

J. Gilbert

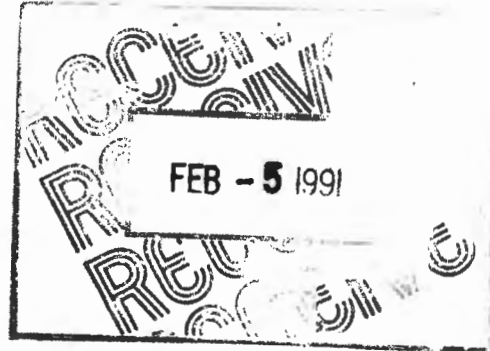
Route 3, Box 7
Gallup, New Mexico
87301

505
722-3833

January 28, 1991

Mr. Bill Honker
RCRA Permits Branch Chief
U.S. Environmental Protection Agency
Region VI
1445 Ross Avenue Suite 1200
Dallas, Texas 75202-2733

RE: CLASS 1 PERMIT MODIFICATION
Giant Refining Company
Route 3 Box 7
Gallup, New Mexico 87301
Permit No. NMD000333211



Dear Mr. Honker,

Giant Refining Company owns and operates a crude oil refinery (the "Ciniza Refinery") located near Gallup, New Mexico. New regulatory guidelines, Federal Register - March 29, 1990 - TC Rule and Federal Register - November 2, 1990 - Petroleum Refinery Sludge Listings, have had a substantial impact on the generation, treatment and disposal of hazardous waste at the Ciniza Refinery. As a result of these regulatory changes, Giant is submitting the attached, modified Part A application (forms OMB No's. 158-R0175 and 158-S80004) for your review. The listings for the newly regulated waste along with their respective treatments are submitted as Class 1 modifications outlined in 40 CFR 270.42 (a).

These newly listed waste and their associated treatments are outlined in the following brief descriptions.

Prior to November 8, 1990 the petroleum refining waste (K-listed) was removed from the units and placed on a land treatment unit. This waste is now being accumulated to be processed for excess liquid removal, stored in containers and shipped off site.

Flammable solids will be stored in containers and shipped off site.

The tetrachloroethylene contaminated solvent is a regenerated solvent supplied by a vendor and is used for parts cleaning. The dirty solvent is returned to the vendor for reclamation. Giant is currently purchasing equipment that will allow us to use a solvent that is not regulated. We expect this new system to be in operation by March.

Prior to September 25, 1990 the process waters at the Ciniza Refinery were discharged from the API separator to evaporation lagoons. These first lagoons contained aerators for oxidation and volatiles removal. On September 24, 1991, air stripping towers were installed immediately downstream of the API separator. This allows the removal of benzene from the process waters before it is discharged into the lagoons.

Giant will be preparing and submitting a Part B permit modification to the New Mexico Environmental Improvement Division. Portions of this submittal will include requests for hazardous waste storage and land application of newly regulated waste (F037 and D018). The D018 waste is generated from spills of petroleum hydrocarbons. The F037 waste will be generated from the primary settling of solids in the sumps of the process water drainage system. Upon approval, the land application of these waste would continue until treatment standards have been developed or Giant develops on site treatment technology.

If you have any questions, contact my office at (505) 722-0217.

Sincerely,



Claud Rosendale
Environmental Manager
Ciniza Refinery

cc w/attachments:

John Stokes - Refinery Manager - Giant Refining Company
Carl Shook - V.P. Refining Operations
Giant Industries Arizona, Inc.
Kim Bullerdick - Corporate Counsel
Giant Industries Arizona, Inc.
Jack Elvinger - New Mexico Environmental
Improvement Division

CCR/sp

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>	L. EPA I.D. NUMBER FNMD000333211
I. EPA I.D. NUMBER III. FACILITY NAME V. FACILITY MAILING ADDRESS VI. FACILITY LOCATION	PLEASE PLACE LABEL IN THIS SPACE		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 areas 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 areas 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.

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.

SPECIFIC QUESTIONS	MARK "X"		SPECIFIC QUESTIONS	MARK "X"	
	YES	NO		YES	NO
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)	X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)	X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X		D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)	X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X	X	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)	X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	X	

III. NAME OF FACILITY

1. **GIANT REFINING COMPANY**

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)	B. PHONE (area code & no.)
2. STOKES JOHN - REFINERY MANAGER	505 722 3833

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX	
3. ROUTE 3 BOX 7	
B. CITY OR TOWN	C. STATE D. ZIP CODE
4. GALLUP	NM 87301

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER	
5. 17 MILES EAST ON I-40	
B. COUNTY NAME	
McKINLEY	
C. CITY OR TOWN	D. STATE E. ZIP CODE F. COUNTY CODE
6. JAMESTOWN	NM 87347

VII. SIC CODES (4-digit, in order of priority)

A. FIRST				B. SECOND			
7	2	9	1	7			
(specify) PETROLEUM REFINING				(specify)			
C. THIRD				D. FOURTH			
7				7			
(specify)				(specify)			

