

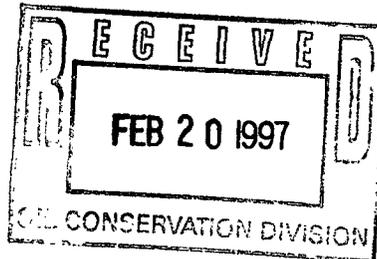
GW - 5

**INSPECTIONS &
DATA**



WARREN PETROLEUM COMPANY,
Limited Partnership
An NGC Company

Mr. P. W. Sanchez
Petroleum Engineer
Oil Conservation Division
Santa Fe, NM



February 17, 1997

RE: Renewal Inspection
Discharge Plan GW-005
Eunice Gas Plant

Dear Sir:

Please find attached the analytical results on the liquid and sludge contained in a septic tank at the Warren Petroleum Co., Eunice Facility. Warren Petroleum contracted Safety & Environmental Solutions Inc. of Hobbs, NM to conduct the sampling on December 20, 1996. The sampling technician for SES Inc. was Mr. Dyke A. Browning, who was accompanied by Mr. Cal Wrangham, Compliance Coordinator for Warren Petroleum. Mr. Wayne Price, representing NMOCD, was present at the initial meeting to discuss sampling procedures, protocol, and goals of the work to be accomplished.

Given the laboratory results we plan no further actions.

Please contact Cal Wrangham (505) 393-2823 with any questions.

cc. Mr. Wayne Price with attachment
Environmental Engineer
Oil Conservation Engineer
Hobbs, NM

RECEIVED

FEB 24 1997

Environmental Bureau
Oil Conservation Division

Bill Hobbs
Warren Petroleum Co. L.P.
Facility Superintendent
Eunice, NM



Safety & Environmental

Solutions, Inc.

Septic System Sampling and Analytical Results

Warren Petroleum Company
Eunice Plant

RECEIVED

FEB 24 1997

Environmental Bureau
Oil Conservation Division

Safety & Environmental Solutions, Inc.

February 17, 1997

1 of 4

Attention: Cal Wrangham
Warren Petroleum Company
P.O. Box 1909
Eunice, NM 88231

On December 20, 1996, Warren Petroleum Company enlisted the services of Safety & Environmental Solutions, Inc. to provide consulting and sampling services for the Eunice plant. The sampling technician for SES, Inc. was Dyke A. Browning, who was accompanied by Mr. Cal Wrangham, compliance coordinator for Warren. Mr. Wayne Price, representing the NMOCD, was present at the initial meeting to discuss sampling procedures, protocol, and goals of the work to be accomplished this day.

A polyethylene coliwasa was utilized to sample the septic tank east of the office in the plant yard. A composite sample was taken of both:

- (1) The fluid present in the top 1/3 of the septic tank
- (2) The sludge settled at the bottom of the septic tank

1. Decontamination of the sampling apparatus was not necessary, as both samples came from the same vessel and cross-contamination can be assumed to have already occurred. Two (2) one liter samples of both the fluid and the sludge were collected, (each sample consisting of numerous grabs with the coliwasa to obtain the necessary zero headspace in one-liter containers of sample). Two (2) two ounce samples of water were also collected from the top of the tank in PAH vial for the appropriate storage of sample for these tests. The samples were sealed, placed on ice for transport to the laboratory, and the necessary chain of custody paperwork was completed. The samples were transported to a third party laboratory within two (2) hours. Third party laboratory tests were requested for :

Sludge Sample(s)

- (1) TCLP semi-volatiles
- (2) TCLP volatiles

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2 of 4

Water Sample(s)

(1) 20 NMAC 6.2.3103 parameters (WQCC Groundwater standards)
(All constituents were analyzed for with the exception of pesticides, herbicides, and radioactives.)

The radioactives, pesticides, and herbicides were excluded from testing on the basis of knowledge of process. There is no indication that any of these materials have ever been present or utilized at the facility.

As can be seen from the attached water analyses, the samples were below EPA limits (and most were below detectable limits) on every constituent in the water quality standards with the following exceptions:

Analyte	Result (mg/L)	Explanation
(1) methylene chloride	0.006	This analyte was also detected in the blank
(2) chlorobenzene	0.005	No limit given in the WQCC standards - no information could be found which indicated chlorobenzene at this level was hazardous in any way. The OSHA PEL for material is 75 ppm.
(3) 1,4 dichlorobenzene	0.038	No limit given in the WQCC standards - no information could be found which indicated 1,4 dichlorobenzene at this level was hazardous in any way. The OSHA PEL for material is 50 ppm.

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3 of 4

Analyte	Result (ppm)	Explanation
(4) Di-n-butylphthalate	0.014	No limit given in the WQCC standards - no information could be found which indicated Di-n-butylphthalate at this level was hazardous in any way. The phthalate compounds are routinely present in any aqueous solution which has been in contact with "plastic" containers.
(5) bisphthalate	0.003	This analyte was detected in the blank in higher concentration than in the sample. No limit was given in WQCC standards for this material.
(6) Iron	37.4	Concentrations of iron in this range are to be expected in water stored in a mild steel underground septic tank.

The attached sludge analyses for TCLP volatiles and semivolatiles show results well below the EPA limits for every analyte.

Enclosed for your convenience please find copies of the earlier TCLP metals and RCRA characteristic testing done at the same site. Per NMOCD request, the laboratory waste is now being segregated and disposed of as hazardous waste by a contractor. Also enclosed are photographs depicting the new laboratory waste disposal area, and photographs depicting the most recent sample collection efforts at the site.

Given the laboratory results of the effluent contained in the septic system, and knowledge of process of the system leading into the septic system (which specifies that no waste other than normal human bathroom waste will enter the septic tank), we propose that no further action is necessary at this time.

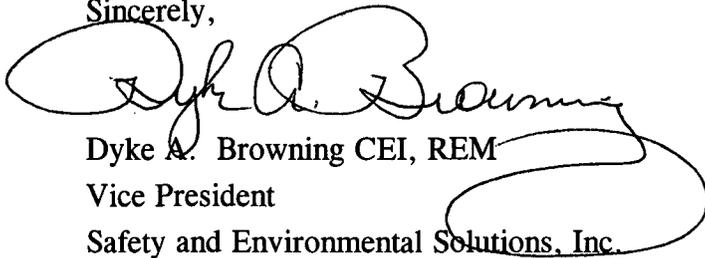
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If there are any questions as to sampling techniques, chain of custody integrity, transport of samples, preservation of samples, or any other relevant concern, please contact Safety & Environmental Solutions, Inc.

Thank you for the opportunity to serve your environmental and compliance needs.

Sincerely,



Dyke A. Browning
Vice President
Safety and Environmental Solutions, Inc.



ARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

PHONE (806) 796-2800 • 5262 34th ST. • LUBBOCK, TX 79407

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: DYKE BEROWNING
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 12/20/96
Reporting Date: 12/23/96
Project Number: NOT GIVEN
Project Name: SEPTIC SYSTEM
Project Location: WARREN PETROLEUM, EUNICE, NM
Lab Number: H2740-1
Sample ID: SLUDGE

Analysis Date: 12/22/96
Sampling Date: 12/20/96
Sample Type: SLUDGE
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC

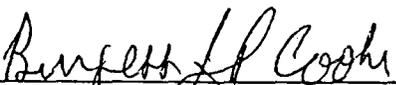
TCLP SEMIVOLATILES (ppm)	EPA LIMIT	Sample Result H2740-1	Method Blank	QC	True Value	
					%IA	QC
Pyridine	5.00	<0.005	<0.005	0.051	102	0.050
1,4-Dichlorobenzene	7.50	*	<0.005	0.049	98	0.050
o-Cresol	200	<0.005	<0.005	0.057	114	0.050
m, p-Cresol	200	<0.005	<0.005	0.058	116	0.050
Hexachloroethane	3.00	<0.005	<0.005	0.047	94	0.050
Nitrobenzene	2.00	<0.005	<0.005	0.054	108	0.050
Hexachloro-1,3-butadiene	0.500	<0.005	<0.005	0.046	92	0.050
2,4,6-Trichlorophenol	2.00	<0.005	<0.005	0.048	96	0.050
2,4,5-Trichlorophenol	400	<0.005	<0.005	0.050	100	0.050
2,4-Dinitrotoluene	0.130	<0.005	<0.005	0.058	116	0.050
Hexachlorobenzene	0.130	<0.005	<0.005	0.046	92	0.050
Pentachlorophenol	100	<0.005	<0.005	0.051	102	0.050

% RECOVERY

Fluorophenol	40
Phenol-d5	23
Nitrobenzene-d5	68
2-Fluorobiphenyl	85
2,4,6-Tribromophenol	40
Terphenyl-d14	82

METHODS: EPA SW 846-8270

*Reported on TCLP Volatile analysis.


Burgess J. A. Cooke, Ph. D.

12/23/96
Date



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ANALYTICAL RESULTS FOR
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
 ATTN: DYKE BROWNING
 703 E. CLINTON, SUITE 103
 HOBBS, NM 88240
 FAX TO:

Receiving Date: 12/20/96
 Reporting Date: 12/23/96
 Project Number: NOT GIVEN
 Project Name: SEPTIC SYSTEM
 Project Location: WARREN PETROLEUM, EUNICE, NM
 Lab Number: H2740-1
 Sample ID: SLUDGE

Analysis Date: 12/21/96
 Sampling Date: 12/20/96
 Sample Type: SLUDGE
 Sample Condition: COOL & INTACT
 Sample Received By: GP
 Analyzed By: BC

TCLP VOLATILES (ppm)	EPA LIMIT	Sample Result H2740-1	Method Blank	QC	True Value	
					%IA	QC
Vinyl Chloride	0.20	<0.005	<0.005	0.119	119	0.100
1,1-Dichloroethylene	0.7	<0.005	<0.005	0.106	106	0.100
Methyl Ethyl Ketone	200	<0.005	<0.005	0.087	87	0.100
Chloroform	6.0	<0.005	<0.005	0.080	80	0.100
1,2-Dichloroethane	0.5	<0.005	<0.005	0.098	98	0.100
Benzene	0.5	<0.005	<0.005	0.099	99	0.100
Carbon Tetrachloride	0.5	<0.005	<0.005	0.098	98	0.100
Trichloroethylene	0.5	<0.005	<0.005	0.097	97	0.100
Tetrachloroethylene	0.7	<0.005	<0.005	0.093	93	0.100
Chlorobenzene	100	0.043	<0.005	0.100	100	0.100
1,4-Dichlorobenzene	7.5	0.702	<0.005	0.091	91	0.100

% RECOVERY

Dibromofluoromethane	71
Toluene-d8	85
Bromofluorobenzene	108

METHODS: EPA SW 846-8260


 Burgess J. A. Cooke, Ph. D.

