

GW - 55

**GENERAL
CORRESPONDENCE**

YEAR(S):

1995 - 1990

OIL CONSERVATION DIVISION

October 17, 1995

CERTIFIED MAIL**RETURN RECEIPT NO. Z-765-963-077**

Mr. Jim Ratcliffe
 Transportation Director
 Thriftway Marketing Corporation
 710 East 20th Street
 Farmington, New Mexico 87401

**RE: Discharge Plan GW-055 Renewal
 Thriftway Bloomfield Refinery
 San Juan County, New Mexico**

Dear Mr. Ratcliffe:

On May 13, 1991, the groundwater discharge plan, GW-055, for the Thriftway Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and the NE/4 NE/4, Section 9, Township 28 North, and Range 1 West, NMPM, San Juan County, New Mexico, will expire on May 9, 1996. The plan was approved by the Director of the New Mexico Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years.

If your facility continues to have potential or actual effluent or leachate discharges and you wish to continue operation, you must renew your discharge plan. If Thriftway Marketing Corporation submits an application for renewal at least 120 days before the discharge plan expires (on or before January 9, 1996), then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can extend for several weeks to months. Please indicate whether you have made, or intend to make, any changes in your system, and if so, please include these modifications in your application for renewal.

The discharge plan renewal application for the Bloomfield Refinery is subject to the WQCC Regulations 3-114 discharge plan fee. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of fifty (50) dollars plus a flat fee of \$3,910 for Refineries processing plants.

The (50) dollar filing fee is to be submitted with the discharge plan renewal application and is nonrefundable. The flat fee for an approved discharge plan renewal may be paid in a single payment due at the time of approval, or in equal annual installments over the

Mr. Jim Ratcliffe
October 17, 1995
Page 2

duration of the discharge plan - with the first payment due the at the time of approval. Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

Please submit the original and one copy to the OCD Santa Fe Office and one copy to the OCD Aztec District Office. Note that the completed and signed application form must be submitted with your discharge plan renewal request. The following information is included: Application form, Guidelines, and WQCC regulations.

If you no longer have any actual or potential discharges a discharge plan is not need, please notify this office. If you have any questions regarding this matter, please do not hesitate to contact Patricio W. Sanchez at (505) 827-7156.

Sincerely,



Roger C. Anderson
Environmental Bureau Chief

RCA/pws

xc: Mr. Denny Foust

Z 765 963 077



Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to 6W-055	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, March 1993

ccwin
6/2/93

Dispatin
file

99830
General

NOT 14 REC'D
WJ

October 6, 1993

Mr. Jim Ratcliffe, Transportation Director
Thriftway
710 East 20th Street
Farmington, NM 87401-4299

Dear Mr. Ratcliffe:

The Ground Water Protection and Remediation Bureau of the New Mexico Environment Department is in receipt of your Corrective Action Report dated Sept. 28, 1993 for the investigation of contaminated soils resulting from a truck accident at Broadway and 1st Street in Bloomfield, NM. This Report is hereby approved pursuant to Section 1-203 of the New Mexico Water Quality Control Commission regulations. A few comments on remediation of the removed soil follow.

Under the soil disposal guidelines promulgated by the Underground Storage Tank Bureau and adopted by the Ground Water Bureau, remediation of off-site materials can be done on a one-time basis. For this reason the stockpiled material can be remediated at the refinery site in accordance with the treatment and cleanup standards specified in Section 1209 of the UST Regulations. My primary concern is that the material be placed on plastic that is at least 8 to 10 mil thickness and that the area be properly bermed to minimize migration of contaminants from the area. When field instrumentation or best professional judgment indicate the material has sufficiently volatilized, a composite sample should be collected from the bottom of the lift and analyzed using Modified 8015. If the analysis indicates less than 50 ppm TPH, the remediation is considered to be complete. A copy of this analysis should be forwarded to NMED.

If ground-water contamination occurs as a result of this discharge, or if additional information becomes available indicating that these corrective actions are inadequate, further efforts may be required. If you have any questions, please feel free to call John Pfeil at (505)827-2776. Thank you for your cooperation in this matter.

Sincerely,

Marcy
Marcy Leavitt, Acting Chief
Ground Water Protection and Remediation Bureau

xc: Dennis McQuillan, Program Manager, GWPRB Remediation Section



STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT

Bruce King
Governor

Edith M. Espinosa
Secretary

Ron Curry
Deputy Secretary

4th Runnels Building
90 St. Francis Drive
P.O. Box 26110
S.Fe. NM 87502
(505) 827-2850
(505) 827-2836



File Copy
830 Dispatch
99830
Gen

INCIDENT INVESTIGATION
TRUCK ACCIDENT
THRIFTWAY MARKETING CORPORATION
BROADWAY AND 1ST STREET
BLOOMFIELD, NEW MEXICO 87413
SEPTEMBER 23, 1993

PREPARED FOR
THRIFTWAY MARKETING CORPORATION
MR. JIM RATCLIFFE
AND
STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MR. BENNIE MONTOYA

SEPTEMBER 28, 1993

INCIDENT INVESTIGATION
TRUCK ACCIDENT
THRIFTWAY MARKETING CORPORATION
BROADWAY AND 1ST STREET
BLOOMFIELD, NEW MEXICO 87413
SEPTEMBER 23, 1993

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THRIFTWAY MARKETING CORPORATION
MR. JIM RATCLIFFE
AND
STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MR. BENNIE MONTOYA

SEPTEMBER 28, 1993

BY

BIOTECH REMEDIATION, INC.
710 EAST 20TH STREET SUITE 400
FARMINGTON, NM 87401

PREPARED BY



KEN SINKS CHEM E. P.E.
SENIOR PROJECT MANAGER

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- FIGURE 2 LOCATION OF GASOLINE IN STREET

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- LABORATORY ANALYSIS

1.0 INTRODUCTION

On September 23, 1993 Mr. Jim Ratcliffe of Thriftway Marketing Corporation contacted BioTech Remediation, Inc., concerning an overturned truck at the intersection of Broadway (US Highway 64) and 1st Street in Bloomfield, New Mexico.

When BioTech personnel arrived the area was cordoned off by the State Police and Bloomfield City Police. The fire and rescue group had set up on the southwest corner of the intersection and several pumper trucks had foamed the surface of the gasoline in the roadway.

The City of Bloomfield road maintenance crew had responded with several truckloads of sand. Dirt from the vacant lot near the spill was built up on the sidewalk and sand was placed in the roadway to stop further migration of the gasoline eastward along the curb. (Figure 2)

2.0 WORK ACCOMPLISHED

After the tractor and trailer had been hauled off and the gasoline and water vacuumed up from the roadway, BioTech had the responsibility to check the area where the gasoline overflowed into the vacant lot and dispose of any contaminated soil.

The area in Figure labeled "Area of Cleanup" was wet and muddy and the hour was late so no clean-up of the soil was affected that evening. The main objective was to wash down the foam from the roadway and spread a thin film of sand on the road

to reduce the risk of sliding. The foam makes the road extremely slick when wet. The excess sand was stockpiled on the vacant lot.

Friday the BioTech crew started the clean-up of the area shown in Figure 1. Mr. George Duncan, the Bloomfield Fire Chief, called Mr. Ken Sinks of BioTech and explained that the sand spread the previous evening was creating a dust problem in the area. The city maintenance crew had cleared and vacuumed the sand from the road and needed to dispose of the sand. BioTech loaded the sand in a dump truck and hauled it to the Thriftway Refinery where it will be tested before final disposition.

Excavation of the area shown in Figure 1 (area of clean-up) was started in the morning. Mr. Rulon Hatch was the project scientist assigned to the clean-up task.

The soil was removed from the clean-up area in six inch (6") layers and the area was tested with a Thermo Environmental 580 B instrument (OVM). The soil at the surface and down to six inches (6") below grade yielded OVM readings between 200 and 450 ppm. At 12" below grade the OVM readings were 350 to 500 ppm. At 18" below grade the OVM readings were 13 to 34 ppm and at 24" the soil was clean. (See Table 1)

Two soil samples below the spill were taken after the initial screening by the OVM and excavation to clean soil was complete. One of these samples was ruined so the second sample was analyzed instead of the first. See the attached laboratory report. The soil was analyzed by EPA method 8015 modified, and found to be clean.

The excavation was backfilled with clean soil. All excavated soil, road sweepings and other potentially contaminated materials were transported to the Thriftway Refinery and placed on plastic until disposition is decided.

3.0 RECOMMENDATIONS AND CONCLUSIONS

The area of the spill in Bloomfield has been cleaned up so that there has been no appreciable impact to the environment. The gasoline was contained in the first two feet of the soil therefore, there was no impact to the ground water in the area.

The asphalt that was in contact with the gasoline may have been softened, however, this will revert back to a harder surface as the gasoline weathers. It is recommended that the asphalt near the curb be inspected by the city maintenance crew and a coat of asphalt protector be applied if necessary. The road stripping in the area of the crosswalk that was near the curb should be inspected and new paint or marking material applied if it has come loose.

With no impact to the ground water and all the contaminated soil removed BioTech recommends no further action on this site.

TABLES

TABLE 1
OVM READINGS

<u>DEPTH IN INCHES</u>	<u>VALUE</u>
6	280
6	347
6	435
12	512
12	350
18	13
18	34
24	0

Note: The OVM is a Thermal Environmental 580 B instrument. It was calibrated prior to use with a 250 ppm isobutylene calibration gas.

FIGURES

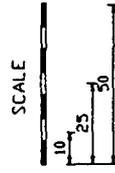
APPROXIMATELY TEN (10) CUBIC YARDS OF SOIL WAS REMOVED FROM THE CLEAN-UP AREA

BURIED LINES
 AREA OF CLEAN-UP
 PHONE BOX
 WATER METER MANHOLE
 SIGNAL LIGHT POLE
 SIGNAL CONTROL

U.S. HIGHWAY 44

NOTE: THE ROADWAY WAS COVERED WITH SAND AFTER THE GASOLINE WAS CLEANED UP. THIS WAS DONE TO ELIMINATE THE POSSIBILITY OF THE ROADWAY BECOMING SLIPPERY IN THE EVENT THERE WAS A RAIN SHOWER.

U.S. HIGHWAY 64



710 EAST 20TH STREET, SUITE 400
 FARMINGTON, NEW MEXICO 87401

OFFICE: (505) 632-3365
 FAX: (505) 632-0030

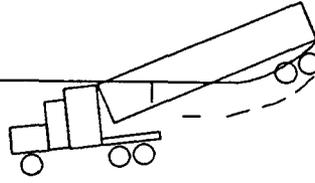
REMEDICATION

DRAFTSMAN:
 C. HOLLANDSWORTH
 FIGURE 1

SEPTEMBER 27, 1993

IPANOPOTATION SPILL
 BLOOMFIELD, N.M.
 AREA OF CLEAN-UP

U.S. HIGHWAY 44



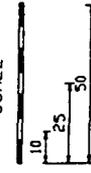
LOCATION OF GASOLINE SPILL
IN ROADWAY

SAND BARRIER



U.S. HIGHWAY 64

SCALE



TRANSPORTATION SPILL
BLOOMFIELD, N.M.
LOCATION OF GASOLINE
IN STREET

F:\FILES\TRAN2

DRAFTSMAN:

C. HOLLANDSWORTH

FIGURE 2

SEPTEMBER 27, 1993

BioTech
REMEDICATION

710 EAST 20TH STREET, SUITE 400

FARMINGTON, NEW MEXICO 87401

OFFICE: (505) 632-3365

FAX: (505) 632-0030

APPENDIX

BIOTECH LABORATORIES

EPA METHOD 8015 (MOD) PURGABLE AROMATICS

CLIENT: THRIFTWAY
CLIENT NUMBER: 810
PROJECT NAME: THRIFTWAY TRUCK ACCIDENT
PROJECT LOCATION: BLOOMFIELD, NEW MEXICO
SAMPLE ID: SOIL SAMPLE #2
SAMPLE NUMBER: S0208243

SAMPLE MATRIX: SOIL
PRESERVATIVE: COOL
REPORT DATE: 09/28/93
DATE SAMPLED: 09/24/93
DATE RECIEVED: 09/24/93
DATE ANALYZED: 09/28/93

ANALYTE	CONCENTRATION (mg/KG)	DETECTION LIMIT (mg/KG)
TOTAL PETROLEUM HYDROCARBON	ND	0.8

ND - ANALYTE NOT DETECTED AT STATED DETECTION LIMIT

REFERENCE: METHOD 8015
TEST METHOD FOR EVALUATION SOLID WASTE,
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, SW-846,
VOLUME IB, NOVEMBER 1990


ANALYZED BY


REVIEWED BY

QUALITY CONTROL

BIOTECH LABORATORIES

EPA METHOD 8015 (MOD) PURGABLE AROMATICS QUALITY CONTROL

CLIENT:	NA	SAMPLE MATRIX:	HEXANE
CLIENT NUMBER:	NA	PRESERVATIVE:	NA
PROJECT NAME:	NA	REPORT DATE:	09/28/93
PROJECT LOCATION:	NA	DATE SAMPLED:	NA
SAMPLE ID:	LABORATORY BLANK	DATE RECIEVED:	NA
SAMPLE NUMBER:	B1509283	DATE ANALYZED:	09/28/93

ANALYTE	CONCENTRATION (mg/KG)	DETECTION LIMIT (mg/KG)
TOTAL PETROLEUM HYDROCARBON	ND	1.0

ND - ANALYTE NOT DETECTED AT STATED DETECTION LIMIT

REFERENCE: METHOD 8015
TEST METHOD FOR EVALUATION SOLID WASTE,
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, SW-846,
VOLUME IB, NOVEMBER 1990

OIL CONSERVATION DIVISION
RECEIVED

1993 AUG 27 AM 9 27



710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-0030

August 12, 1993

Mr. William C. Olson
State of New Mexico
Oil Conservation Division
P. O. Box 2088
State Land Office Building.
Santa Fe, New Mexico 87504

RE: Thriftway Refinery, Finished Gasoline Spill.

Dear Mr. Olson:

This letter is in response to your letter dated August 9, 1993. I will address the questions in the order that you asked them.

Inquiry #1 - *Either sample the soils for hazardous waste characteristics or obtain a variance from the NMED for this requirement. The OCD suggests you contact Ed Horst of the NMED Hazardous and Radioactive Materials Bureau to discuss variance issues.*

As suggested, we have contacted Mr. Ed Horst in regards to the variance issue.

Inquiry #2 - *Thriftway's June 4, 1993 correspondence states that the source of the spill was a premium unleaded gasoline tank, however, Thriftway's July 27, 1993 correspondence states that the source of the spill was a diesel fuel tank. Please provide information clarifying discrepancies regarding the source of the spill.*

We regret the confusion in referring to the spill as Diesel in our letter dated July 27, 1993. It was finished gasoline premium unleaded delivered by Gary Energy and other wise as stated in our letter dated June 14, 1993.

Inquiry #3 - *Thriftway has not provided OCD with a report documenting the exact area contaminated and the final cleanup levels attained during excavation of the contaminated soils. Please provide this information to OCD.*

All of the hydrocarbon contaminated soil excavated from the spill area was placed on plastic and a berm placed around it.

The report documenting the exact area and contamination levels attained in cleanup will follow under separate cover.

If you have any questions, please contact me at (505)-632-3365.

Thank you for your help in this matter.

Sincerely,

Jack D. Dewey

Jack D. Dewey
Hydrologist

F:\files\810\CR081293

9/17/93
Referred to ~~HA~~-Waste ED
WJ

8/20/93 OCD/Thriftway Meeting on Gasoline Spill 10:00 am

attendees - Bill Olson - Envir. Bureau
Roger Anderson - " "
Ken Simkes - Biotech Remediation, Inc.
Jack Dewey " " "

K.S. Handout of TCLP Benzene results
over TC limits for benzene

BO OCD has no authority for Haz-waste
Will refer to ED

R.A. Roze will meet with ED Horst to discuss

K.S. Thriftway has response to OCD 8/9/93 letter
will be to OCD by next week

BIOTECH LABORATORIES

8/20/93

EPA METHOD 8020 PURGABLE AROMATICS

TCLP Results

CLIENT: THRIFTWAY
CLIENT NUMBER: 00810
PROJECT NAME: THRIFTWAY REFINERY
PROJECT LOCATION: BLOOMFIELD, NEW MEXICO
SAMPLE ID: SOIL SAMPLE #1
SAMPLE NUMBER: S0108183

SAMPLE MATRIX: WATER
PRESERVATIVE: HGCL2
REPORT DATE: 08/19/93
DATE SAMPLED: 08/18/93
DATE RECEIVED: 08/18/93
DATE ANALYZED: 08/19/93
EXTRACTANT: ZHE

ANALYTE	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
BENZENE	1248.0	500.0
TOLUENE	1469.0	500.0
ETHLYBENZENE	1368.0	500.0
M,P-XYLENE	968.0	500.0
O-XYLENE	587.0	500.0

ND - ANALYTE NOT DETECTED AT STATED DETECTION LIMIT

BIOTECH LABORATORIES

EPA METHOD 8020 PURGABLE AROMATICS

PAGE 2 - QUALITY CONTROL

CLIENT:	THRIFTWAY	SAMPLE MATRIX:	WATER
CLIENT NUMBER:	00810	PRESERVATIVE:	HGCL2
PROJECT NAME:	THRIFTWAY REFINERY	REPORT DATE:	08/19/93
PROJECT LOCATION:	BLOOMFIELD, NEW MEXICO	DATE SAMPLED:	08/18/93
SAMPLE ID:	SOIL SAMPLE #1	DATE RECIEVED:	08/18/93
SAMPLE NUMBER:	S0108183	DATE ANALYZED:	08/19/93
		EXTRACTANT	ZHE

QUALITY CONTROL:	SURROGATE	PERCENT RECOVERY	ACCEPTANCE LIMIT
	BROMOCHLOROMETHANE	104.5 %	85-115%
	2-BROMO-1-CHLOROPROPANE	106.7 %	85-115%

REFERENCE: METHOD 5030, PURGE AND TRAP
METHOD 8020, PURAGABLE AROMATICS
TEST METHOD FOR EVALUATION SOLID WASTE,
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, SW-846,
VOLUME IB, NOVEMBER 1990

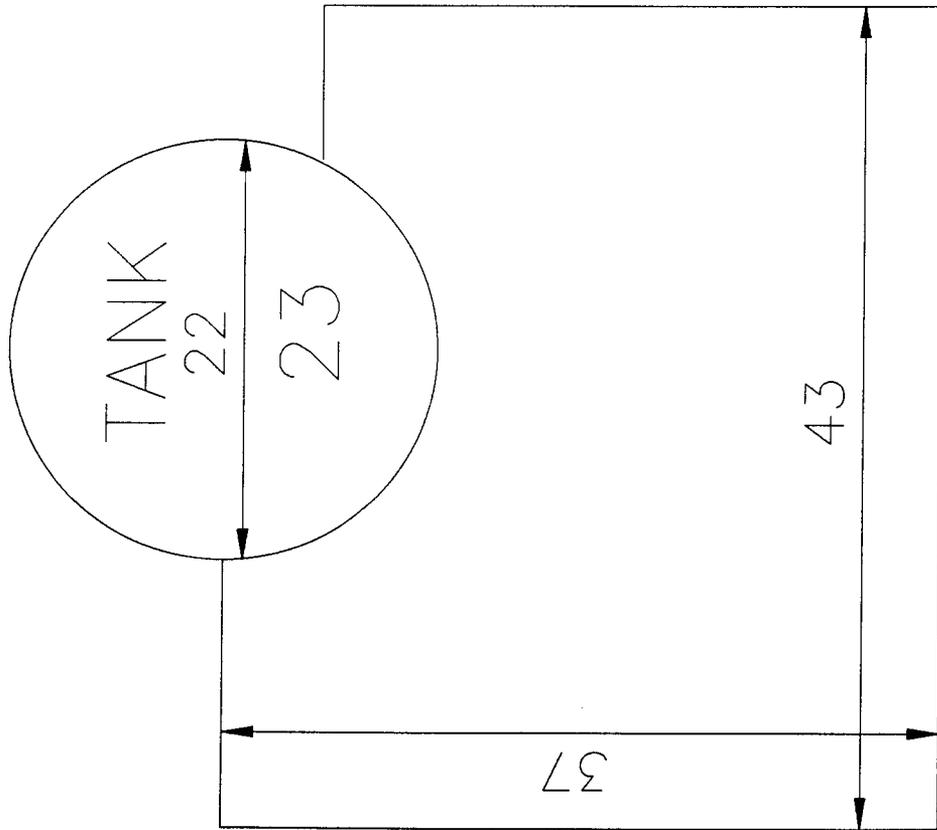
COMMENTS:



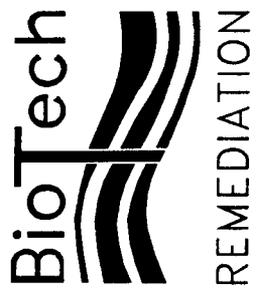
ANALYST



REVIEW



approx 3-4 deep



710 EAST 20TH STREET, SUITE 400
 FARMINGTON, NEW MEXICO 87401
 FIELD OFFICE: (505) 632-3365
 FAX: (505) 632-0030

THRIFTWAY REFINERY SITE 810
 BLOOMFIELD, NEW MEXICO

SUPER UNLEADED GASOLINE SPILL
 TANK 23



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

August 9, 1993

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ANITA LOCKWOOD
CABINET SECRETARY

CERTIFIED MAIL

RETURN RECEIPT NO. P-667-242-373

Mr. R.J. Dalley
Thriftway Marketing Corporation
770 East 20th Street
Albuquerque, New Mexico 87401

**RE: SPILL CONTAMINATED SOILS
THRIFTWAY BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Dalley:

The New Mexico Oil Conservation Division (OCD) has received a request from BioTech Remediation on behalf of Thriftway Marketing, dated July 27, 1993, requesting a variance from the OCD requirement that soils contaminated from a recent diesel spill at the Thriftway Bloomfield Refinery be tested for hazardous characteristics prior to remediation. This document also stated that Thriftway's preferred remediation technique is onsite bioremediation of the soils.

While the concept of onsite bioremediation of the contaminated soils is acceptable, the OCD has no authority to grant variances from RCRA Subtitle C requirements. Only the New Mexico Environment Department (NMED) Hazardous and Radioactive Materials Bureau has this authority. Therefore, the above referenced request is hereby denied.

The OCD is concerned about discrepancies in Thriftway correspondence related to this incident. The OCD is also concerned that these soils are still being stored and have not been either remediated or removed from the facility. Due to the length of time that has elapsed since the spill incident, the OCD requires that Thriftway, within 7 days of receipt of this letter, perform the following actions:

1. Either sample the soils for hazardous waste characteristics or obtain a variance from the NMED for this requirement. The OCD suggests you contact Ed Horst of the NMED Hazardous and Radioactive Materials Bureau to discuss variance issues.

Mr. R.J. Dalley
August 9, 1993
Page 2

2. Thriftway's June 4, 1993 correspondence states that the source of the spill was a premium unleaded gasoline tank, however, Thriftway's July 27, 1993 correspondence states that the source of the spill was a diesel fuel tank. Please provide information clarifying discrepancies regarding the source of the spill.
3. Thriftway has not provided OCD with a report documenting the exact area contaminated and the final cleanup levels attained during excavation of the contaminated soils. Please provide this information to OCD.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,



William C. Olson
Hydrogeologist
Environmental Bureau

xc: OCD Aztec Office
Ed Horst, NMED Hazardous and Radioactive Materials Bureau

OIL CONSERVATION DIVISION
RECEIVED



July 27, 1993

'93 AUG 2 AM 8 48

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-0030

Mr. Bill Olson
State of New Mexico
Oil Conservation Division
P.O. Box 2088
State Land Office Building.
Santa Fe, New Mexico 87504

RE: Thriftway Refinery Diesel Spill

Dear Mr. Olson:

As you are aware, the Thriftway Refinery had a Diesel spill of several thousand gallons some time ago. The soil in the area of the spill was analyzed in the past when the refinery reinjection system was installed. This was necessary before the soil excavated for that project could be sent to the Envirotech land farm for remediation. At the time of the installation of the reinjection system, your office required a complete analysis of the soil (TCLP). The cost of this analysis runs between \$1000 and \$1500. The product that was spilled in that area was refined diesel. There are no hazardous materials in the diesel that would be detected in the TCLP analysis. The soil contaminated by the latest diesel spill was excavated and stockpiled on plastic.

I am requesting a variance from the requirement of a TCLP analysis for this soil. Thriftway has recently obtained a license to use exogenous bacteria to remediate soil and water. The application of microbes to the excavated soil and subsequent remediation on site is less expensive than hauling the soil to the Envirotech land farm for remediation. The requirement for another TCLP on the soil in that area would be a waste of manpower in collecting the sample and a waste of money in analyzing it.

I appreciate any consideration and help you can give me in obtaining this variance.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth Sinks".

Kenneth Sinks
Senior Project Manager

F:\files\810\CR072793



State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
 Santa Fe, New Mexico 87505

STATE OF
 NEW MEXICO
 OIL
 CONSERVATION
 DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1100	Date 6/23/93
---	-----------------------------------	--------------	-----------------

<u>Originating Party</u> Bill Olson - Envir. Bureau	<u>Other Parties</u> Terry Griffin - Biotech Remediation Inc 632-3365
--	---

Subject
 Thruway Refinery Gasoline Spill

Discussion
 Informal her that WCD needs to see a full Haz-waste characterization of the waste soils prior to evaluating remedial options

Conclusions or Agreements
 She will tell Ken Simko and they will do it

Distribution

Signed *Bill Olson*

OIL CONSERVATION DIVISION
RECEIVED

'93 JUN 21 AM 10 29



June 14, 1993

710 East 20th Street, Suite 400
Farmington, New Mexico 87401
Field Office: (505) 632-3365
Fax: (505) 632-0030

Mr. Bill Olsen
State of New Mexico
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87502

RE: Treatment Of Contaminated Soil From A Finished Gasoline
Spill.

Dear Mr. Olsen:

Around June 4, 1993, approximately 10,000 gallons of premium unleaded was spilled in the dike of tank 23 at the Thriftway Bloomfield Refinery. None of this product was recovered. The soil from the contaminated area was excavated and placed on plastic.

Thriftway Marketing Corp., has retained BioTech Remediation, Inc., to remediate this contaminated soil at the refinery. BioTech has two (2) approved remediations for Thriftway underway at this time; 1) an ex-situ remediation scheduled to start soon and 2) an in-situ pilot study that will begin about July 6, 1993. The ex-situ site is located in Gallup, New Mexico, at the Malco Station #181 and the in-situ site is located at the Thriftway Station #214 in Bloomfield, New Mexico. These site clean-ups were authorized by the NMED Underground Storage Tank Bureau.

BioTech would like to remediate the soil excavated at the refinery ex-situ. The soil is contaminated with gasoline, which is easily remediated biologically.

The process to be used to bioremediate the soil is the Alpha Process. BioTech has recently licensed this process through Applied Bioscience, an Alpha affiliate.

BioTech is working with Mr. Richard Ohrbom, of the New Mexico Ground Water Section and Kathy Garland, Steve Jetter, John Cochran, and Gregg Crandall (all with the New Mexico Under Ground Storage Tank Bureau) on the ex-situ and in-situ remediations, reference above. We also have three (3) other in-situ remediations awaiting the results of the pilot study at the Thriftway Station #214 site in Bloomfield, New Mexico.

June 14, 1993
Mr. Bill Olsen
Page 2

We would like to start the remediation procedure ASAP. As I mentioned above, the soil is stored on plastic and a berm has been placed around the stored soil.