VIII. OPERATOR INFORMATION

A. NAME										B. Is the name listed in Item VIII-A also the owner?					
GIANT REFINING COMPANY										<input checked="" type="checkbox"/> YES <input 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				M - PUBLIC (other than federal or state)				P - PRIVATE		S - STATE		D - OTHER (specify)			
								A		505		7223833			
E. STREET OR P.O. BOX															
ROUTE 3 BOX 7															
F. CITY OR TOWN										G. STATE		H. ZIP CODE		IX. INDIAN LAND	
GALLUP										NM		87301		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)			
9IN1				9IP			
B. UIC (Underground Injection of Fluids)				E. OTHER (specify)			
9IU1				AQCR 622-M-1 STATE AIR PERMIT			
C. RCRA (Hazardous Wastes)				F. OTHER (specify)			
9IR1 INMD000333211				GW-3.2 STATE GROUNDWATER DISCHARGE PLAN			

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)

This facility refines crude oil and markets gasoline, diesel, kerosene, asphalt and residual fuel oil.

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	
Carl D. Shook Vice President Refining Operations				Jan 28, 1991	

COMMENTS FOR OFFICIAL USE ONLY

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FORM 3 RCRA
EPA
ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS WASTE PERMIT APPLICATION
 Consolidated Permits Program
 (This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER
 FINMD000333211

FOR OFFICIAL USE ONLY

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.)

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

YR.	MO.	DAY
8	10	31

2. NEW FACILITY (Complete item below.)

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY

B. REVISED APPLICATION (place an "X" below and complete item 1 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
Storage:			Treatment:		
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
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			

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	G
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.

C	DUP	1
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LINE NUMBER	A. PROCESS CODE			B. PROCESS DESIGN CAPACITY			FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE			B. PROCESS DESIGN CAPACITY			FOR OFFICIAL USE ONLY
	1	2	3	1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)				1	2	3	1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)		
X-1	S	0	2	600	G			5	T	0	4 ^b	300	U		
X-2	T	0	3	20	E			6							
1	D	8	1	15	B			7							
2	T	0	1	187,000	U			8							
3	T	0	4 ^a	187,000	U			9							
4	S	0	1	8,000	G			10							

III. PROCESSES (continued)

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

- a
T04: Benzene removal by air stripping.
Two units at 150 gallon per minute.
- b
T04: Filter press for liquids removal and volume reduction of sludges. Mobile, portable unit to be used as needed.

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 wastes: 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:

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 B(2) on that line enter "included with above" and make no other entries on that line.
3. 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	K054	900	P	T03D80	
X-2	D002	400	P	T03D80	
X-3	D001	100	P	T03D80	
X-4	D002				included with above

EPA I.D. NUMBER (enter from page 1)										FOR OFFICIAL USE ONLY																													
W	N	M	D	O	0	0	3	3	3	2	1	1	1	1	1	1	1	1	1	W																			
										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																		
				1. PROCESS CODES (enter)					2. PROCESS DESCRIPTION (if a code is not entered in D(1))													
1	K 0 4 9	0.4	T	T04	S01																T04 - Filter press	
2	K 0 5 0	5.0	T	T04	S01																	T04 - Filter press
3	K 0 5 1	250.0	T	T04	S01																	T04 - Filter press
4	K 0 5 2	10.0	T	T04	S01																	T04 - Filter press
5	D 0 1 8	280.000	T	T01	T04																	T04 - Air Stripping
6	D 0 1 8	200	T	S01	D81																	
7	D 0 0 1	1.0	T	S01																		
8	D 0 3 9	1.0	T	S01																		
9	F 0 3 7	5.0	T	T04	S01	D81																T04 - Filter press
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

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

EPA I.D. NO. (enter from page 1)	
N	M:D:O.O:0 3 3 3 2 1 1 16

V. FACILITY DRAWING

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)

35 29 20

108 25 42

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.)

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.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

Carl D. Shook

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.

