.O. Box or Route Number)		
A. Street T O P O F W O O L S E Y C A N Y O N R O A D		
Street (continued)		
City or Town S I M I H I L L S		State ZIP Code C A 9 3 0 6 3 -
County Code (if known) County Name 0 5 6 V E N T U R A C O U N T Y ( U N I N C O R P )		
B. Land Type (enter code) p	C. Geographic Location LATITUDE (degrees, minutes, & seconds) 3 4 1 3 4 6 - LONGITUDE (degrees, minutes, & seconds) 1 1 8 4 2 3 0 -	D. Facility Existence Date Month Day Year 0 1 0 1 1 9 5 8
IV. Facility Mailing Address		
Street or P.O. Box 6 6 3 3 C A N O G A A V E ( P O B O X 7 9 2 2 ) ( J A 1 6 )		
City or Town C A N O G A P A R K		State ZIP Code C A 9 1 3 0 9 - 7 9 2 2
V. Facility Contact (Person to be contacted regarding waste activities at facility)		
Name (last) I A F F L A M		(first) S T E V E
Job Title D I R E C T O R		Phone Number (area code and number) 8 1 8 - 7 7 3 - 5 3 0 1
VI. Facility Contact Address (See Instructions)		
A. Contact Address Location Mailing XX		B. Street or P.O. Box
City or Town		State ZIP Code



BNA01122550



EPA I.D. Number (Enter Page page 1)  
 C A 3 8 9 0 0 9 0 0 0 1

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

The Energy Technology Engineering Center (ETEC) is a government owned laboratory co-operated by the U.S. Department of Energy (DOE) and Rockwell International Corporation, Rocketdyne Division. ETEC is devoted to the applied engineering development of emerging technologies including solar, geothermal, fossil, fusion, fission energy and conservation. ETEC performs test facility design, manages construction, and manages and conducts system and component development test programs.

**XII. Process - Codes and Design Capacities**

- A. PROCESS CODE** - Enter the code from the list of process codes below that best describes each process to be used at the facility. Twelve lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided in Item XII.
- B. PROCESS DESIGN CAPACITY** - For each code entered in column A, enter the capacity of the process.
- 1. AMOUNT** - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process unit.
  - 2. UNIT OF MEASURE** - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.
- C. PROCESS TOTAL NUMBER OF UNITS** - Enter the total number of units used with the corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	UNIT OF MEASURE	UNIT OF MEASURE CODE
<b>DISPOSAL:</b>				
D79	INJECTION WELL	GALLONS; LITERS; GALLONS PER DAY; OR LITERS PER DAY	GALLONS .....	G
D80	LANDFILL	ACRE-FEET OR HECTARE-METER	GALLONS PER HOUR .....	E
D81	LAND APPLICATION	ACRES OR HECTARES	GALLONS PER DAY .....	U
D82	OCEAN DISPOSAL	GALLONS PER DAY OR LITERS PER DAY	LITERS .....	L
D83	SURFACE IMPOUNDMENT	GALLONS OR LITERS	LITERS PER HOUR .....	H
<b>STORAGE:</b>				
S01	CONTAINER (barrel, drum, etc.)	GALLONS OR LITERS	LITERS PER DAY .....	V
S02	TANK	GALLONS OR LITERS	SHORT TONS PER HOUR .....	D
S03	WASTE PILE	CUBIC YARDS OR CUBIC METERS	METRIC TONS PER HOUR .....	W
S04	SURFACE IMPOUNDMENT	GALLONS OR LITERS	SHORT TONS PER DAY .....	N
<b>TREATMENT:</b>				
T01	TANK	GALLONS PER DAY OR LITERS PER DAY	METRIC TONS PER DAY .....	S
T02	SURFACE IMPOUNDMENT	GALLONS PER DAY OR LITERS PER DAY	POUNDS PER HOUR .....	J
T03	INCINERATOR	SHORT TONS PER HOUR; METRIC TONS PER HOUR; GALLONS PER HOUR; LITERS PER HOUR; OR BTU'S PER HOUR	KILOGRAMS PER HOUR .....	R
			CUBIC YARDS .....	Y
T04	OTHER TREATMENT	GALLONS PER DAY; LITERS PER DAY; POUNDS PER HOUR; SHORT TONS PER HOUR; KILOGRAMS PER HOUR; METRIC TONS PER DAY; METRIC TONS PER HOUR; OR SHORT TONS PER DAY	CUBIC METERS .....	C
			ACRES .....	B
			ACRE-FEET .....	A
			HECTARES .....	Q
			HECTARE-METER .....	F
			BTU'S PER HOUR .....	K