12/23/96
 Date



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ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: DYKE BROWNING
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 12/20/96
Reporting Date: 12/24/96
Project Number: NOT GIVEN
Project Name: SEPTIC SYSTEM
Project Location: WARREN PETROLEUM, EUNICE, NM
Sample ID: WATER
Lab Number: H2740-2

Analysis Date: 12/20/96
Sampling Date: 12/20/96
Sample Type: LIQUID
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC

VOLATILES - 8260/624 (mg/L) Sample Result H2740-2 Method Blank QC True Value %IA QC

	VOLATILES - 8260/624 (mg/L)	Sample Result H2740-2	Method Blank	QC	True Value %IA	QC
1	Dichlorodifluoromethane	<0.002	<0.002	0.111	111	0.100
2	Chloromethane	<0.002	<0.002	0.109	109	0.100
3	Vinyl chloride	<0.002	<0.002	0.106	106	0.100
4	Bromomethane	<0.002	<0.002	0.112	112	0.100
5	Acrolein	<0.050	<0.050	NR	NR	NR
6	Acrylonitrile	<0.050	<0.050	NR	NR	NR
7	1,1-Dichloroethene	<0.002	<0.002	0.098	98	0.100
8	Trichlorofluoromethane	<0.002	<0.002	0.113	113	0.100
9	Methylene chloride	0.006*	0.011	0.105	105	0.100
10	trans-1,2-Dichloroethene	<0.002	<0.002	0.112	112	0.100
11	1,1-Dichloroethane	<0.002	<0.002	0.097	97	0.100
12	cis-1,2-Dichloroethene	<0.002	<0.002	0.107	107	0.100
13	2,2-Dichloropropane	<0.002	<0.002	0.082	82	0.100
14	Chloroform	<0.002	<0.002	0.091	91	0.100
15	1,1,1-Trichloroethane	<0.002	<0.002	0.100	100	0.100
16	1,2-Dichloroethane	<0.002	<0.002	0.106	106	0.100
17	1,1-Dichloropropene	<0.002	<0.002	0.099	99	0.100
18	Benzene	<0.002	<0.002	0.102	102	0.100
19	Carbon tetrachloride	<0.002	<0.002	0.104	104	0.100
20	Trichloroethene	<0.002	<0.002	0.104	104	0.100
21	Bromodichloromethane	<0.002	<0.002	0.102	102	0.100
22	trans-1,3-Dichloropropene	<0.002	<0.002	0.109	109	0.100
23	cis-1,3-Dichloropropene	<0.002	<0.002	0.099	99	0.100
24	Toluene	0.003	<0.002	0.110	110	0.100
25	1,1,2-Trichloroethane	<0.002	<0.002	0.112	112	0.100
26	1,2-Dibromoethane	<0.0001	<0.0001	0.114	114	0.100
27	Tetrachloroethene	<0.002	<0.002	0.112	112	0.100
28	Chlorobenzene	0.005	<0.002	0.110	110	0.100
29	Ethylbenzene	<0.002	<0.002	0.109	109	0.100
30	m, p - Xylene	0.004	<0.004	0.216	108	0.200
31	Bromoform	<0.002	<0.002	0.117	117	0.100

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by clients, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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PHONE (806) 796-2800 • 5262 34th ST. • LUBBOCK, TX 79407

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: DYKE BROWNING
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 12/20/96
Reporting Date: 12/24/96
Project Number: NOT GIVEN
Project Name: SEPTIC SYSTEM
Project Location: WARREN PETROLEUM, EUNICE, NM
Sample ID: WATER
Lab Number: H2740-2

Analysis Date: 12/20/96
Sampling Date: 12/20/96
Sample Type: LIQUID
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC

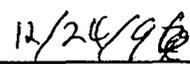
VOLATILES - 8260/624 (mg/L)	Sample Result H2740-2	Method Blank	QC	True Value	
				%IA	QC
32 o-Xylene	0.002	<0.002	0.109	109	0.100
33 1,3-Dichlorobenzene	<0.002	<0.002	0.101	101	0.100
34 1,4 Dichlorobenzene	0.038	<0.002	0.102	102	0.100
35 1,2-Dichlorobenzene	<0.002	<0.002	0.102	102	0.100

% Recovery	
36 Dibromofluoromethane	112
37 Toluene-D8	110
38 4-Bromofluorobenzene	114

METHODS: EPA 624, SW-846 8260

*this analyte also detected in the blank in comparable amounts.


Burgess J. A. Cooke, Ph. D.


Date



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ATTN: DYKE BROWNING
703 E. CLINTON, SUITE 103

Receiving Date: 12/20/96

Reporting Date: 12/24/96

Project Number: NOT GIVEN

Project Name: SEPTIC SYSTEM

Project Location: WARREN PETROLEUM, EUNICE, NM

Sample ID: WATER

Lab Number: H2740-2

HOBBS, NM 88240

FAX TO:

Analysis Date: 12/22/96

Sampling Date: 12/20/96

Sample Type: WATER

Sample Condition: COOL & INTACT

Sample Received By: GP

Analyzed By: BC

	SEMIVOLATILES - 625/8270 (mg/L)	Sample Result H2740-2	Method			True Value	
			Blank	QC	%IA	QC	
1	n-Nitrosodimethylamine	<0.002	<0.002	0.043	86	0.050	
2	Phenol	<0.002	<0.002	0.048	96	0.050	
3	bis (2-Chloroethyl) ether	<0.002	<0.002	0.053	106	0.050	
4	2-Chlorophenol	<0.002	<0.002	0.045	90	0.050	
5	1,4-Dichlorobenzene	0.020	<0.002	0.045	90	0.050	
6	1,3-Dichlorobenzene	<0.002	<0.002	0.047	94	0.050	
7	1,2-Dichlorobenzene	<0.002	<0.002	0.046	92	0.050	
8	2-Methylphenol	<0.002	<0.002	0.050	100	0.050	
9	bis (2-Chloroisopropyl) ether	<0.002	<0.002	0.046	92	0.050	
10	4-Methylphenol	<0.002	<0.002	0.056	112	0.050	
11	n-Nitroso-di-n-propylamine	<0.002	<0.002	0.044	88	0.050	
12	Hexachloroethane	<0.002	<0.002	0.042	84	0.050	
13	Nitrobenzene	<0.002	<0.002	0.044	88	0.050	
14	n-Nitrosopiperidine	<0.002	<0.002	0.048	96	0.050	
15	Isophorone	<0.002	<0.002	0.047	94	0.050	
16	2-Nitrophenol	<0.002	<0.002	0.051	102	0.050	
17	2,4-Dimethylphenol	<0.002	<0.002	0.050	100	0.050	
18	bis (2-Chloroethoxy) methane	<0.002	<0.002	0.055	110	0.050	
19	2,4-Dichlorophenol	<0.002	<0.002	0.053	106	0.050	
20	Naphthalene	<0.002	<0.002	0.044	88	0.050	
21	2,6-Dichlorophenol	<0.002	<0.002	0.054	108	0.050	
22	Hexachlorobutadiene	<0.002	<0.002	0.043	86	0.050	
23	n-Nitroso-di-n-butylamine	<0.002	<0.002	0.051	102	0.050	
24	4-Chloro-3-methylphenol	<0.002	<0.002	0.053	106	0.050	
25	1- & 2-Methylnaphthalene	<0.002	<0.002	0.048	96	0.050	
26	1,2,4,5-Tetrachlorobenzene	<0.002	<0.002	0.047	94	0.050	
27	Hexachlorocyclopentadiene	<0.002	<0.002	0.044	88	0.050	
28	2,4,6-Trichlorophenol	<0.002	<0.002	0.044	88	0.050	
29	2,4,5-Trichlorophenol	<0.002	<0.002	0.046	92	0.050	
30	Dimethylphthalate	<0.002	<0.002	0.050	100	0.050	
31	2,4-Dinitrophenol	<0.002	<0.002	0.051	102	0.050	
32	Pentachlorobenzene	<0.002	<0.002	0.042	84	0.050	
33	4-Nitrophenol	<0.002	<0.002	0.044	88	0.050	
34	2,4-Dinitrotoluene	<0.002	<0.002	0.055	110	0.050	
35	2,3,4,6-Tetrachlorophenol	<0.002	<0.002	0.048	96	0.050	
36	Fluorene	<0.002	<0.002	0.051	102	0.050	

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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ANALYTICAL RESULTS FOR
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC
 ATTN: DYKE BROWNING
 703 E. CLINTON, SUITE 103
 HOBBS, NM 88240
 FAX TO:

Receiving Date: 12/20/96
 Reporting Date: 12/24/96
 Project Number: NOT GIVEN
 Project Name: SEPTIC SYSTEM
 Project Location: WARREN PETROLEUM, EUNICE, NM
 Sample ID: WATER
 Lab Number: H2740-2

Analysis Date: 12/22/96
 Sampling Date: 12/20/96
 Sample Type: WATER
 Sample Condition: COOL & INTACT
 Sample Received By: GP
 Analyzed By: BC

SEMIVOLATILES - 625/8270 (mg/L)	Sample Result H2740-2	Method Blank	QC	True Value	
				%IA	QC
37 Diethylphthalate	<0.002	<0.002	0.051	102	0.050
38 4,6-Dinitro-2-methylphenol	<0.002	<0.002	0.059	118	0.050
39 n-Nitrosodiphenylamine	<0.002	<0.002	0.054	108	0.050
40 Diphenylhydrazine	<0.002	<0.002	0.053	106	0.050
41 Hexachlorobenzene	<0.002	<0.002	0.049	98	0.050
42 Pentachlorophenol	<0.002	<0.002	0.045	90	0.050
43 Phenanthrene	<0.002	<0.002	0.053	106	0.050
44 Anthracene	<0.002	<0.002	0.050	100	0.050
45 Di-n-butylphthalate	0.014	<0.002	0.051	102	0.050
46 Fluoranthene	<0.002	<0.002	0.048	96	0.050
47 Benzidine	<0.002	<0.002	0.049	98	0.050
48 Pyrene	<0.002	<0.002	0.041	82	0.050
49 3,3'-Dichlorobenzidine	<0.002	<0.002	0.047	94	0.050
50 Chrysene	<0.002	<0.002	0.045	90	0.050
51 bis (2-Ethylhexyl) phthalate	0.003*	0.012	0.043	86	0.050
52 Di-n-octylphthalate	<0.002	<0.002	0.053	106	0.050
53 Benzo [b] fluoranthene	<0.002	<0.002	0.057	114	0.050
54 Benzo [k] fluoranthene	<0.002	<0.002	0.054	108	0.050
55 Benzo [a] pyrene	<0.0007	<0.0007	0.050	100	0.050
56 Arochlor 1016 (PCB)	<0.001	<0.001	NR	NR	NR
57 Arochlor 1221 (PCB)	<0.001	<0.001	NR	NR	NR
58 Arochlor 1232 (PCB)	<0.001	<0.001	NR	NR	NR
59 Arochlor 1242 (PCB)	<0.001	<0.001	NR	NR	NR
60 Arochlor 1248 (PCB)	<0.001	<0.001	NR	NR	NR
61 Arochlor 1254 (PCB)	<0.001	<0.001	NR	NR	NR
62 Arochlor 1260 (PCB)	<0.001	<0.001	NR	NR	NR

*This analyte also detected in the blank.



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

PHONE (806) 796-2800 • 5262 34th ST. • LUBBOCK, TX 79407

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC

ATTN: DYKE BROWNING
703 E. CLINTON, SUITE 103

HOBBS, NM 88240

FAX TO:

Receiving Date: 12/20/96

Reporting Date: 12/24/96

Project Number: NOT GIVEN

Project Name: SEPTIC SYSTEM

Project Location: WARREN PETROLEUM, EUNICE, NM

Sample ID: WATER

Lab Number: H2740-2

Analysis Date: 12/22/96

Sampling Date: 12/20/96

Sample Type: WATER

Sample Condition: COOL & INTACT

Sample Received By: GP

Analyzed By: BC

SEMIVOLATILES - 625/8270 (mg/L)	Sample Result H2740-2	Method Blank	True Value		
			QC	%IA	QC

	% Recovery
63 2-Fluorophenol	21
64 Phenol-d5	14
65 Nitrobenzene-d5	45
66 2-Fluorobiphenyl	58
67 2,4,6-Tribromophenol	23
68 Terphenyl-d14	104

METHODS: EPA 625, SW-846 8270

Burgess A. Cooke
Burgess J. A. Cooke, Ph. D.