If you have any questions concerning the Alpha Process, I will be happy to answer them. I have voluminous amounts of material concerning the Alpha Process that has been supplied to me by Alpha Environmental and Applied Bioscience. If you need a copy of our filings with the USTB, please let me know and I will see that you receive a copy.

Sincerely,



Kenneth Sinks
Senior Project Manager

FILE \810\CR061493



State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
 Santa Fe, New Mexico 87505

STATE OF
 NEW MEXICO
 OIL
 CONSERVATION
 DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 0925	Date 2/2/93
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<u>Originating Party</u>	<u>Other Parties</u>
Kathy Garland - EP UST Bureau - 2926	Bill Olson - OCD

Subject
 Thriftway Refinery

Discussion
 Thriftway doing UST Emergency Action near ABB and is taking water/product to refinery to run through separator & into the lined pond.
 She is checking to see if OK with OCD
 I told her that Thriftway does not have authorization to do this and that Thriftway must make such a request to OCD for approval

Conclusions or Agreements
 She will contact Ken Sikes of Thriftway and tell him he must contact OCD for approval

Distribution

Signed 

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

November 18, 1992

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ANITA LOCKWOOD
CABINET SECRETARY

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-312

Mr. R.J. Dalley
Thriftway Marketing Corporation
710 East 20th Street
Farmington, New Mexico 87401

**RE: CONTAMINATED SOILS
THRIFTWAY BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Dalley:

On October 26, 1992, the New Mexico Oil Conservation Division (OCD) received a request from Envirotech, Inc., dated October 23, 1992, to receive petroleum contaminated soils from the Thriftway Bloomfield Refinery at Envirotech's OCD approved soil remediation facility. The soils to be remediated at the Envirotech facility were generated during the installation of the ground water remediation system at the refinery and have been in long term storage at the refinery since the remediation system was installed. On October 27, 1992, Denny Foust of the OCD Aztec Office approved Envirotech for the receipt of these soils based upon laboratory analyses showing the soils to be characteristically non-hazardous per U.S. EPA RCRA regulatory limits. To date these soils are still in long term storage at the refinery.

Due to the high levels of contaminants in the soils and the shallow nature of ground water at the refinery, the OCD requires that Thriftway remove the soils from the refinery to an OCD approved remediation site by December 2, 1992.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,

A handwritten signature in cursive script, appearing to read "William C. Olson".

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Denny Foust, OCD Aztec Office

ENVIROTECH INC.

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

5796 U.S. HIGHWAY 64 - 3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

October 23, 1992

RECEIVED

OCT 26 1992

OIL CON. DIV

DIST. 2

Mr. Denny Foust
Environmental Compliance Inspector
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: Request for Authorization to Receive
Contaminated Soil

Project 91100

Dear Mr. Foust:

Thriftway Inc. has requested Envirotech Inc. receive hydrocarbon contaminated soils from a clean-up of their Bloomfield Refinery site.

The contaminated soils resulted from miscellaneous leaks and spills from their crude oil refining operations. In-as-much as refined products were involved, the attached TCLP analysis was performed, as per your request.

As per the attached analysis, this soil is classified as non-hazardous per RCRA Regulatory limits.

Envirotech Inc. requests authorization to receive the soils for remediation.

Your assistance is greatly appreciated.

Sincerely,



Morris D. Young
President

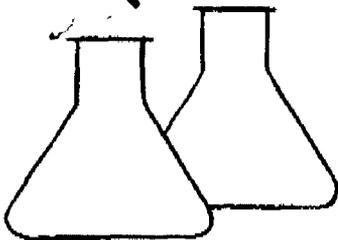
MDY/cj096

CC: Mr. R.J. Dalley - Thriftway Inc.
MR. Ken Sinks - Thriftway Inc.

OK

DGF

10/27/92



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
 PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 1311
 TOXICITY CHARACTERISTIC LEACHING PROCEDURE
 TRACE METAL ANALYSIS

Client:	Thriftway Refinery	Project #:	91100
Sample ID:	Composite	Date Reported:	08-20-92
Laboratory Number:	2269	Date Sampled:	08-12-92
Sample Matrix:	Soil	Date Received:	08-13-92
Preservative:	Cool	Date Analyzed:	08-20-92
Condition:	Cool & Intact	Date Extracted:	08-17-92
		Analysis Needed:	TCLP

Parameter	Regulatory Level (mg/L)	Concentration (mg/L)	Det. Limit (mg/L)
ARSENIC	5.000	0.004	0.001
BARIUM	100.0	2.3	0.1
CADMIUM	1.000	0.005	0.001
CHROMIUM	5.000	ND	0.001
LEAD	5.000	ND	0.001
MERCURY	0.200	0.015	0.002
SELENIUM	1.000	0.017	0.001
SILVER	5.00	ND	0.01

Method: Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, Sept. 1986

Methods 7060A, 7080A, 7131A, 7191, 7470A, 7421, 7740, 7760A
 Analysis of Metals by GFAA and FLAA, SW-846, USEPA

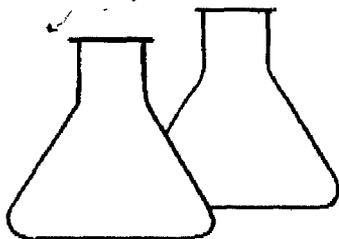
Method 1311, Toxicity Characteristic Leaching Procedure
 SW-846, USEPA, Nov. 1990

ND - Parameter not detected at the stated detection limit.

Comments: Thriftway Refinery, Bloomfield, New Mexico

Devin L. Spencer
 Analyst

Monica D. Young
 Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
 PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8090
 NITROAROMATICS AND CYCLIC KETONES

Client:	Thriftway Refinery	Project #:	91100
Sample ID:	Composite	Date Reported:	10-02-92
Laboratory Number:	2269	Date Sampled:	08-13-92
Sample Matrix:	Soil	Date Received:	08-13-92
Preservative:	Cool	Date Extracted:	08-17-92
Condition:	Cool and Intact	Date Analyzed:	10-01-92
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	5.0
Nitrobenzene	ND	0.020	5.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

Method: Method 1311, Toxicity Characteristic Leaching Procedure
 Test Methods for Evaluating Solid Waste, SW-846, USEPA,
 Sept. 1986.

Method 3510, Separatory Funnel Liquid-Liquid Extraction,
 Test Methods for Evaluating Solid Waste, SW-846, USEPA,
 Sept. 1986.

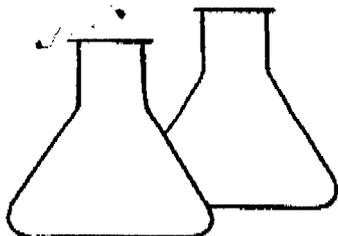
Method 8090, Nitroaromatics and Cyclic Ketones,
 Test Methods for Evaluating Solid Waste, SW-846,
 USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Thriftway Refinery, Bloomfield, New Mexico

David Green
 Analyst

Marisa Young
 Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
 PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8040 PHENOLS

Client:	Thriftway Refinery	Project #:	91100
Sample ID:	Composite	Date Reported:	09-30-92
Laboratory Number:	2269	Date Sampled:	08-12-92
Sample Matrix:	Soil	Date Received:	08-13-92
Preservative:	Cool	Date Extracted:	08-17-92
Condition:	Cool & Intact	Date Analyzed:	09-29-92
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200.0
p,m-Cresol	ND	0.040	200.0
2,4,6-Trichlorophenol & 2,4,5-Trichlorophenol	ND	0.040	2.0
Pentachlorophenol	ND	0.025	100.0

Method: Method 1311, Toxicity Characteristic Leaching Procedure
 Test Methods for Evaluating Solid Waste, SW-846, USEPA,
 Sept. 1986.

Method 3510, Separatory Funnel Liquid-Liquid Extraction,
 Test Methods for Evaluating Solid Waste, SW-846, USEPA,
 Sept. 1986.

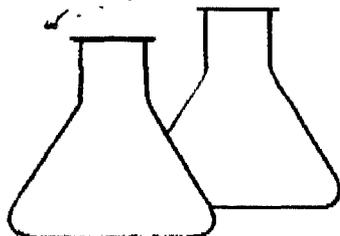
Method 8040, Phenols, Test Methods for Evaluating Solid
 Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Composite of contaminated soil.
 Thriftway Refinery, Bloomfield, NM.

Robert M. Young
 Analyst

M. David Young
 Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
 PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHODS 8010/8020
 AROMATIC VOLATILE ORGANICS/HALOGENATED VOLATILE ORGANICS

Client:	Thriftway Refinery	Project #:	92140
Sample ID:	Composite	Date Reported:	10-20-92
Laboratory Number:	2269	Date Sampled:	08-13-92
Sample Matrix:	Soil	Date Received:	08-13-92
Preservative:	Cool	Date Extracted:	08-17-92
Condition:	Cool and Intact	Date Analyzed:	08-24-92
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.010	0.2
1,1-Dichloroethene	ND	0.010	0.7
Chloroform	ND	0.010	6.0
Benzene	0.189	0.025	0.5
Carbon Tetrachloride	ND	0.010	0.5
2-Butanone	ND	0.012	200
1,2-Dichloroethane	ND	0.010	0.5
Trichloroethene	ND	0.010	0.5
Tetrachloroethene	ND	0.010	0.7
Chlorobenzene	ND	0.045	100
1,4-Dichlorobenzene	ND	0.010	7.5

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Trifluorotoluene	94.5 %
Bromfluorobenzene	95.9 %

Method: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

Method 8010, Halogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1990

ND - Parameter not detected at the stated detection limit.

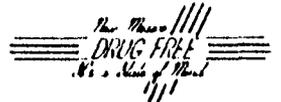
Comments: Thriftway Refinery, Bloomfield, New Mexico

[Signature]
 Analyst

[Signature]
 Review



STATE OF NEW MEXICO



ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

RECEIVED

'92 SEP 11 AM 9 27

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

CERTIFIED MAIL RECEIPT NO. P 988 786 233

SEPTEMBER 8, 1992

Thriftway Marketing Corp.
Attn. Ken Sinks
Dept. of Environmental Services
710 East 20th Street
Farmington, NM 87401

RE: Prompt and prudent response to oil spills.

Dear Mr. Sinks:

An oil spill was discovered at the Thriftway Refinery on August 31, 1992 while Ken Sinks of Thriftway and Denny Foust of the Oil Conservation Division were sampling monitor wells. The oil spill consisted of tank bottoms and water and was contained within firewalls near tank #30. The spill was caused by seals leaking in a transfer pump. Sampling of monitor wells continued after discussing the necessary steps to remediate the spill. On a subsequent inspection of the spill September 3, 1992, no action had yet been taken to remediate and clean up the spilled hydrocarbons and water. Chris Hollandsworth of Thriftway was informed immediate action was necessary. The following day September 4, 1992, although some fluids had been removed and some solids had been stored for subsequent remediation, work had stopped due to a soggy bottom in the pit plus a lack of equipment and help.

Oil Conservation Division Rules and policy are for prompt and prudent attention to spills to prevent potential contamination. When spills are contained, "prompt" is deemed to be in daylight hours with all the necessary equipment and personnel to complete the clean up. When spills are not contained, all necessary equipment and personnel shall be utilized in a prudent and safe manner to contain the spill at any hour. Safety of personnel on the job and the public are always of primary concern. Contract equipment and personnel may be necessary to contain and/or clean up a spill in a prudent manner. Waiting until personnel and/or equipment are available from within the company to clean up an oil spill is not an option acceptable to the Oil Conservation Division.

If you have questions please feel free to contact this office.

Yours truly,

Denny G. Foust
Denny G. Foust
Environmental Geologist

no
10/30/92
District

XC: OCD Environmental Bureau
Environmental file
DGF file

Thrift way

710 East 20th Street
Farmington, New Mexico 87401

Office: (505) 326-5571
Refinery: (505) 632-3363

RECEIVED
OIL CONSERVATION DIVISION
MAR 10 1992

March 3, 1992

Mr. Roger Anderson
State of New Mexico
Oil Conservation Division
PO Box 2088
Sante Fe, NM 87504

RE: Thriftway Refinery monitoring and cleanup update.

Dear Mr. Anderson

RE: Status of Thriftway Marketing Company's Bloomfield NM
Refinery.

Gasoline margins continue to be thin, however, gasoline blend stock is priced such that we are continuing to blend gasoline in the refinery.

We have emptied both of our crude tanks and are in the process of cleaning and inspecting them. I anticipate this will take some time because of our reduced work force.

The remediation project is progressing a little behind schedule. The plant shutdown and subsequent work force reduction has stopped all construction until we have at least one of our crude tanks cleaned and inspected.

I will continue to keep you posted concerning refinery operations as changes occur. If you have any questions concerning the above I can be contacted at the refinery at 505-632-3363.

Sincerely,



Ken Sinks
Environmental Engineer

c.c. Dalley, Ratcliffe

Doc121

Thrift way

710 East 20th Street
Farmington, New Mexico 87401

Office: (505) 326-5571
Refinery: (505) 632-3363
Fax: 505-327-3813

February 17, 1992

RECEIVED

FEB 21 1992

OIL CONSERVATION DIV.
SANTA FE

Mr. Roger Anderson
State of New Mexico
Oil Conservation Division
PO Box 2088
Sante Fe, NM 87504

RE: Thriftway Refinery monitoring and cleanup update.

Dear Mr. Anderson

Thriftway is in the process of laying off a number of employees of the refinery located in Bloomfield, New Mexico. This has become necessary because of the economic climate surrounding crude and product prices. Thriftway is suspending its crude processing operation until such time as the fluctuations in crude prices stabilize.

We are continuing ahead with our site remediation program, but have stopped our tank high level alarm system installation and the tank cleaning and inspection program. It is Thriftways intent to remove all inventory from the refinery and operate the site remediation system. Provisions are being made to insure a separate electrical source for the pumps and strippers connected to the site remediation system.

Sincerely,



Ken Sinks
Environmental Engineer

c.c. file

Doc97

Thrift way

710 East 20th Street
Farmington, New Mexico 87401

Office: (505) 326-5571
Refinery: (505) 632-3363
Fax: 505-327-3813

RECEIVED
OIL CONSERVATION DIVISION
'91 OCT 8 39

October 2, 1991

Mr. Roger Anderson, Environmental Engineer
State of New Mexico
Oil Conversation Divison
PO Box 2088
Santa Fe, NM 87505

RE: Reporting Authority and Thriftway Contact

Dear Mr. Anderson:

Due to the tremendous state, federal and other agency reporting and excessive administrative and consulting cost Thriftway has taken over the environmental monitoring and routine correspondence from Envirotech Inc. and Camp Dresser & McKee Inc.

In order to insure that we don't miss reporting deadlines or send our correspondence to the wrong person we would appreciate your verification of the following information:

We have your address and telephone number listed as:

Mr. Roger Anderson, Environmental Engineer
State of New Mexico
Oil Conversation Divison
PO Box 2088
Santa Fe, NM 87505
1-505-827--5884

The station(s) or area(s) of reporting we have you listed for is:

Thriftway Refinery #810

Mr. Kenneth Sinks, Environmental Engineer has been retained to act as the company specialist in Environmental matters. He will be reporting to Mr. R.J. Dalley. Please send all correspondence to Mr. R.J. Dalley with a copy to Mr. Kenneth Sinks. The address for the above individuals is:

Thriftway Marketing Corp.
710 E. 20th Street
Farmington, NM 87401

Mr. Dalley can be reached at 1-505-326-5571.

Mr. Sinks can be reached at 1-505-632-3363.

We appreciate your help in this important matter. Please send acknowledgement of the above information along with your telephone number to Mr. Sinks at the above address.

Sincerely,



Linda Stewart
Administrative Aide

cc: R.J. Dalley
Ken Sinks

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ENVIROTECH INC.

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION
IN DIVISION

5796 U.S. HIGHWAY 64 - 3014 OIL CONSERVATION DIVISION
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

RECEIVED

'91 JUL 12 AM 8 42

July 8, 1991

Mr. William LeMay, Director
Oil Conservation Division
State of New Mexico
P.O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

Re: Discharge Plan GW-55
Thriftway Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. LeMay:

We are in receipt of your June 18, 1991 correspondence requesting a progress report on the various components of Thriftway's Groundwater Discharge Plan GW-55. Specifically you requested information on the following items:

1. Construction of groundwater remediation system

Construction of this system was begun June 17, 1991. The collection sump was constructed and set, but due to the groundwater conditions encountered the tank floated and will be reinstalled this coming week when the proper equipment becomes available. Construction is anticipated to require approximately 60 days.

2. Completion of the process area containment and wastewater collection system

The process area containment and the wastewater collection system was completed as of June 1, 1991.

3. Closure of the abandoned wastewater lagoon

The abandoned wastewater lagoon closure was completed March 15, 1991. A closure report was forwarded to your office June 17, 1991.

4. Completion of construction of containment systems at transfer pumps, tank water draws, fuel oil loading dock and crude oil receiving dock

Containment systems for the transfer pumps has begun, but is not complete at this time. The tank water draw containment system is also underway and is scheduled for completion prior to August 31, 1991. Both the fuel oil and crude oil receiving docks have been completed and are ready for inspection as reported in our June 17, 1991 correspondence to your office.

5. Retrofitting below grade sumps with leak detection systems

We have been informed that Thriftway personnel have either retrofitted all below grade sumps with leak detection systems or modified them so that they can be cleaned and internally inspected on an annual basis.

6. Replacement of bolted diesel tank

Diesel tank No. 20 was removed from service January 1, 1991. It has not been physically removed from the refinery property yet, but the piping to and from has been physically removed, as well as the tank opened up rendering it unusable. We have requested authorization from New Mexico Air Quality Bureau to replace this tank with a 10,000 barrel floating roof tank. This tank will be installed upon receipt of their authorization.

7. Removal of culvert and construction of surface runoff containment system

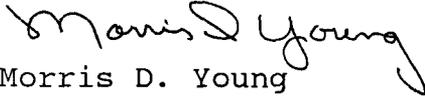
Construction is currently underway to remove the north-central culvert and build the surface runoff containment system. The project is anticipated to be completed prior to July 20, 1991.

We appreciate the help and direction the Oil Conservation Division (OCD) personnel have been in assisting Thriftway to attain compliance with OCD regulations.

Thriftway requests that you address all future correspondence to the attention of Mr. Jim Ratcliff. Mr F.L. Stark has retired and is no longer with Thriftway.

If we can provide any additional information, or in any way be helpful, please contact us.

Sincerely,


Morris D. Young
President

MDY/tjg

625.doc

c: Jim Ratcliff, Thriftway Marketing
R.J. Dalley, Thriftway Marketing
Ken Sinks, Thirftway Refinery

ENVIROTECH INC.

UNDERGROUND TANK TESTING • OIL CONSERVATION DIVISION • SITE ASSESSMENT • SITE REMEDIATION
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5796 U.S. HIGHWAY 64 - 3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

'91 JUN 20 AM 9 00

June 17, 1991

Mr. Roger Anderson
Oil Conservation Division
PO Box 2088
State land Office Building
Santa Fe, NM 87504

RE: Spill Containment of Process Areas & Loading Docks
Thriftway Bloomfield Refinery
Discharge Plan GW-55

Dear Mr. Anderson:

Envirotech Inc. has completed, as of June 1, 1991, concrete paving of both the Crude Unit and the Reformer Plant areas of the Thriftway Refinery, Bloomfield, New Mexico.

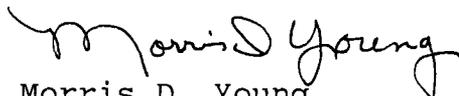
Construction of the Hydrocracker Unit has temporarily been placed on hold, therefore, this unit will not be paved at the present time.

Containment structures have been completed for the Crude Unloading, Light Crude Unloading, Diesel Loading, and Residual Fuels Loading activities as per previous submittal for GW-55.

The above referenced facilities are ready for Oil Conservation Division inspection, at the Division's convenience.

We appreciate working with you on this matter.

Sincerely,



Morris D. Young
President

MDY/tjg

572.doc

c: Mr. Ken Sinks, Thriftway Refinery
Mr. R.J. Dalley, Thirftway Marketing
Mr. Jim Ratcliff, Thirftway Marketing

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNORPOST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

June 4, 1991

CERTIFIED MAIL - RETURN RECEIPT NO. P-327-278-249

Ms. Jennifer Fowler-Propst
Field Supervisor
U. S. Fish and Wildlife Service
Suite D
3530 Pan American Highway, N.E.
Albuquerque, New Mexico 87107

Dear Ms. Fowler-Propst:

The Oil Conservation Division (OCD) has received your comments, dated March 19, 1991, concerning the discharge plan (GW-55) application for the Thriftway Marketing Corporation's Bloomfield Refinery. Your comments regarding Ciniza Refinery are being addressed in separate correspondence.

The concerns stated in your letter are taken into consideration in all discharge plan reviews. A discharge plan is a management tool with the goal of total containment of any contaminant discharges, whether planned or accidental, such that surface water, ground water or the environment are not adversely impacted. This discharge plan does not authorize any discharges to surface water or ground water except for discharges of clean water to flush contaminated water to authorized on-site recovery wells. In the event that an accidental spill should occur that could have an impact, discharge plans contain procedures for notification, clean-up and mitigation. The evaporation pond is required to comply with OCC Order R-8952 for protection of migratory birds.

As with all correspondence with the OCD, discharge plans are public documents open for review. These documents can be viewed at the OCD's Santa Fe office between 8:00 a.m. and 5:00 p.m., Monday through Friday.

If you have any question, please do not hesitate to contact me at (505) 827-5884.

Sincerely,

A handwritten signature in cursive script that reads "Roger C. Anderson".

Roger C. Anderson
Environmental Engineer

cc: Aztec OCD Office

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

June 18, 1991

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-360

Mr. F.L. Stark
Thriftway Marketing Corporation
710 East 20th Street
Farmington, New Mexico 87401

**RE: DISCHARGE PLAN GW-55
THRIFTWAY BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Stark:

On May 13, 1991, the New Mexico Oil Conversation Division (OCD) approved a ground water discharge plan (GW-55) for the Thriftway Marketing Corporation Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4 section 33, Township 29 North, Range 11 West and the NE/4 NE/4, Section 9, Township 28 north, Range 1 West, NMPM, San Juan County, New Mexico.

The above referenced discharge plan was approved conditioned upon numerous commitments made by Thriftway to implement a variety of ground water protection measures, construct a ground water remediation system and investigate the extent of ground water contamination related to refinery activities. Thriftway has notified the OCD about the completion of some of the discharge plan commitments. However, Thriftway has not notified OCD of the progress or completion of several important commitments.

The OCD requires that Thriftway provide OCD, within 10 working days of receipt of this letter, information regarding the following discharge plan conditions that Thriftway committed to either complete or initiate prior to the date of this letter:

1. Initiating construction of the ground water remediation system.

Mr. F.L. Stark
June 18, 1991
Page 2

- Hydrocracker unit on hold*
2. Completion of the process area containment and wastewater collection system.
 3. Closure of the abandoned wastewater lagoon. ✓ *to be completed under Remediation Plan*
 4. Completion of construction of containment systems at transfer pumps, tank water draws, the fuel oil loading dock and the remaining crude oil receiving dock. ✓
 5. Completion of retrofitting of all below grade sumps with leak detection systems.
 6. Replacement of the bolted diesel tank.
 7. Removal of the north central culvert and construction of the surface runoff containment system.

The OCD appreciates Thriftway's willingness to implement ground water protection measures at the refinery in as timely a manner as possible and looks forward to your response regarding the progress of the above commitments.

If you have any questions, please contact either William Olson at (505) 827-5885 or Roger Anderson at (505) 827-5884.

Sincerely,

William J. LeMay for William J. LeMay

William J. LeMay
Director

WJL/WCO

xc: OCD Aztec Office
Morris Young, Envirotech, Inc.
Robert G. Stovall,



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

May 13, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL

RETURN RECEIPT NO. P-918-402-110

Mr. F. L. Stark, Vice President
Thriftway Marking Corporation
710 East 20th Street
Farmington, New Mexico 87401

RE: Discharge Plan GW-55
Thriftway Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Stark:

The groundwater discharge plan (GW-55) for the Thriftway Marketing Corporation Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and the NE/4 NE/4, Section 9, Township 28 North, Range 1 West, NMPM, San Juan County, New Mexico is hereby approved with the following conditions:

1. The Investigation Proposal to investigate the full extent of contamination at the refinery, dated October 30, 1990 and contained in the February 12, 1991 revisions, will commence within thirty (30) days of approval of this discharge plan.
2. All other timetables committed to in your correspondence remain in effect.

The discharge plan consists of the discharge plan application dated July 30, 1990, and materials dated September 17, 1990, October 30, 1990, October 31, 1990, November 20, 1990, February 12, 1990, March 18, 1991, and May 3, 1991, submitted as supplements to the application.

The discharge plan was submitted pursuant to Section 3-106 of the New Mexico Water Quality Control Commission Regulations. It is renewed pursuant to Section 3-109.A.; please note Section 3-109.F., which provides for possible future amendments of the plan. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters or the environment which may be actionable under other laws and/or regulations.

Mr. F. L. Stark
May 13, 1991
Page -2-

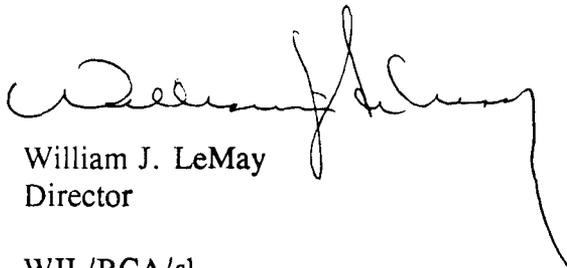
Please be advised that all exposed pits, including lined pits and open top tanks (tanks exceeding 16 feet in diameter), shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that Section 3-104 of the regulations requires that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3-107.C. you are required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3-109.G.4., this plan approval is for a period of five (5) years. This approval will expire May 9, 1996 and you should submit an application for renewal in ample time before that date. It should be noted that all gas processing plants and oil refineries in excess of twenty-five years of age will be required to submit plans for, or the results of an underground drainage testing program as a requirement for discharge plan renewal.

On behalf of the staff of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,



William J. LeMay
Director

WJL/RCA/sl

cc: OCD Hobbs Office



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Ecological Services
Suite D, 3530 Pan American Highway, NE
Albuquerque, New Mexico 87107

191 7 68 2
MARCH 8 1991

March 19, 1991

Mr. William J. Lemay, Director
New Mexico Energy, Minerals and
Natural Resources Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Dear Mr. Lemay:

This responds to the Public Notice dated January 7, 1991, regarding the affects of granting State of New Mexico groundwater discharge permits on fish, shellfish, and wildlife resources in New Mexico.

The U.S. Fish and Wildlife Service (Service) has determined that there are no wetlands or other environmentally sensitive habitats that will be adversely affected by the following discharges.

GW-2 - Phillips 66 Natural Gas Company, Lee Plant Disposal Well,
Lea County, NM.

GW-60 - Williams Field Services, Milagro Plant, San Juan County,
NM.

The Service is providing the following comments with regard to GW-32 and GW-55.

(GW-32) - The Giant Refining Company has requested renewal of the existing ground water discharge permit for its Ciniza Refinery located 17 miles east of Gallup, New Mexico. The applicant proposes to renew the existing discharge plan to apply 161,000 gallons per day of process and nonprocess wastewater to 11 unlined evaporation ponds with a total capacity of 117 acres. The refinery and associated waste management facilities are located in Sections 28 and 33 of Township 15 North, Range 15 West, McKinley County, New Mexico. The receiving ponds are constructed in and of the shales of the upper Chinle Formation.