EPA I.D. Number (enter from page 1)												Secondary ID Number (enter from page 1)											
C	A	3	8	9	0	0	9	0	0	0	1												

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

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

Line Number	A. PROCESS CODE (from list above)					B. PROCESS DESIGN CAPACITY		C. PROCESS TOTAL NUMBER OF UNITS			FOR OFFICIAL USE ONLY			
						1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)							
X 1	S	0	2			600	G	0	0	2				
X 2	T	0	3			20	E	0	0	1				
1	S	0	1			63,000	G	2	3	6				
2														
3														
4														
5														
6														
7														
8														
9														
1 0														
1 1														
1 2														

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

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

Line Number (enter numbers in sequence with Item XII)	A. PROCESS CODE					B. TREATMENT PROCESS DESIGN CAPACITY		C. PROCESS TOTAL NUMBER OF UNITS			D. DESCRIPTION OF PROCESS
						1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)				
0 2	T	0	4			800	U	0	0	1	Treatment involves a combination of one or more of the following process steps: thermal treatment with mixing; phase separation & carbon adsorption; washing & screening; and amalgamation/stabilization.
0 3	T	0	4			80	U	0	0	1	Treatment involves thermal oxidation in a bed of molten salt.
0 4	T	0	4			2	R	0	0	1	Treatment involves chemical reduction, neutralization and precipitation, followed by filtration/drying and stabilization.
0 5	T	0	4			10	U	0	0	1	Treatment involves chemical conversion using nitrogen and steam.



EPA I.D. Number (enter from page 1)  
 C A 3 8 9 0 0 9 0 0 0 1  
 Secondary ID Number (enter from page 1)

**XIV. Description of Hazardous Wastes**

- A. **EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. **ESTIMATED ANNUAL QUANTITY** - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. **UNIT OF MEASURE** - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

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

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

**D. PROCESSES**

**1. PROCESS CODES:**

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item XI A, on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

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

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

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

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

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

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

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

Line Number	A. EPA HAZARD WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESS	
				(1) PROCESS CODES (enter)	(2) PROCESS DESCRIPTION (if a code is not entered in D(1))
X 1	K 0 5 4	900	P	T 0 3 D 8 0	
X 2	D 0 0 2	400	P	T 0 3 D 8 0	
X 3	D 0 0 1	100	P	T 0 3 D 8 0	
X 4	D 0 0 2				Included With Above



EPA ID Number (enter from page 1)

Secondary ID Number (enter from page 1)

C A 3 8 9 0 0 9 0 0 0 1

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				(1) PROCESS CODES (enter)	(2) PROCESS DESCRIPTION (if a code is not entered in D(1))
1	D 0 0 9	382	T	S 0 1 T 0 4	Using treatment in section XIII lines 2, 3, or 5
2	D 0 0 1				Included With Above
3	D 0 0 3				" " "
4	D 0 0 4				" " "
5	D 0 0 5				" " "
6	D 0 0 6				" " "
7	D 0 0 7				" " "
8	D 0 0 8				" " "
9	D 0 0 9				" " "
10	D 0 1 0				" " "
11	D 0 1 1				" " "
12	D 0 1 8				" " "
13	D 0 1 9				" " "
14	D 0 2 1				" " "
15	D 0 2 8				" " "
16	D 0 2 9				" " "
17	D 0 3 9				" " "
18	D 0 4 0				" " "
19	N O N E				California regulated wastes included under CMC 611
20	D 0 0 9	100	P	S 0 1 T 0 4	Using treatment T04 line 2 Section XIII
21	D 0 0 7	3000	P	S 0 1 T 0 4	Using treatment T04 line 2 Section XIII
22	D 0 0 8				Included With Above
23	D 0 0 3	50	P	S 0 1 T 0 4	Using T04 line 3, Section XIII
24	D 0 0 7	800	P	S 0 1 T 0 4	Using T04 line 4., Section XIII
25	N O N E				Included With Above. Also Contains CA Reg. Waste CMC 132
26	D 0 0 8	116,000	P	S 0 1	
27	N O N E	700	P	S 0 1 T 0 4	CA regulated waste only, CMC221 Using T04 line 3, Section XIII
28	D 0 0 3	300	P	S 0 1 T 0 4	Using T04 line 5., Section XIII
29	D 0 0 8	15000	P	S 0 1 T 0 4	Using T04 lines 1 or 2, Sect. XIII
30	N O N E				Included With Above. Also contains CA regulated waste CMC 221.
31					
32					
33					