12/24/96
Date

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ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: DYKE BROWNING
703 E. CLINTON, SUITE 103
HOBBS, NM 88240

Receiving Date: 12/20/96
Reporting Date: 01/07/97
Project Number: NOT GIVEN
Project Name: SEPTIC SYSTEM
Project Location: WARREN PETROLEUM, EUNICE, NM

FAX TO:

Sampling Date: 12/20/96
Sample Type: LIQUID
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: WL

TOTAL METALS

LAB NUMBER SAMPLE ID	Al (ppm)	Cu (ppm)	B (ppm)	Mn (ppm)	Fe (ppm)
ANALYSIS DATE:	12/23/96	12/21/96	12/27/96	12/21/96	12/23/96
H2740-2 WATER	3.67	<0.1	0.13	0.20	37.4
Quality Control	9.89	0.507	5.250	0.506	5.23
True Value QC	10.00	0.500	5.000	0.500	5.00
% Accuracy	98.9	101	105	101	105
Relative Percent Difference	7.8	4.8	0	4.4	0.4

METHODS: EPA 600/4-79-020	202.1	220.1	200.7	243.1	236.1
---------------------------	-------	-------	-------	-------	-------

	Zn (ppm)	Co (ppm)	Mo (ppm)	Ni (ppm)	CN (ppm)
ANALYSIS DATE:	12/21/96	12/27/96	12/27/96	12/23/96	1/6/97
H2740-2 WATER	1.9	<0.05	<0.05	<0.5	<0.1
Quality Control	0.532	5.100	5.300	1.004	NR
True Value QC	0.500	5.000	5.000	1.000	NR
% Accuracy	106	102	106	100	NR
Relative Percent Difference	4.4	1	1	0.8	NR

METHODS: EPA 600/4-79-020	289.1	200.7	200.7	249.1	335.2
---------------------------	-------	-------	-------	-------	-------

Wei Li
Wei Li, Chemist

1-7-97
Date



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PHONE (806) 796-2800 • 5262 34th ST. • LUBBOCK, TX 79407

ANALYTICAL RESULTS FOR
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC
 ATTN: DYKE BROWNING
 703 E. CLINTON
 HOBBS, NM 88240
 FAX TO:

Receiving Date: 12/20/96
 Reporting Date: 12/23/96
 Project Number: NOT GIVEN
 Project Name: SEPTIC SYSTEM
 Project Location: WARREN PETROLEUM, EUNICE, NM

Sampling Date: 12/20/96
 Sample Type: WASTEWATER
 Sample Condition: COOL & INTACT
 Sample Received By: GP
 Analyzed By: GP

LAB NUMBER SAMPLE ID	Cl ⁻ (mg/L)	SO ₄ (mg/L)	pH (s.u.)	TDS (mg/L)	Conductivity (umhos/cm)	Hardness (mg/L as CaCO ₃)
ANALYSIS DATE:	12/20/96	12/20/96	12/20/96	12/20/96	12/20/96	12/20/96
H2740-2 WATER	168	29	8.15	608	1626	244
Quality Control	496	98.0	7.02	NR	1422	NR
True Value QC	500	100	7.00	NR	1413	NR
% Accuracy	99.2	98.0	100	NR	101	NR
Relative Percent Difference	2.0	2	0.4	6.8	2	NR

METHODS:	SM4500-Cl-B	375.4	150.1	160.1	120.1	130.2
----------	-------------	-------	-------	-------	-------	-------

	NO ₃ -N (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	Na (mg/L)	Ca (mg/L)	Mg (mg/L)
ANALYSIS DATE:	12/20/96	12/20/96	12/20/96	12/20/96	12/20/96	12/20/96
H2740-2 WATER	1.75	0	752	287	54	26
Quality Control	5.20	NR	NR	NR	NR	NR
True Value QC	5.00	NR	NR	NR	NR	NR
% Accuracy	104	NR	NR	NR	NR	NR
Relative Percent Difference	3.8	NR	NR	NR	NR	NR

METHODS:	353.3	310.1	310.1	273.1	M3500-Ca-D	M3500-Mg E
----------	-------	-------	-------	-------	------------	------------

Dyke Browning
 Chemist

12/23/96
 Date

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PHONE (806) 796-2800 • 6262 34th ST. • LUBBOCK, TX 79407

ANALYTICAL RESULTS FOR
 SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
 ATTN: DYKE BROWNING
 703 E. CLINTON, SUITE 103
 HOBBS, NM 88240
 FAX TO: 505-393-4388

Receiving Date: 09/23/96
 Reporting Date: 10/02/96
 Project Number: WARREN PETROLEUM
 Project Name: SEPTIC TANK
 Project Location: EUNICE, NM

Sampling Date: 09/23/96
 Sample Type: LIQUID
 Sample Condition: COOL & INTACT
 Sample Received By: BC
 Analyzed By: WL

TCLP METALS

LAB NUMBER SAMPLE ID As Ag Ba Cd Cr Pb Hg Se
 ppm ppm ppm ppm ppm ppm ppm ppm ppm

ANALYSIS DATE:	9/27/96	9/25/96	9/26/96	9/26/96	9/25/96	9/25/96	9/25/96	9/27/96
EPA LIMITS:	5	5	100	1	5	5	0.2	1
H2655-1 SLUDGE	<0.1	<0.1	<5	<0.1	<0.5	<1	<0.002	<0.1
H2655-2 WATER	<0.1	<0.1	<5	<0.1	<0.5	<1	<0.002	<0.1
Quality Control	9.3	0.504	4.77	0.54	2.125	0.99	102.1	44.3
True Value QC	10.0	0.500	5.00	0.50	2.000	1.00	100.0	50.0
% Accuracy	93	100.8	95.4	108	106.3	99	102.1	88.6
Relative Percent Difference	5.4	0.7	3.4	0.1	0.7	1.0	7.7	3.8

METHODS: EPA 1311, 600/4-91/	200.7	200.7	200.7	200.7	200.7	200.7	245.1	200.7
------------------------------	-------	-------	-------	-------	-------	-------	-------	-------

Wei Li
 Wei Li, Chemist

10-2-96
 Date

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**ARDINAL
LABORATORIES**

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

PHONE (505) 328-4869 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

PHONE (806) 796-2800 • 5262 34th ST. • LUBBOCK, TX 79407

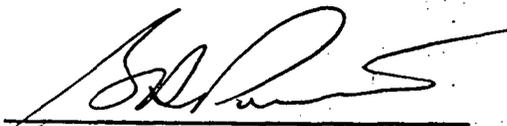
ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: DYKE BROWNING
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO: 505-393-4388

Receiving Date: 09/23/96
Reporting Date: 10/07/96
Project Number: WARREN PETROLEUM
Project Name: SEPTIC TANK
Project Location: EUNICE, NM 88240

Sampling Date: 09/23/96
Sample Type: LIQUID
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By:

LAB NUMBER	SAMPLE ID	REACTIVITY			
		Sulfide (ppm)	Cyanide (ppm)	CORROSIVITY (pH)	IGNITABILITY (°F)
ANALYSIS DATE:		9/26/96	9/26/96	10/4/96	10/4/96
H2655-1	SLUDGE	<50	<50	7.52	>140
H2655-2	WATER	<50	<50	7.45	>140
Quality Control		NR	NR		NR
True Value QC		NR	NR		NR
% Accuracy		NR	NR		NR
Relative Percent Difference		NR	NR		NR

METHOD: EPA SW 846-7.3, 7.2, 1010


Chemist

10/7/96
Date

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Safety & Environmental Solutions, Inc.

703 E. Clinton, Suite 103, Hobbs, New Mexico 88240
 (505)397-0510

CLAIM-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Name:

DYKE BREWING

Phone #: 397-0510

FAX #: 393-4388

ANALYSIS REQUEST

Company Name & Address:

Safety & Environmental Solutions, Inc.

Project #:

Women Petroleum -

Project Name:

Septic Tank

Project Location:

Eunice, NM

Sampler Signature:

[Signature]

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX					PRESERVATIVE METHOD	SAMPLING DATE	TIME
				WATER	SOIL	AIR	SLUDGE	OTHER			
①	H2655	1	1 qt				X			9/23	1:10
②		1	1 qt				X			9/23	1:10
③		1	1 qt				X			9/23	1:10

BTEX 8020/5030	
TPH 418.1	
TCLP Metals Ag As Ba Cd Cr Pb Hg Se	X
Total Metals Ag As Ba Cd Cr Pb Hg Se	X
TCLP Volatiles	
TCLP Semi Volatiles	
TDS	
RCI	X

LAB #	FIELD CODE	# CONTAINERS	Volume/Amount	WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER	DATE	TIME
①	H2655	1	1 qt				X							9/23	1:10
②		1	1 qt				X							9/23	1:10
③		1	1 qt				X							9/23	1:10

Relinquished by:

[Signature]

Date:

9/23/96

Time:

1:13

Received by:

[Signature]

REMARKS

Date:

Time:

Received by:

Relinquished by:

Date:

Time:

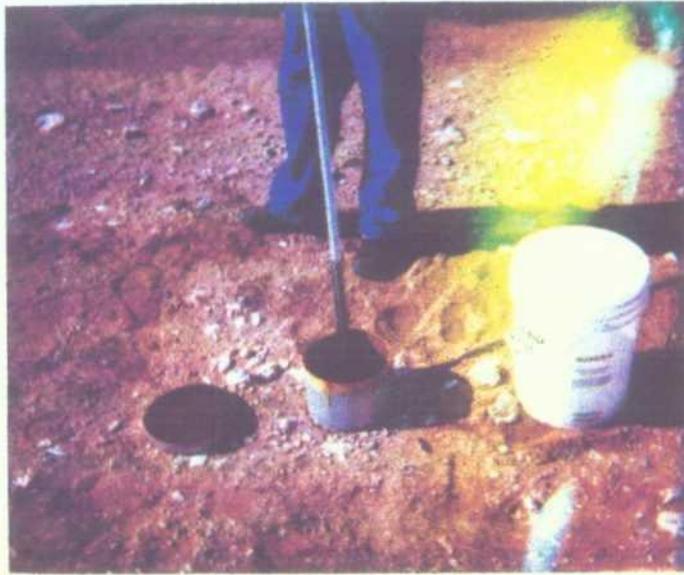
Received by Laboratory:



Sludge Sample Collection From Septic Tank Opening



Collected Water Samples from Septic Tank



Coliwasa Sampling from Septic Tank Opening



Water Sample Collection from Septic Tank



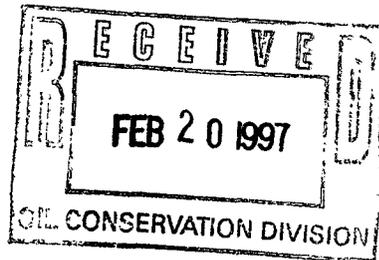
Laboratory Waste Collection Site
with Secondary Containment



WARREN PETROLEUM COMPANY,
Limited Partnership
An NGC Company

February 11, 1997

Mr. P. W. Sanchez
Petroleum Engineer
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505



RE: Renewal Inspection
Discharge Plan GW-005
Eunice Gas Plant

RECEIVED
FEB 21 1997

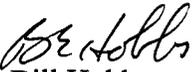
Environmental Bureau
Oil Conservation Division

Dear Sir,

The open drain system testing at the Warren Petroleum, Eunice Plant was completed on 02/07/97. The attached sheet demonstrates the section breakdowns, test pressures, and the test duration that were used to complete the testing. No leaks were discovered on the entire system.

If you have any questions, please call me at (505) 394-2534 ext 26

Sincerely,


Bill Hobbs
Plant Superintendent

cc: Mr. Wayne Price w/attachment
Environmental Engineer
Oil Conservation Division
Hobbs, NM

Plant file: VI.H.

MEMORANDUM

TO: EUNICE PLANT EMPLOYEES

FROM: MITCH TYREE

DATE: FEBRUARY 10, 1997

SUBJECT: OPEN DRAIN TEST
EUNICE PLANT



RED Cooling tower line and skimmer basin to disposal well area.
⇒ Tested at 20 PSI for 30 minutes - 01/28/97

BLUE Boiler line, water treater line, sump pit and vacuum condenser area.
⇒ Tested at 5 PSI for 30 minutes - 01/29/97.

GREEN Cryo skid area
⇒ Tested at 5 PSI for 30 minutes - 02/03/97

ORANGE Central section of main including #17 & #18 engines, pipe line
pump area and vapor recovery to open pit.
⇒ Tested at 5 PSI for 30 minutes - 02/04/97

LT. BLUE Engines #1 through #4, starting air tanks and jacket water pumps.
⇒ Tested at 5 PSI for 30 minutes - 02/05/97

LIME Engines #5 through #7.
⇒ Tested at 5 PSI for 30 minutes - 02/06/97

TAN Engines #8 through #15, main including #20 through #22,
amine pump room, fuel scrubbers, MEA contactors, water treater
area and starting air building.
⇒ Tested at 5 PSI for 30 minutes - 02/07/97

cc: plant file VI.H.