The Service is concerned about adverse impacts to Interior Trust Resources from exposure of migratory birds to selenium at the Ciniza Refinery evaporation ponds and adjacent wetlands. Data from the 1986 water quality analysis provided by the Oil Conservation Division indicated that selenium concentrations in the evaporation ponds range from 0.01 mg/l in Pond 2 to 0.52 mg/l in Pond 9A with intermediate levels in the other ponds. Water analysis indicated selenium residues in Pond 8 were less than 0.01 mg/l and a ditch adjacent to the ponds had less than 0.005 mg/l. Wetland vegetation

occurs around the evaporation ponds and in the artesian charged areas adjacent to the ponds. A significant number of migratory birds use the evaporation ponds and adjacent wetlands as a stopover during spring and fall migrations. There are also resident birds that nest and raise young in the area.

Bioconcentration of selenium in higher level organisms has been documented due to concentrations in water as low as 3.3 ug/l (ppb), (Eisler 1985). Concentrations of selenium in water at 40 ug/l have resulted in bioconcentration of selenium in aquatic invertebrates at levels greater than 50 mg/kg (ppm) (Schuler 1987). The recommended criterion for the protection of aquatic life for selenium in water is 5 ug/l (Schroeder et al. 1988). Selenium levels above this can cause an adverse impact to the exposed fauna. Lemly and Smith (1987) reported that selenium residues above 5 ug/l in water would cause reproductive failure in fish and waterfowl that either are present in the water or depend upon the water as a food source. Ohlendorf (1989) has observed that the most pronounced effect of selenium in wildlife species was found in birds that fed regularly at sites having selenium residues in water above the recommended levels. Ohlendorf also found that high incidences of bird embryonic mortality and deformities as well as adult mortality occurred at these sites. Residues of selenium reported in the 1986 water quality analysis are above levels documented to cause reproductive failure in birds.

Direct adverse impacts to migratory birds will also occur from petroleum hydrocarbon contamination if oil is present on the ponds as noted by visible oil sheens. Migratory birds that become covered by or ingest oil typically suffer mortality due to hypothermia or poisoning. If oil is present in the discharge, the refinery needs to take remedial steps to remove visible oil.

The Service recommends that the risks to wildlife be ascertained at the Ciniza Refinery evaporation ponds. Residue levels of selenium in aquatic organisms need to be evaluated and selenium residues in the ponds should be reduced to less than 5 ug/l to avoid "take" under the Migratory Bird Treaty Act (Olive and Johnson 1986). If the refinery does not develop reasonable plans to reduce risk to migratory birds, the Service objects to the issuance of this permit.

GW-55 - Thriftway Marketing Corporation (TMC) has submitted a discharge plan application for its Bloomfield Refinery located in Sections 32 and 33, Township 29 N, Range 11 W and in Section 9, Township 28 N, Range 11 W in San Juan County, New Mexico. The discharge plan application is for the disposal of approximately 1225 gallons per day of wastewater into a synthetically double lined evaporation pond equipped with leak detection. It is the understanding of the Service that this is an after the fact permit application for this facility.

The Service is concerned with potential adverse effects of the proposed discharge plan upon the downstream habitat of the endangered Colorado squawfish (Ptychocheilus lucius) and the candidate species razorback sucker (Xyrauchen texanus) and roundtail chub (Gila robusta). The applicant should provide evidence to the Service that it can adequately address and manage spills, leaks, and other accidental oil discharges to the San Juan River.

The discharge plan also addresses remediation of contaminated groundwater at the facility. The Service requests the opportunity to review the complete plan to evaluate the impact of groundwater decontamination upon the San Juan River.

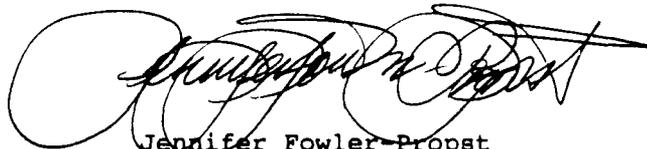
The TMC Bloomfield Refinery lies within the 100-year floodplain of Kutz Canyon. In the event that a spill, leak, or accidental discharge from this facility occurs, the Service should be notified immediately. The facility should develop a contaminant plan to ensure that discharges do not occur to the San Juan River. The evaporation pond may also act as an attractant for some of the 500,000 ducks and geese that utilize this portion of the San Juan Basin. The refinery should develop remedial cleanup plans for the evaporation pond in the event that an oil discharge occurs to the surface.

The Service is currently conducting a contaminants survey of the San Juan River Basin. Analysis of fish and bird tissue samples indicate that elevated levels of polycyclic aromatic hydrocarbons (PAH) occur in samples downstream of the Highway 44 bridge by Bloomfield, New Mexico (see attached data). PAH data from the San Juan River are at levels that are comparable to Galveston Bay, Texas, which is considered to be severely impacted by PAH contamination (Cain 1991).

The Service recommends that the TMC Bloomfield Refinery develop a discharge plan to identify and delineate the response actions that would be undertaken in the event of a spill at this site. The discharge plan should include a notification procedure to the Fish and Wildlife Service to avoid unreasonable risk to endangered or threatened species and migratory birds of the San Juan River Basin. The discharge plan should include oil cleanup procedures to the evaporation basin as well as any off site contamination.

These comments represent the views of the Service. If you have any questions concerning our comments, please contact Scott P. Hamilton-McLean, Richard Roy, or Thomas O'Brien at FTS 474-7877 or (505) 883-7877.

Sincerely,



Jennifer Fowler-Propst
Field Supervisor

Attachments

cc: (w/atch)

District Supervisor, Oil Conservation Division, Aztec, New Mexico
 Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
 Regional Administrator, Environmental Protection Agency, Dallas, Texas
 Regional Director, U.S. Fish and Wildlife Service, Fish and Wildlife
 Enhancement, Albuquerque, New Mexico
 Regional Director, U.S. Fish and Wildlife Service, Division of Law
 Enforcement, Albuquerque, New Mexico
 Special Agents, New Mexico District, U.S. Fish and Wildlife Service,
 Albuquerque, New Mexico

Selected References

- Cain, B., U.S. Fish and Wildlife Service, Ecological Services, Houston, Texas. Personal communication, 1991.
- Eisler, R. 1985. Selenium hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85(1.5). 57pp.
- Lemly, A. D., and G.J. Smith. 1987. Aquatic cycling of selenium: implications for fish and wildlife. U.S. Fish Wildlife Service Leaflet 12. 10pp.
- Ohlendorf, H. M. 1989. Bioaccumulation and effects of selenium in wildlife. Published in Selenium in Agriculture and the Environment, Soil Science Society of America Special Publication No. 23, 1989. pp. 133-177.
- Olive, S.W., and R.L. Johnson. 1986. Environmental contaminants: selected legal topics. Fish and Wildlife Service Biological Report 87(1), November 1986.
- Schroeder, R. A., D.V. Palawski, and J.P. Skoropa. 1988. Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Tulare Lake bed area, southern San Joaquin Valley, California, 1986-87. U.S. Geological Survey, Water Resource Investigation Report 88-4001. 86pp.
- Schuler, C. A. "Impacts of agricultural drainwater and contaminants on wetlands of Kesterson Reservoir, California." Master's Thesis, Wildlife and Fisheries, Oregon State University, 1987. 148pp.

PAH CONCENTRATIONS IN FISH BILE COLLECTED FROM

THE SAN JUAN RIVER BASIN, NORTHWEST, NEW MEXICO

(NG/G WET WEIGHT)

SPP	LOCATION	NAPTH.	PHEN.	B(a)P
CARP	NAVAJO RESERVOIR	52,000	8,200	130
CARP	BLOOM TO LEE AC.	180,000-260,000	42,000-49,000	600-700
CARP	LEE AC- FARM.	210,000	48,000	580
CARP	BELOW LA PLATA	190,000	43,000	650
CARP	CUDEI/MANCOS R.	71,000	18,000	290
N. PIKE*	NAVAJO RESERVOIR	8,500	2,300	<100
E. SOLE*	ALASKA	<10,000	<3,000	<100
MULLET**	GALVESTON BAY	100,000-400,000	20,000-100,000	330-1,000

* REPRESENTS BASELINE CONCENTRATIONS OF NAPHTHALENE, PHENANTHRENE, AND BENZO (A) PYRENE IN FISH. ENGLISH SOLE DATA PROVIDED BY NATIONAL MARINE FISHERIES SERVICE.

** STRIPED MULLET FROM GALVESTON BAY, TEXAS. GALVESTON BAY IS CONSIDERED TO BE SEVERELY IMPACTED BY PAH CONTAMINATION.



State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
 Santa Fe, New Mexico 87505

STATE OF
 NEW MEXICO
 OIL
 CONSERVATION
 DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 10/15

Date 8/27/92

Originating Party

Other Parties

Chris - Hollings - Thriftway Refinery

Bill Olson - OCD Santa Fe

Subject

MW Sampling

Discussion

Thriftway has installed drive pts. in locations reviewed with OCD. I told him Thriftway was to get OCD approval prior to installation

Thriftway MW sampling to begin on Mon 8/31/92

Conclusions or Agreements

He will inform Ken Sinks on OCD problems with well getting approvals.

Distribution

Signed



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

July 28, 1992

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-690-155-074

Mr. R.J. Dalley
Thriftway Marketing Corporation
710 East 20th Street
Farmington, New Mexico 87401

**RE: DISCHARGE PLAN GW-55
THRIFTWAY BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Stark:

On May 13, 1991, the New Mexico Oil Conversation Division (OCD) approved a ground water discharge plan (GW-55) for the Thriftway Marketing Corporation Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4 section 33, Township 29 North, Range 11 West and the NE/4 NE/4, Section 9, Township 28 north, Range 1 West, NMPM, San Juan County, New Mexico.

Based upon a review of the above referenced approved discharge plan and OCD's June 23, 1992 site inspection, the OCD has found the following commitments made by Thriftway to be unfulfilled or violated:

1. Submission of quarterly ground water monitoring reports.

The OCD has not received any quarterly reports from Thriftway since the discharge plan was approved.

2. Operate the ground water remediation system such that the air stripper effluent meets or exceeds N.M. Water Quality Control Commission (WQCC) ground water standards.

On June 23, 1992 the OCD inspected the remediation system and sampled the effluent from the air stripper. Enclosed you will find the laboratory analytic results of OCD's sampling. The laboratory results show the effluent containing 111.5 ppb Benzene (11 times WQCC standards), 1.3 ppb Tetrachloroethane and 1.8 ppb Trichloroethene.

Mr. R.J. Dalley
July 28, 1992
Page 2

3. **Investigate the full extent of ground water contamination related to refinery activities.**

OCD is in receipt of Thriftway's October 1991 "RESULTS OF LABORATORY ANALYSIS OF GROUNDWATER FOR SITE ASSESSMENT" which documents Thriftway's ground water investigations. While the investigation was thorough, the investigation does not fully define the extent of ground water contamination from refinery activities on the western and northwestern sides of the refinery. In addition, the report documented the presence of 0.10 ppm Chromium in monitor well MW-12 (2 times WQCC standards).

4. **Construct the remediation system pursuant to plans and specifications submitted by Thriftway and approved in the discharge plan.**

During the June 23, 1992 OCD inspection, OCD noted that the proposed trench for reinjection of treated ground water was not constructed as approved in the discharge plan. In fact, the system design had been changed to an injection well system and the system was located in a different area from that approved by OCD.

This is a clear violation of Thriftway's discharge plan approval. OCD's May 13, 1991 discharge plan approval informed Thriftway that under Section 3-104 of the WQCC regulations "When a plan has been approved discharges must be consistent with the terms and conditions of the plan". Any modifications to Thriftway's approved discharge plan GW-55 must be approved by OCD prior to implementation.

5. **Storage of petroleum contaminated soils.**

During OCD's June 23, 1992 inspection, OCD observed a large volume of petroleum contaminated soils stockpiled adjacent to the injection wells and the ground water recovery trench. Thriftway is not approved for long term storage or disposal of petroleum contaminated soils at the refinery

The OCD requires that Thriftway provide OCD, within 30 days of receipt of this letter, with the following items:

1. All required quarterly reports since approval of the discharge plan.

Mr. R.J. Dalley
July 28, 1992
Page 3

2. A plan for correcting the operation of the air stripper so that effluent from air stripper meets WQCC ground water quality standards.
3. A work plan to complete definition of the extent of contaminated ground water related to Thriftway's activities.
4. Final construction specifications of the injection well system including a map showing the locations of the injection wells in relation to other site features.
5. A plan for disposal of stockpiled petroleum contaminated soils.

In the future Thriftway will not modify the refinery discharge plan without prior approval by OCD. The OCD will deem any future discharge plan modification that does not receive prior approval by OCD to be a willful violation of the WQCC regulations.

The OCD looks forward to your response in this matter. If you have any questions, please contact me at (505) 827-5885.

Sincerely,



William C. Olson
Hydrogeologist
Environmental Bureau

Enclosures

xc w/enclosures: Denny Foust, OCD Aztec Office
Kenneth Sinks, Thriftway Refinery

Thrift way

710 East 20th Street
Farmington, New Mexico 87401

Office: (505) 326-5571
Refinery: (505) 632-3363
Fax: 505-327-3813

October 31, 1991

RECEIVED

NOV 04 1991

OIL CONSERVATION DIV.
SANTA FE

Roger Anderson
Environmental Engineer
State of New Mexico
Oil Conservation Division
PO Box 2088
Santa Fe, NM 87505

RE: Refinery Aquifer Pump Test

Dear Mr. Anderson:

Thriftway Marketing Corp. has commissioned Envirotech to do a site survey to determine the extent of site contamination at the Thriftway Refinery. During this work a number of monitoring wells were drilled. This information was sent to you in the initial site assessment.

The enclosed report contains the results of the aquifer pump test and the laboratory result of the analysis of the ground water samples.

Thriftway is continuing with the installation of the site remediation system and hopes to complete it by the end of November.

The tank farm drain system is installed and functioning well. The tank farm high level alarm system is progressing. The alarms have been ordered and are scheduled for delivery in December 1991. The conduit for this system was installed at the same time as the tank farm drain system.

If you have any questions, concerning the aquifer test or the report, please contact me at 505-632-3363.

Sincerely,



Ken Sinks
Environmental Engineer

KS/lb

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ENVIROTECH[®] INC.

OIL CONSERVATION DIVISION
UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

'91 AUG 14 AM 9 32

5796 U.S. HIGHWAY 64 - 3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

August 13, 1991

Mr. Roger Anderson
State of New Mexico
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504

RE: Field Investigation of Hydrocarbon Contamination
Thriftway Bloomfield Refinery Facility
626 County Road 5500
Bloomfield, San Juan County, New Mexico

Dear Mr. Anderson:

Enclosed are the results of the site investigation and assessment of hydrocarbon contamination at the Thriftway Bloomfield Refinery Facility. This site investigation was required by OCD as part of the implementation of Discharge Plan GW-55 and was initiated by Envirotech Inc., in June 1991.

Results of the groundwater laboratory analyses have not been completed and will be submitted under a separate cover, upon completion of all testing.

We appreciate your direction and assistance in this investigation. If there are any questions, or you require additional information, please contact us.

Sincerely,

Morris D. Young
Morris D. Young
President

CC: R.J. Dalley, Thriftway Marketing Corporation
Jim Ratcliff, Thriftway Marketing Corporation
Ken Sinks, Thriftway Bloomfield Refinery

MDY/tg

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PHONE: (505) 632-0615

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June 17, 1991

Mr. Roger Anderson
Oil Conservation Division
PO Box 2088
State Land Office Building
Santa Fe, NM 87504

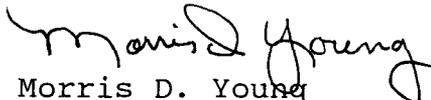
RE: Discharge Plan GW-55
Thriftway Bloomfield Refinery
Site Contamination Investigation

Dear Mr. Anderson:

Pursuant to Oil Conservation Division approval of Thriftway's Discharge Plan GW-55, site investigation work started at the Thriftway's Bloomfield Refinery on June 14, 1991.

We appreciate working with you on this project.

Sincerely,



Morris D. Young
President

MDY/tjg

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UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

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FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

June 17, 1991

Mr. Roger Anderson
Oil Conservation Division
PO Box 2088
State Land Office Building
Santa Fe, NM 87504

RE: Abandoned Lagoon Closure
Discharge Plan GW-55
Thriftway Bloomfield Refinery

Dear Mr. Anderson:

Envirotech has excavated the Abandoned Waste Water Lagoon, at Thriftway's Bloomfield Refinery, to remove highly contaminated soil from this area and complete closure of the lagoon. Excavation of the soils proceeded in all directions until all visibly stained soils were removed. Staining was evident for approximately 20 feet to the north and west of the old lagoon boundary. This soil staining indicates migration of the hydrocarbons laden waste water in the down gradient direction.

Testing of the excavation side wall soils via Head Space Field Method with an Organic Vapor Meter (PID), as well as our previously reported site investigation, indicated the residual hydrocarbon background levels to be in excess of 100ppm. This area will be subject to additional mitigation efforts with the installation of the "Site Remediation System" as detailed under Discharge Plan GW-55 submittal.

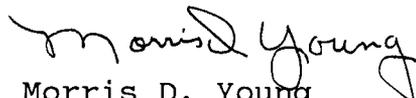
It appears that approximately 1400 cubic yards of soil were excavated from this site. Due to the inability of Envirotech to receive this soil at our Hilltop, New Mexico, Soil Remediation Site, approximately 500 cubic yards were stock piled at the refinery.

Once expansion of the Soil Remediation Site is approved, this excavated soil will be routed to Hilltop for remediation.

Page 2
Mr. Anderson
June 17, 1991

We appreciate working with you on this matter. If we can provide any additional information, please contact us.

Sincerely,



Morris D. Young
President

MDY/tjg
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c: Mr. Ken Sinks, Thriftway Refinery
Mr. R.J. Dalley, Thirftway Marketing
Mr. Jim Ratcliff, Thirftway Marketing

ENVIROTECH INC.

OIL CONSERVATION DIVISION
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5796 U.S. HIGHWAY 64 - 3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

'91 MAY 11 PM 1 43

May 3, 1991

Mr. William C. Olson
Hydrogeologist
State of New Mexico
Oil Conservation Division
PO Box 2088
Santa Fe, New Mexico 87504

RE: Discharge Plan GW-55
Thriftway Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Olson:

Confirming our recent conversation, Thriftway Marketing Corporation agrees that an infiltration gallery would be the best method of reinjecting treated groundwater up-gradient at their Bloomfield, New Mexico Refinery.

Attached please find a construction detail of injection gallery. This gallery will be located exactly at the location for injection wells I-1 through I-19 shown on previous submitted sheet C-3 THRIFTWAY REFINERY REMEDIATION SYSTEM SITE PLAN, dated July 1990; revised February 16, 1991.

The groundwater remediation system will be constructed upon receipt of the approved Groundwater Discharge Plan.

We appreciate your assistance in preparing this Groundwater Discharge Plan for the Thriftway Refinery.

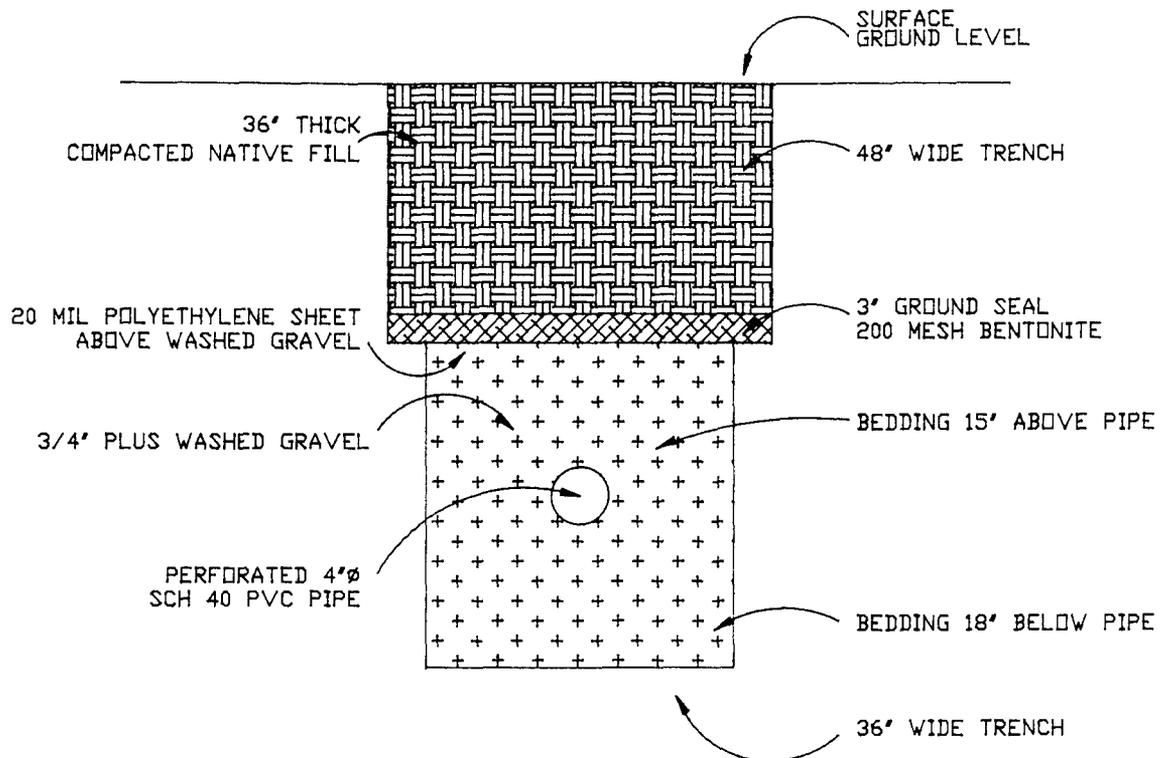
Sincerely,

Morris D. Young/tjg

Morris D. Young
President

MDY/tjg

c: R.J. Dalley, Thriftway Marketing
Jim Ratcliff, Thriftway Marketing
Ken Sinks, Thriftway Refinery
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INFILTRATION GALLERY REFINERY REMEDIATION SYSTEM

NO TO SCALE

ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS
646 US HIGHWAY 64 FARMINGTON, NM 87401
505/632-0815

THRIFTWAY REFINERY

THRIFTWAY MARKETING CORP.
710 E 20TH ST
FARMINGTON, NEW MEXICO

INFILTRATION GALLERY
REFINERY
REMEDICATION SYS
REVISED 5/3/91

A 3

ENVIROTECH INC.

OIL CONSERVATION DIVISION
UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

'91 MAR 26 AM 8 58

640 U.S. HIGHWAY 64 - 3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

March 18, 1991

Mr. William C. Olsen
Hydrogeologist
State of New Mexico
Oil Conservation Division
PO Box 2088
Santa Fe, New Mexico 87504

RE: Discharge Plan GW-55
Thriftway Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Olsen:

After consultation with the Oil Conservation Division personnel on implementation of the above referenced discharge plan GW-55 for the Thriftway Refinery, Envirotech Inc. requests authorization to construct an infiltration gallery instead of injection wells for the treated groundwater reintroduction into the shallow aquifer.

The location of the gallery will be as shown in the October 1990 Site Plan, Sheet C5, previously submitted to your office. We trust this modification meets with your approval.

We have reviewed the U.S. Fish and Wildlife Services comments contained in their March 19, 1991 correspondence to OCD. Many of their reported concerns are not only addressed in the GWDP, but are the reason to initiate the plan in the first place. The GWDP addresses containment of spills and leaks, preventing any contamination from entering the San Juan River water course. Specifically, the GWDP delineates the containment structures and remediation system the U.S. Fish and Wildlife Service think should be addressed.

As per U.S. Fish and Wildlife Services correspondence, they requested to review the complete plan. It is our understanding that the public notice time period was designed to allow such review and that the documents have been made available. Consequently, we don't understand the receipt of their comments prior to making an effort to review the data that has been made available.

Page 2
Mr. Olsen
March 18, 1991

Comment was made concerning oil discharge to the evaporation lagoons. Any water discharged to the lagoons has been skimmed of oil and routed to a second and a third back-up skimming system to insure no such discharge will occur. In the unlikely event oil is ever noted on the pond surface, it would be removed with a vacuum truck that is permanently stationed at the refinery site.

We feel the OCD has been extremely cognizant of environmental impacts in guiding the development of this comprehensive Discharge Plan.

Sincerely,

Morris D. Young

Morris D. Young
President

MDY:tjg

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ENVIROTECH INC.

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

ENVIROTECH INC.
640 HWY. 54 - B 14
FARMINGTON, NEW MEXICO 87401
PH (505) 532-0615

February 12, 1991

RECEIVED

FEB 21 1991

**OIL CONSERVATION DIV.
SANTA FE**

Mr. William C. Olson
Hydrogeologist
State of New Mexico
Oil Conservation Division
PO Box 2088
Santa Fe, New Mexico 87504

RE: Discharge Plan GW-55
Thriftway Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Olson:

Thriftway Marketing Corporation is in receipt of your December 14, 1990 correspondence requesting clarification and modification of previous submittal on the subject Discharge Plan Application. We shall answer each issue in the format of your December 14, 1990 letter.

1. STORAGE TANK INSPECTION

A. Submit a schedule for reporting tank inspection results.

Thriftway will forward to OCD the inspection report of each storage tank within 30 days of completion of tank inspection for each tank.

2. ABANDONED WASTE WATER LAGOON CLOSURE

A. Explain sample methodology.

A composite soil sample of the lagoon area was obtained from the excavated soil of a backhoe exploration pit placed at or near the center of the old lagoon. Results of the 1310 EP Tox, 8020 Aromatic Volatile Organics, and 418.1 Total Petroleum Hydrocarbon test were attached to our October 30, 1990 correspondence.

Subsequently we re-sampled the abandoned lagoon area utilizing SW-846 protocol. Three (3) excavation pits were dug at approximately 20 feet on center East to West across the suspected center area of the old abandoned lagoon. Soil from approximately three (3) feet depth from excavation was piled together and a duplicate soil sample was placed in laboratory supplied 100 ml wide mouth jars. The samples were transported on ice directly to Intermountain Laboratories by Envirotech personnel. We will forward those analysis results to your attention upon receipt from the laboratory.

B. Submit closure time table.

It appears the Lagoon area requiring excavation is more extensive than originally anticipated and will exceed approximately 1200 cubic yards. Excavation and transportation to Envirotech's Soil Remediation Site will be completed March 31, 1991. A formal closure report will be submitted to OCD within 30 days there after.

3. INTERIM REMEDIATION PLAN

A. Monitor wells

(I) OCD requests placement of monitor wells as follows:

MW-1	TO	B-10 Location
MW-4	TO	B-14 Location
MW-6	TO	B-15 Location
MW-7	TO	750 feet east of northwest corner
MW-8	TO	1000 feet east of northwest corner

Monitor wells MW-1 and MW-4 were already installed during site investigation phase. As per OCD request these wells will be abandoned and new wells installed at specified location.

MW-6, MW-7, & MW-8 will be located as requested. New locations are shown on attached Remediation Site Plan (revised) sheet C-3.

(II) Install monitor wells with screen section three (3) feet above water table and ten (10) feet below and no closer than six (6) inches below ground surface.

Monitor wells shall be installed as requested.

(III) Survey monitor wells to include well coordinates, elevation of top of well casing and measure point.

Survey shall be completed as directed.

(IV) Submit sampling procedures for ground water.

Groundwater will be sampled by removing approximately three (3) well volumes of water from the well bore via a previously cleaned teflon bailer. Duplicate samples will be collected in laboratory supplied 40ml VOA vials with teflon closures. The vials are laboratory supplied with HCL preservative. Care is taken to eliminate any head space bubbles. The samples are then transported on ice to the laboratory by Envirotech personnel.