EPA I.D. Number (enter from page 1)											Secondary ID Number (enter from page 1)																	
C	A	3	8	9	0	0	9	0	0	0	1																	

**XIV. Description of Hazardous Waste (continued)**

**E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 6.**

Line Number	Additional Process Codes (enter)																												

**XV. 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 this map area. See instructions for precise requirements.

**XVI. Facility Drawing**

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

**XVII. 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).

**XVIII. Certification(s)**

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

Owner Signature & CO-OPERATOR Date Signed  
July 13, 1992

Name and Official Title (type or print)  
**DONALD W. PEARMAN, MANAGER, SAN FRANCISCO OPERATIONS, U.S. DEPARTMENT OF ENERGY**

Operator Signature (Second Co-Operator) Date Signed  
July 9, 1992

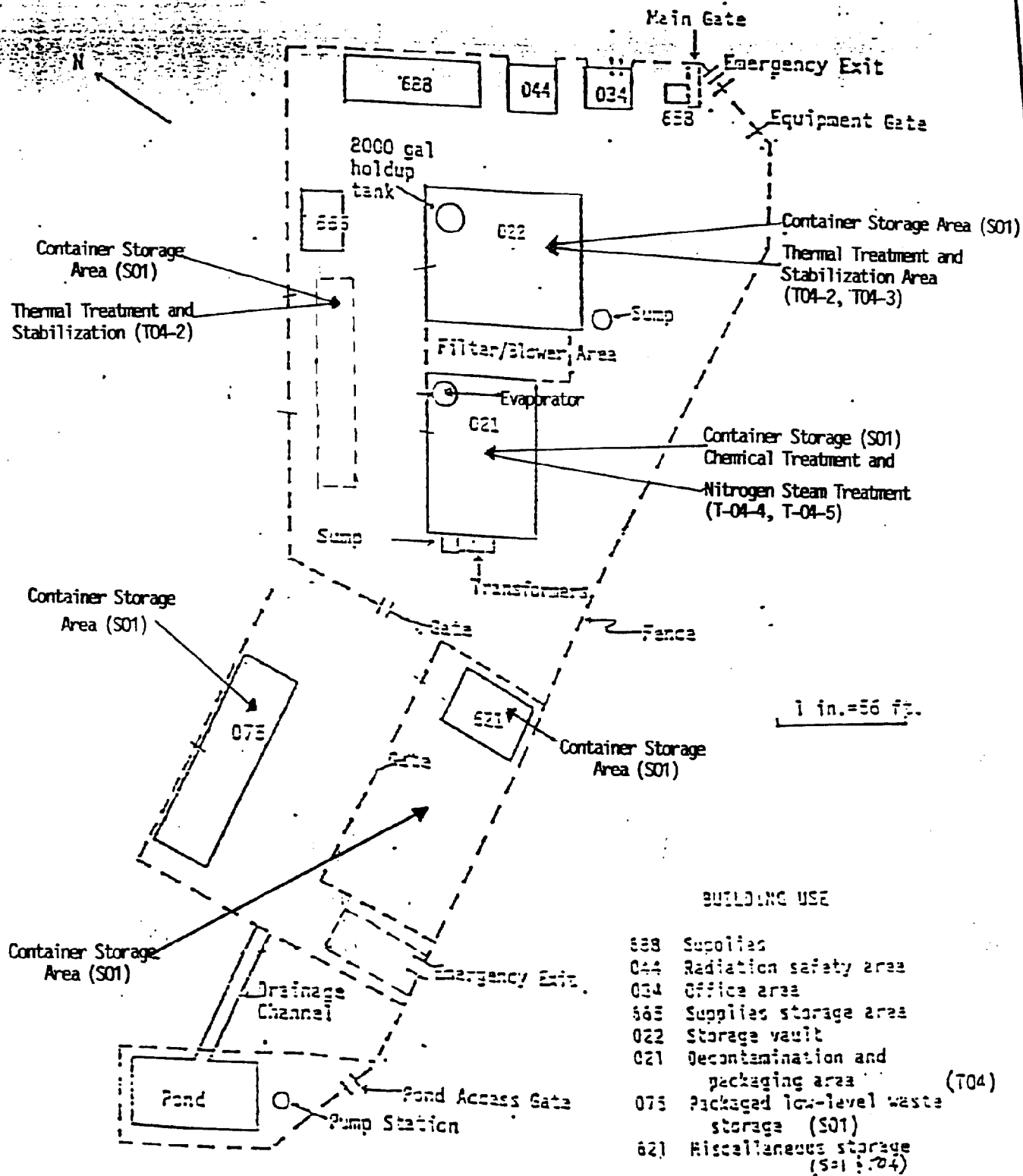
Name and Official Title (type or print)  
**D. C. GIBBS, MANAGER - ETEC OPERATIONS, ROCKETDYNE DIVISION OF ROCKWELL INTERNATIONAL**