Pat Sanchez

From: Wayne Price
Sent: Tuesday, January 14, 1997 2:05 PM
To: Pat Sanchez
Cc: Jerry Sexton
Subject: Warren-Eunice GW-5 Sump (pit) sludge disposal
Importance: High

Re: Memorandum of Conversation with Mr. Wayne Banks- Warren.

Mr. Banks requested information on disposing of co-mingled exempt and non-exempt waste sludge from a pit located on site. The DP was reviewed and this waste has not been classified.

Therefore Warren is to make a hazardous waste determination by sampling this material using EPA SW-846 methods and running a full TCLP & RCI.

If non-hazardous they propose to dispose of this material at Parabo, an NMOCD permitted facility. This will require the C-138 process.

cc: Wayne Banks-Warren Pet. Co.
P.O. Box 67
Monument, NM 88265
393-2823

Pat Sanchez

From: Wayne Price
Sent: Friday, December 20, 1996 1:47 PM
To: Pat Sanchez
Cc: Jerry Sexton
Subject: RE: Warren-Eunice GW-005 Lab septic sampling
Importance: High

From: Wayne Price
To: Pat Sanchez
Cc: Jerry Sexton
Subject: Warren-Eunice GW-005 Lab septic sampling
Date: Friday, December 20, 1996 1:34PM
Priority: High

Field Report:
present: Cal Wrangham, Bill Hobbs- Warren
Dyke Browning- SES
Wayne Price-NMOCD

* [Warren's consultant Dyke Browning of SES indicated that they had received verbal approval from you to waive certain WQCC constituents, such as radionuclides, herbicides, & pesticides. All others will be ran.]

Witnessed sample taken of the sump using a coliwasa. Observed the sample to be mostly dark water with suspended solids. The solid portion of sludge was observed to be approximately one inch out of three feet of sample.

Warren's consultant called the Lab to obtain extra sample jars in order to obtain enough sample of the sludge so as to be able run TCLP on that portion of it.

This will satisfy the requirements of the work plan on sampling both the sludge and water matrix.

Warren will take pictures:

Inspected new lab waste collection system.

* Not true - I said they could certify through process knowledge what constituents need to be looked at. We did discuss the 3 items above, but I indicated that they need to certify what the constituents of concern are. *WPS* 12-31-96.

Pat Sanchez

From: Wayne Price
Sent: Friday, December 20, 1996 1:34 PM
To: Pat Sanchez
Cc: Jerry Sexton
Subject: Warren-Eunice GW-005 Lab septic sampling
Importance: High

Field Report:

Warren's consultant Dyke Browning of SES indicated that they had received verbal approval from you to waive certain WQCC constituents, such as radionuclides, herbicides, & pesticides. All others will be ran.

Witnessed sample taken of the sump using a coliwasa. Observed the sample to be mostly dark water with suspended solids. The solid portion of sludge was observed to be approximately one inch out of three feet of sample.

Warren's consultant called the Lab to obtain extra sample jars in order to obtain enough sample of the sludge so as to be able run TCLP on that portion of it.

This will satisfy the requirements of the work plan on sampling both the sludge and water matrix.



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

April 22, 1996

OLD-File
COPY

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-963-137

Mr. Donnie E. Wallis
Environmental Specialist
Warren Petroleum Company
P.O. Box 1909
Eunice, NM 88231

RE: Renewal Inspection
Discharge Plan GW-005
Eunice Gas Plant

Dear Mr. Wallis:

The New Mexico Oil Conservation Division (OCD) has completed this inspection report as part of the permit renewal process for discharge plan GW-005. The following OCD staff members were present during the renewal inspection on Wednesday April 10, 1996 - Mr. Wayne Price and Mr. Patricio Sanchez. The purpose of this report is to provide Warren Petroleum Company with the information that is needed to ensure that the NMOCD can renew GW-005 on or before the expiration date of May 16, 1996. However, it will be Warren Petroleum Company's responsibility to provide the OCD with commitments and time lines that are approvable at least 10 working days before GW-005 expires.

- Warren Petroleum Company will submit a plan to pressure test all below grade lines to 3 psig above normal working pressure of the line - see OCD "Discharge Plan Guidelines, Revised 12-95" page 9. **The testing plan must be approved by the Santa Fe OCD office.** Also, all below grade sumps that do not have leak detection and secondary containment must be cleaned and inspected for integrity yearly - with written documentation kept at the facility so that OCD may view the inspection results at any time during a facility inspection. Any below grade sump or tank that is found not to have integrity shall be reported to the Santa Fe OCD office with a proposed corrective action plan to repair the sump or below grade tank and identify possible contamination.

Note: Any new sumps, below grade tanks, double lined evaporation ponds, or modifications to the discharge plan will be approved by the OCD Santa Fe office before installation or alteration of an approved permit condition or commitment - Please see the enclosed "Discharge Plan Guidelines, Revised 12-95" for other items that require OCD approval.

Mr. Donnie E. Wallis
Warren Petroleum Company
April 22, 1996
Page 2

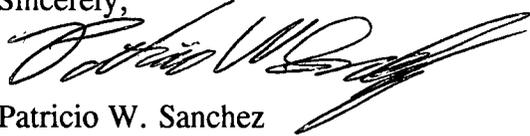
- It is the OCD's understanding that all solid waste that is generated at the facility is subject to a company "Waste Management Plan" that provides for waste characterization and disposal methods - Warren Petroleum Company shall verify that all the items covered in the "Waste Management Plan" cover the NMOCD Discharge Plan guidelines 12/95 requirements for waste disposal. Include the "Waste Management Plan" as part of the Discharge Plan Renewal.
- Warren Petroleum must also ensure that current spill reporting and corrective action measures fall in line with WQCC 1203 and NMOCD Rule 116 requirements. All reportable spills are to be reported within 24 hours to the Hobbs District office at (505)-393-6161.
- A work plan to address the Class V well at the facility that was connected to the lab sink needs to be proposed by Warren Petroleum Company - The plan shall address the nature of the sludge in the septic as well as the leech line drainage area, and vertical extent of possible contamination so that WQCC Groundwater Standards will not be exceeded. Lab waste can no longer be disposed of in the septic - and Warren needs to identify an alternate disposal method. **Note:** If the sludge and leech line drainage area test Hazardous per TCLP and RIC, or contain listed Hazardous Waste - Warren Petroleum Company will contact the New Mexico Environment Department, Hazardous and Radioactive Materials Bureau at (505)- 827-1558 for guidance.
- The chemicals in the lab area should be listed, and any that are not needed should be removed from the facility.
- See Photo No. 9 - Landfarm area.
The records that the OCD has in permit GW-005 do not indicate OCD approval of the remediation area. The OCD has not received any treatment zone monitoring information or approved of any contaminated soil spreading at the cell area. Warren shall refer to the OCD "Landfarm Guideline" and propose a discharge plan modification to allow the continued use of the remediation area. The modification proposal will include operating and monitoring procedures as outlined in the OCD "Landfarm Guideline."
- The Chemical storage area at the boiler feed needs to have an impermeable pad placed under it - see photo No. 3.
- Warren Petroleum needs to certify that all wastes that are injected into the Class II disposal well are exempt from RCRA Subtitle C regulations.

Mr. Donnie E. Wallis
Warren Petroleum Company
April 22, 1996
Page 3

- The floor drains in the old turbine warehouse need to capped.
- Warren Petroleum has the option to submit actual work plans by June 15, 1996 but shall commit to these time lines in the renewal that will be submitted 10 working days before the permit expires on May 16, 1996.

If Warren Petroleum Company has any questions with regards to this inspection report feel free to contact the OCD (505)-827-7156.

Sincerely,



Patricio W. Sanchez
Petroleum Engineering Specialist

enclosure

xc: Mr. Wayne Price

**GUIDELINES FOR THE PREPARATION OF
DISCHARGE PLANS**

**AT NATURAL GAS PLANTS, REFINERIES,
COMPRESSOR AND CRUDE OIL PUMP STATIONS
(Revised 12-95)**

**OIL CONSERVATION DIVISION
2040 SOUTH PACHECO
SANTA FE, NEW MEXICO 87505
PHONE: 505-827-7131
FAX: 505-827-8177**

Introduction

The New Mexico Oil Conservation Division (OCD) regulates disposal of non-domestic wastes resulting from the activities at Natural Gas Plants, Refineries, Compressor and Crude Oil Pump Stations pursuant to authority granted in the New Mexico Oil and Gas Act and the Water Quality Act. OCD administers, through delegation by the New Mexico Water Quality Control Commission (WQCC), all Water Quality Act regulations pertaining to surface and ground water except sewage. However, if the sewage is in a combined waste stream, the OCD will have jurisdiction.

Sections 3104 and 3106 of the WQCC Regulations stipulate that, unless otherwise provided for by the regulations, no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into the ground water unless such discharge is pursuant to a discharge plan approved by the director. The Oil and Gas Act (Section 70-2-12.B(22)) authorizes the OCD to regulate the disposition of non-domestic, non-hazardous wastes at oil field facilities to protect public health and the environment. The OCD has combined these requirements into one document, (a "discharge plan") that will provide protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids.

A proposed discharge plan shall set forth in detail the methods or techniques the discharger proposes to use which will ensure compliance with WQCC regulations and the Oil and Gas Act. The proposed discharge plan must provide the technical staff and the director of the regulating agency (in this case, the OCD) with sufficient information about the operation to demonstrate that the discharger's activities will not cause state regulations or ground water standards (WQCC Section 3103) to be violated.

A facility having no intentional liquid discharges still is required to have a discharge plan. Inadvertent discharges of liquids (ie. leaks and spills, or any type of accidental discharge of contaminants) or improper disposal of waste solids still have a potential to cause ground water contamination or threaten public health and the environment. The discharge plan must address surface facility operations including storage pits, tankage and loading areas.

For new or proposed facilities, WQCC Regulation 3106.B. requires the submittal and approval of a discharge plan prior to the start of discharges. The regulation further specifies that "for good cause shown, the director may allow such a person to discharge without an approved discharge plan for a period not to exceed 120 days."

For existing facilities, WQCC Regulation 3106.A. provides for submittal of a ground water discharge plan within "120 days of receipt of written notice that a discharge plan is required, or such longer time as the director shall for good cause allow." Dischargers not having an approved discharge plan may continue discharging "without an approved discharge plan until 240

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days after written notification by the director that a discharge plan is required or such longer time as the director shall for good cause allow."

After a discharge application plan has been received, the OCD must publish a public notice pursuant to Section 3108 of the regulations, and allow 30 days for public comment before a discharge plan may be approved or otherwise resolved. If significant public interest is indicated, a public hearing will be held which will delay a decision on plan approval.

Once a plan has been approved, discharges must be consistent with the terms and conditions of the plan. Similarly, if there is any facility expansion or process change that would result in any significant modification of the approved discharge of water contaminants, the discharger is required to notify this agency, and have the modification approved prior to implementation. Approval of a discharge plan application by OCD will not relieve the operator of the necessity to become familiar with other applicable state and federal regulations, especially EPA's Hazardous Waste Regulations.

The review of a proposed discharge plan can require several months depending on complexity. This includes time for requests to the discharger for additional information and clarification, in-house information gathering and analysis, and field investigations of the discharge site, and a public notice and comment period. Review time will, to a large extent, be dependent on the extent to which a facility has generally self-contained processes to prevent movement of fluids and leaching of solids from the work area into the environment.