(V) Ground water sample analysis

All groundwater samples will be analyzed for aromatic and halogenated volatile organics using EPA method 8010/8020, ICAP Heavy Metals using EPA method 6010 and major cations and anions using standard EPA analysis methods.

(VI) Groundwater elevations shall be measure monthly.

Groundwater elevations shall be measured monthly. Elevations shall be reported in the quarterly reports.

(VII) Proposed monitor well sampling schedule.

Groundwater in MW-6, MW-7 and MW-8 shall be

sampled monthly for a minimum of three (3) months at start of the system and then quarterly there after.

(VIII) Quarterly reports

Quarterly reports shall be forwarded to OCD on or before the following schedule:

for 1st Quarter	-	April 30
2nd Quarter	-	July 31
3rd Quarter	-	October 31
4th Quarter	-	January 31

B. Collection Trench System

(I) Barrier design of collection trench

20 mill polyethylene sheet shall be utilized to prevent migration of fines into the washed gravel void spaces of the collection trench as per the attached Collection Trench, Refinery Remediation System; detail sheet A-3.

(II) Trench design

The trench system will be a minimum of four (4) feet deep and will extend down to intercept a six (6) inch sand stringer that varies from approximately 30 to 50 inches below ground surface in the intended area of excavation.

Previous soil boilings and excavations have encountered this sand stringer and in all cases it appears to be the major conduit for hydrocarbon contamination advection.

(III) Groundwater collection sump.

We anticipate installation of a concrete collection sump that can be skimmed of oil residues and cleaned of accumulating solids.

C. Water Treatment System Control and Effluent Disposal

(I) Influent and effluent water samples from water treatment system

Water samples of the influent and the effluent of the water treatment system shall be analyzed monthly for aromatic and halogenated volatile organic using EPA method 8010/8020, ICAP heavy metals using EPA method 6010 and major cations and anions using standard EPA analysis methods.

(II) Monitoring fluid volumes.

A water meter will be installed to monitor the effluent to injection wells from the water treatment system monthly meter readings will be submitted with the quarterly reports to OCD.

(III) Water treatment system maintenance.

The water treatment system shall be visually inspected no less than once per month to determine presence of any fouling. Either visual detection or loss of effectiveness in reducing hydrocarbon concentrations in the effluent stream will require the air stripper to be cleaned before being returned to service.

Cleaning residuals shall be removed from the system via vacuum truck and transported to the refinery waste water evaporation system for treatment.

(IV) Injection wells

The injection wells will be drilled to approximately 20 foot depth, 0.02 slotted PVC screen will be installed from 15 to 20 foot depth. The wells will be sand packed around the screen with 8-12 mesh Colorado Silica Sand to 13 foot depth below ground surface and sealed from the top of sand packing to 18" depth with ground bentonite. A bolt down

manhole cover will be installed with cement grout to provide access to the injection well manifold.

Soil borings of the proposed injection well locations show the top 20 feet of the formation consists of fine/medium grain tan sand with small sandy clay lens interspersed through out the subject area.

(V) Water system pumping and treatment report.

Monthly pumping and treatment monitoring reports will be integrated within the quarterly monitory reports.

D. Contingency Plan

(I) OCD Notification

The OCD will be notified immediately of any effluent discharge that does not comply with New Mexico Water Quality Control Commission groundwater standards.

4. INVESTIGATION PROPOSAL

A. Purpose of Investigation

The site investigation will determine the extent of free product and dissolved phase petroleum contamination of the groundwater at the north and east quadrants of the refinery property.

B. Monitor well location

(I) OCD requests MW-9, MW-10, MW-12, MW-13, MW-14 and MW-16 be placed as follows:

MW-9	TO	750' West of Northeast fence corner
MW-10	TO	500' West of Northeast fence corner
MW-12	TO	location of B-26
MW-13	TO	location of B-27

MW-14 TO location of B-28

MW-16 TO 200' Northeast of MW-14 and 200'
Northwest of storage tank 12

Monitor wells MW-9, MW-10, MW-12, MW-13, MW-14
and MW-16 shall be located as requested.

C. Additional monitor wells

(I) OCD requests monitor wells MW-17, MW-18
and MW-19 be placed as follows:

MW-17 TO Location of B-20

MW-18 TO 200' Southwest of MW-4

MW-19 TO 400' Southwest of MW-5

MW-17, MW-18 and MW-19 shall be installed as
required.

D. Monitor well installation

(I) Install monitor wells with screen section
three (3) feet above water table and ten (10)
feet below and no closer than six (6) inches
below ground surface.

Monitor wells shall be installed as requested.

E. Monitor well survey

(I) Survey monitor wells to include well
coordinates, elevation of top of well casing
and measure point.

Survey shall be completed as directed.

F. Monitor well sampling

(I) Submit sampling procedures for
groundwater.

Groundwater will be sampled by removing

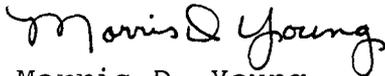
approximately three (3) well volumes of water from the well bore via a previously cleaned teflon bailer. Duplicate samples will be collected in laboratory supplied 40 VOA vials with teflon closures. The vials are laboratory supplied with HCL preservative. Care is taken to eliminate any head space bubbles. The samples are then transported on ice to the laboratory by Envirotech personnel.

G. Groundwater sample

(I) All groundwater samples will be analyzed for aromatic and halogenated volatile organics using EPA method 8010/8020, ICAP heavy metals using EPA method 6010 and major cations and anions using standard EPA analysis methods.

We appreciate your direction and assistance in preparation of a viable Groundwater Discharge Plan for the Thriftway Refinery.

Sincerely,

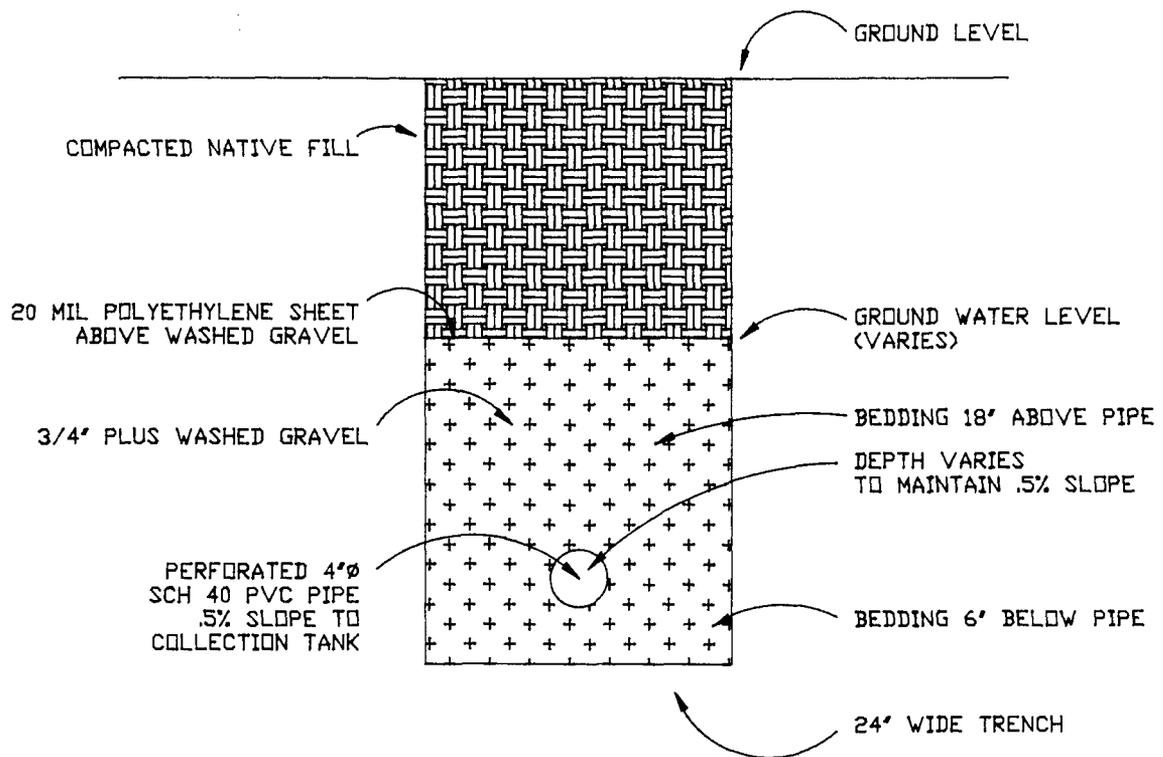


Morris D. Young
Envirotech Inc. President

MDY:tjg

390.doc

c: R.J. Dalley, Thriftway Marketing
Jim Ratcliff, Thriftway Refinery
Ken Sinks, Thriftway Refinery



COLLECTION TRENCH
REFINERY REMEDIATION SYSTEM

NO TO SCALE

ENVIROTECH Inc.

ENVIRONMENTAL SCIENTISTS
640 US HIGHWAY 64 FARMINGTON, NY 87401

THRIFTWAY REFINERY

THRIFTWAY MARKETING CORP.
710 E 20TH ST
FARMINGTON, NEW MEXICO

COLLECTION TRENCH
REFINERY
REMEDIATION SYS
REVISED 2/15/91

A3



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

December 14, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-437

Mr. Morris D. Young
Envirotech Inc.
3111 Knudsen
Farmington, New Mexico 87401

RE: DISCHARGE PLAN GW-55
THRIFTWAY BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO

Dear Mr. Young:

The New Mexico Oil Conversation Division (OCD) is in receipt of the following correspondence submitted by Envirotech on behalf of Thriftway Refinery:

- 1) October 30, 1990 "DISCHARGE PLAN GW-55, STORAGE TANK INSPECTION, THRIFTWAY'S BLOOMFIELD REFINERY, SAN JUAN COUNTY, NEW MEXICO".
- 2) October 30, 1990 "CLOSURE PLAN FOR ABANDONED WASTE WATER LAGOON AT THRIFTWAY'S BLOOMFIELD, NEW MEXICO REFINERY".
- 3) October 30, 1990 "INTERIM REMEDIATION PLAN, DISCHARGE PLAN GW-55, THRIFTWAY'S BLOOMFIELD REFINERY, SAN JUAN COUNTY, NEW MEXICO".
- 4) October 30, 1990 "INVESTIGATION PROPOSAL, THRIFTWAY'S BLOOMFIELD REFINERY, SAN JUAN COUNTY, NEW MEXICO".

Mr. Morris D. Young
December 14, 1990
Page 2

The following comments, requirements and requests for additional information and/or commitments are based upon a review of these documents:

1) **STORAGE TANK INSPECTION**

- A. A tank inspection schedule was submitted, but there is no commitment to report the inspections to OCD. Submit a schedule for reporting the results of all tank inspections.

2) **ABANDONED WASTE WATER LAGOON CLOSURE**

- A) The closure plan does not indicate the sampling methods employed nor the sample locations for the composite samples. Submit sampling methodology and sample locations for the composite samples.
- B) Submit a completion timetable for the removal of contaminated soils and submission of a closure report.

3) **INTERIM REMEDIATION PLAN**

A) Monitor Wells

- i. The OCD notes that Thriftway is now proposing to monitor the effectiveness of the pumping system with 8 monitor wells instead of the 5 wells originally proposed. The OCD requests that proposed wells MW-1, 4, 6, 7 and 8 be moved to the following locations:
- MW-1 to be installed at the location of borehole B-10 (as shown on the September 17, 1990 Thriftway Refinery Site Plan).
 - MW-4 to be installed at the location of borehole B-14 (as shown on the September 17, 1990 Thriftway Refinery Site Plan).
 - MW-6 to be installed at the location of borehole B-15 (as shown on the September 17, 1990 Thriftway Refinery Site Plan).
 - MW-7 to be installed outside the north fence line at a distance of 750 feet from the northwest fence corner.
 - MW-8 to be installed outside the north fence line

at a distance of 1000 feet from the northwest fence corner.

The OCD believes that these locations will provide more adequate coverage of the contaminated areas surrounding the recovery system.

- ii. Because of the potential for fluctuations in the water table the monitor wells will be completed with at least 3 feet of well screen above the water table and 10 feet of screen below the water table. In the case of shallow water table conditions, the top of the screen will not be closer than 6 inches below the surface.
- iii. Upon completion the well locations will be surveyed and a map and map coordinate system provided showing the well locations and elevations of the top of the casings or water level measuring point.
- iv. Submit the sampling procedures to be used in the collection of all ground water samples.
- v. All ground water samples will be analyzed for aromatic and halogenated volatile organics using EPA Methods 8010/8020, ICAP heavy metals using EPA Method 6010 and major cations and anions using standard EPA methods.
- vi. Ground water elevations will be measured in all monitor wells on a monthly basis to determine the effectiveness of the recovery system.
- vii. OCD's interpretation of the proposed monitor well sampling schedule is that ground water samples from monitor wells adjacent to the collection trench will be taken monthly for at least three months and thereafter sampled on a quarterly basis. Is this the correct interpretation? If not, please clarify.
- viii. The proposal does not commit to supplying OCD with a quarterly report containing all ground water monitoring results. Submit a schedule for submission of quarterly monitoring reports.

B) Collection Trench System

- i. The cross-sectional diagram for the collection trench shows tar paper being used as a barrier between the washed gravel in the collection trench and the overlying compacted native fill. A petroleum based product

used for this purpose is unacceptable. Submit an alternate barrier design for the collector trench.

- ii. Submit information regarding the total depth of the trench and depth to the top of the washed gravel in relation to the water table elevation.
- iii. Because the underground collection sump contains only fluids collected from the ground water and is directly adjacent to the pumping area, the OCD does not require that the sump be fitted with leak detection.

C) Water Treatment System Control and Effluent Disposal

- i. Water samples of the influent and effluent of the water treatment system will be analyzed monthly for aromatic and halogenated volatile organics using EPA Methods 8010/8020 and not with a photoionization meter via the closed container headspace method. In addition, samples will also be analyzed for ICAP heavy metals using EPA Method 6010 and major cations and anions using standard EPA methods.
- ii. Monthly monitoring will also include the volumes of fluids pumped from the collection trench and the effluent volumes.
- iii. Submit a plan describing any water treatment system cleaning procedures and the disposition of all cleaning wastes.
- iv. Submit detailed information on the injection horizon of all injection wells.
- v. All of the monthly pumping and treatment monitoring will be included in the quarterly report referenced above in section 3.A.vii.

D) Contingency Plan

- i. The OCD will be notified immediately of any effluent discharge that does not comply with New Mexico Water Quality Control Commission ground water standards.

4) **INVESTIGATION PROPOSAL**

- A. There appears to be some confusion as to the purpose of

the ground water investigation. The purpose of the investigation, as stated in OCD's October 12, 1990 correspondence, is "to determine the extent of free product and dissolved phase petroleum contamination of ground water related to all refinery activities". The OCD did not imply at the October 10, 1990 meeting that ground water mounding near the center of the refinery is pushing contaminants upgradient east of the refinery.

- B. The OCD requests that proposed wells MW-9, 10, 12, 13, 14 and 16 be moved to the following locations:
- MW-9 to be installed outside the north fence line at a distance of 750 feet from the northeast fence corner.
 - MW-10 to be installed outside the north fence line at a distance of 500 feet from the northeast fence corner.
 - MW-12 to be installed at the location of borehole B-26 (as shown on the September 17, 1990 Thriftway Refinery Site Plan).
 - MW-13 to be installed at the location of borehole B-27 (as shown on the September 17, 1990 Thriftway Refinery Site Plan).
 - MW-14 to be installed at the location of borehole B-28 (as shown on the September 17, 1990 Thriftway Refinery Site Plan).
 - MW- 16 to be installed approximately 200 feet northeast of MW-14, described above, and 200 northwest of storage tank 12.

Based upon review of Thriftway's previous borehole investigation program, the OCD believes that these locations will provide more adequate coverage of the potential contamination source areas.

- C. The OCD also requests that Thriftway install three additional monitor wells at the following locations for which there is a lack of ground water quality information:
- MW-17 to be installed at the location of borehole B-20 (as shown on the September 17, 1990 Thriftway Refinery Site Plan).

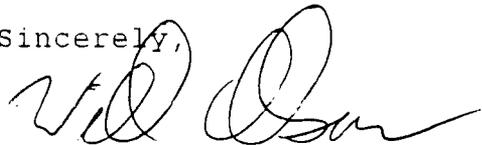
Mr. Morris D. Young
December 14, 1990
Page 6

- MW-18 to be installed approximately 200 feet southwest of MW-4 (described in above section 3.A.i.).
 - MW-19 to be installed approximately 400 feet southwest of MW-4 (described in above section 3.A.i.).
- D. Because of the potential for fluctuations in the water table the monitor wells will be completed with at least 3 feet of well screen above the water table and 10 feet of screen below the water table. In the case of shallow water table conditions, the top of the screen will not be closer than 6 inches below the surface.
- E. Upon completion the well locations will be surveyed and a map and map coordinate system provided showing the well locations and elevations of the top of the casings or water level measuring point.
- F. Submit the sampling procedures to be used in the collection of all ground water samples.
- G. All ground water samples will be analyzed for aromatic and halogenated volatile organics using EPA Methods 8010/8020, ICAP heavy metals using EPA Method 6010 and major cations and anions using standard EPA methods.

Please be advised that OCD will likely require additional quarterly ground water monitoring based on the results of Thriftway's ground water investigations.

If you have any questions, please contact me 827-5885.

Sincerely,



William C. Olson
Hydrogeologist

xc: OCD Aztec Office

ENVIROTECH[®] INC.

OIL CONSERVATION DIVISION
UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

'90 NOV 7 AM 8 39

October 30, 1990

Mr. David G. Boyer
Environmental Bureau Chief
State of New Mexico
Oil Conservation Division
PO Box 2088
Santa Fe, New Mexico 87504

Re: Investigation Proposal
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Boyer:

On September 17, 1990 Envirotech submitted results of a field investigation of the ground water contamination at the Thriftway refinery. This investigation consisted of soil borings to determine the origin and extent of point sources of free product on groundwater in the Northwestern area of the refinery property. An interim remediation proposal has been sent to your attention under separate cover to address this area.

As per your October 12, 1990 correspondence additional investigation is required to determine if the mounding of the groundwater near the center of the refinery property is pushing contaminants in either a North or East direction towards the Kutz Wash.

Monitor wells will be constructed at the property line to determine if any contamination has migrated to the North or East of the tank farm area. Monitor wells will be located at 200 feet on center as shown on the accompanying site plan. Construction of the monitor well is shown on the attached detail.

Groundwater shall be sampled in each monitor well and tested via method 8020 for BTEX analysis. Any free product encountered will be reported as well.

This investigation will be initiated no later than January 15, 1991. Final report including laboratory results will be forwarded to your attention on or before March 15, 1991.

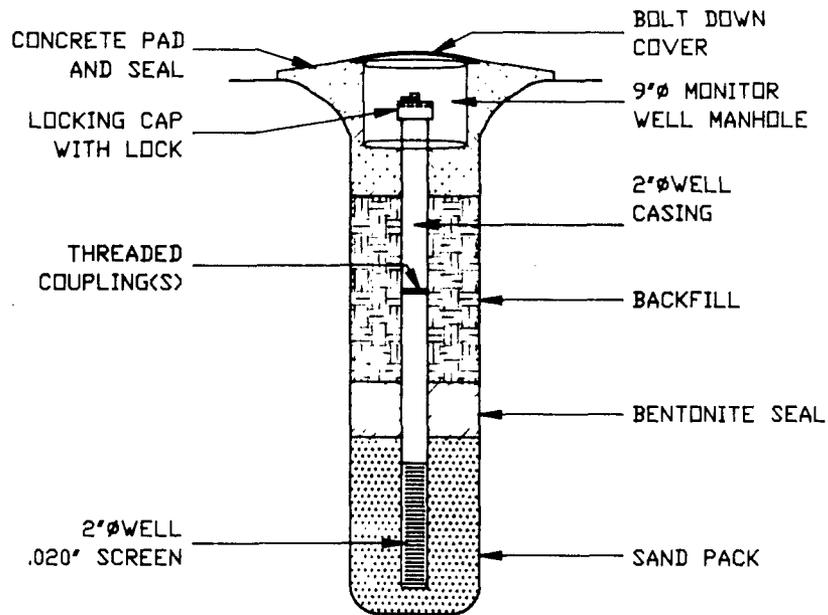
If free product is encountered in any boring, an effort will be made to determine the point of origin of the contamination.

Sincerely,

ENVIROTECH INC.

Morris D. Young
Morris D. Young, President

Enclosure



TYPICAL MONITORING WELL

NOT TO SCALE

ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS
2111 10th St NW
FARMINGTON, NH 07401

THRIFTWAY REFINERY

THRIFTWAY MARKETING CORP.
710 E 20TH ST
FARMINGTON, NEW MEXICO

TYPICAL
MONITORING WELL
REFINERY
REMEDATION SYS

A4

ENVIROTECH INC.

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

OIL CONSERVATION DIVISION

RECEIVED

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October 30, 1990

Mr. David G. Boyer
Environmental Bureau Chief
State of New Mexico
Oil Conservation Division
PO Box 2088
Santa Fe, New Mexico 87504

Re: Interim Remediation Plan
Discharge Plan GW-55
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Boyer:

Envirotech Inc. submitted a "REMEDICATION PLAN PROPOSAL, OIL CONTAMINATION AT THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO" for review by the Oil Conservation Division.

Subsequent meeting and your correspondance dated October 12, 1990 requested additional information and inclusion of additional monitor wells as follows:

A. Monitor Wells

To monitor the effectiveness of the collection trench in removing free hydrocarbon product from the groundwater flow; three monitor wells, MW#6, MW#7 and MW#8 will be installed approximately 50 feet down gradient of the collection trench as shown on the attached THRIFTWAY REFINERY REMEDIATION SYSTEM SITE PLAN.

Samples will be drawn monthly for a minimum of three (3) months or until a clearly established pattern of decreased BTEX and TPH concentration is established. Quarterly monitoring of the proposed remediation system will include monitor wells MW#1 through MW#8 and will allow evaluation of the entire system's viability at containing and removal of the hydrocarbon contamination.

Modified 8020/8015 analysis will be preformed on monitor will sample.

B. Cross-sectional Diagram

A cross sectional diagram of the collection trench is enclosed.

C. Water Treatment system Control

The water treatment and injection system will be inspected visually once each

daylight shift by Thriftway's refinery operating personel.

Envirotech will collect samples of the influent and effluent of the treatment system weekly for 3 months and then monthly thereafter. Samples will be checked for volilite hydrocarbon content with a photoionization meter via the closed container headspace method.

Any notable increase in effluent concentration will then require a 8020 analysis to determine effluent concentrations in compliance with New Mexico WQCC standards.

Monthly monitoring will include influent and effluent analysis and the results reported in a Report to OCD. After the initial quarter, laboratory analysis will be preformed on a quarterly basis.

Monitoring results from the first quarter will enable implementation of a route cleaning schedule to prevent biofouling of the stripping system and maintain it's efficiency.

D. Contingency Plan

Effluent from the collection system that does not comply with N.M.WQCC standards will be routed to the refinery waste water treatment system for treatment and containment in the lined lagoon system until the remediation treatment system can be repaired or modified to meet said standards.

E. Implementation Schedule

Upon approval from OCD the entire system including injection wells will be installed within 90 calendar days. OCD will be notified upon construction completion and prior to startup.

We appreciate your attention and efforts in implementing a viable remediation plan for the hydrocarbon contamination at the Thriftway Refinery.

Sincerely,

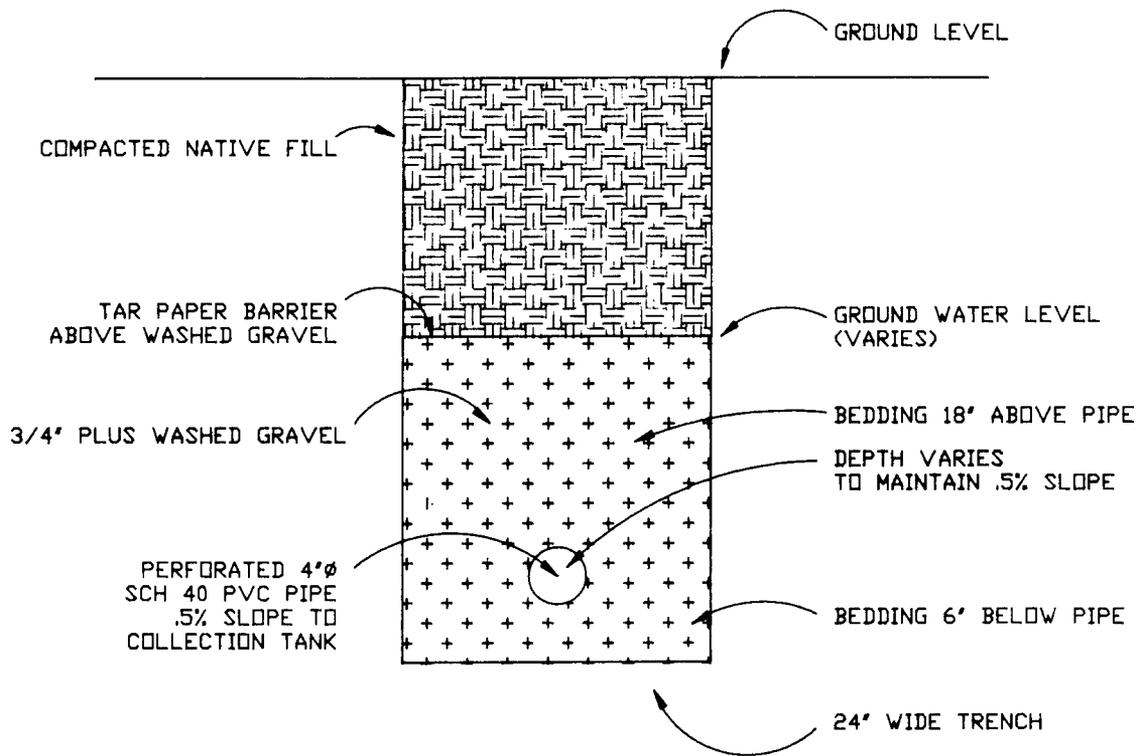
ENVIROTECH INC.



Morris D. Young
President

MDY:mf

Enclosure



COLLECTION TRENCH REFINERY REMEDIATION SYSTEM

NOT TO SCALE

ENVIROTECH Inc.

ENVIRONMENTAL SCIENTISTS
3111 SOUTHERN
FARMINGTON, NH 07401

THRIFTWAY REFINERY

THRIFTWAY MARKETING CORP.
710 E 20TH ST
FARMINGTON, NEW MEXICO

COLLECTION TRENCH
REFINERY
REMEDICATION SYS

A3

ENVIROTECH INC.

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

SEP 21 11 20 AM

September 17, 1990

RECEIVED

SEP 21 1990

OIL CONSERVATION DIV.
SANTA FE

Mr. William J. LeMay, Director
OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, New Mexico 87504

Re: Remediation Plan Proposal
Oil Contamination at Thriftway Refinery
Bloomfield, New Mexico

Dear Mr. LeMay:

Envirotech has conducted a site assessment to determine the origin of hydrocarbons present on the shallow groundwater at the Northwestern portion of Thriftway's Bloomfield Refinery.

The field investigation consisted of soil boring starting at the site where hydrocarbons were noted and proceeded in a direction until clean or near clean groundwater was encountered. The concentrations of volatile hydrocarbons were determined via the headspace method which consists of collecting a groundwater sample from the boring and testing it by placement of 8 ounces of sample into a clean 16 ounce jar sealed with aluminum foil. The sample is shaken and allowed to come to equilibrium for 5 minutes prior to insertion of the probe from a photoionization meter into the headspace. A direct reading of the volatile hydrocarbon is obtained. A Model 580A Organic Vapor Meter manufactured by Thermo Environmental Instruments was utilized to obtain the measurements.