**XIX. Comments**

Section VII - This facility is co-operated by the U.S. Dept. of Energy and Rockwell International.

**Note: Mail completed form to the appropriate EPA Regional or State Office. (refer to instructions for more information)**





BNA01122557



Packaged  
Low-Level  
Waste Storage  
Bldg 075

Decontamination  
& Pkg Area  
Bldg 021

Storage Vault  
Bldg 022

BNA-0122558

Rockwell International  
Rockwell Automation



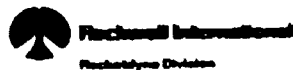
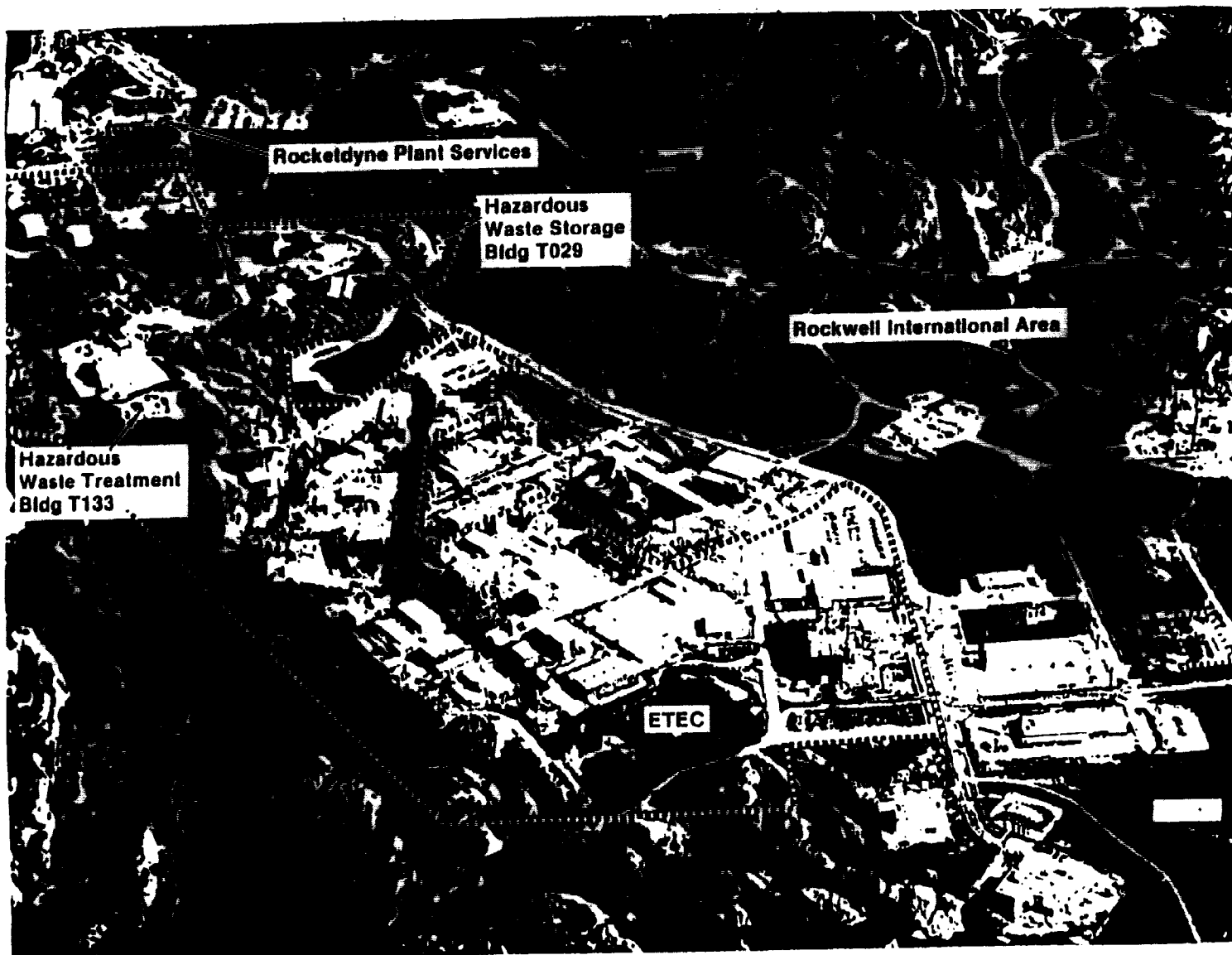
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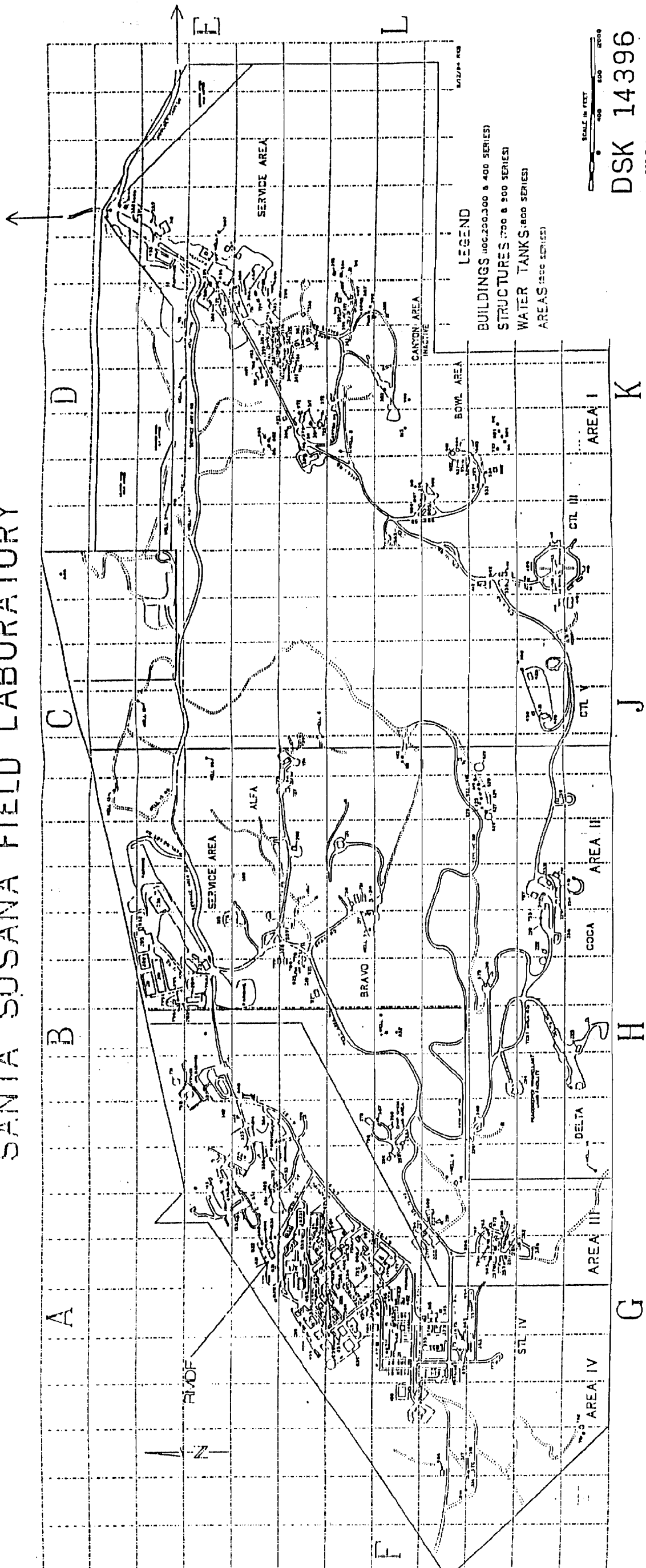
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# SANTA SUSANA FIELD LABORATORY



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