For example, the review process will be expedited when effluent, process or other fluids are routed to tanks, or double lined pits with underdrains for leak detection, when accurate monitoring of fluid volumes and pressure and/or integrity testing is performed for leak detection in below grade or underground tanks, and when the possibility of accidental spills and leaks is addressed by adequate contingency plans (e.g. containment by curbing and drainage to properly constructed sumps). Other examples allowing faster review include recycling of used lube oils, proper disposal of dried sludges to minimize potential ground water contamination, and closure of previously used ponds. The more rapid review of discharge plans for such facilities is possible because much less geologic and hydrologic study of the site is required in order to delineate impact.

Similarly, longer review times will be required for operators seeking to continue to use unlined ponds or to utilize other procedures that have a high probability of allowing infiltration and movement of effluent and leachate to the subsurface. For these instances large amounts of technical data generally will be required including: 1) detailed information on site hydrogeology, natural and current water quality, and movement of contaminants; 2) processes expected to occur in the vadose and saturated zones to attenuate constituents to meet WQCC standards at a place of present or reasonably foreseeable future use of ground water; and 3) monitoring of ground water (including post operational monitoring as necessary).

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If an operator desires to change or modify effluent or solid waste disposal practices it is not necessary to have completed all such changes prior to plan approval. A commitment to make the changes together with submittal of proposed modification details and a timely completion schedule can be included in the plan. These become plan requirements after the plan is approved.

The following discharge plan application guidelines have been prepared for use by the discharger to aid in fulfilling the requirements of Sections 3106 and 3107 of the WQCC regulations and to expedite the review process by minimizing OCD requests for additional information. It sets up a logical sequence in which to present the information required in a discharge plan for this type of facility. It is suggested that you read the entire document before preparing your application. Not all information discussed may be applicable to your facility. However, all sections of the application must be completed.

NOTE: A completed "Discharge Application" form including date and signature must be included with the application along with the filing fee described in WQCC 3114. The filing fee should be made payable to - NMED Water Quality Management Fund.

If there are any questions on the preparation of a discharge plan, please contact OCD's Environmental Bureau. (2040 S. Pacheco, Santa Fe, New Mexico 87505 or by telephone at (505) 827-7131).

DISCHARGE PLAN GUIDELINES

1. Type of Operation

Indicate the major operational purpose(s) of the facility. (i.e. Gas Plant, Refinery, Crude Oil pump station, or Compressor station.) If the facility is a compressor station include the total combined site rated horsepower.

2. Name of Operator or Legally Responsible Party and Local Representative

Include address and telephone number.

3. Location of the Discharge Plan Facility

Give a legal description of the location (i.e. 1/4. 1/4, Section, Township, Range) and county. Use state coordinates or latitude/longitude on unsurveyed land. Submit a large scale topographic map, facility site plan, or detailed aerial photograph for use in conjunction with the written material. If within an incorporated city, town or village also provide a street location and map.

4. Landowners

Attach the name, telephone number, and address of the landowner(s) of record of the facility site.

5. Facility Description

Attach description of the facility with a diagram indicating location of fences, pits, berms, and tanks on the facility. The diagrams of the facility should depict the locations of discharges, storage facilities, disposal facilities, processing facilities and other relevant areas including drum storage. Show the facility/property boundaries on the diagram.

6. Materials Stored or Used at the Facility

For each category of material listed below provide information on the general composition of the material or specific information (including brand names if requested), whether a solid or liquid, type of container (tank, drum, etc.), estimated volume stored, and location (yard, shop, drum storage, etc.). **MSD sheets need only be provided as requested; sheets for all chemicals should be maintained at the facility.**

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- A. Process specific chemicals - i.e. TEG, Amine, Lean Oil, etc.
- B. Acids/Caustics;
- C. Detergents/soaps;
- D. Solvents, inhibitors and degreasers;
- E. Paraffin Treatment/Emulsion breakers;
- F. Biocides;.
- G. Others;

7. Sources and Quantities of Effluent and Waste Solids Generated at the Facility

A. For each source include types of major effluent (e.g. produced water, spent gas treating fluids, heat media, hydrocarbons, sewage, etc.) estimated quantities in barrels or gallons per month, and types and volumes of major additives (e.g. acids, biocides, detergents from steam cleaner, degreasers, corrosion inhibitors etc.)

- 1. Separator(s), Scrubber(s), and Slug Catcher(s);
- 2. Boilers, Waste Heat Recovery Units, cogeneration facilities, and cooling towers/fans;
- 3. Wash down/Steam out effluent from process and storage equipment internals and externals;
- 4. Solvent/degreaser use;(Describe)
- 5. Spent acids or caustics; (Describe).
- 6. Used engine coolants;(i.e. antifreeze)
- 7. Used lubrication and motor oils;
- 8. Used lube oil and process filters;
- 9. Solids and sludges from tanks (provide description of materials)
- 10. Painting wastes;

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11. Sewage (Indicate if other wastes are mixed with sewage; if no commingling occurs domestic sewage under jurisdiction of the NMED);
 12. Laboratory wastes;
 13. Other waste liquids; (Describe in detail)
 14. Other waste solids; (e.g. used drums, molecular sieve materials, charcoal filter media, etc.)
- B. Quality Characteristics.

Provide the following information for each above listed source where applicable:

1. Provide concentration analysis for Total Dissolved Solids (TDS) and Major Cations/Anions (eg. F, Br, Ca, K, Mg, Na, HCO₃, CO₃, Cl, SO₄ in mg/l), Ph, and Conductivity in umhos/cm.
 2. Provide hydrocarbon analysis for benzene, ethyl benzene, toluene, and meta-, ortho-, and Para-xylene (i.e. BTEX).
 3. Provide analyses for WQCC section 3103 standards not included within above analyses. Exceptions can be approved upon request for certain constituents if not used in processing or not expected to be present in the waste water effluent.
 4. Discuss the presence or absence of toxic pollutants (WQCC 1101.TT) in each process where a discharge/possible discharge effluent may be generated. If present, provide volumes and concentrations. Estimates may be used pending Director evaluation of discharge plan submittal and proposed discharge methods.
 5. Discuss sampling locations, methods, and procedures used to obtain values for #1, 2, and 3 above. Include information as to whether the sample was "grab" or "time-composite", and sample collection and preservation techniques, laboratory used for the analysis, etc. Sources for sampling and analytical techniques to be used are listed in WQCC 3107.B.
 6. Discuss any variations that could produce higher or lower values than those shown by the sampling procedures outlined above in #5 - i.e. flowrate variations, process upsets, etc. If major variations are expected or inherent with a particular process, provide ranges and the expected average.
- C. Commingled Waste Streams.

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Note: It is recommended that waste streams be segregated as much as possible-especially those wastes that are exempt from RCRA Subtitle C regulations and those that are non-exempt. If hazardous wastes are on site they should never be commingled with exempt wastes or non-exempt non-hazardous wastes. For guidance in dealing with hazardous wastes contact the NMED Hazardous and Radioactive Materials Bureau at 505-827-1558.

1. If produced and process fluids are commingled within the facility, and if individual rates, volumes and concentrations do not vary beyond a set range, and if process units are entirely self-contained to prevent intentional discharges and spills or inadvertent discharges (see B. 3,4 previous page), then chemical characterization of commingled effluent or process streams may be sufficient to satisfy discharge plan requirements.
2. If the discharger wishes to submit information on commingled streams in lieu of submittal of individual stream characteristics, adequate information should be provided to justify the request.

8. Description of Current Liquid and Solid Waste Collection/Storage/Disposal Procedures

A. Summary Information.

For each source listed in Part 7, provide summary information about onsite collection, storage and disposal systems. Indicate whether collection/storage/disposal location is tank or drums, floor drain or sump, lined or unlined pit, onsite injection well, leach field, or offsite disposal.

B. Collection and Storage Systems.

1. For collection and storage systems named in Part A, provide sufficient information to determine what water contaminants may be discharged to the surface and subsurface within the facility. Water and wastewater flow schematics may be used provided they have sufficient detail to show individual treatment units. Information desired includes whether tanks, piping, and pipelines are pressurized, above ground or buried. If fluids are drained to surface impoundments, oil skimmer pits, emergency pits, shop floor drains, sumps, etc. for further transfer and processing, provide size and indicate if these collection units are lined or unlined. If lined describe lining material (e.g. concrete, steel tank, synthetic liner, etc.).
2. Tankage and Chemical Storage Areas - Storage tanks for fluids other than fresh water must be bermed to contain a volume one-third more than the

largest tank. If tanks are interconnected, the berm must be designed to contain a volume one-third more than the total volume of the interconnected tanks. All new tank installations must be placed on an impermeable type pad. Chemical and drum storage areas must be paved, curbed and drained such that spills or leaks from drums are contained on the pads or in lined sumps.

3. All facilities must demonstrate the integrity of buried piping. If the facility contains underground process or wastewater pipelines the age and specifications (i.e., wall thickness, fabrication material, etc.) of said pipelines should be submitted. A proposed hydrostatic test method and schedule for testing of piping must be included as part of the submittal. All lines must be tested to a pressure of 3 pounds per square inch above the normal operating pressure in the line, and a duration time for the test will also be proposed for OCD approval. If hydrostatic tests have already been conducted, details of the program and the results should be submitted.

C. Existing Effluent and Solids Disposal.

1. On-Site Facilities

- a. Describe existing on-site facilities used for effluent or solids disposal of water, sludges, waste oils, solvents, etc., including surface impoundments, disposal pits, leach fields, floor drains, injection wells, and landfarms etc. (If effluents and solids are shipped off-site for recycling or disposal, see C.2. on pg. 11.) Locate the various disposal areas on the facility site plan or topographic map. Provide technical data on the design elements of each disposal method:

- (1) Surface impoundments - date built, use, type and volume of effluent stored, area, volume, depth, slope of pond sides, sub-grade description, liner type and thickness, compatibility of liner and effluent, installation methods, leak detection methods and frequency checked, freeboard, runoff/run on protection.

- (2) Leach fields - Type and volume of effluent, leach field area and design layout. If non-sewage or mixed flow from any process units or internal drains is, or has been, sent to the leach fields, include dates of use and disposition of septic tank sludges.

- (3) Injection wells - Describe effluent injected, volume, depth, formation, OCD order number and approval date. The effluent must not be classified as a hazardous waste at the time of injection. (Note - Any sump, floor drain or hole deeper than wide used for subsurface emplacement of fluids may be considered an injection well unless its integrity to contain fluids can be demonstrated). Class II injection wells are required to have an OCD permit and can only inject produced water or other waste fluids brought to the surface that are Exempt from RCRA Subtitle C Hazardous Waste regulations. A Part 5 WQCC Class I Non-Hazardous discharge plan approval will be required if the injection well is used to dispose of Non-Exempt, Non-Hazardous effluent. The effluent can not be classified as a Hazardous Waste by characteristics or listing as spelled out in RCRA Subtitle C.
- (4) Drying beds or other pits - Types and volumes of waste, area, capacity, liner, clean-out interval and method, and ultimate disposal location.
- (5) Solids disposal - Describe types volumes frequency and location of on-site solids dried disposal. Types solids include sands, sludges, filters, containers, cans and drums.
- (6) Landfarms- Describe the surface dimensions of the landfarm area and the operational and monitoring procedures.

NOTE: The OCD has developed specific guidelines for the construction, operation, and monitoring of landfarms.

- b. For leach fields, pits, and surface impoundments having single liners of any composition, clay liners or that are unlined and not proposed to be modified or closed as part of this discharge plan:
 - (1) Describe the existing and proposed measures to prevent or retard seepage such that ground water at any place of present or future use will meet the WQCC Standards of Section 3103, and not contain any toxic pollutant as defined in Section 1101.TT.
 - (2) Provide the location and design of site(s) and method(s) to be available for effluent sampling. and for measurement or calculation of flow rates.

- (3) Describe the monitoring system existing or proposed in the plan to detect leakage or failure of the discharge system. If ground water monitoring exists or is proposed, provide information on the number, location, design, and installation of monitoring wells.

2. Off-Site Disposal.

If wastewater, sludges, solids etc. are pumped or shipped off-site, indicate general composition (e.g. waste oils), method of shipment (e.g. pipeline, trucked), and final disposition (e.g. recycling plant, OCD permitted Class II disposal well, or domestic landfill, etc.). Include name, address, and location of receiving facility. If receiving facility is a sanitary or modified landfill show operator approval for disposal of the shipped wastes.