The boundary of the hydrocarbon plume was determined by successive borings in a direction until a value of 0 to 20 parts per million was obtained via this method.

As the field investigation proceeded it became evident that several hydrocarbon plumes were present with identifiable point sources, but that these plume had merged into the Northwestern area of the refinery as observed by OCD personnel on their previous site inspections at the refinery.

Identifiable areas of high hydrocarbon concentrations include the following specific areas.

- A. Unlined waste water lagoons
- B. Crude unit Process Oil collection tank
- C. Crude unit and reformer process unit areas
- D. Abandoned waste water lagoon
- E. Fuel oil loading dock

These sites are identified as site A through E on the accompanying Thriftway Refinery Site Plan.

The location of each investigative boring is also identified by number on the site plan.

Organic vapor meter readings for each investigative boring is presented below. Where free product was observed on the shallow groundwater it is so noted.

SITE INVESTIGATION BORINGS SUMMARY

<u>BORING NO.</u>	<u>OVM READING</u> (ppm)	<u>GROUNDWATER ELEVATION</u>
1	860 free product	
2	902 free product	
3	0	
4	2	77.15
5	55	
6	11	
7	15	78.63
8	40	
9	89	
10	21	86.91
11	4	
12	7	
13	0	
14	22	
15	302	
16	312	
17	361	
18	0	68.72
19	722 free product	
20	526 free product	
21	203	
22	18	78.55
23	68	76.52
24	56	72.30
25	38	74.21
26	42	86.70
27	28	84.08
28	12	80.88
29	5	
30	42	70.43

As reported in the preceeding table, relative groundwater elevations were measured to determine the groundwater contours and direction of flow. The groundwater elevations are noted on the accompanying Ground Water Contour Map. It appears that the direction of flow is to the Northwest where free product has been observed on the shallow groundwater.

It appears that naturally occurring hydrocarbon contamination is flowing onto the refinery property from the oil production areas across county road 5500 which is South of the refinery property.

The proposed remediation plan addresses elimination of any future contamination at each of the identifiable point sources and remediation of the groundwater contamination to prevent discharge from the refinery property.

Specifically, the following action will be accomplished at each identified point source. The proposed date of compliance or completion is noted.

A. Unlined waste water lagoons

These lagoons have been closed and new doublelined lagoons with leak detection are under construction as submitted in the Thriftway Refinery Discharge Plan GW-55 dated July, 1990. Construction will be completed September 22, 1990.

B. Crude Unit Process Oil Collection Tank

The former tank was a concrete vault. This structure had developed cracks. During removal we noted an unsealed opening through the wall was allowing hydrocarbon leakage into the surrounding soil. The surrounding soil was excavated to remove the major portion of contamination. A new 10,000 gallon steel tank was installed with a 20 mil PVC liner surrounding the tank and a leak detection monitoring well. The system was hydrostaticly tested at 4 pounds pressure. Completion date was approximately March 15, 1990.

C. Crude Unit and Reformer Unit Process Area

A new waste water collection sewer will be installed in the crude unit. This waste water sewer will be extended to connect with the wastewater sewer serving the Reformer and Hydrocracker units. Outfall from this wastewater sewer is skimmed of free hydrocarbon and then treated to assure compliance with Thriftway Discharge Plan GW-55 prior to introduction into the lined evaporative lagoons.

The entire process areas will have a 4" concrete floor with curbing installed to collect any hydrocarbon spills in this area and route them to the wastewater sewer system. Completion of the concrete floors and wastewater sewer system is scheduled for November 30, 1990.

D. Abandoned Wastewater Lagoon

Soil borings No. 1 & 2 encountered this abandoned wastewater lagoon. This lagoon was improperly closed by simply filling with granular fill. The entire lagoon area is currently being excavated. The excavated soils have been analyzed and are within levels acceptable for remediation at Envirotech's Soil Remediation Site located South of Bloomfield, New Mexico. The excavation will be backfilled with clean granular fill as part of the closure of this old lagoon. Closure is anticipated to be complete October 15, 1990.

E. Fuel Oil Loading Dock

A new concrete fuel oil loading dock complete with spill collection will be constructed to contain and prevent any future hydrocarbon spills from reaching the groundwater. Design of this loading dock is similar to the crude oil and gasoline docks recently constructed at this refinery. Completion of the fuel oil loading dock is anticipated by December 14, 1990.

The contaminated groundwater collection system will consist of a collection trench constructed with crushed washed 3/4" gravel, perforated PVC pipe and a collection sump as shown on the attached diagram titled Ground Water Remediation System.

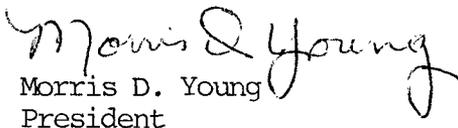
The collected hydrocarbon contaminated groundwater will be skimmed of all free product by flowing through 2-20,000 gallon vertical tanks and then routed to an air stripping tower to treat the effluent to New Mexico Groundwater Standards. The treated effluent will be pumped as per the diagram to injection wells up-gradient of the contaminated point sources. The injection wells are located on the Remediation System Site Plan.

Monitor wells will be constructed as per the typical monitor well detail at the locations identified on the Remediation System Site Plan to monitor the progress of the cleanup efforts.

The groundwater collection system is currently under construction. This will prevent any additional hydrocarbon movement on the water table. Installation of the balance of the treatment system and injection wells will be completed upon receipt of OCD approval of the remediation system design.

Sincerely,

ENVIROTECH INC.


Morris D. Young
President

MDY:mf

cc: Mr. F. L. Stark, VP, Thriftway

ENVIROTECH[®] INC.

OIL CONSERVATION DIVISION
UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

'90 SEP 12 AM 8 46

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

August 10, 1990

Mr. William J. LeMay, Director
OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, New Mexico 87504

Re: Oil Contamination at Thriftway Refinery
Bloomfield, New Mexico

Dear Mr. LeMay:

Envirotech Inc. has been retained to investigate an apparent oil spill at the Thriftway Refinery, Bloomfield, New Mexico, to determine the origin of oil on the shallow groundwater at Northwestern portion of their refinery.

Initial investigative work by OCD personnel and Envirotech indicates the previous waste water disposal lagoons to be a major contributor. These lagoons have been closed and the residual soils have been transported to an authorized soil remediation site for remediation.

New double lined evaporative basins are currently under construction to serve this refining facility.

Additional investigative work is necessary to identify each point source that may be contributing to this contamination plume. Soil borings will be performed to determine the horizontal extent of the plume and to identify any point sources.

Monitoring wells will be installed as part of this investigative work to definitively quantify the contamination constituents and their concentrations. These monitor wells will be permanently constructed to allow monitoring the progress of remediation efforts.

A remediation system proposal shall be submitted to the OCD upon completion of the site investigation phase.

We appreciate the help and cooperation of your field personnel, Mr. Rodger Anderson and Bill Olsen. They represent the Division very well and are most helpful in their efforts to bring facilities into compliance with OCD regulations.

Please contact us if we can provide any additional information.

Sincerely,

ENVIROTECH INC.



Morris D. Young
President

ENVIROTECH[®] INC.

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

90 MAY 11 AM 8 57

May 9, 1990

Mr. Roger C. Anderson, Environmental Engineer
Oil Conservation Division
PO Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

Re: Hydrocarbon Contamination at Thriftway's
Bloomfield, New Mexico Refinery

Dear Mr. Anderson:

As per your request during OCD's recent inspection of Thriftway's Bloomfield Refinery by yourself and Mr. William Olsen, Envirotech will begin a site investigation of the refinery proper starting May 21 to determine the horizontal and vertical extent of hydrocarbon contamination that is surfacing near Kutz Wash within the Thriftway Refinery property.

We anticipate completing some of the soil boring investigation sites as permeate monitor wells to monitor the progress of the site remediation.

Once the hydrocarbon plume has been delineated it should be possible to determine and correct any point sources that may be actively contributing hydrocarbons to the plume.

The site investigation is expected to require 2-3 weeks with laboratory analysis results available by June 30, 1990.

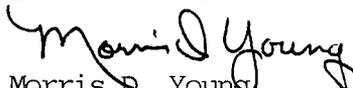
A proposed remediation plan will be forwarded to your attention on or before July 15, 1990.

We are nearing completion of the construction of the Light Crude Oil Receiving Dock, Heavy Crude Oil Docks #1 and #2 and the Diesel Fuel Tank/spill containment system. Photographs depicting the work in various stages of completion will be forwarded to your attention prior to May 31, 1990.

We appreciate working with you and your people on this matter.

Sincerely

ENVIROTECH INC.


Morris D. Young
President

MDY:mf

cc: Mr. F. L. Stark, Thriftway
Mr. J. D. Clayton, Thriftway

OIL CONSERVATION UNIT
RECEIVED

'91 FEB 14 PM

THRIFTWAY REFINERY
710 E. 20th Street
Farmington, NM 87401

February 5, 1991

RECEIVED

FEB 07 1991

OIL CON. DIV.
DIST. 3

State of New Mexico
Energy, Minerals & Natural Resources Dept.
1000 Rio Brazos Road
Aztec, NM 87410

Dear Mr. Foust:

Attached, please find the data sheet for the notification of spill which occurred on February 1, 1991.

Sincerely,



Ken Sinks
Refinery Engineer

KS/ls

cc: file
Jim Ratcliffe

NEW MEXICO OIL CONSERVATION COMMISSION
 NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

NAME OF OPERATOR Thriftway Refinery				ADDRESS 710 E. 20th Street, Farmington, NM				
REPORT OF	FIRE	BREAK	SPILL XXXX	LEAK	BLOWOUT	OTHER*		
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE	GASO PLNT	OIL RFY XXXX	OTHER*	
NAME OF FACILITY Thriftway Refinery								
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)				626 RD 5500, Bloomfield	SEC.	TWP.	RGE. COUNTY	
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK								
DATE AND HOUR OF OCCURENCE				DATE AND HOUR OF DISCOVERY				
WAS IMMEDIATE NOTICE GIVEN?	YES XXXX	NO	NOT REQUIRED	IF YES, TO WHOM Denny Foust				
BY WHOM	Ross J. Small			DATE AND HOUR	2-1-91 11:00A.M.			
TYPE OF FLUID LOST	.05 Gram/gal Regular Gasoline			QUANTITY OF LOSS	750 gal. VOLUME RECOVERED 650-720 gal.			
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO XXXX	QUANTITY					
IF YES, DESCRIBE FULLY**								
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p style="font-size: 2em; margin: 0;">RECEIVED</p> <p style="margin: 0;">FEB 07 1991</p> <p style="margin: 0;">OIL CON. DIV.</p> <p style="margin: 0;">DIST. 2</p> </div>								
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**								
<p>A new operational procedure for product transfers and blending were developed to alleviate this problem in the future. The spill occurred because a sample tap was left opened.</p>								
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**								
<p>The spill occurred in the dyke of tank 28 (regular gasoline sales tank). The ground was frozen and therefore no gasoline was lost to the subsurface ground water. The product was picked up with a vacuum truck and three yards of dirt were brought in to cover the spill area. Samples of the dirt in area will be taken, and that soil which is determined(over)</p>								
DESCRIPTION OF AREA	FARMING	GRAZING	URBAN	OTHER* Refinery Tank Farm				
SURFACE CONDITIONS	SANDY	SANDY LOAM	CLAY	ROCKY	WET	DRY	SNOW/ICE	
DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**								
<p>The prevailing conditions were clear weather, freezing temperatures. The ground was frozen and the spill was contained in the snow and ice in the tank dyke.</p>								
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF								
SIGNED	<i>Kenneth Smith</i>			TITLE	Refinery Engineer		DATE	2-5-91

*SPECIFY

**ATTACH ADDITIONAL SHEETS IF NECESSARY

Affidavit of Publication

STATE OF NEW MEXICO,
COUNTY OF MCKINLEY

Barbara Garrett being duly sworn upon oath, deposes and says:

As Legal Clerk of the Gallup Independent, a newspaper published in and having a general circulation in McKinley County, New Mexico, and in the City of Gallup, therein: that this affiant makes this affidavit based upon personal knowledge of the facts herein sworn to. That the publication, a copy of which is hereto attached was published in said newspaper during the period and time of publication and said notice was published in the newspaper proper, and not in a supplement thereof,

for One (1) Time, the first publication being on the 15th day of January, 1991 the second publication being on the _____ day of _____, 19____ the third publication on the _____ day of _____, 19____

and the last publication being on the _____ day of _____, 19____

That such newspaper, in which such notice or advertisement was published, is now and has been at all times material hereto, duly qualified for such purpose, and to publish legal notices and advertisements within the meaning of Chapter 12, of the statutes of the State of New Mexico, 1941 compilation.

Barbara Garrett
Affiant.

Sworn and subscribed to before me this 15th day of

January, A.D., 1991
Stuart Chase
Notary Public.

My commission expires 6-22-93

LEGAL NOTICE
STATE OF NEW MEXICO
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications and renewal applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P. O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-32) - Giant Refining Company, Claud Rosendale, Environmental Manager, Route 3, Box 7, Gallup, New Mexico 87301, has submitted a renewal application for its previously approved discharge plan for its Ciniza Refinery located 17 miles east of Gallup, New Mexico on Interstate Highway 40. The refinery and associated waste-management facilities are located in the S/4 of Section 28 and the N 3/4 of Section 33 of Township 15 North, Range 15 West, NMPM, McKinley County, New Mexico. The refinery discharges approximately 161,000 gallons per day of process and non-process wastewater. The wastewater, with an approximate concentration of 2000 to 3000 mg/l total dissolved solids, is discharged to 11 unlined evaporation ponds with a total of 117 acres of capacity. These ponds are constructed in and of the shales of the upper Chinle Formation, which have a permeability of less than six inches per year. The uppermost ground water likely to be affected by refinery discharges is in thin localized sand lenses at depths of 30 to 65 feet, with a total dissolved solids concentration of approximately 1100 mg/l. The uppermost ground water at the site known to be areally extensive is the Sonsela Sandstone at depths from 20 to 140 feet, with a total dissolved solids concentration of approximately 800 mg/l. Ground water in localized sands and the Sonsela is confined under artesian conditions. The discharge plan application in addresses how spills, leaks and other accidental discharges to the surface will be managed.

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(GW-2) - Phillips 66 Natural Gas Company, David Jelmini, Environmental Specialist, 4001 Penbrook, Odessa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Lee Plant located in SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Approximately 47,000 gallons per day of process wastewater with a total dissolved solids concentration of approximately 5300 mg/l is disposed of in an OCD approval offsite commercial Class II disposal well. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of approximately 600 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-60) - Williams Field Services, H. Spencer George, Manager, Processing Engineering, P.O. Box 10368, Salt Lake City, Utah, 84158-0900, has submitted a discharge plan application for its Milagro Plant located in the SW/4 SE/4, Section 12, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1500 gallons per day of process wastewater will be disposed of in synthetically double-lined evaporation basins equipped with leak detection. The total dissolved solids concentration of the wastewater will not be known until the plant begins operation. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth in excess of 60 feet with a total dissolved solids concentration of approximately 5800 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of January, 1991. To be published on or before January 18, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAY, Director

Legal #6450 published in the Independent January 15, 1991.

STATE OF NEW MEXICO
County of Bernalillo

SS

Thomas J. Smithson being duly sworn declares and says that he is National Advertising manager of the **Albuquerque Journal**, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made or assessed as court costs; that the notice, a copy of which is hereto attached, was published in said paper in the regular daily edition,

for.....¹.....times, the first publication being on the.....²¹.....day

of.....^{Jan}....., 1991, and the subsequent consecutive

publications on....., 1991.

Thomas J. Smithson

Sworn and subscribed to before me, a Notary Public in and for the County of Bernalillo and State of New Mexico, this ...²¹... day of ...^{Jan}..., 1991.

PRICE.....^{\$52.25}.....

Statement to come at end of month.

CLA-22-A (R-12/91)

ACCOUNT NUMBER.....^{C 81184}.....

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERALS AND
NATURAL
RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications and renewal applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

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Maddette Cortez

12-18-93

RC

(GW-2) - Phillips 66 Natural Gas Company, David Jemini, Environmental Specialist, 4001 Penbrook, Odessa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Lee Plant located in SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Approximately 47,000 gallons per day of process wastewater with a total dissolved solids concentration of approximately 5300 mg/l is disposed of in an OCD approved offsite commercial Class II disposal well. Groundwater most likely to be affected by a spill, leak and other solids concentration of approximately 600 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of January, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
s/William J. LeMay
Director

Journal: January 21, 1991

No. 27090

STATE OF NEW MEXICO,
County of San Juan:

CHRISTINE HILL being duly sworn, says: "That she is the NATIONAL AD MANAGER of The Farmington Daily Times, a daily newspaper of general circulation published in English in Farmington, said county and state, and that the hereto attached LEGAL NOTICE

was published in a regular and entire issue of the said Farmington Daily Times, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for ONE consecutive (days) (/////) on the same day as follows:

- First Publication SUNDAY, JANUARY 13, 1991
- Second Publication _____
- Third Publication _____
- Fourth Publication _____

and that payment therefore in the amount of \$ 81.66 has been made.

Christine Hill

Subscribed and sworn to before me this 14TH day of JANUARY, 1991.

Connie Andrae

Notary Public, San Juan County,
New Mexico

My Comm expires: JULY 3, 1993

**NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY MINERALS
AND NATURAL RESOURCES
DEPARTMENT OIL
CONSERVATION DIVISION**

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Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that he is Adv. Director of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled
Notice Of Publication

and numbered in the
..... Court of Lea
County, New Mexico, was published in a regular and
entire issue of THE LOVINGTON DAILY LEADER and
not in any supplement thereof, once each week on the
same day of the week, for one (1)
consecutive weeks, beginning with the issue of
January 13, 1991
and ending with the issue of
January 18, 1991

And that the cost of publishing said notice is the
sum of \$48.08

which sum has been (Paid) ~~As per~~ as Court Costs

Joyce Clemens
Subscribed and sworn to before me this 21st

day of January 19 91

Mrs. Jean Senier
Notary Public, Lea County, New Mexico

My Commission Expires Sept. 24, 1994

LEGAL NOTICE
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERAL AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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(GW-32) - Giant Refining Company, Claud Rosendale, Environmental Manager, Route 3, Box 7 Gallup, New Mexico 87301, has submitted a renewal application for its previously approved discharge plan for its Ciniza Refinery located 17 miles east of Gallup, New Mexico on Interstate Highway 40. The refinery and associated waste-management facilities are located in the S/4 of Section 28 and the N 3/4 of Section 33 of Township 15 North, Range 15 West, NMPM, McKinley County, New Mexico. The refinery discharges approximately 161,000 gallons per day of process and non-process wastewater. The wastewater, with an approximate concentration of 2000 to 3000 mg/l total dissolved solids, is discharged to 11 unlined evaporation ponds with a total of 117 acres of capacity. These ponds are constructed in and of the shales of the upper Chinle Formation, which have a permeability of less than six inches per year. The uppermost ground water likely to be affected by refinery discharges is in thin localized sand lenses at depths of 30 to 65 feet, with a total dissolved solids concentration of approximately 1100 mg/l. The uppermost ground water at the site known to be areally extensive is the Sonsela Sandstone at depths from 20 to 140 feet, with a total dissolved solids concentration of approximately 800 mg/l. Ground water in localized sands and the Sonsela is confined under artesian conditions. The discharge plan application in addresses how spills, leaks and other accidental discharges to the surface will be managed.

(GW-55) - Thriftway Marketing Corporation, F. L. Stark, Vice President, 710 East 20th Street, Farmington, New Mexico 87401, has submitted a discharge plan application for its Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and the NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1225 gallons per day of wastewater is disposed of in a synthetically double-lined evaporation pond equipped with leak detection. The wastewater has a total dissolved solids concentration of 1670 mg/l. Groundwater most likely to be affected by an discharge to the surface is at a depth of from 5 to 30 feet with a total dissolved solids concentration of approximately 4300 mg/l. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-2) - Phillips 66 Natural Gas Company, David Jelmini, Environmental Specialist, 4001 Penbrook, Odessa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Lee Plant located in SW/4 SE/4 Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Approximately 47,000 gallon per day of process wastewater with a total dissolved solids concentration of approximately 5300 mg/l is disposed of in an OCD approval offsite commercial Class II disposal well. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of approximately 600 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-60) - Williams Field Services, H. Spencer George, Manager, Processing Engineering, P. O. Box 10368, Salt Lake City, Utah, 84158-0900, has submitted a discharge plan application for its Milagro Plant located in the SW/4 SE/4, Section 12, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1500 gallons per day of process wastewater will be disposed of in synthetically double-lined evaporation basins equipped with leak detection. The total dissolved solids concentration of the wastewater will not be known until the plant begins operation. Groundwater most likely to be affected by a spill, leaks and other accidental discharge to the surface is at a depth in excess of 60 feet with a total dissolved solids concentration of approximately 5800 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed. Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest. If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of January, 1991. To be published on or before January 18, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J LEMAY,
Director

SEAL

Published in the Lovington Daily Leader January 18, 1991.

NOTICE OF PUBLICATION

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications and renewal applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P. O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-32) - Giant Refining Company, Claud Rosendale, Environmental Manager, Route 3, Box 7, Gallup, New Mexico 87301, has submitted a renewal application for its previously approved discharge plan for its Ciniza Refinery located 17 miles east of Gallup, New Mexico on Interstate Highway 40. The refinery and associated waste-management facilities are located in the S/4 of Section 28 and the N 3/4 of Section 33 of Township 15 North, Range 15 West, NMPM, McKinley County, New Mexico. The refinery discharges approximately 161,000 gallons per day of process and non-process wastewater. The wastewater, with an approximate concentration of 2000 to 3000 mg/l total dissolved solids, is discharged to 11 unlined evaporation ponds with a total of 117 acres of capacity. These ponds are constructed in and of the shales of the upper Chinle Formation, which have a permeability of less than six inches per year. The uppermost ground water likely to be affected by refinery discharges is in thin localized sand lenses at depths of 30 to 65 feet, with a total dissolved solids concentration of approximately 1100 mg/l. The uppermost ground water at the site known to be areally extensive is the Sonsela Sandstone at depths from 20 to 140 feet, with a total dissolved solids concentration of approximately 800 mg/l. Ground water in localized sands and the Sonsela is confined under artesian conditions. The discharge plan application in addresses how spills, leaks and other accidental discharges to the surface will be managed.

(GW-55) - Thriftway Marketing Corporation, F. L. Stark, Vice President, 710 East 20th Street, Farmington, New Mexico 87401, has submitted a discharge plan application for its Bloomfield Refinery located in the SE/4, Section 32, and SW/2 SW/4, Section 33, Township 29 North, Range 11 West, and the NE/4 NE/4, Section 9, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1225 gallons per day of wastewater is disposed of in a synthetically double-lined evaporation pond equipped with leak detection. The wastewater has a total dissolved solids concentration of 1670 mg/l. Groundwater most likely to be affected by an discharge to the surface is at a depth of from 5 to 30 feet with a total dissolved solids concentration of approximately 4300 mg/l. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-2) - Phillip [redacted] 6 Natural Gas Company, David J. [redacted] ini, Environmental Specialist, 4001 Penbrook, Odessa, Texas 79762, has submitted an application for renewal of its previously approved discharge plan for its Lee Plant located in SW/4 SE/4, Section 30, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico. Approximately 47,000 gallons per day of process wastewater with a total dissolved solids concentration of approximately 5300 mg/l is disposed of in an OCD approval offsite commercial Class II disposal well. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth of 85 feet with a total dissolved solids concentration of approximately 600 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed and also covers remediation of contaminated groundwater.

(GW-60) - Williams Field Services, H. Spencer George, Manager, Processing Engineering, P. O. Box 10368, Salt Lake City, Utah, 84158-0900, has submitted a discharge plan application for its Milagro Plant located in the SW/4 SE/4, Section 12, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 1500 gallons per day of process wastewater will be disposed of in synthetically double-lined evaporation basins equipped with leak detection. The total dissolved solids concentration of the wastewater will not be known until the plant begins operation. Groundwater most likely to be affected by a spill, leak and other accidental discharge to the surface is at a depth in excess of 60 feet with a total dissolved solids concentration of approximately 5800 mg/l. The discharge plan application addresses how spills, leaks and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of January, 1991. To be published on or before January 18, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY, Director

S E A L



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

November 7, 1990

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P918-402-244

Mr. Morris D. Young, President
Envirotech, Inc.
3111 Knudson
Farmington, NM 87401

Re: **Discharge Plan GW-55**
Wastewater Lagoon Spray System
Thriftway Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Young:

The Oil Conservation Division (OCD) has received your request dated October 31, 1990, to install an enhanced evaporation spray system in the newly constructed wastewater evaporation ponds. Construction and operation of the submitted spray system design is approved with the following conditions:

1. All windborn spray, mists and salts will remain within the confines of the lined portions of the ponds.
2. The spray system will only be operated when a facility attendant is on duty.
3. An anemometer with automatic shutdown systems will be activated automatically when windborn spray drift can be carried outside the confines of the lined portion of the ponds.

Please be advised that approval of this system does not relieve you of liability should your operation result in actual pollution of surface or ground waters or the environment actionable under other laws and/or regulations.

If you have any questions, please contact me at (505) 827-5884.

Sincerely,



ROGER C. ANDERSON
Environmental Engineer

RCA/dp

cc: Aztec OCD Office



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

November 1, 1990

CERTIFIED MAIL -
RETURN RECEIPT NO. P-918-402-457

Mr. Morris D. Young, President
Envirotech, Inc.
3111 Knudsen
Farmington, New Mexico 87401

RE: Discharge Plan GW-55
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

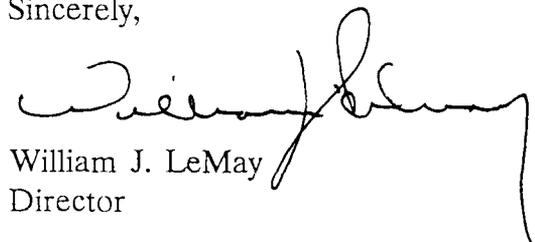
Dear Mr. Young:

The Oil Conservation Division (OCD) has received your request, dated October 30, 1990, for a 180 day extension to May 23, 1991, to discharge without an approved discharge plan. The extension will allow Thriftway to incorporate OCD's comments and requirements into the Discharge Plan application submitted to the OCD on August 3, 1990.

Pursuant to Water Quality Control Commission Regulation 3-106.A. and for good cause shown, an extension to May 23, 1991, to discharge without an approved discharge plan is hereby approved.

If you have any questions, please do not hesitate to contact Roger Anderson at (505) 827-5884.

Sincerely,



William J. LeMay
Director

cc: OCD Aztec Office

ENVIROTECH[®] INC.

011 UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION
RECEIVED

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

'90 NOV 6 AM 9 01

October 31, 1990

Mr. David G. Boyer
Environmental Bureau Chief
State of New Mexico
Oil Conservation Division
PO Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

Re: Discharge Plan GW-55
Wastewater Lagoon System
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Boyer:

Double lined evaporation lagoons have been installed at Thriftway's Bloomfield, New Mexico Refinery as part of the waste water treatment system. To enhance the evaporation rate and insure control of all waste waters generated at this facility, we propose installation of a wastewater recycle system that will pump wastewater from the lagoon and spray it back over the lagoon.