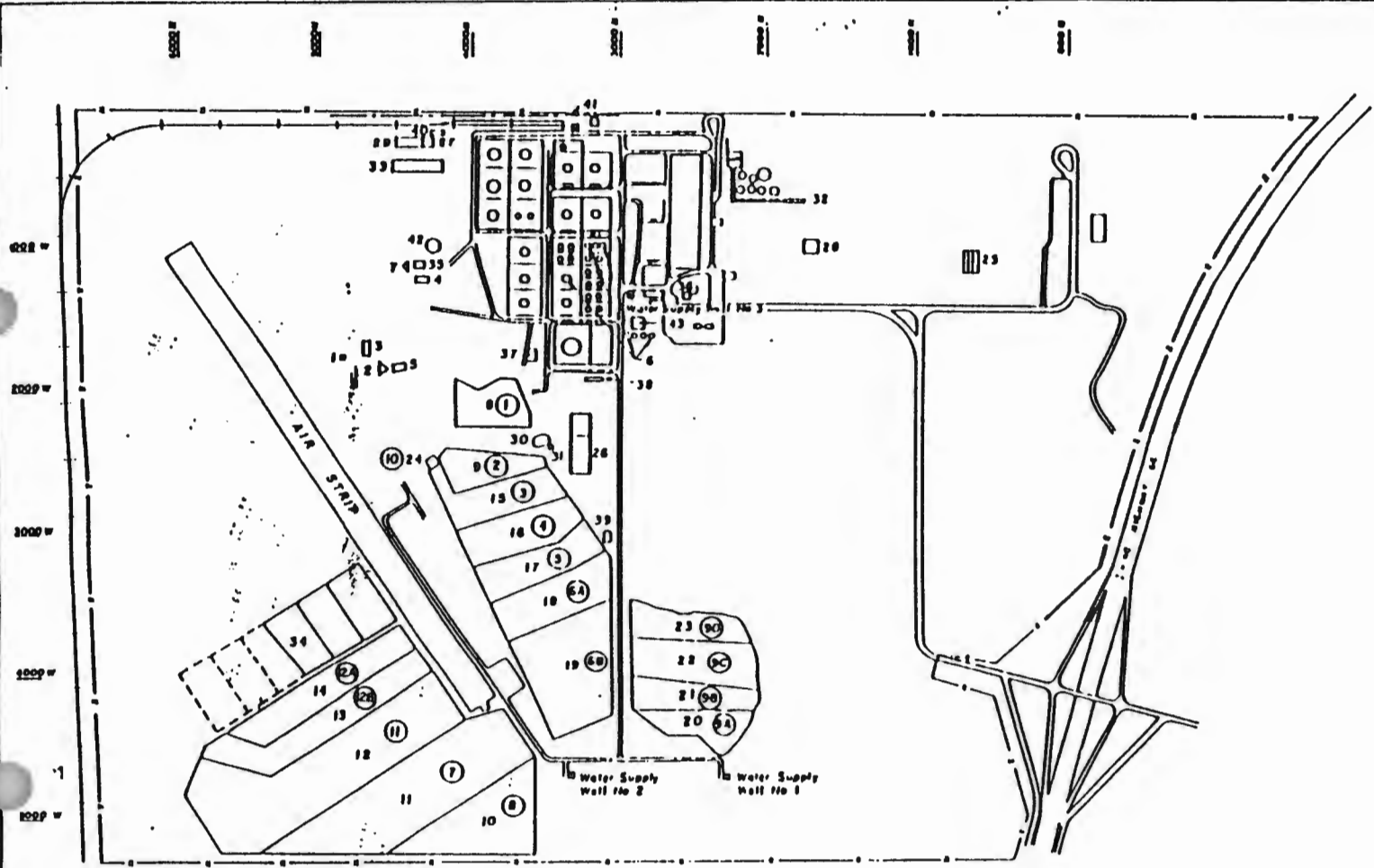
A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

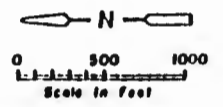
NOT APPLICABLE

Carl D. Shook January 28, 1991



LEGEND
 (1) - (12) Evaporation Ponds as Identified in Giant Refinery Documents.

- | | | | | | | |
|--------------|----------------------|----------------------|----------------------|--------------------------|--------------------------------|--------------------------------|
| 1. Landfill | 8. Aerialion Basin | 15. Evaporation Pond | 21. Evaporation Pond | 27. Sewage Trough | 33. Inactive Land Treatment | 39. Secondary Mill Skimmer |
| 2. Landfill | 9. Evaporation Pond | 16. Evaporation Pond | 22. Evaporation Pond | 28. Sewage Trough | 34. Active Land Treatment | 40. Inaugural Storage Tanks |
| 3. Landfill | 10. Evaporation Pond | 17. Evaporation Pond | 23. Evaporation Pond | 29. Railroad Rack Trough | 35. Inactive Container Storage | 41. Drainage from Process Area |
| 4. Landfill | 11. Evaporation Pond | 18. Evaporation Pond | 24. Drainage Ditch | 30. Sludge Pit | 36. Active Container Storage | 42. Fire Training Area |
| 5. Landfill | 12. Evaporation Pond | 19. Evaporation Pond | 25. Sewage Trough | 31. Sludge Pit | 37. M/I Separator | 43. Empty Container Storage |
| 6. Tank Farm | 13. Evaporation Pond | 20. Evaporation Pond | 26. Sewage Trough | 32. Asphalt Pit | 38. Neutralization Tank | |
| 7. Burn Pit | 14. Evaporation Pond | | | | | |



Applied Earth Sciences		GIANT REFINERY Gallup, New Mexico	SITE MAP	1
FILE NO. 5202	MADE BY: R.G. DATE: 5-15-87 CHECKED BY: DATE:			