9. Proposed Modifications

- A. If collection and storage systems do not meet the criteria of Section 8 B. above, or if protection of ground water cannot be demonstrated pursuant to Section 8 C.1.b.(1) above, describe what modification of that particular method (including closure), or what new facility, is proposed to meet the requirements of the Regulations. Describe in detail the proposed changes. Provide the information requested in 8 B, and C.1.a. and b. above for the proposed facility modifications and proposed time schedule for construction and completion. (Note: OCD has developed specific guidelines for lined surface impoundments, land farms, below grade tanks, and closure guidelines that are available on request.)
- B. For ponds, pits, leach fields, etc. where protection of ground water cannot be demonstrated, describe the proposed closure of such units so that existing fluids are removed, and emplacement of additional fluids and runoff/run on of precipitation are prevented. Provide a proposed time schedule for closure. (Note: The OCD has closure guidelines and are available upon request.)

10. Inspection, Maintenance and Reporting

- A. Describe proposed routine inspection procedures for surface impoundments and other disposal units having leak detection systems. Include frequency of inspection, how records are to be maintained and OCD notification in the event of leak detection.
- B. If ground water monitoring is used to detect leakage on failure of the surface impoundments, leach fields, or other approved disposal systems provide:

1. The frequency of sampling, and constituents to be analyzed.
 2. The proposed periodic reporting of the results of the monitoring and sampling.
 3. The proposed actions and procedures (including OCD notification) to be undertaken by the discharger in the event of detecting leaks or failure of the discharge system.
- C. Discuss general procedures for containment of precipitation and runoff such that water in contact with process areas does not leave the facility, or is released only after testing for hazardous constituents. Include information on curbing, drainage, disposition, notification, etc.

11. Spill/Leak Prevention and Reporting Procedures (Contingency Plans)

It is necessary to include in the discharge plan submittal a contingency plan that anticipates where any leaks or spills might occur. It must describe how the discharger proposes to guard against such accidents and detect them when they have occurred. The contingency plan also must describe the steps proposed to contain and remove the spilled substance or mitigate the damage caused by the discharge such that ground water is protected, or movement into surface waters is prevented. The discharger will be required to notify the OCD Director of significant leaks and spills, and this commitment and proposed notification threshold levels must be included in the contingency plan. In any case the local OCD District field office should be notified by telephone within 24 hours of a significant spill or release as defined in OCD Rule 116 and WQCC Section 1203.

NOTE: USE NMOCD RULE 116 AND WQCC Section 1203 for spill reporting

- A. Describe proposed procedures addressing containment, cleanup and reporting in case of major and minor spills at the facility. Include information as to whether areas are curbed, paved and drained to sumps; final disposition of spill material; proposed schedule for OCD notification of spills; etc.
- B. Describe methods used to detect leaks and ensure integrity of above and below round tanks, and piping. Discuss frequency of inspection and procedures to be undertaken if significant leaks are detected.
- C. If an injection well is used for on-site effluent disposal, describe the procedures to be followed to prevent unauthorized discharges to the surface or subsurface in the event the disposal well or disposal line is shut-in for work over or repairs (e.g. extra storage tanks, emergency pond, shipment offsite, etc.). Address actions to

be taken in the event of disposal pipeline failure, extended disposal well downtime, etc.

12. Site Characteristics

- A. The following hydrologic/geologic information is required to be submitted with all discharge plan applications. Some information already may be on file with OCD and can be provided to the applicant on request.
1. Provide the name, description, and location of any bodies of water, streams (indicate perennial or intermittent), or other watercourses (arroyos, canals, drains, etc.); and ground water discharge sites (seeps, springs, marshes, swamps) within one mile of the outside perimeter of the facility. For water wells, locate wells within one-quarter mile of the outside perimeter of the facility and specify use of water (e.g. public supply, domestic, stock, etc.).
 2. Provide the depth to and total dissolved solids (TDS) concentration (in mg/l) of the ground water most likely to be affected by any discharge (planned or unplanned). Include the source of the information and how it was determined. Provide a recent water quality analysis of the ground water, if available, including name of analyzing laboratory and sample date.
 3. Provide the following information and attach or reference source information as available (e.g. driller's logs):
 - a. Soil type(s) (sand, clay, loam, caliche);
 - b. Name of aquifer(s);
 - c. Composition of aquifer material (e.g. alluvium, sandstone, basalt, etc.); and
 - d. Depth to rock at base of alluvium (if available).
 4. Provide information on:
 - a. The flooding potential at the discharge site with respect to major precipitation and/or run-off events; and
 - b. Flood protection measures (berms, channels, etc.), if applicable.

B. Additional Information

Provide any additional information necessary to demonstrate that approval of the discharge plan will not result in concentrations in excess of the standards of WQCC Section 3103 or the presence of any toxic pollutant (Section 1101.TT.) at any place of withdrawal of water for present or reasonably foreseeable future use. Depending on the method and location of discharge, detailed technical information on site hydrologic and geologic conditions may be required to be submitted for discharge plan evaluation. This material is most likely to be required for unlined surface impoundments and pits, and leach fields. Check with OCD before providing this information. However, if required it could include but not be limited to:

1. Stratigraphic information including formation and member names, thickness, lithologies, lateral extent, etc.
2. Generalized maps and cross-sections;
3. Potentiometric maps for aquifers potentially affected;
4. Porosity, hydraulic conductivity, storativity and other hydrologic parameters of the aquifer;
5. Specific information on the water quality of the receiving aquifer; and
6. Information on expected alteration of contaminants due to sorption, precipitation or chemical reaction in the unsaturated zone, and expected reactions and/or dilution in the aquifer.

13. Other Compliance Information

Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders. Examples include previous Division orders or letters authorizing operation of the facility or any surface impoundments at the location.

1. Also include a brief statement committing to NMOCD Rule 116 and WQCC Section 1203 spill/leak reporting.
2. A closure plan as described in WQCC Section 3107.A.11 "Monitoring, Reporting, and other Requirements." The "Closure Plan" shall include all of the information described in WQCC Section 3107.A.11 and can use OCD guidelines for accepted remediation techniques and unlined surface impoundment closure guidelines.



Photo No.1 4-10-96

(Photos Taken by the NMOCB)



Photo No.2 4-10-96

W. Photo taken Eunice Gas Plant (CW-005)



Photo No. 3 4-10-96

(Photos Taken by the NMOC D)



Photo No. 4 4-10-96

Wagner P... Engine Co. Plant (GW-0105)



Photo No. 5 4-10-96
(Photos Taken by the NMOC D)



Photo No. 6 4-10-96

Western Petroleum - Empire - Plus (CW-995)

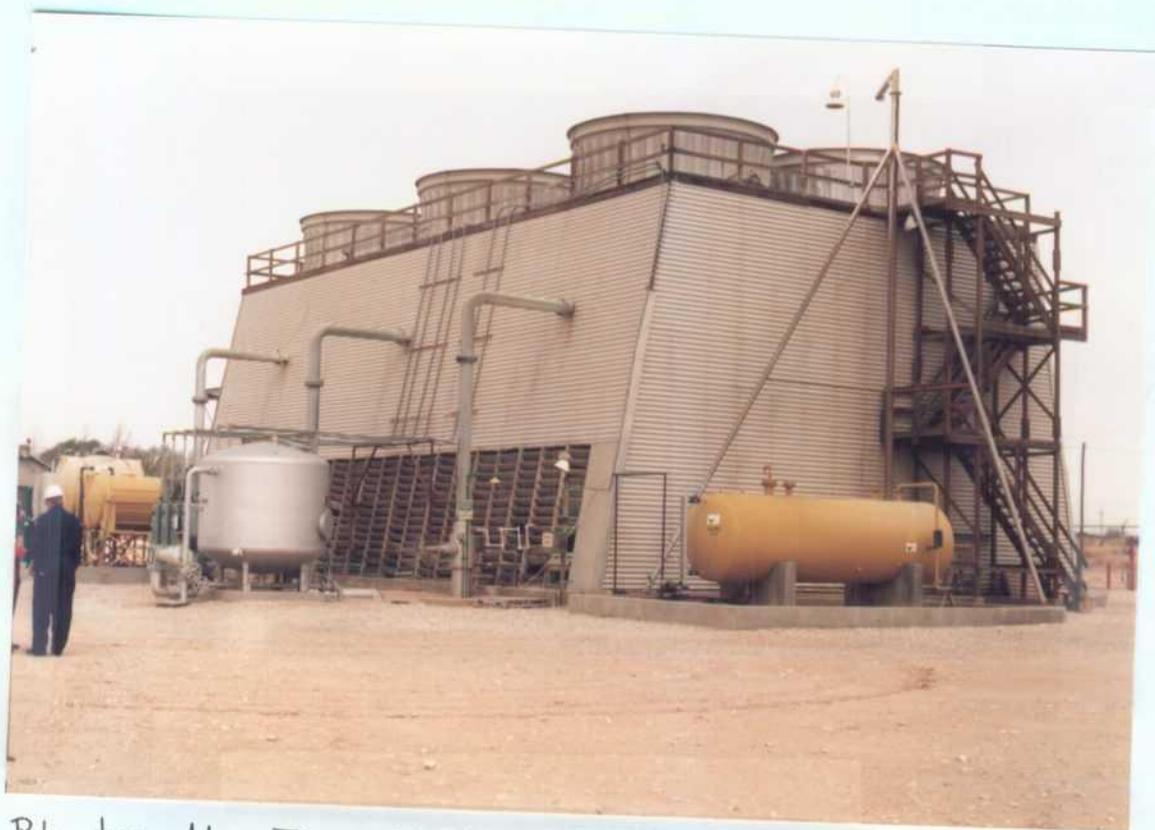


Photo No. 7 4-10-96
(Photos Taken by the NMOCB)



Photo No. 8 4-10-96

Western Petroleum - Eureka Gas Plant (GW-005)

(Photo Taken by the NMCCD)



Photo No. 9 4-10-96

Warren Petroleum - Eunice Gas Plant (GW-005)

OCD - LAND FARM
Guidelines.

**GUIDELINES FOR PERMIT APPLICATION
DESIGN, AND OPERATION OF
CENTRALIZED & COMMERCIAL LANDFARMS**

(JULY 1993)

**NEW MEXICO OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088**

PREFACE

The following specifications shall be used as a guide for the preparation of a permit application for a commercial or centralized landfarm designed to treat oilfield solids classified as 1) exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations, or 2) nonhazardous by characteristic testing. Landfarm permits are reviewed and approved pursuant to the New Mexico Oil Conservation Division (OCD) Rule 711.

The applicant shall submit an "Application for Surface Waste Disposal Facility" accompanied by the information necessary to evaluate the application. All plans and specifications shall be submitted to and approved by the Oil Conservation Division prior to construction. Designs for construction and operation of the facility may deviate from the following specifications if it can be shown that the design and operation of the facility will not effect any present or foreseeable beneficial uses of protectable water and the facility is protective of public health and the environment.

The following procedures shall also be used as a guide for the treatment of contaminated solids at locations where a permit is not required such as at a production site or leak/spill location where the contaminated materials are solely from that individual site. OCD approval from the appropriate district office must be obtained prior to conducting onsite landfarm operations at individual well site locations.

An OCD Rule 711 permit does not relieve the applicant of liability should the operation result in actual pollution of surface or ground waters or the environment actionable under other laws and/or regulations. In addition, an OCD Rule 711 permit does not relieve the applicant of liability to comply with all other federal, state or rules and/or regulations.

GUIDELINES FOR APPLICATION FOR COMMERCIAL & CENTRALIZED LANDFARMS

(to use with the application form)

Check the appropriate box indicating whether the application is for a centralized or commercial disposal facility. A commercial facility is a facility that receives compensation for collection, disposal, evaporation, treatment, and/or storage of oil field related wastes. A centralized surface facility is a facility that is owned by a single company/proprietor and receives wastes from two or more sites owned by that same company/proprietor.