This spray or sprinkler system will allow full containment of the waste stream but provide both aeration and increase the effective surface area promoting rapid evaporation.

As per the attached diagram, all nozzels will discharge within the confines of the double lined lagoons. Each lagoon system is separated from the other. The pumping rate is anticipated at 235 G.P.M.

We have installed similar systems on several gray water lagoons and found the system to be both manageable and extremely efficient.

We appreciate your continuing cooperation in our efforts to bring the Thriftway facility in compliance with OCD regulations.

Sincerely,

ENVIROTECH INC.



Morris D. Young
President

MDY:mf

Enclosure

100'x100' LAGOON

150'x75' LAGOON

TOE OF SLOPE

TOP OF BERM

STABILIZE EACH RISER WITH #8 GALVANIZED WIRE SECURED TO EACH BANK
2"Ø x 6FT SCH 40 PVC RISERS, TYPICAL OF 30 HEADS

2"Ø SCH 40 PVC MANIFOLD

CONCRETE PAD
TWO REDJACKET SELFPRIMING CENTRIFICAL PUMPS, 5HP, 235 GPM @ 30FT HEAD

2"Ø SCH 40 MANIFOLD

2"Ø SCH 40 SUCTION LINE WITH 2" ISOLATION VALVE AND SCREENED INLET

2"Ø SCH 40 MANIFOLD

STABILIZE EACH RISER WITH #8 GALVANIZED WIRE SECURED TO EACH BANK
3/4"Ø x 6FT SCH 40 PVC RISERS, TYPICAL OF 36 HEADS



EVAPORATION ENHANCEMENT SYSTEM

SCALE 1" = 20FT

DATE	REVISION	BY

ENVIROTECH INC.
 ENVIRONMENTAL SCIENTISTS
 3111 KOLLIGSEN
 FARMINGTON, NH 07401
 603-865-8822

EVAPORATION ENHANCEMENT SYSTEM
 THRIFTWAY REFINERY
 BLOOMFIELD, NEW MEXICO
 THRIFTWAY MARKETING CORP
 710 E 20th ST, FARMINGTON, N.M. 87401

DATE: OCT'90
 DRAWN: GEB
 PROJ. 9023
 SCALE: NA
 SHEET **A2**
 OF 5

ENVIROTECH[®] INC.

OIL CO. UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION
REMOVED

3111 KNUDSEN

FARMINGTON, NEW MEXICO 87401 '90 NOV 1 AM 8 46

PHONE: (505) 326-2822

October 30, 1990

Mr. David G. Boyer
Environmental Bureau Chief
State of New Mexico
Oil Conservation Division
PO Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

Re: Discharge Plan GW-55
Tank overfill protection
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Boyer:

Thriftway Marketing Corp. will install a continuously monitored overfill detection system on all hydrocarbon storage tanks at it's Bloomfield, New Mexico refinery. The system will immediately alert the refinery personel anytime the tank is over-filled. This will prevent surface discharge of any product into the berm tank containment area on existing storage tank.

New tank construction shall also provide an imperable barrier between the tank and the soil.

The overfill prevention system shall consist of a low voltage float contactor installed in the top of each tank hard wired directly to an annunciator board located in the central refinery control building. The board will both lightup and sound an alarm should any tank reach an overfill condition.

Several of the tanks appear to be more suitable for installation of a Murphymatic high level detection system which utilizes the column pressure within the tank to detect a high level condition rather than a float switch contactor. The remainder of the detection system remains as described above.

Design and selection of system components can be completed by January 1, 1991. System installation will take place one tank at a time and is expected to be completed prior to the end of 1991.

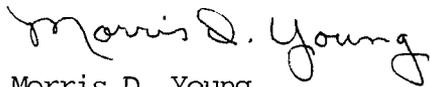
The above proposed system provides a mechanism to continuously alert operating personel of potential overfills and prevent spills from occuring in the storage tank farm.

Page 2 - October 30, 1990
David Boyer - Oil Conservation Division

Your assistance in preparation of a viable discharge plan for the Thriftway Refinery is greatly appreciated.

Sincerely,

ENVIROTECH INC.

A handwritten signature in cursive script that reads "Morris D. Young". The signature is written in dark ink and is positioned above the typed name.

Morris D. Young
President

MDY:mf

ENVIROTECH[®] INC.

THE OIL CONSERVATION DIVISION

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

NOV 6 AM 8 58

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

October 30, 1990

Mr. Roger C. Anderson, Environmental Engineer
State of New Mexico, Oil Conservation Division
PO Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

Re: Discharge Plan GW-55
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Anderson:

Thriftway Marketing Corp. is in receipt of your August 29, 1990 correspondence requesting additional information on Thriftway's Discharge Plan GW-55 application dated July 30, 1990. The format of your letter shall be utilized to answer specific questions and present additional information.

1. Water Drain Spill Containment Systems

Water drain receiving tanks have been installed on Crude Tanks #11 and 12. Other product storage tanks are currently equipped with water draw receiving tanks that will be replaced to assure tank integrity and leak detection.

New water draw receiving tanks will be installed on all hydrocarbon storage tanks except for the residual fuel oil tanks #30 and 31; ethanol tanks #36, 37, 38, 27 and 39 which don't require and water draws.

Construction of Water Drain Containment Systems on tanks 13, 14, 17 18, 19, 21, 22, 23, 25, 26, 28 and 29 shall be completed June 15, 1991.

The receiving tank for waters collected from tank drains is located adjacent the oil water separator system immediately East of the South process water evaporation lagoon. (See attached revised site Plan C1).

2. Domestic sewage

Domestic sewage is discharged into septic systems at the following locations as shown on the accompanying Site Plan C1:

1. Dispatch Office
2. Control Building
3. Refinery Office

There is no non-domestic waste discharge into these systems. The septic systems have never-ever received any refinery waste at anytime.

3. Loading/Unloading Docks

The diesel truck fueling station, light crude receiving dock, gasoline loading rack and two of the three pads for the crude oil receiving docks have been completed as of this writing. The remaining crude oil receiving pad, diesel loading rack and fuel oil loading racks will be completed on or before March 15, 1991.

The location of each facility is shown on attached Thriftway Refinery Site Plan sheet C1.

4. Paving and curbing Process Units

The process units are currently being prepared for concrete paving and installation of an expanded refinery process water sewer. Installation is expected to be completed in all units on or before November 30, 1990.

Transfer pump containment will be accomplished with installation of water draw containment system at each hydrocarbon storage tank and shall be completed on or before June 15, 1991.

5. Wastewater Collection system

Wastewater collection systems for the crude and hydrocracker systems is being installed as of this writing and will be completed on or before November 30, 1990.

6. Process Unit floors

Concrete floors are scheduled for installation in the crude unit, hydrocracker and unpaved areas of the reformer unit. Construction should be completed November 30, 1990 unless adverse weather prevents the pours.

7. Groundwater

Shallow groundwater is present at the refinery site. This groundwater is extremely high in TDS and has a distinct sulfur odor rendering it unusable for domestic or process use. An analysis of this groundwater will be sent to your attention under separate cover upon receipt from the analytical laboratory.

8. Below grade sumps

Existing below grade sumps that are not equipped with leak detection are scheduled for replacement on or before June 15, 1991, as per item 1 above.

9. Spill Notification

Thriftway will report all spills over 25 gallons pursuant to New Mexico

October 30, 1990 - Page 3
Anderson, Engineer, OCD

Water Quality Control Commission (WQCC) regulation 1-203. Such spills will be verbally reported to OCD immediately, and a written report on the incident will be filed with OCD within 7 days of verbal notification.

10 (a). Diesel Tank

A containment curb, concrete floor and spill collection system capable of containing 200% of the entire contents of the diesel fueling tank has been installed and ready for your inspection.

10 (b) Transfer Manifold

A concrete containment basin will be installed under the transfer manifold. This containment basin will be completed with the other tank farm installations on or before June 15, 1991.

10 (c). Drum Storage

A curbed drum storage area has been constructed East of and adjacent to the Crude Processing Unit area. Drum storage is not planned for anyother area.

10 (d). North Central Culvert

The current culvert will be replaced with a surface water containment berm that will collect all storm runoff in this area. Storm water will be retained for evaporation and not released into the wash.

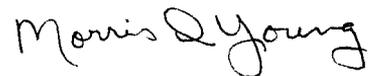
10 (e). Reflux Pumps

Leaks from the reflux pump seals will flow to the hydrocarbon collection sewer that is currently being installed as part of the new process sewer and floor installation. Installation will be completed on or before November 30, 1990.

We appreciate your continued help and cooperation in assisting Thriftway to develop and implement a viable discharge plan.

Sincerely,

ENVIROTECH INC.



Morris D. Young
President

MDY:mf

Attachments

ENVIROTECH INC.

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION
REMOVED

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

'90 NOV 1 AM 8 59

October 30, 1990

Mr. David G. Boyer
Environmental Bureau Chief
State of New Mexico
Oil Conservation Division
PO Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

Re: Discharge Plan GW-55
Storage Tank Inspection
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Boyer:

Integral with implementation of Thriftway Marketing Corp.'s Discharge Plan, Thriftway commits to perform periodic inspections on their hydrocarbon storage tanks at their Bloomfield, New Mexico Refinery.

Inspection shall commence July 1991 and continue at the rate of 1 tank per month until all tanks have been inspected.

Inspection shall consist of opening up each tank, cleaning the tank of all bottom sediment and visually inspecting the entire floor surface. Integrity of each tank bottom will be verified by spot testing with an ultrasonic thickness gauge and/or a vacuum suction cup device to assure no voids remain undetected.

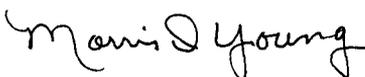
Any defects shall be repaired prior to placing the tank back in service.

The tanks shall all be tested again in 5 years from the date of the first test excepting new tanks which shall be tested within 10 years of their installation.

We appreciate working with you on this matter.

Sincerely,

ENVIROTECH INC.



Morris D. Young
President

MDY:mf

ENVIROTECH INC.

OIL CONSERVATION DIVISION
RECEIVED
UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

'90 NOV 1 AM 8 49

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

October 30, 1990

Mr. David G. Boyer
Environmental Bureau Chief
State of New Mexico
Oil Conservation Division
PO Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

Re: Discharge Plan GW-55
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Boyer:

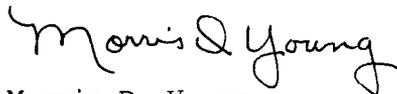
Thriftway Marketing Corp. requests a six (6) month authorization to continue discharge at their Bloomfield, New Mexico refinery to allow incorporation of necessary amendment to their proposed Discharge Plan submitted for OCD review August 3, 1990.

The proposed extension shall allow development of a viable comprehensive discharge plan incorporating OCD input without disruption of refinery operations. Disruption of operations would create extreme hardship and be economically disastrous for Thriftway.

We respectfully request your timely consideration of this requested extension.

Sincerely,

ENVIROTECH INC.



Morris D. Young
President

MY:MF



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

October 12, 1990

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-343

Mr. F.L. Stark, Vice President
Thriftway Marketing Corporation
710 East 20th Street
Farmington, New Mexico 87401

**RE: DISCHARGE PLAN GW-55
THRIFTWAY BLOOMFIELD REFINERY
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Stark:

The New Mexico Oil Conversation Division (OCD) met with your consultant, Envirotech, Inc. on Wednesday October 10, 1990 in Santa Fe, New Mexico. The purpose of the meeting was to discuss the above referenced discharge plan and the investigation and remediation of petroleum contamination related to the Thriftway Bloomfield Refinery. Items discussed included OCD's August 29, 1990 request for additional information, Envirotech's September 17, 1990 "REMEDICATION PLAN PROPOSAL, OIL CONTAMINATION AT THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO" and Envirotech's presentation of information obtained from recent boreholes installed on the refinery.

The following is a summary of the discussions and agreements reached during this meeting:

DISCHARGE PLAN

1. The remediation plan will be incorporated into the Thriftway Refinery Discharge Plan GW-55.

2. Construction to replace the bolted diesel fuel storage tank will begin by January 1, 1990.
3. Thriftway will report all spills over 25 gallons pursuant to New Mexico Water Quality Control Commission (WQCC) regulation 1-203. Such spills will be verbally reported to OCD immediately, and a written report on the incident will be filed with OCD within 7 days of verbal notification.
4. Thriftway will respond to OCD's August 29, 1990 request for additional information by November 6, 1990.
5. In addition to OCD's August 29, 1990 requests, Thriftway will also submit by November 6, 1990:
 - A. A plan for either paving of all tank areas or installation of a system to prevent surface discharges in the tank area including tank overflows.
 - B. Details of plans to use enhanced evaporation techniques at the lined pits for OCD review and comment prior to operation.
 - C. A plan for periodic inspection or testing of all storage tanks for integrity.
 - D. A closure plan for the abandoned waste water lagoon (Area D) identified in Envirotech's September 17, 1990 remediation plan.

REMEDICATION PLAN

1. Thriftway will submit an interim ground water remediation plan for OCD review by November 6, 1990 based upon information available from the recent borehole investigation at the refinery. No construction will begin on the remedial system prior to OCD approval.
2. The following detailed information will be included in the interim remedial plan:
 - A. An installation and sampling program for monitor wells installed to evaluate the efficiency of the proposed collection trench.
 - B. Cross-sectional diagrams of the proposed collection trench system.
 - C. A maintenance, inspection and sampling program for the

Mr. F.L. Stark
October 12, 1990

Page 3

water treatment and injection system to ensure that reinjected waters comply with New Mexico WQCC standards.

- D. A contingency plan for system malfunctions.
- E. A timetable for implementation of all aspects of the remediation plan.

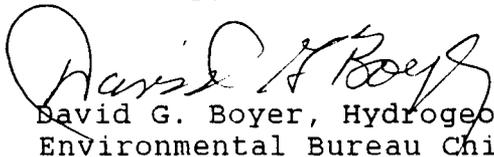
INVESTIGATION PROPOSAL

1. Thriftway will submit a ground water investigation proposal for OCD review and approval by November 6, 1990.
2. The purpose of the investigation is to determine the extent of free product and dissolved phase petroleum contamination of ground water related to all refinery activities. This goal will be accomplished by installing and sampling monitor wells on refinery property, including the area in, and adjacent to, Kutz Wash, and the eastern refinery storage tank area.
2. The investigation plan will contain:
 - A. Proposed locations for monitoring wells.
 - B. Construction details of monitoring wells.
 - C. A sampling and analysis plan to determine the concentrations of contaminants dissolved in ground water.
 - D. A timetable for completion of all aspects of the study including submission of an investigation report.

The OCD looks forward to working with you as you develop a discharge plan and begin remediation of ground water at the refinery.

If you have any questions, please contact me or my staff at 827-5812.

Sincerely,


David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/WCO

xc: OCD Aztec Office

Thriftway Meeting 10/10/90

Dave Boyer	NMOCT	(505) 827-5812
Roger Anderson	NMOCT	827-5884
Bill Olsen	NMOCT	827-5885
MIKE EASON	ENVIROTECH	326-2822
MORRIS YOUNG	ENVIROTECH	326-2822

Thruway Meeting

10/10/90

participants

Morris Young - Envirotech

Mike Eason - "

Bill Olson - OCD

Dave Boyer - OCD

Roger Anderson - OCD

M.Y. presented new map with G.W. elevations
from new borehole logs MW - B 31 - 38
shows mounding effect at the pond

D.B. Need to know downgradient extent from
collection trench

RCA submit proposal on defining extent of cont.
and remediation alternatives to OCD
prior to performing work

M.Y. Black stained soil with H.C. odor in B-30
OVA calibrated with C-4 H.C. Bugh Pioneer

D.B. what time frame for proposal

M.Y. 30 days for proposal

RCA... Where are you with remediation system

M.V... Worried about TC deadline

DGB... TC exempted for 120 days in current fed. register

M.V... Lagoons, replaced
Oil water skimming systems being constructed
Water then goes to stripper then pond
Tanks on concrete pads
Remediation system not constructed

RCA... Concerned about point source - ie tank farm
diesel tank, land farming, in NE corner of
tank area

M.V... Landfarm soil from soil removed from pit A

RCA... Did deadline pass for removal of diesel tank

M.V... Concreted ground tank with collection for
leaks

D.B... May be bottom leaks

M.V... Bottom (false) had been put in

R.A. When can tank be replaced.

M.Y. Can start by 1st of 1991

P.B. Status of remediation

M.Y. Not yet constructed

R.A. Depth of trench? with sump underground

M.Y. 4-6 ft

Sump tank below water table
Family drain system 1 ft gravel in trench
with PVC covered with petromat

RCA Petro mat will clog with oil
should check with manufacturer on petromat
in that gets oil on it, effects on infiltration

M.Y. Will then install MW's to determine effectiveness

W.O. But no control, No. of collection trench
Also problem with disposal of treated water

M.Y. 2 options - redirection } for disposal
- line pump

R.B. If oil gets in fire pond it would
have to be netted

W.O. Recognize that this is interim measure

* R.A. Need cross-section of collector trench

D.B. Time scale for trench

M.Y. Approximately 1-2 weeks
Also want to remove cont. soil from
area D

Take 1 week to install trench
approx 6th at Nov. 1990

* W.O. Summarize install 2 items will be required,
1) installation of trench as interim measure

* 2) Proposal by ^{Nov. 6th, 1990} 30 days for debris extent
at cont. (North fence line)

R.A. When can get proposal for reinjection, disposal

M.Y. By Nov. 6th, 1990

D.B. What I would like stayed approach

- 1) Area North of property line
- 2) Tank Farm
- 3) Loading racks, etc

D.B. Summary of items due by Nov. 6, 1990

- 1.) Proposal for investigation, staged approach
- 2.) Interim remedial measure, remediation in west end of property including
 - 1.) contingencies for upsets
 - 2.) maintenance
 - 3.) inspection
 - 4.) maintain quality out of strips
 - 5.) MW's for determining effectiveness, efficiency of cleanup

RA. ~~W~~

Tanks on pads $\bar{=}$ with beams

M.Y. No beams

RA Then need positive shut-off devices to prevent overflow

~~How will work~~

O.B. Leaning toward injection well idea
Need info on preventing injection from only first couple injection wells

M.Y. pressure values at injection wells will serve this purpose

W.A. should consider infiltration gallery in addition to ~~inj~~ injection wells with high density of wells proposed

R.A. Discharge Plan expires Nov 26th, 1980
Need extension of ~~the~~ permit time
approx. 6 months max. will be allowed
for discharge without approved plan set in by
Nov. 6, 1990

On review of 8/29/80 OCD letter
items in letter must be specifically addressed
Some items addressed, most not, review by item

M.Y. 1-6 will submit
7 want budgeted with quality?

R.A. Yes, also need discharge volume, and ^{quantity} ~~quality~~
for public notice

* M.Y. Already have installed sprinklers in new
ponds which are constructed

DB Stress that these must be approved prior to
installation

* R.A. We will put conditions on their use
Need to supply OCD with letter at P.P. modification
for sprinklers

M.Y. Item 8 OK

DB 9 Immediate notification with 25 gals.
or greater spill

D.B. stress reporting at spills due to
past problems
reporting deadlines as per 1-203 WQCC
Did you address tank testing, above grad.
Gary Reberry for tanks over 10 yrs old
must be tested once, over 25 yrs.
tested every five yrs. Also need cathodic
protection on tanks

How do you ensure integrity?

Need to see proposal for testing tanks

Also need to either have some boreholes or high level sensors with shut-off

M.Y.

Visual inspection with ultrasonic thickness tester
is most viable option

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 29, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-417

Mr. F. L. Stark, Vice President
Thriftway Marking Corporation
710 East 20th Street
Farmington, New Mexico 87401

RE: Discharge Plan GW-55
Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Stark:

The Oil Conservation Division (OCD) has received and is in the process of reviewing the above referenced discharge plan application. The application dated, July 30, 1990 was received by the OCD on August 3, 1990. The following requests for additional information and/or commitments are based on review of the application and observations from the OCD site visit of January 30, 1990:

1. Section II.A.1 refers to the Water Drain Spill Containment Systems contained in attachment sheet A-4. Has construction of this system been completed at all storage tanks? If construction is not completed, submit a listing of the tanks where the system is not in service and a timetable for completion. This section also states the water collected in this system is transported from a "receiving tank" to an oil/water separator. What is the location of this "receiving" tank? Site Plan (sheet C1).
2. Section II.A.5 states domestic sewage is discharged to separate septic systems. Identify the location of each system on the Site Plan (sheet C1). Is any non-domestic refinery waste discharged to any septic system? Has any septic system received any refinery waste in the past?

3. Section II.C.1 discuss containment pads at the loading and unloading docks. Is the construction of each of these facilities complete? If not, submit a completion timetable.
4. Section II.C.2. commits to the paving and curbing of all transfer pumps and process units. Identify those units that have not been paved and curbed and a completion timetable.
5. Section II.C.3 describes an expanded wastewater collection system for the floor of the crude and hydrocraker units. Submit a completion timetable for this system.
6. Section II.D.1 commits to concrete lining of units presently unlined. What units are presently lined. What units are proposed for concrete lining? Submit a completion timetable.
7. Section IV does not contain the hydrologic information required to evaluate the application. The two water wells mentioned, at 350 feet in depth, are considered deep wells and most likely do not represent the alluvial ground water in Kutz wash. In addition, there is no mention of the quality, quantity or source of the seep into Kutz wash from the northwest part of the refinery property.
8. There are numerous below grade sumps at the facility or proposed for construction. All newly constructed below grade sumps will be equipped with leak detection. Those sumps already in service that do not have leak detection are required to be cleaned and physically inspected for integrity on an annual basis. Records will be maintained at the facility showing dates and results of these inspections.
9. Spill notification will be pursuant to WQCC Rule 1-203. Immediate notification shall be as soon as possible after discovery of any spill. After normal business hours, notification shall be to the District Supervisor or an Oil and Gas Inspector.
10. The following items were identified during the January 30, 1990 inspection but not addressed in your application:
 - a. The diesel tank at the truck fueling station was not bermed. Submit a schedule for berming this tank.
 - b. The transfer manifold at the tank farm had a valve leaking with no containment. Submit plans and a completion timetable for constructing spill and leak containment under this manifold.
 - c. The drums at the MMT building were leaking. All drums at the facility will

be stored on pads with curbing. Submit a completion timetable for paving and curbing all drum storage areas.

- d. The north center area of the facility had a culvert exiting the property to Kutz wash. This culvert drained rain water from the facility into the wash. Submit plans and a completion timetable to modify this culvert to prevent untested runoff water from being released from the facility.
- e. The reflex pumps were leaking. Submit a timetable for construction of containment facilities under these pumps.

Submission of the information and/or commitments outlined above will allow review of your application to continue. Please be aware that modification of your application, or discharge plan when approved, will be required when your site remediation plan is implemented.

If you have any questions, please contact me at (505) 827-5884.

Sincerely,



Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Aztec Office



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 29, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-417

Mr. F. L. Stark, Vice President
Thriftway Marking Corporation
710 East 20th Street
Farmington, New Mexico 87401

RE: Discharge Plan GW-55
Bloomfield Refinery
San Juan County, New Mexico

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OK
2. Section II.A.5 states domestic sewage is discharged to separate septic systems. Identify the location of each system on the Site Plan (sheet C1). Is any non-domestic refinery waste discharged to any septic system? Has any septic system received any refinery waste in the past?
OK

- 2400 gm long
- no
- OK
3. Section II.C.1 discuss containment pads at the loading and unloading docks. Is the construction of each of these facilities complete? If not, submit a completion timetable.
- OK
4. Section II.C.2. commits to the paving and curbing of all transfer pumps and process units. Identify those units that have not been paved and curbed and a completion timetable.
- OK
5. Section II.C.3 describes an expanded wastewater collection system for the floor of the crude and hydrocraker units. Submit a completion timetable for this system.
- OK
6. Section II.D.1 commits to concrete lining of units presently unlined. What units are presently lined. What units are proposed for concrete lining? Submit a completion timetable.
- OK
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- OK
8. There are numerous below grade sumps at the facility or proposed for construction. All newly constructed below grade sumps will be equipped with leak detection. Those sumps already in service that do not have leak detection are required to be cleaned and physically inspected for integrity on an annual basis. Records will be maintained at the facility showing dates and results of these inspections.
- OK
9. Spill notification will be pursuant to WQCC Rule 1-203. Immediate notification shall be as soon as possible after discovery of any spill. After normal business hours, notification shall be to the District Supervisor or an Oil and Gas Inspector.
- OK
10. The following items were identified during the January 30, 1990 inspection but not addressed in your application:
- OK
- a. The diesel tank at the truck fueling station was not bermed. Submit a schedule for berming this tank.
- b. The transfer manifold at the tank farm had a valve leaking with no containment. Submit plans and a completion timetable for constructing spill and leak containment under this manifold.
- c. The drums at the MMT building were leaking. All drums at the facility will

Mr. F. L. Stark
August 29, 1990
Page -3-

be stored on pads with curbing. Submit a completion timetable for paving and curbing all drum storage areas.

- d. The north center area of the facility had a culvert exiting the property to Kutz wash. This culvert drained rain water from the facility into the wash. Submit plans and a completion timetable to modify this culvert to prevent untested runoff water from being released from the facility.
- e. The reflex pumps were leaking. Submit a timetable for construction of containment facilities under these pumps.

Submission of the information and/or commitments outlined above will allow review of your application to continue. Please be aware that modification of your application, or discharge plan when approved, will be required when your site remediation plan is implemented.

If you have any questions, please contact me at (505) 827-5884.

Sincerely,



Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Aztec Office



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

August 16, 1990

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P 918-402-341

Mr. Morris D. Young, President
Envirotech Inc.
3111 Knudsen
Farmington, New Mexico 87401

Re: Discharge Plan GW-55
Thriftway Bloomfield Refinery
Wastewater Evaporation Pond

Dear Mr. Young:

The Oil Conservation Division has received your application dated July 25, 1990 to construct and operate two double-lined wastewater evaporation ponds equipped with leak detection at Thriftway Bloomfield refinery. The ponds are to be constructed on the site of the existing unlined evaporation ponds.

The designs and specifications as proposed in the July 25, 1990 application and the additional information contained in the discharge plan application dated July 31, 1990 are adequate for the protection of surface and ground waters and the environment and are hereby approved with the following conditions:

1. Only liquids that are non-hazardous by RCRA Subtitle C exemption or by characteristic testing will be disposed of in the ponds.
2. A two (2) foot freeboard will be maintained in the ponds.
3. The leak detection sumps will be inspected weekly. If fluids are found in a sump, Thriftway will obtain a sample analysis of the fluids to determine its origin. The OCD will be notified with 24 hours of the discovery of fluids in a leak detection sump. Remedial actions to be taken by

Thriftway will be determined by the OCD based on the origin of the fluids. Inspection records will be maintained by Thriftway. Records are subject to inspection by OCD personnel.

4. Prior to installation of the secondary liner, the soils underlying the proposed site will be remediated to the following standards:
 - a) Total Petroleum Hydrocarbons (TPH) < 100 PPM
 - b) Total Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) < 50 PPM
 - c) Benzene < 10 PPM
5. The water table at the proposed site will not be penetrated by the ponds.
6. The OCD will be notified a minimum of 24 hours prior to installation of the liners to allow a representative the opportunity to witness the installation.

The use of the lined evaporation ponds will be a part of Thriftway's discharge plan.

Please be aware that approval of these ponds does not relieve you of liability should your operation result in actual pollution of surface or ground waters or the environment actionable under other law and/or regulations. Additionally, this approval does not relieve you of responsibility for compliance with other city, county, state and federal laws and/or regulations.

If you have any questions, please contact me at (505) 827-5884.