Note: All commercial landfarms must submit to the OCD a surety or cash bond in the amount of \$25,000, in a form approved by the Division, prior to commencing construction of the facility.

I. TYPE OF OPERATION

Indicate the major purpose(s) of the facility (ie. remediation of oil field solids) and briefly describe the processes occurring at the facility.

II. OPERATOR

Name of owner or legally responsible party, include the address, contact person and telephone number.

III. LOCATION OF LANDFARM

Give a legal description of the location by 1/4 1/4 Section, Township, Range and County. Use state coordinates or latitude/longitude on unsurveyed land. Submit a large scale topographic map, site plan, or detailed aerial photograph for use in conjunction with the written material. Include on the map the appropriate highways or roads giving access to the facility.

IV. EXPANSION REQUEST

If the application is for an expansion of an existing facility, include the original OCD order or approval authorization for the facility.

V. LAND & OWNERSHIP

List the name and address of the landowner of the landfarm and all landowners of record within one-half mile of the site. Include a topographic map, plot map or aerial photograph delineating ownership boundaries. Include on the map all private residences within one mile of the proposed facility.

Note: see Part XII. of application for Proof of Notice.

VI. FACILITY DESCRIPTION

Attach a description of the facility with a diagram indicating the location of the following:

1. Roads, fences, gates, berms, ditches, and proposed cells.
2. All pipelines crossing the facility, including owner, contents, depth and size of the pipeline(s).
3. Actual or proposed offices and/or storage buildings.
4. Chemical storage areas indicating the type of storage containers (ie. drums, sacks, tanks, etc.).
5. All tanks indicating whether they are above ground or below ground and saddle or vertical.
6. Any on-site storage/disposal facilities for wastes other than contaminated soils to be landfarmed (ie. waste oil, washbay sumps, etc.).

VII. FACILITY CONSTRUCTION/OPERATION & WASTE CLASSIFICATION

A. **Facility Construction** - The following items should be addressed when designing the facility:

1. Location: A landfarm facility shall not be located in any watercourse, lakebed, sink-hole, or other depression. Facilities located adjacent to any such watercourses or depression shall be located safely above the high-water level of such watercourse or depression. In addition, facilities located adjacent to any watercourses shall include a storm water runoff plan.

2. Fences & Signs: The facility shall be fenced and have a sign at the entrance. The sign shall be legible from at least fifty (50) feet and contain the following information: a) name of the facility, b) location by section, township and range, and c) emergency phone number.
3. Facility Buffer Zone: No contaminated soils should be placed within one-hundred (100) feet of the boundary of the facility unless it can be demonstrated that a smaller buffer zone will not adversely impact the adjacent properties.
4. Pipeline Buffer Zone: No contaminated soils should be placed within twenty (20) feet of any pipelines crossing the landfarm. In addition, no equipment should be operated within ten (10) feet of a pipeline. All pipelines crossing the facility should have surface markers identifying the location of the pipelines.
5. Facility Berming: The portion of the facility containing contaminated soils shall be bermed to prevent runoff and runoff. A berm should be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for that specific region.
6. Treatment Zone Monitoring: Because a landfarm is designed to remediate contaminated soils and not transfer contaminants into the underlying native soil and/or groundwater, the applicant shall submit a plan to detect leaching of contaminants. If the native ground surface has a minimum of three feet of uncemented material (ie. soil) then a treatment zone monitoring program may be incorporated into the facility design to ensure contaminants are not leaching into the native soil/groundwater. The following procedures should be used to monitor a treatment zone not to exceed three (3) feet beneath the landfarm:
 - a. One (1) background soil sample should be taken from the center portion of the landfarm two (2) feet below the native ground surface prior to operation. The sample should be analyzed for total petroleum hydrocarbons (TPH), major cations/anions, volatile aromatic organics (BTEX), and heavy metals using approved EPA methods.
 - b. A treatment zone not to exceed three (3) feet beneath the land farm should be monitored. A minimum of one random soil sample should be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample should be taken at two to three (2-3) feet below the native ground surface.

- c. The soil samples should be analyzed using approved EPA methods for TPH and BTEX quarterly, and for major cations/anions and heavy metals annually.
 - d. After obtaining the soil samples the boreholes should be filled with an impermeable material such as cement.
 - e. Analytical results from the treatment zone monitoring should be submitted to the OCD Santa Fe Office for review on a regular schedule to be proposed by the applicant.
7. Double-Lined System: If the native ground surface is composed of resistant cemented materials which make it infeasible to sample a treatment zone then another method shall be proposed to guarantee that contaminants do not leach into the underlying soils and/or groundwater. This may be accomplished by installing a double-lined system with leak detection in accordance with the OCD "Engineering Design Guidelines for Construction of Waste Storage/Disposal Ponds (10/90)". In addition, the facility shall be constructed so that the primary liner will not be ripped or punctured when the contaminated soils are disked.

B. Facility Operation - The Director shall consider, but is not limited to, the following operating procedures for commercial and centralized landfarms. The purpose of specific operating requirements is so that operation of a landfarm will not adversely impact ground water, surface water, public health or the environment.

1. Disposal shall only occur when an attendant is on duty. The facility shall be secured when no attendant is present.
2. All contaminated soils received at the facility should be spread and disked within 72 hours of receipt.
3. Soils should be spread on the surface in six inch lifts or less unless the applicant can demonstrate that the equipment will adequately disk a thicker lift.
4. Soils should be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
5. Exempt contaminated soils should be placed in the landfarm so that they are physically separate (ie. bermed) from nonexempt contaminated soils. There should be no mixing of exempt and nonexempt soils.

6. Successive lifts of contaminated soils should not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations shall be maintained at the facility. Authorization from the OCD shall be obtained prior to application of successive lifts.
7. Moisture should be added as necessary to enhance bioremediation and to control blowing dust. There shall be no ponding, pooling or run-off of water allowed. Any ponding of precipitation should be removed within seventy-two (72) hours of discovery.
8. Enhanced bio-remediation through the application of microbes (bugs) and/or fertilizers shall only be permitted after prior approval from the OCD. Request for application of microbes should include the location of the area designated for the bio-remediation program, composition of additives, and the method, amount and frequency of application.
9. No free liquids or soils with free liquids shall be accepted at the facility.
10. Comprehensive records of all material disposed of at the facility shall be maintained at the facility. The records for each load will include: 1) the generator, 2) the origin, 3) date received, 4) quantity, 5) Certification of exempt status or analysis for hazardous constituents if non-exempt, 6) transporter, and 7) exact cell location and any addition of microbes, moisture, fertilizers, etc.

C. **Characterization & Tracking of Wastes** - The operator of a landfarm must be able to distinguish between those oilfield contaminated solids which are exempt from RCRA Subtitle C (hazardous waste) regulations and those which are subject to the RCRA Subtitle C regulations. To aid the landfarm applicant in making those determinations and therefore prohibiting hazardous waste from entering the facility, all OCD permitted landfarms should operate under the following conditions:

1. The facility should be authorized to accept only:
 - a. Oilfield contaminated solids which are exempt from RCRA Subtitle C regulations. These wastes should be accompanied by a "Certification of Waste Status" from the generator.

- b. "Non-hazardous" non-oilfield contaminated solids from **OCD permitted facilities** on a case-by-case basis after conducting an analysis for hazardous characteristics and receiving OCD approval. The test for hazardous characteristics for a particular waste may be effective for one year from the date of analysis, if, the subsequent wastes from the same waste stream are accompanied by a statement from the generator that there has been no change in the processes employed or the chemicals stored/used at the facility generating the waste.
 - d. Other non-oilfield contaminated solids which are RCRA Subtitle C exempt or non-hazardous by characteristic testing, if requested by another regulatory agency on an emergency basis as the waste poses an eminent danger to public health. The wastes should be accompanied by a "Verification of Waste Status" demonstrating the exempt or non-hazardous classification of the solids and signed by the appropriate regulatory agency. OCD approval shall be obtained prior to accepting the wastes.
2. **At no time will any OCD permitted landfarms accept wastes which are hazardous by either testing or listing.**
3. All loads received at the facility will be accompanied by the following:
 - a. A "Certification of Waste Status" signed by the waste generator or a "Verification of Waste Status" issued by the New Mexico Environment Department (NMED) or the appropriate agency from another state for wastes regulated by that agency. The state agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the exempt or non-hazardous classification of the waste.
 - b. The analytical results of Hazardous Waste Characterization for non-exempt waste including corrosivity, reactivity, ignitability, and toxic constituents and a certification that no listed hazardous wastes are contained within the wastes. The samples for these analyses and results will be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures.
4. The transporter of all wastes to the facility will supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

VIII. SPILL/LEAK PREVENTION & REPORTING (CONTINGENCY PLANS)

- A. The disposal application shall contain a contingency plan that anticipates where any leaks/spill might occur. It should describe how the applicant proposes to guard against such accidents and detect them when they have occurred.
- B. The contingency plan shall describe the steps proposed to contain and remove the spilled substance or mitigate the damage caused by the discharge such that ground water is protected, or movement into surface waters is prevented.
- C. The disposal application shall describe how any ponding, pooling or runoff of precipitation will be removed from the landfarm and where its final disposition will be.
- D. The disposal application shall contain a contingency plan that describes what procedures will be taken to contain and mitigate any contaminants which are leached beneath the native surface of the landfarm. The precise method will depend upon the engineering design of the facility and the method used to detect leaching of contaminants (ie. monitoring a two foot treatment zone, installing a double-lined system with leak detection, etc.)
- E. The applicant shall commit to notify the OCD of any break, spill, blow out, or fire or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

IX. INSPECTION, MAINTENANCE & REPORTING

- A. Discuss proposed housekeeping practices and routine inspection procedures for all collection, storage, and disposal units. Include procedures for any units having leak detection systems with frequency of inspection, how records are to be maintained and OCD notification in the event of a leak is detected.
- B. The facility should be maintained to keep soils from blowing and to minimize odors from leaving the facility boundary. Discuss how this will be accomplished. Berms should be maintained in such a manner to prevent erosion. Inspections of the berms should be made after any rainfall or wind storms of consequence.
- C. All tank bottoms or miscellaneous hydrocarbons received at the facility shall be accompanied by a Form C-117-A.
- D. The applicant should commit to submitting all required analytical results, OCD forms and other specified reports referenced in the guidelines.

X. CLOSURE PLAN

- A. Provide a closure plan for the facility including the following OCD closure procedures: 1) when the facility is to be closed no new material should be accepted. Existing soils should be remediated until they meet the OCD standards in effect at the time of closure; 2) the area should be reseeded with natural grasses and allowed to return to its natural state; and 3) Closure shall be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.
- B. A closure plan shall contain a commitment from the applicant that he shall notify the Division of cessation of operations. Upon cessation of disposal operations for six (6) consecutive months, the operator shall complete cleanup of constructed facilities and restoration of the facility site within the following six (6) months, unless an extension of time is granted by the Director.

XI. SITE CHARACTERISTICS - FRESH WATER PROTECTION DEMONSTRATION

- A. The following hydrologic/geologic information shall be submitted with all applications:
1. Hydrologic Features: Provide the following information:
 - a. Name, description, and location of any bodies of water, streams, (indicate perennial or intermittent), or other watercourses (arroyos, canals, drains, etc.); and ground water discharge sites (water wells, seeps, springs, marshes, swamps) within one (1) mile of the outside perimeter of the facility. For water wells, specify use of water (ie. public supply, domestic, stock, etc.), depth to water and water quality.
 - b. The total dissolved solids (TDS) concentration (in mg/l) and the depth to ground water most likely to be affected by any discharge. Include the source of the information and how it was determined. **This information is required for the OCD to issue public notice pursuant to Part 2 of Rule 711.**
 - c. Flow direction of the ground water most likely to be affected by any leaks. Include the source of the information and how it was determined.

- d. It is suggested that the applicant provide a recent chemical analysis of the ground water beneath or adjacent to the proposed site so that background information is available in case of leaks or charges of neighboring groundwater contamination. Include the name of the analyzing laboratory, sample location, date the sample was taken, and a well schematic.
2. Geologic Description of Landfarm Site: Provide the following information and attach or reference source information, as available (ie. driller's log):
 - a. Soil type(s) - sand, clay, caliche, bedrock. Include a lithologic discription of all soil and rock members from ground surface down to the shallowest fresh water aquifer.
 - b. Depth to, name of, and thickness of the shallowest fresh water aquifer.
 - c. Composition of the aquifer material - alluvium, sandstone, basalt, etc.
 3. Flood Protection: Provide information on:
 - a. The flooding potential at the facility with respect to major precipitation and/or runoff events.
 - b. Flood protection measures (berms, drainage channels, etc.) for at least a 100 year flood.
 - c. Proposed schedule for OCD notification in case of flooding or washout.
- B. Provide any additional information necessary to demonstrate that approval of the application will not adversely affect fresh water protected for present or reasonably foreseeable future use. Depending on the location and design of the landfarm, detailed technical information on site hydrologic and geologic conditions may be required to be submitted for the disposal permit evaluation. Check with the OCD before providing this information. However, if required it could include but not be limited to:
1. Stratigraphic information including formation and member names, thickness, lithologies, lateral extent, etc.
 2. Generalized maps and cross-sections.

3. Potentiometric maps for aquifers potentially affected;
4. Porosity, hydraulic conductivity, storativity, and other hydrologic parameters of the aquifer.
5. Specific information on the water quality of the receiving aquifer.
6. Information on expected alteration of contaminants due to sorption, precipitation or chemical reaction in the unsaturated zone, and expected reactions and/or dilution of the aquifer.
7. Porosity, permeability, conductivity, cation exchange rates, compaction ratios and swelling characteristics for the sediments on which the contaminated soils will be directly placed upon.

XII. PROOF OF NOTICE

Attach proof that the notice requirements of OCD Rule 711 have been met. For a commercial landfarm the applicant must give written notice of application to the owners of surface lands and occupants within one-half (1/2) mile of the proposed facility boundary. For permit modifications, the Division may require the applicant to give written notice as above. For centralized landfarm facilities the OCD may give written notice as above.

XIII. H2S CONTINGENCY PLAN

Not applicable unless the landfarm is designed to generate H2S.

XIV. ADDITIONAL INFORMATION

Provide any additional information necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

XV. CERTIFICATION

Include the signature information required on the application form. The form must be signed by an authorized representative of the applicant.

OCD ENVIRONMENTAL BUREAU
SITE INSPECTION SHEET

DATE: 11-21 Time: 8:30 AM

Type of Facility: Refinery Gas Plant Compressor St. Brine St. Oilfield Service Co.
Surface Waste Mgt. Facility E&P Site Crude Oil Pump Station
Other _____

Discharge Plan: No Yes DP# GW-05

FACILITY NAME: DYNEGY - EUNICE MIDDLE PLANT
PHYSICAL LOCATION: _____

Legal: QTR _____ QTR _____ Sec _____ TS _____ R _____ County LEA

OWNER/OPERATOR (NAME) DYNEGY MIDSTREAM SERVICES L.P.

Contact Person: _____ Tele:# _____

MAILING

ADDRESS: _____ State _____ ZIP _____

Owner/Operator Rep's: CAL WRANHAM, MITCH TYREE

OCD INSPECTORS: W PRICE

1. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.

2. **Process Areas:** All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

PIPELINE PUMP AREA OIL DISCHARGED TO GROUND - PIC #2
#13A ENGINE - OIL DISCHARGE TO GROUND - PIC #3
ENGINE ROOM #20 DOES NOT HAVE CONTAINMENT - PIC #4

3. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.

4. **Above Ground Saddle Tanks:** Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

5. **Labeling:** All tanks, drums and containers will be clearly labeled to identify their contents and other emergency notification information.

6. **Below Grade Tanks/Sumps:** All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

MAIN ENGINE SUMP - FULL OF OIL + WATER

7. **Underground Process/Wastewater Lines:** All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years thereafter, or prior to discharge plan renewal. The permittee may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

8. **Onsite/Offsite Waste Disposal and Storage Practices:** Are all wastes properly characterized and disposed of correctly? Does the facility have an EPA hazardous waste number? _____ Yes _____ No

ARE ALL WASTE CHARACTERIZED AND DISPOSED OF PROPERLY? YES NO IF NO DETAIL BELOW.

ENGINE OIL FILTER SPECIAL WASTE GOES TO WASTE MANAGEMENT

9. Class V Wells: Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. All Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be closed unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Closure of Class V wells must be in accordance with a plan approved by the Division's Santa Fe Office. The OCD allows industry to submit closure plans which are protective of human health, the environment and groundwater as defined by the WQCC, and are cost effective. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.

ANY CLASS V WELLS NO YES IF YES DESCRIBE BELOW! Undetermined

10. Housekeeping: All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.

CLASS II FILTER SCREEN DRAIN SUMP OVERFLOWING - PIC

11. Spill Reporting: All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the proper OCD District Office.

12. Does the facility have any other potential environmental concerns/issues?

OLD COOLING TOWER BLOWDOWN AREA EAST OF PLANT
SEVERAL PICTURES TAKEN
~~UP/~~ LAST PICTURES DURING DOWNLOAD-

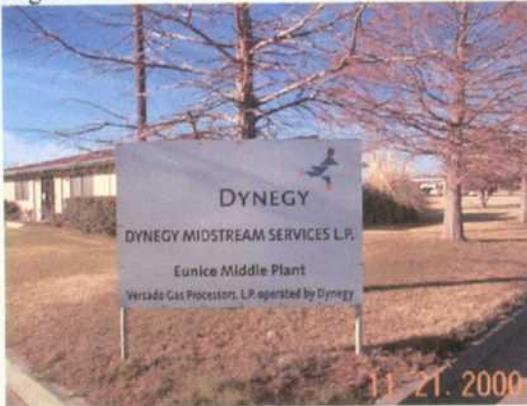
13. Does the facility have any other environmental permits - i.e. SPCC, Stormwater Plan, etc.?

SPCC - YES

14. ANY WATER WELLS ON SITE? NO YES IF YES, HOW IS IT BEING USED ?

Miscellaneous Comments:

Number of Photos taken at this site: PIC #1 - SIGN
attachments-



Pic #1- Plant Entrance



Pic#4- Engine Room (#20) does not have proper containment.



Pic#2- Pipeline pump area show oil discharge to ground.



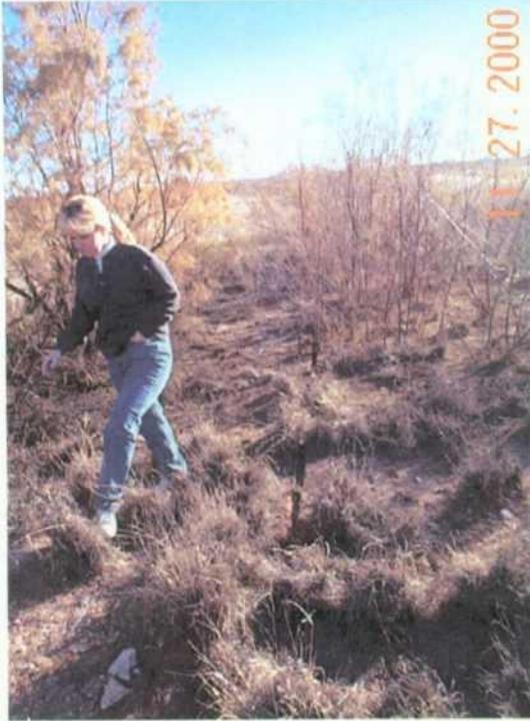
Pic#5- Class II SWD disposal well area filter screen drain sump.



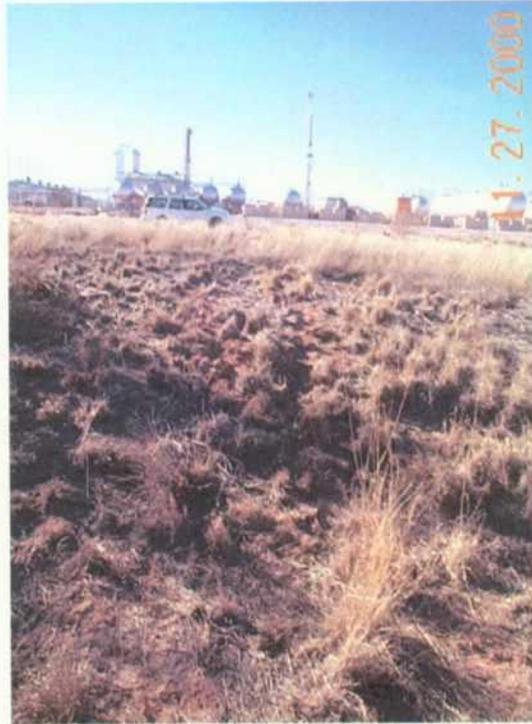
Pic #3- Engine #13A- Oil discharge to ground.



Pic#6- Area east of plant where old plant lines were found. Looking East.



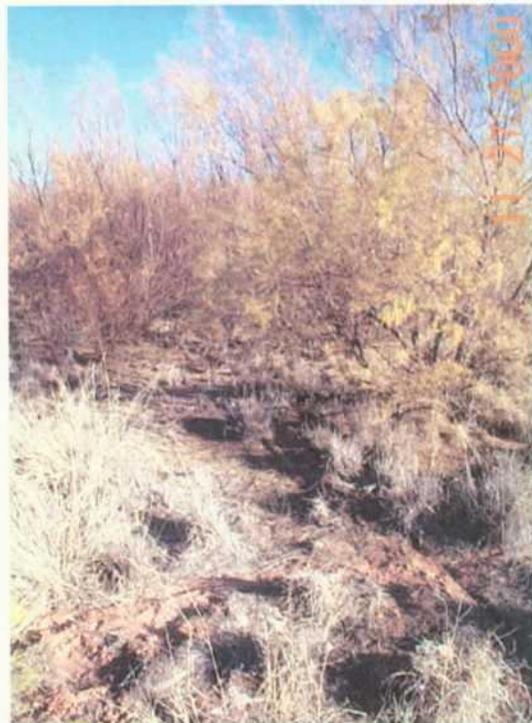
Area East of plant-picture shows where old plant waste water lines were.-Pictures taken by Bill Olson -OCD. Donna Williams of OCD.



Area East of plant-picture shows where old plant waste water lines were.-Pictures taken by Bill Olson -OCD.



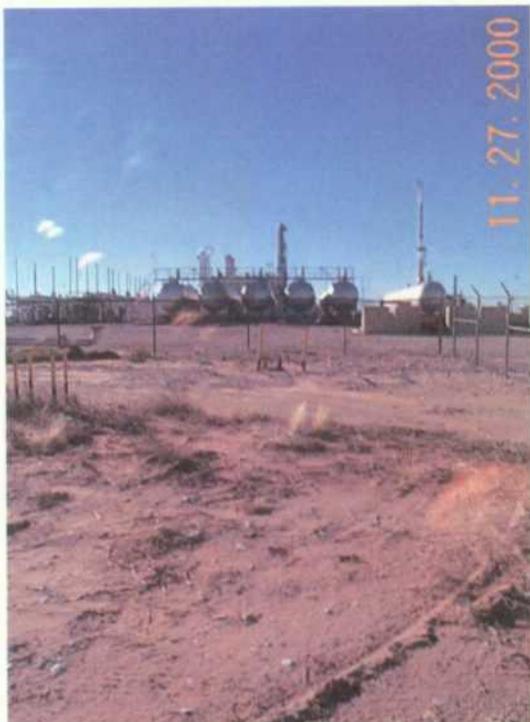
SAB



SAB



Area East of plant-picture shows where old plant waste water lines were -Pictures taken by Bill Olson -OCD.



Area East of plant looking west.