Sincerely,



Roger C. Anderson,
Environmental Engineer

cc: Aztec District Office

FILE COPY

RECEIVED

AUG 03 1990
OIL CONSERVATION DIV.
SANTA FE

DISCHARGE PLAN GW-55

THRIFTWAY MARKETING CORP.
BLOOMFIELD REFINERY
626 County Road 5500
Bloomfield, San Juan Co., New Mexico

July 1990

PREPARED by:

ENVIROTECH INC.
3111 KNUDSEN
Farmington, New Mexico

505-326-2822

DISCHARGE PLAN for THRIFTWAY MARKETING CORP.
BLOOMFIELD, NEW MEXICO REFINERY

1. GENERAL INFORMATION

A. NAME OF DISCHARGER:

THRIFTWAY MARKETING CORP.
710 East 20th Street
Farmington, New Mexico 87401

Telephone: 505-326-5571
Fax No: 505-326-3813

B. CONTACT PERSON:

Mr. F. L. Stark, Vice President
710 East 20th Street
Farmington, New Mexico 87401

Telephone: 505-326-5571

C. LOCATION of DISCHARGE:

THRIFTWAY REFINERY
626 County Road 5500
Bloomfield, New Mexico 87413

Refinery property located in SE/4 Sec. 32 SW/2 SW/4 Sec 33
Township 29N Range 11 W and 7.35 acres in the N.E./4 NE/4
Sec. 9 Township 28 North Range 11 West N.M. P.M., San
Juan County, New Mexico.

The accompanying site plan shows both the property boundaries
and the existing fence lines.

D. TYPE of OPERATION:

Crude Oil Refinery processing light sweet San Juan Basin crude oil.
Principal processes include crude oil fractionation, naptha reforming
and heavy oil hydrocracking to yield gasoline, diesel and residual
fuel oil products.

Crude oil is received from the surrounding oil fields of the San Juan
Basin. This light sweet crude is routed to the Crude Fractionation Plant
where it is heated and distilled into light gasoline, heavy gasoline,
diesel and fuel oil fractions. The light gasoline is routed to storage
for blending into the final gasoline products. Heavy gasoline is routed
to the reformer unit where it is contacted with a platinum catalyst under
controlled heat and temperature conditions.

This causes the long chain paraffin hydrocarbon molecules to rearrange
to cyclic or branched chained molecules which have higher octane characteristics

This reformer product is called reformate and is used to blend gasoline to meet the State's requirement for octane.

The fuel oil fraction is routed to the hydrocracker unit where under controlled temperature and pressure conditions it is contacted with a catalyst that fractures or causes the long chain molecules to "crack" in the presence of hydrogen into gasoline and/or diesel sized molecules.

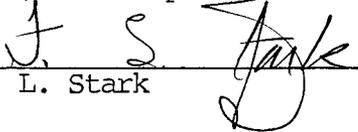
A small stream of the heavy fuel oil does not crack and is withdrawn as residual fuel oil.

E. COPIES:

Three (3) copies of the Discharge Plans application are attached.

F. AFFIRMATION:

I hereby certify that I am familiar with the information contained in and submitted with this application and that such information is true, accurate, and complete to the best of my knowledge and belief.



F. L. Stark

July 30, 1990

F. L. Stark

Vice President

II. PLANT PROCESSES:

A. SOURCES and QUANTITIES of EFFLUENT and PROCESS FLUIDS:

For the previous three (3) months all effluent streams for the refinery have been impounded and trucked to Southwestern Disposal at Blanco, New Mexico for treatment and disposal. This outfall fluid has averaged 1224 gallons per calendar day.

1. SEPERATORS and STORAGE TANKS

Crude oil is received at the refinery containing less than 0.10% Bottom Sediment and water. This water settles out of the crude in the storage tank and is drawn off as shown in sheet A-4, WATER DRAIN SPILL CONTAINMENT SYSTEM.

This produced water is then transported from the receiving tank via vacuum truck to the oil/water separator.

Separators in the process area separate any entrained produced water and condensed steam from the hydrocarbon stream. This is drained to the process water drain system where it is routed through an oil/water separator tank to the evaporation containment lagoons. This stream is estimated to average approximately 350 gallons per day and typically is high in TDS, NaCL and hydrocarbons.

2. BOILER

This refinery employs a very small boiler (100HP) to provide steam for stripping and heat tracing, etc. The boiler is blown down once per day to the process water system where it will be routed to the containment lagoons for evaporation. This stream is estimated at approximately 125 gallons per day and contains high TDS. A phosphate based boiler treatment compound is used to prevent corrosion of the boiler system.

3. ENGINE COOLING WATER

This refinery does not employ engines in any service.

4. COOLING TOWER

A 450 Ton per day Marley updraft cooling tower provides process cooling water for the plant processes.

This water is treated with small quantities of a biocide and a phosphate based corrosion inhibitor. A small side stream is drawn off to prevent the dissolved solids from getting too high. This stream averages approximately 600-800 gallons per day and is high in TDS.

5. SEWAGE

There are three (3) separate restroom facilities at the refinery. Each system is served by a totally separate septic tank with leach field. There is no co-mingling of domestic sewage with any other outfall stream.

6. OTHER SOURCES

Process floor drainage and miscellaneous cleaning activities contribute an estimated average 50 to 100 gallons per day to the process water drain system. Typically, this stream would contain hydrocarbons.

B. QUALITY CHARACTERISTICS

All effluent streams are currently co-mingled within the plant. The streams are each small contributors to the effluent and are routed by a common process water drain system to an oil/water separator and then to the containment lagoons for evaporation.

The evaporation lagoons are double lined and equipped with a leak detection system to positively prevent contact with the groundwater.

Analysis of the co-mingled stream is attached. The samples were collected at the end of pipe via grab method and transported on ice to Intermountain Laboratory's Farmington, New Mexico laboratory as per the attached Chain of Custody report. Each sample was delivered to the laboratory with two (2) hours of collection by the sampler.

Methods of analysis and results are reported on the attached laboratory reports. As per the analysis, the stream currently meets WQCC standards for a non-hazardous classification.

The effluent stream was not analyzed for radio active elements, PCB's or pesticides because such compounds are not even present at the refinery.

The refinery operations are continuous 365 days per year and except for maintenance and repair shutdown or variations in the feed rate, the effluent stream is anticipated to remain constant in both quantity and quality.

C. TRANSFER and STORAGE of PROCESS FLUIDS AND EFFLUENTS

1. EFFLUENT FLOW SCHEMATICS

The attached THRIFTWAY REFINERY SITE PLAN, Sheet C-1 shows the principal spill and effluent collection systems and their location at the refinery site.

The PROCESS WATER SYSTEM LAYOUT, Sheet A-1 and PROCESS WATER SYSTEM, Sheet A-2 present a schematic of the process water gathering and evaporation containment lagoons.

The PROCESS OIL COLLECTION SYSTEM is shown on the Site Plan and Sheet A-2. This system is used principally to prevent hydrocarbon spills when sampling the process streams or purging a process vessel. Collected hydrocarbons are transported to the crude tank via vacuum truck.

Various product loading and unloading docks are schematically represented on Sheet A-4. Each dock consists of a curbed containment pad sloped to a spill collection drain that is routed to a steel collection tank equipped with a leak detection system. As per the diagram each tank is wrapped in a 20 mil PVC liner to assure spill detection and prevent corrosion from contact with the soil.

Any collected hydrocarbons are transported via vacuum truck to the crude storage tank.

The final source of effluent is the produced water that is entrained in the incoming crude oil and/or entrained in the refinery products. This entrained water breaks out of the hydrocarbon fluids upon standing in storage tanks.

Each tank is equipped with a water draw located near the tank bottom. The water is drawn manually and routed to an underground steel collection tank that is wrapped with a 20 mil PVC liner and equipped with leak detection.

Produced water and/or other fluids collected from the spill collection pads and basins around the storage tanks are picked up with a vacuum truck and transported to the oil/water separator where it is treated prior to being allowed to flow to the evaporation containment lagoons.

2. POTENTIAL DISCHARGE TO SURFACE or SUBSURFACE

A thorough review of the refinery operations and storage facility has targeted every likely potential point of leak or spill. Concrete containment pads, curbs and dykes have either been installed or are slated for installation in the near future for each loading/unloading operation, transfer pump or process unit. Catchment basins as per sheet A-2 are equipped with 4-inch diameter or larger steel pipe drains. These drains route collected fluids to steel collection tanks wrapped with

PVC liners and equipped with a leak detection system or routed it directly to the oil/water separator prior to final discharge to the double lined evaporation lagoons.

Fluids collected in the underground steel collection tanks are transferred via vacuum truck to either the oil/water separator or to the crude storage tank.

Except for drain piping as described above, all piping is above ground routed on pipe racks where any leak would be immediately noticed.

Plant personnel are inspecting the process and storage tank areas of the refinery 24 hours per day year around and hence would observe any leak that may develop.

3. UNDERGROUND PIPE LINES

The only underground pipelines are wastewater or spill collection pipe lines. These pipelines were constructed of schedule 40 standard butt weld pipe layed in a sand bed. The load/unload dock collection system was installed in January-March 1990 and hydrotested at 4 psig at the time of installation.

The process oil collection system was originally installed in 1980 and partially replaced with the installation of a steel collection tank in March 1990. The entire system was hydrotested March 1990.

The system was hydrotested to 4 psig for 30 minutes with no apparent leaks. Testing was conducted by Enviortech personnel.

The current process water system collects only the reformer unit area at present. This system was installed in 1980 and consists of steel pipe and collection basins routed to a steel containment vessel where the fluids are collected and transported to Southwestern Disposal for final treatment and disposal.

The process water system will be expanded to collect the floor of the crude and hydrocracker units. Effluent will be routed to the oil/water separator and then to a double lined evaporation lagoon.

Construction of this expanded collection and lagoon system will begin upon receipt of OCD approval of submitted plans and specifications.

The entire system will be hydrotested prior to placing it in service. Hydrotesting of all underground waste stream piping will be conducted annually.

D. SPILL/LEAK PREVENTION and HOUSEKEEPING

1. SPILL/LEAK PREVENTION:

Those areas of the process units not currently concrete lined will have the concrete apron extended to encompass the entire units. Any spill would drain to collection basins and be routed to the oil/water separator. Skimmed oil is routed back to the crude oil tank for reprocessing. The water effluent is routed to the double lined evaporation lagoon system. Any spill major enough to breach the containment system would require OCD notification within 4 hours or at the beginning of the next business day if the OCD office is closed.

A vacuum truck and backhoe are stationed at the refinery to assist in any cleanup requirements.

2. OFF-PROCESS AREA SPILL/LEAKS

Potential spill/leak areas consist principally of the product transfer lines and storage tanks. Each storage tank is bermed to contain 150% of the storage tank capacity.

The same berm system would contain any leak or spill from a ruptured transfer pipe. The berm system is shown on the accompanying THRIFTWAY REFINERY SITE PLAN.

Operating personnel are assigned to continuously inspect the piping and tankage system as they perform their duties throughout the refinery.

Upon notice of any hydrocarbon leak, these operating personnel would immediately shut-off the fluid to the leaking pipe valve, etc. or transfer product out of the effected tankage. Plant personnel would be immediately mobilized to contain the spill and remove it via vacuum trucks from the contained area to prevent any additional contamination.

If such a spill was greater than 25 gallons, OCD will be notified within 4 hours or as soon as possible their next business day.

Contaminated soil would be removed from the site and shipped to an approved soil remediation site for treatment. Rainwater collected in the bermed areas would be skimmed off any observed hydrocarbons via picking up the fluid with a vacuum truck and transporting it to the oil/water separator.

3. PIPING INTEGRITY

All process piping is above ground. As a general practice it is hydrotested at 1½ times expected operating pressure prior to being placed in service. Piping on the pipe racks is visually inspected a minimum of 10-15 times everyday as plant operating personnel perform their duties in the process and storage tank areas. Any leak would be immediately detected and the fluid rerouted from the leaking pipe even if it required unit shutdown to do so. Spill containment and cleanup would be initiated immediately with a backhoe and vacuum truck as required. OCD notification would be as previously written.

4. INJECTION WELL

The facility does not operate any injection wells.

III. EFFLUENT DISPOSAL

A. ON-SITE FACILITIES

1-A. ON-SITE FACILITIES

Fluids will be collected from the process area via a system of catch basins collecting from the process unit floors. The fluids are routed to an oil/water separator where the separated oil is transported back and co-mingled with virgin crude oil in the crude storage tank.

Produced water separated from the storage tanks will be routed to the influent

of the oil water separator and co-mingled with the process water stream.

Underflow effluent water is to be routed to a double lined evaporation lagoon as shown on drawings Thriftway Refinery Site Plan, Process Water System Lagoon Sheet A-1, Process Water System Sheet A-2 and Evaporation Lagoon Profiles Sheet A-3.

The lagoons are sized with an engineering safety factor of 2 and consist of a Primary liner of 35 mil polyester reinforced XR-5 resin which is resistant to both hydrocarbon and sun damage. The Secondary liner is 35 mil oil resistant PVC. 100 mil oil resistant Geotextile felt will separate the liners and will provide easy transport of any liquid to the leak detection laterals.

The lagoon system will be installed upon receipt of authorization from the New Mexico O.C.D.

As per the referenced drawings, the containment berms will route storm runoff away from the lagoons. The inside slope of the sides is 1:2 and the outside is 1:3. The lagoon has a total elevation of 6 foot and will be operated with a minimum of 2 foot freeboard.

No other method of disposal will be undertaken at the refinery site.

1-B. OTHER DISCHARGE to GROUND WATER

This plan has been developed to provide positive containment of both hydrocarbons and plant effluents to prevent any discharge to or contact with the groundwater.

Groundwater North of the lagoon site has previously been contaminated by exposure to hydrocarbons. Thriftway has retained Envirotech Inc. to conduct a site assessment to determine the horizontal and vertical extent of the hydrocarbon plume. The site assessment is to be conducted by boring to the groundwater setting monitor wells and following the plume up-gradient to the contaminating source or sources.

A remediation system will be installed upon receipt of approval of the remediation plan by O.C.D. Remediation is anticipated to remove any source of contamination as well as remove contaminants from the groundwater system.

2. OFF SITE DISPOSAL

No off site disposal of effluent or sludge is anticipated. Southwestern Disposal, Blanco, New Mexico is a contingent receiving facility should an emergency off site disposal be necessary for some unanticipated reason.

B. PROPOSED MODIFICATIONS

Not applicable.

IV. SITE CHARACTERISTICS

A. Hydrologic Features

Kutz Wash borders the refinery site on the North property boundary. This wash is normally dry and runs only with storm runoff. Kutz Wash discharges into the San Juan River approximately 1½ miles Northwest of the refinery property.

A groundwater contour map and groundwater analysis is currently being prepared by Envirotech for Thriftway in connection with the previously referenced Site Assessment.

Groundwater is expected to slope to the Northwest in the area.

Thriftway has two (2) shallow water wells on their refinery property. These wells are reported to be completed at approximately 350 feet deep. The water quality of both wells is reported so poor that the only use is to charge the fire water reserve pond. High TDS and Sulfide content renders the water useless for process or domestic uses.

The groundwater data will be forwarded to the OCD upon its availability.

B. GEOLOGIC DESCRIPTION of DISCHARGE SITE

Site soils are described as silty light brown fine to medium grain sands. This sand extends to at least 14 feet which is the depth of observation pits dug by the author at the site.

The Ojo Alamo is the top aquifer at the site. Thriftway has completed two (2) wells into this aquifer at 350 feet total depth. Water quality is so poor the water has no process or domestic uses. The Ojo Alamo is a sandstone aquifer.

Drilling logs were unavailable to determine the depth to bedrock at the site.

C. FLOOD PROTECTION

Kutz Wash provides a channel for storm runoff that would route any flood waters away from the refinery proper.

All storage tanks are dyked and the evaporation lagoons are berms as shown on attached sheets A-2 and A-3. This berming would route storm runoff away from the lagoons and storage area.

V. ADDITIONAL INFORMATION

This Discharge Plan is designed to prevent contamination of the groundwater by spill containment and use of double lined lagoons to evaporate the collected effluent.



2518
Farmington, New Mexico

CLIENT: Envirotech DATE REPORTED: 07/18/90
ID: Thriftway DATE ANALYZED: 07/12/90
SITE: #1A&B DATE RECEIVED: 07/10/90
LAB NO: F4592 DATE COLLECTED: 07/10/90

Analysis Requested: Purgeable aromatics in water.

Parameter	Concentration	Units
-----	-----	-----
Benzene	22100 (100)	ug/l
Toluene	23800 (100)	ug/l
Ethylbenzene	1020 (100)	ug/l
m/p-Xylene	2520 (100)	ug/l
o-Xylene	1850 (100)	ug/l
1,4-Dichlorobenzene	ND (100)	ug/l
1,3-Dichlorobenzene	ND (100)	ug/l
1,2-Dichlorobenzene	ND (100)	ug/l
Chlorobenzene	ND (100)	ug/l

Method:

8020 Aromatic Volatile Organics, SW-846, USEPA (1982).
602 Purgeable Aromatics, 40 CFR, Part 136.

Surrogate recovery, 99%.

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

C. Neal Schaeffer
Senior Chemist



2506 West Van Dyke
 Farmington, New Mexico 87401
 Tel. 505 325-1107

CLIENT: Envirotech
 ID: Thriftway
 SITE: #1A&B
 LAB NO: F4592

DATE REPORTED: 07/18/90
 DATE RECEIVED: 07/10/90
 DATE COLLECTED: 07/10/90

Lab pH (s.u.)..... 5.49
 Lab conductivity, umhos/cm..... 2595
 Lab resistivity, ohm-m..... 3.8536
 Total dissolved solids (180), mg/l.. 1670
 Total dissolved solids (calc), mg/l. 1277
 Total alkalinity as CaCO3, mg/l..... 85.95
 Total acidity as CaCO3, mg/l..... 330.97
 Total hardness as CaCO3, mg/l..... 341.36
 Sodium absorption ratio..... 8.03

	mg/l	meq/l
Bicarbonate as HCO3.....	104.9	1.72
Carbonate as CO3.....	0.0	0.00
Chloride.....	640.1	18.06
Sulfate.....	111.9	2.33
Calcium.....	88.4	4.41
Magnesium.....	29.4	2.42
Potassium.....	14.1	0.36
Sodium.....	341.1	14.84
Major cations.....		28.64
Major anions.....		22.11
Cation/anion difference.....		12.88 %

 C. Neal Schaeffer
 Lab Director



2506 West 11th Street
Farmington, New Mexico 87401
Tel. 505 724-1000

CLIENT: Envirotech
ID: 1A.13
SITE: N/A
LAF NO: F4008

DATE REPORTED: 03/13/90
DATE ANALYZED: 03/12/90
DATE RECEIVED: 03/12/90
DATE COLLECTED: 03/12/90

Benzyl Chloride	ND	(50)	ug/l
bis(2-chloroethoxy)methane	ND	(50)	ug/l
bis(2-Chloroisopropyl)ether	ND	(50)	ug/l
Bromomethane	ND	(50)	ug/l
Chloroacetaldehyde	ND	(50)	ug/l
1-Chlorohexane	ND	(50)	ug/l
1-Chloroethyl Vinyl Ether	ND	(50)	ug/l
Chloromethyl methyl ether	ND	(50)	ug/l
Chlorotoluene	ND	(50)	ug/l
1,3-Dichloropropene	ND	(50)	ug/l

Method:

801 Purgeable Halocarbons, 40 CFR Part 136, USEPA (1984).
8010 Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

C. Neal Schaeffer
Senior Chemist



1506
Farmington
Tel: 313-211-1111

CLIENT: Envirotech
ID: 1A/1B
SITE: N/A*
LAB NO: F4006
Analysis Requested: Purgeable halocarbons in water.

DATE REPORTED: 03/13/90
DATE ANALYZED: 03/12/90
DATE RECEIVED: 03/12/90
DATE COLLECTED: 03/12/90

Parameter	Concentration	Units
Bromobenzene	ND (50)	ug/l
Bromodichloromethane	ND (50)	ug/l
Bromoform	ND (50)	ug/l
Carbon Tetrachloride	ND (50)	ug/l
Chlorobenzene	ND (50)	ug/l
Chloroethane	ND (50)	ug/l
Chloroform	ND (50)	ug/l
Chloromethane	ND (50)	ug/l
Dibromochloromethane	ND (50)	ug/l
Dibromomethane	ND (50)	ug/l
1,2-Dichlorobenzene	ND (50)	ug/l
1,3-Dichlorobenzene	ND (50)	ug/l
1,4-Dichlorobenzene	ND (50)	ug/l
Dichlorodifluoromethane	ND (50)	ug/l
1,1-Dichloroethane	ND (50)	ug/l
1,2-Dichloroethane	ND (50)	ug/l
1,1-Dichloroethene	ND (50)	ug/l
trans-1,2-Dichloroethene	ND (50)	ug/l
1,2-Dichloropropane	ND (50)	ug/l
1,3-Dichloropropylene	ND (50)	ug/l
2,2-Dichloropropane	ND (50)	ug/l
Dichloromethane	ND (50)	ug/l
1,1,1,2-Tetrachloroethane	ND (50)	ug/l
1,1,2,2-Tetrachloroethane	ND (50)	ug/l
Tetrachloroethene	ND (50)	ug/l
1,1,1-Trichloroethane	ND (50)	ug/l
1,1,2-Trichloroethane	ND (50)	ug/l
Trichloroethene	ND (50)	ug/l
Trichlorofluoromethane	ND (50)	ug/l
1,2,3-Trichloropropane	ND (50)	ug/l
Bromochloromethane	ND (50)	ug/l
1,2-Dibromoethane	ND (50)	ug/l
cis-1,2-Dichloroethene	ND (50)	ug/l
1,1-Dichloropropene	ND (50)	ug/l
Vinyl Chloride	ND (50)	ug/l

*Thriftway Refinery's Process Water



2506 West 12th Street
Farmington, New Mexico 87401
Tel. 505-326-1107

CLIENT: Envirotech
ID: 1A 1B
SITE: N/A *
LAB NO: F3008

DATE REPORTED: 03/13/90
DATE ANALYZED: 03/12/90
DATE RECEIVED: 03/12/90
DATE COLLECTED: 03/12/90

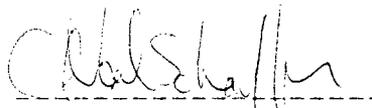
Benzyl Chloride	ND	(50)	ug/l
bis(2-chloroethoxy)methane	ND	(50)	ug/l
bis(2-Chloroisopropyl)ether	ND	(50)	ug/l
Bromomethane	ND	(50)	ug/l
Chloroacetaldehyde	ND	(50)	ug/l
1-Chlorohexane	ND	(50)	ug/l
1-Chloroethyl Vinyl Ether	ND	(50)	ug/l
Chloromethyl methyl ether	ND	(50)	ug/l
Chlorotoluene	ND	(50)	ug/l
1,3-Dichloropropene	ND	(50)	ug/l

Method:

801 Purgeable Halocarbons, 40 CFR Part 136, USEPA (1984).
8010 Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



C. Neal Schaeffer
Senior Chemist

*Thriftway Refinery's Process Water

ENVIROTECH[®] INC.

OIL CONSERVATION DIVISION
UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION
RECEIVED

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

'90 JUL 27 AM 9 15

July 25, 1990

Mr. Rodger Anderson
OIL CONSERVATION DIVISION
ENERGY, MINERALS AND NATURAL RESOURCES
PO Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

Re: Application for permit to construct
a Waste Water Disposal Evaporation Pond

Dear Mr. Anderson:

Enclosed please find the design details of a proposed process waste water evaporation lagoon system for the Thriftway Refinery located near Bloomfield, New Mexico.

The outfall water is currently collected and shipped to Southwestern Disposal for treatment. Average daily production of outfall water is 1,224 gallons per day over the last three months.

Evaporation rates for the San Juan Basin are 69 net inches per calendar year hence:

$$\frac{1,224 \text{ gallon} \times 365 \text{ days}}{7.48 \text{ gallon/cu ft.}} = 59,727 \text{ cubic feet of water}$$

$$\frac{69 \text{ net inches}}{12 \text{ inches/foot}} = 5.75 \text{ net feet of evaporation per year}$$

$$\frac{59,727 \text{ cubic feet}}{5.75 \text{ ft. net evaporation}} = 10,387 \text{ sq. ft. of evaporation surface required}$$

Using an engineering safety factor of 2, we have sized the basins for 20,000 sq. ft.

As per the attached drawings, OCD construction standards will be utilized for these lagoons including a leak detection system between the liners. We have tentatively selected XR-5 polyester reinforced resin liners for their chemical and ultraviolet resistance characteristics.

Chemical analysis of the outfall stream show it to be classified as non-hazardous, but we understand pretreatment of the stream may become necessary due to a 22 ppm benzene content. The pretreatment will be addressed as part of the discharge plan application for this facility.

Your earliest attention to this matter will be greatly appreciated.

Sincerely,
ENVIROTECH INC.


Morris D. Young, President

ENVIROTECH INC.

OIL CONSERVATION DIVISION
RECEIVED

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

'90 JUL 24 AM 9 19

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

July 23, 1990

Mr. Roger C. Anderson, Environmental Engineer
Oil Conservation Division
PO Box 2088
State Land Office Bldg.
Santa Fe, New Mexico 87504

Re: Discharge Plan GW-55
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Anderson:

Final preparation of the referanced Discharge Plan for Thriftway's Bloomfield refinery is waiting for receipt of required laboratory analysis results.

Intermountain laboratory has committed to delivery of the results no later than July 26, 1990 which will allow the Discharge Plan to be delivered to your office prior to July 31, 1990.

We appreciate your help on this matter.

Sincerely,

ENVIROTECH INC.



Morris D. Young
President

cc: F. L. Stark, Thriftway
J. D. Clayton, Thriftway
Frank Chavez, OCD, Aztec Office

MDY:mf

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

May 25, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-314

Mr. Morris D. Young
Envirotech, Inc.
3111 Knudsen
Farmington, New Mexico 87401

RE; Discharge Plan GW-55
Thriftway Bloomfield Refinery
San Juan County, New Mexico

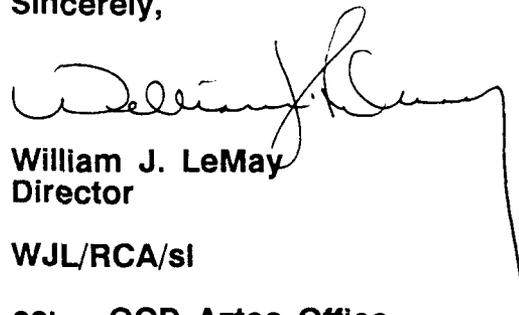
Dear Mr. Young:

The Oil Conservation Division (OCD) has received your letter dated May 24, 1990, requesting a sixty (60) day extension for the submittal of a discharge plan application for the above referenced facility. Notification of discharge plan requirement was dated January 24, 1990 and a discharge plan application was to be submitted on or before May 24, 1990.

Pursuant to Water Quality Control Commission (WQCC) Regulation 3-106.A. and for good cause shown, an extension for submittal of a discharge plan application to July 23, 1990, and an extension to discharge without an approved discharge plan to November 23, 1990, is hereby approved. This extension will allow you to identify sources and quantities of potential discharge points and investigate effective control measures.

If you have any questions, please do not hesitate to contact Roger Anderson at (505) 827-5884.

Sincerely,



William J. LeMay
Director

WJL/RCA/si

cc: OCD Aztec Office

ENVIROTECH[®] INC.

UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

'90 MAY 29 AM 10 19

May 24, 1990

Mr. Roger C. Anderson, Environmental Engineer
Oil Conservation Division
PO Box 2088
State Land Office Bldg.
Santa Fe, New Mexico 87504

Re: Discharge Plan GW-55
Thriftway's Bloomfield Refinery
San Juan County, New Mexico

Dear Mr. Anderson:

Envirotech Inc. has been retained by Thriftway Marketing Corp. to prepare a Discharge Plan for their Bloomfield, New Mexico Refinery.

And though we have identified and remediated many of the point sources of possible hydrocarbon spills and potential spills we require an additional 60 day extension for final submission of a comprehensive Discharge Plan for this facility.

Efforts are currently underway to not only determine sources but to quantify these potential discharge points in order to adequately determine the most effective control mechanism.

We appreciate the help the Oil Conservation Division personnel have given us thus far and respectfully request this 60 day extension in preparation of this comprehensive plan.

Sincerely,

ENVIROTECH INC.


Morris D. Young
President

cc: F. L. Stark, Thriftway
J. D. Clayton, Thriftway
Frank Chavez, OCD, Aztec Office

MDY:mf

MEMORANDUM OF MEETING OR CONVERSATION

Telephone

Personal

Time 11 AM

Date 3/12/90

Originating Party

Other Parties

MORRIS Young - Thriftway
326-5571

David Boyer - OCA

Subject

Thriftway water Disposal

Discussion

Young called to inquire what type of tests would be required prior to letting SWWD dispose of the water they have collected at the site.

Conclusions or Agreements

I faxed him a copy of the heavy metal, EP Toxicity & RA standards and 8010 (halogenated) hydrocarbon Test compounds and told him to analyze and report these before transporting to SWWD.

Distribution

Thriftway file

Signed

David Boyer

River oil leak reported

Bill Papich
Daily Times staff

As many as 125 gallons of oil may have leaked into the Animas River from a spill at a natural gas well in the Cedar Hill area, the Oil Conservation Division reported today.

A total of about 325 gallons may have leaked Wednesday into an arroyo next to the well which leads to the river about

1½ miles away, said Frank Chavez of the OCD's Aztec office.

Natural gas wells produce some oil and the leak was from a valve on the well, Chavez said. The well is owned by Meridian Oil Co. and the leak could have resulted from equipment malfunction, he said.

Meridian has not been cited for violating any state regulations, he added.

Most of the oil solidified on the banks of the arroyo before reaching the river, Chavez said.

The Environmental Improvement Division office in Farmington is investigating whether the spill.

Spokespersons for Aztec and Farmington's public works departments said the cities were warned about the spill and did not pump any oily water into their reservoirs.

10, 1990, INCIDENTS INVOLVING a

FOT 3-1-90

Thriftway told to replace tanks

Bill Papich
Daily Times staff

The Oil Conservation Division has ordered Thriftway Oil Co. to replace two tanks at the company's refinery on West Hammond Road, according to an OCD spokesman.

In early January, OCD began investigating oil and gasoline contamination of Kutz Wash near the refinery, located a few miles south of Bloomfield and just west of New Mexico 44 on West Hammond Road.

Frank Chavez, area supervisor for OCD's Aztec office, said Wednesday more testing is needed to determine the types and extent of contamination —

suspected to have come from the refinery — in the refinery area.

He said Thriftway has hired a consulting company to drill ground "probes" in the area to determine whether groundwater has been contaminated. The water table in the area is no more than 20 feet deep, Chavez said.

"We don't know the extent or the amounts of the liquids out there yet. We've sent them a directive to submit a discharge plan required under water control regulations of the state," he said.

In the meantime, Chavez said the OCD has ordered the company to stop using an under-

ground concrete tank for storing oil products. That tank has been replaced by another tank with a leak detection system, he said.

"We think that old concrete sump may not necessarily be the only source, but a source."

The agency also instructed Thriftway to stop using a 5,000-barrel above-ground storage tank believed to have leaked, he said.

The OCD inspected the refinery in 1988 and found no violations of any state regulations. Chavez has said the closest water well downhill from the refinery is about 1½ miles away. He noted the well is not used for drinking.

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1000	Date 2/20/90
<u>Originating Party</u> R. Anderson		<u>Other Parties</u> Morris Young	
<u>Subject</u> Collection sump and Tank 20			
<u>Discussion</u> Informed Mr Young requirements for A sump: ① Records of Pressure test, ② >20mil lines for sump; ③ Submit designs for approval and ③ Completion by 3/7/90 with old sump inspected & repaired and used temporarily. ④ Tank 20: ① Physically inspect tk bottom, ② outside catchment; and ③ out of service in 3 mos (with possibility of extension for good cause			
<u>Conclusions or Agreements</u> He verbally agreed to these requirements.			
<u>Distribution</u> File Thriftway		Signed R. Anderson	

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1600	Date 2/19/90
---	-----------------------------------	--------------	-----------------

<u>Originating Party</u> Morris Young - returned call	<u>Other Parties</u> Roger Anderson
--	--

Subject Inspection deficiencies compliance and D.P requirements

Discussion

① Informed Mr Young he can't move excavated dirt from sump to hell top for land farming without authorization. he said contaminated soil is stockpiled at refinery and he will submit land farm plan for approval before moving.

② asked Mr Young where he was disposing of waste water. Information from Frank Chavez indicates Thruway tried to use SWWD. They refused load + unknown where load went. Mr Morris said they used SWWD but is checking further

Conclusions or Agreements

Distribution Thruway file

Signed *R Anderson*

2/19/90

1600

Memorandum continued

- ③ Discussed the removal of collection sump and installation of new tank. Mr Morris stated they were going to double wrap an old, pressure tested, UST with ^{2 layers} 6 mil plastic. A 2" pvc pipe will be used for leak detection. I told him I would discuss his proposal with OGD staff but I did not ~~think~~ think 6 mil plastic would be sufficient. Will let him know 2/20 AM.
- ④ Discussed TK 20. Frank inspected tank bottom on 2/16. He said tank had shifted during erection to reveal ~1ft of bottom around edge. Shifting had broken tank connection. I informed Mr Young the tank must be out of service in 3 mos due to unknown stresses placed on tank during shifting. Thruway wanted more time. Said would shut refinery down. He proposed emptying and inspecting bottom, constructing concrete trough around tank to catch leaks and replace tank in 1 yr. Will let him know 2/20



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

February 13, 1990

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-210

Mr. F. L. Stark, Vice President
Thriftway Marketing Corporation
710 East 20th Street
Farmington, New Mexico 87401

**RE: Discharge Plan GW-55
Bloomfield Refinery
San Juan County, New Mexico**

Dear Mr. Stark:

On January 30, 1990 and January 31, 1990, the Oil Conservation Division (OCD) conducted an onsite inspection of the above referenced facility in conjunction with the discharge plan review process. Those present during the inspection were Roger Anderson, Environmental Engineer, OCD; Bill Olson, Water Resource Specialist, Environmental Improvement Division (EID); Mr. F. L. Stark, Vice President, Thriftway Marketing Corporation; Mr. Morris Young, President, Envirotech Inc; and Mr. Rex Farinsworth, Envirotech, Inc.

This letter will serve as official written notification of deficiencies noted during the inspection. Those deficiencies that pose an imminent threat to ground water, the environment, health or safety have corrective action time limits (Numbers 11 and 29) and are to be corrected immediately with OCD approved actions. For the remainder of the deficiencies, proposed actions with a reasonable timetable will be a part of the discharge plan application. The proposed actions should include methods to preclude future repetition of the deficiencies.

The following is a listing of the deficiencies observed during the inspection:

1. The crude unloading facility south of the tank farm had oil ponding on the ground. There were no pads or curbs to contain spills and leaks or prevent migration to the water table. Buried drums, used for storing hose ends, were not equipped with leak detection and had no method to prevent or contain any spillage or overflow.
2. The diesel storage tank at the truck fueling area is not bermed. There are no pads or spill containment devices in the area where the trucks are fueled.

3. Tank #1 (Condensate storage): The tank is equipped with a water draw valve that emptied to the ground and the fluid flowed to a underground concrete sump. There is no impermeable conduit from the valve to the sump. The sump is not equipped with leak detection. A sampling valve on the tank is allowed to leak or drip on the ground. Both inspection hatches were leaking. The valves on the south side of the tank were leaking and did not have any containment for the fluids.
4. Tank #12 (Condensate storage): The pumps on the west side of the tank were leaking. There is no containment for the pumps and runoff of the leaked fluids went to a small earthen pit. A sampling valve on the tank leaks or drips to the ground. The water draw drained through a pipe to an underground concrete sump. The sump is not equipped with leak detection. There is evidence the sump has had uncontained overflows to the ground surface.
5. Tank #14 (Gasoline Storage): The water draw drained directly to the ground. There was no collection sump. The sample valve had no containment for spills or leaks.
6. Tank #13 (Gasoline Storage): The water draw drained to trucks or the ground. There is no containment for leaks or spills and no method for preventing discharge directly to the ground.
7. Tank Farm Transfer Manifold: Valves were leaking with no containment under the valves.
8. Tank #19 (Gasoline Storage): The water draw drained directly to the ground with no containment.
9. Tank #18: The valves off this tank had minor leaks with no containment for the fluid leaking.
10. Diesel Bottom Loading Rack: Oil stained soil encompassed the area. There are no pads or drains to contain any spillage or leaks in the loading area.
11. Tank #20 (Diesel Storage): This tank is a 1933 vintage riveted tank that has had problems with leakage in the past. At the time of the inspection, diesel was leaking from plate seams. There is extensive hydrocarbon staining around the tank. The pumps and valves on this tank were leaking. There is no collection system to contain any of these leaks. The water drain discharges directly to the ground. This tank poses a safety as well as a major environmental problem. If this tank is still being used it must be removed from service and emptied within forty eight (48) hours of receipt of this letter.

12. "Run-down" tanks: There was an ethanol/gasoline mixture in a pool on the ground on the west side of these tanks. The mixture was from overflowing one of the tanks the previous night. There is no system of containment for any spills from the tanks.
13. Ethanol Load Manifold: This manifold can also be used to truck load gasoline. There is no containment for any spills or leaks.
14. Tank #17 (Gasoline Storage): Water draw drained directly to the ground.
15. Tank #22 (Mixer Tank): Valves were leaking with no containment. The water draw drained directly to the ground.
16. Tank #23 (Blend Tank): Valves were leaking with no containment. The water draw drained directly to the ground.
17. Tank #25 (Bolted Tank): This tank has evidence of leaks between the bolted plates.
18. Area between Tank #25 and #26: This area was heavily oil stained. The pump has been leaking on a concrete pad and the oil has flowed off the pad onto the ground. There are no curbs on the pad for containment.
19. Drum area at the MTT Building: There is evidence of drum spillage or leakage with no containment.
20. Tank #27 (Ethanol): The water draw drained directly to the ground.
21. Tank #29: The valves and manifold on the south side of the tank were leaking with no containment. The water draw drained directly to the ground.
22. Tank #21 (Gasoline): The water draw drained directly to the ground.
23. Tank #30 and #31 (Residual Oil): Free oil was observed on the ground inside the berm. The pump on the berm between Tank #30 and #31 had just been replaced. Free oil was seen on both berm sides. The tanks are interconnected, therefore the bermed area for each must be large enough to hold 50% more than the contents of each tank. The bermed areas did not appear to be large enough.
24. The area of the refinery property inside the fence in the north east corner appears to have been used as a soil and/or sludge dump. Additional investigation in this area will be required to determine the impact on ground water. Specific authorization must be obtained if this activity is to continue.

25. In the north center of the facility at the fence line, an open culvert is present that drains runoff from the facility into Kutz Canyon. This culvert must be valved or closed so that all fluids being released into the canyon can be tested prior to release. Pursuant to Section 402(l)(2) of the Federal Water Pollution Control Act (33 USC 1342), if you wish to continue discharging storm water runoff from the refinery property, a National Pollutant Discharge Elimination System (NPDES) permit must be obtained. This permit is issued by the USEPA with certification from the New Mexico Environmental Improvement Division.
26. Heavy oil loading rack: It was stated this area is inactive, however there is evidence the sump has recently overflowed. The sump is apparently connected to an active portion of the refinery. This sump is not equipped with leak detection.
27. Reflex pump: The pump is mounted on a pad with no curbing for containment. The pump was leaking and fluid was flowing off the pad onto the ground.
28. Preflash unit: The pump and valves on the valve manifold were leaking. The unit did not have a pad or containment.
29. Oil Collection Sump: This sump showed a history of overflows. It is not equipped with leak detection. There were cracks in the above ground portion of the concrete which likely extend below grade. A portion of a corner of the sump was damaged and missing. If this sump is still being used it must be taken out of service and emptied within forty eight (48) hours of receipt of this letter.

In addition to the areas identified during the inspection, you and/or your consultant should conduct a survey of the refinery property and determine any additional areas that will require attention. In addition to requirements outlined in the guidelines previously provided to you, the OCD is requiring the following.

1. Berming of tanks: Above grade tanks that contain materials with constituents that can be harmful to fresh water and the environment, if a sudden and catastrophic spill were to occur, must be contained at the site of the spill and mitigated immediately. Containment in a small area at the tank site allows for maximum recovery of fluids and small volumes of contaminants available for infiltration. Without berming, the rupture of a tank will spread its contents over a large area minimizing the amount that can be recovered and increasing the surface area of contaminated soil available to leach contaminants. All tanks that contain these types of materials must be bermed to prevent migration of the fluids and decrease the potential for infiltration. Therefore a commitment and completion schedule is required to be included in the discharge plan application for the berming of vessels that contain fluids other than fresh water. The bermed areas shall be large enough to hold one-third more than the volume of the largest vessel or one-third more than the total volume of all interconnected vessels contained within the berm.

2. **Tank Testing:** All of the storage tanks at the facility are constructed directly on the ground or on gravel pads. This method of construction does not provide for visual detection of floor leaks from the tanks or the interception of fluids before they reach the water table. Because of this, the shallow water table, and increased potential for corrosion, the OCD requires that tanks containing materials other than fresh water that are twenty five (25) years of age or older be tested every five (5) years and tanks less than twenty five (25) years of age be tested every ten (10) years. Further, because of the shallow depth to ground water (less than 10 feet) and sandy soil material, the OCD will require that the internal slope of the berms and the area surrounded by berms be paved or equipped with an impermeable barrier between the tanks and ground water.
3. **Curbing and Paving:** The purpose of curbing and paving process areas is to prevent migration and infiltration of any spilled or leaked materials from the process units. Include in the discharge plan application plans and a completion schedule for paving and berming those portions of the process and storage areas where leaks or spills can occur. The total process area does not need to be curbed and paved. Small containment facilities should be placed under and around valves and pumps. Vessels that have overflowed or leaked or have the potential to overflow or leak should also have containment. All drum storage must be paved and curbed.
4. **Below Grade Tanks:** All newly constructed below grade tanks or sumps will be equipped with leak detection. If a tank or sump is to be removed for repair or replacement, leak detection will be incorporated in the design. For all below grade tanks or sumps presently in service where it is impractical to install leak detection, yearly visual inspection and/or pressure testing will be instituted.

Please be aware that requirements stated in the OCD Director's letter, dated January 18, 1990, prohibit Thriftway from draining any fluids through tank water draws onto the ground. If it becomes necessary to drain water from a tank, the fluid must be drained directly to a vessel.

If there are any questions, please do not hesitate to call me at (505) 827-5884.

Sincerely,



Roger C. Anderson
Environmental Engineer

RCA/si

cc: W. J. LeMay
Aztec District Office

ENVIROTECH INC.

OIL CONSERVATION DIVISION
UNDERGROUND TANK TESTING • SITE ASSESSMENT • SITE REMEDIATION

3111 KNUDSEN
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 326-2822

'90 FEB 12 AM 9 06

February 6, 1990

Mr. William J. Lamay, Director
OIL CONSERVATION DIVISION
PO Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

Re: Thriftway's Bloomfield New Mexico Refinery

Dear Mr. Lamay:

Thriftway Marketing Corporation has retained Envirotech Inc. to assess and remediate suspected hydrocarbon contamination at their Bloomfield, New Mexico, refinery.

We are in receipt of your January 18, 1990 correspondence to Thriftway directing containment of refinery process waste water.

The process waters have been routed to steel catchment tanks. When sufficient volumes of this water collect it will be tested for compliance with nonhazardous waste standards and transported to a licensed disposal facility at Blanco, New Mexico.

On January 30 and 31, an inspection of the refinery facilities was conducted with Mr. Frank Chavez, Mr. Roger Anderson and Mr. William Olsen of OCD, Mr. F. L. Stark of Thriftway, Mr. Rex Farnsworth and Mr. Morris Young of Envirotech.

This inspection noted numerous small hydrocarbon drips and leaks from flanges and valves that need correction as well as the necessity to install containment vessels on the tank water drawoff and sampling ports in the process areas.

A positive containment system for the crude unloading area will consist of curbed concrete unloading pads that slope to a catchment tank equipped with leak detection.

As requested in your January 23, 1990 correspondence we are developing a Discharge Plan as per WQCC Regulations. The design of a double wall lined evaporation pit will be submitted as an integral part of this Discharge Plan.

Site investigations will begin shortly to determine the point sources and extent of the noted hydrocarbon contamination on the shallow ground water at the Northwest portion of the refinery property. It is anticipated that soil borings will be conducted down gradient of each of the tank farm tanks as well as down gradient of the process and old evaporation pond areas to determine each contributing point source. We shall also define the horizontal and vertical extent of the hydrocarbon plume.

Page 2 - February 6, 1990
William Lamay - O.C.D.

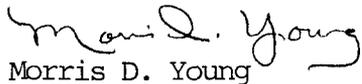
Upon completion of the investigation stage we will submit to O.C.D. a plan to provide containment and remediation of the hydrocarbon contamination.

Some initial steps for containment will be undertaken immediately.

We appreciate the helpful and cooperative attitude of your O.C.D. personnel and are confident of an early and satisfactory resolution of the compliance issues at the refinery facility.

Sincerely,

ENVIROTECH INC.



Morris D. Young
President

MDY:mf

cc: Mr. Frank Chavez - OCD Aztec
Mr. F. L. Stark - Thriftway

THRIFTWAY REFINERY

1-30-90 INSPECTION

Tank #11 - Condensate Storage:

- a) Water draw drains to ground flows to underground concrete sumps.
- b) Sump has overflowed.
- c) Sump not equipped with leak detection.
- d) Leaks and spills at sample valve - Paraffins and oil covering ground for 3-5 feet radius - no collection or containment facilities under valve.
- e) Both tank inspection hatches leaking.

Tank #12 - Condensate Storage:

- a) Valve on south side of tank leaking. No collection or containment facilities under valve.
- b) Pumps on west side of tank leaking. No collection or containment facilities under pumps.
- c) Run off from pump leak flows on ground to small earthen pit within the berm.
- d) Oil soaked soil around valves, pumps and pit.
- e) Water draw discharges through pipe to underground concrete sump. Sump had overflowed in the past. No leak detection for sump.

Tank #13 - Gasoline Storage:

- a) Water draw is drained to vacuum trucks.
- b) Evidence of leaks and spills on ground. No containment.

Tank #14 - Gasoline Storage:

- a) Water draw drains directly to the ground.
- b) Contamination on the ground under the sample valve indicates valve had leaked or sloppy sampling had occurred.

Tank #17 - Gasoline Storage:

- a) Water draw drains directly to the ground.

Tank #18 -

- a) Valves off of tank are leaking. No containment under valves.

Tank #19 - Gasoline Storage:

- a) Water draw drains directly to the ground.

Tank #20 - Diesel Storage:

- a) 1933 vintage riveted tank.
- b) Tank is leaking at seams of plates.
- c) Pumps at tank are leaking. No containment under pumps.
- d) Water draw drained directly to ground.
- e) Valves from tank leaking. No containment under valves.
- f) Leaks are severe enough, Thriftway was told by OCD to take tank out of service until repaired or replaced.

Tank #21 - Gasoline Storage:

- a) Water draw drained directly to ground.

Tank #22 - Mixer Tank:

- a) Valves leaking. No containment under valves.
- b) Water draw drained directly to ground.

Tank #23 - Blend Tank:

- a) Valves leaking. No containment under valves.
- b) Water draw drained directly to ground.

Tank #25 -

- a) Bolted Tank - evidence of leaks at seams of plates.
- b) Pump between tank 25 and 26 leaking on pad. No containment - leaks flowed off pad to ground.

Tank #27 - Ethanol Tank:

- a) Water draw drained directly to ground.

Tank #29 -

- a) Valves and manifold south of tank leaking. No containment.
- b) Water draw drained directly to ground.

Tank #30 & #31 - Residual Oil Storage:

- a) Free oil inside berm of tank #30.
- b) Pump between 30 and 31 recently replaced. Free oil on berm and inside berm of both tanks from pump change out.
- c) Berms did not appear to have sufficient capacity.

Crude unloading area (South of Tank Farm)

- a) Oil stained soil with oil pooling on ground.
- b) No pads, curbs or drains to contain spills or leaks.
- c) Buried drums used as hose end storage were full of oil. No leak detection. No prevention or collection for overflows.

Diesel Truck Fueling Area (South of Tank Farm)

- a) Above ground diesel tank does not have a berm.
- b) Loading area has evidence of spills and leaks. No pads curbs or drains for containment.

Land Disposal Area (Northeast corner of property)

- a) Oily soils from lagoons spread there.
- b) Unknown if tank bottoms and sludges have been spread.

Transfer Manifold at Tank Farm:

- a) Valve leaking. No containment.

"Rundown Tanks":

- a) Ethanol and gas mixture on ground. From 1000 gal overflow previous day. No containment for spills, leaks or tank overflows.

Ethanol Load Manifold:

- a) Have ability to load gasoline at this manifold.
- b) Evidence of spills. No containment.

Diesel Bottom Loading Rack:

- a) Oil stained oil. No pads or drains.

MMT Additive Building:

- a) Drums leaking. No containment.

Heavy Oil Loading Rack:

- a) Rack now inactive. May retroactive in future.
- b) Sump has overflowed recently to surrounding ground.
- c) Sump does not have leak detection.
- d) Oil stained soil in area.

Reflex Pumps:

- a) Pumps leak. No pads or containment.

Preflash Unit:

- a) Pump leaking, no pad or containment.
- c) Valves on manifold leaking. No containment.

North Central Fence Line:

- a) Culvert drains fluids from property to Kutz Canyon.
- b) Thriftway told to close or valve culvert and test fluids prior to release.

Oil Collection Sump (API Separator?):

- a) Evidence of overflows.
- b) Below grade concrete sump.
- c) Cracks in sump.
- d) Corner severely damaged-pieces missing.
- e) Sump not equipped with leak detection.
- f) Thriftway told by OCD to empty sump and repair or remove from service.

Refinery inspected by: R. C. Anderson
W. C. Olson

Report prepared by:

R. C. Anderson

2-21-70
Date

Refinery ordered not to discharge

Bill Papich
Daily Times staff

Thriftway Oil Co.'s refinery on West Hammond Road has been ordered by the state Oil Conservation Division not to discharge water onto the ground or into unlined pits, an OCD spokesman said.

Earlier this month the OCD began investigating rolls and gasoline contamination of Kutz Wash near the refinery, which is located a few miles south of Bloomfield. The OCD suspects the contamination could be coming from the refinery.

they've drained water from tanks onto the ground. They did have some overflows of water and petroleum products, Chavez said.

Efforts today to contact the refinery's owner, Jerry Clayton, were unsuccessful. He was reported by a Thriftway employee to be out of town.

Chavez said the closest water well downhill from the refinery along the wash is about 1 1/2 miles away. He noted the well is not used for drinking. But, as with any contamination the OCD discovers there's concern of its

impact in the future, he said. "Any groundwater is really a precious resource, even though it's not used at the current time domestically," he said.

The OCD inspected the refinery in 1988 and it was not violating any state regulations, Chavez said. Thriftway has hired a consultant to perform an environmental analysis, he said.

"We're still getting our eggs in a basket to take the next step with Thriftway, which will be to work with them to start doing some testing," he said.



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

January 23, 1990

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-157

Mr. F. L. Stark, Vice President
Thirftway Marketing Corporation
710 East 20th Street
Farmington, New Mexico 87401

**RE: Discharge Plan GW-55
Bloomfield Refinery
San Juan County, New Mexico**

Dear Mr. Stark:

Under the provisions of the Water Quality Control Commission (WQCC) Regulations, you are hereby notified that the filing of a discharge plan is required for your existing Bloomfield refining facility located in the SE/4 SE/4, Section 32, Township 29 North, Range 11 West, (NMPM), San Juan County, New Mexico.

This notification of discharge plan requirement is pursuant to Sections 3-104 and 3-106 of the WQCC Regulations. The discharge plan, defined in Section 1.101.P. of the WQCC Regulations, should cover all discharges of effluent or leachate at the plant site or adjacent to the plant site. Included in the application should be plans for controlling spills and accidental discharges at the facility (including detection of leaks in any tanks including buried underground tanks, and in buried piping), and closure plans for any ponds whose use will be discontinued.

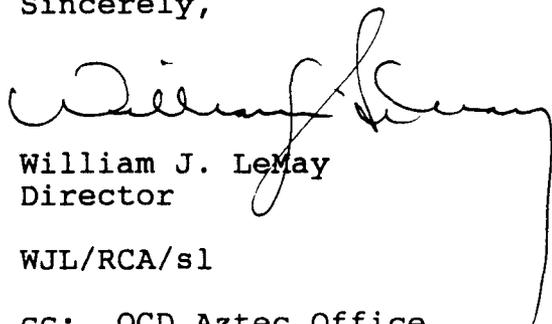
A copy of the regulations is enclosed for your convenience. Also enclosed is a copy of an OCD guide to the preparation of discharge plans for gas processing plants and refineries. The guidelines are presently being revised to include berming of tanks, curbing and paving of process areas susceptible to leaks or spills and the disposition of any solid wastes. Please include these items in your application. Three copies of your discharge plan should be submitted for review purposes.

Mr. F. L. Stark
January 23, 1990
Page -2-

Section 3-106.A. of the regulations requires a submittal of the discharge plan within 120 days of receipt of this notice unless an extension of this time period is sought and approved for good cause. Section 3-106.A also allows the discharge to continue without an approved discharge plan until 240 days after written notification by the Director of the OCD that a discharge plan is required. An extension of this time may be sought and approved for good cause.

If there are any questions on this matter, please feel free to call David Boyer at 827-5812, or Roger Anderson at 827-5884 as they have the assigned responsibility for review of all discharge plans.

Sincerely,



William J. Lemay
Director

WJL/RCA/sl

cc: OCD Aztec Office

Enclosures: WQCC Regulations
Discharge Plan Guidelines

MOB Date

JAN 23 1990

1. Complaint Number

70332218

2. Employer Name

THRIFTWAY REFINERY

3. Site Location (Street, City, State, ZIP)

W. HAMMOND DITCH RD. BLOOMFIELD, NM 87413

4. Mailing Address (if different) (Street, City, State, ZIP)

710 E 20th ST. FARMINGTON, NM 87401

5. Management Official

JERRY CLAYTON

6. Telephone Number

632-3363

7. Type of Business

REFINING

8. Hazard Description Describe briefly the hazard(s) which you believe exist. Include the approximate number of employees exposed to or threatened by each hazard.

- INTERCHANGING HYDROGEN WITH PROPANE IN SAME STORAGE TANK.

- LEAKING DIESEL FUEL FROM DIESEL STORAGE TANK.

- 1K12 (CRUDE) HAS HOLE WHERE CRUDE SLUDGE WAS BUILT WHEN TANK WAS CLEANED.

- STAFF NOT PROPERLY TRAINED TO PERFORM WORK REQUIRED.

- LOADING RACK - Jumping the ground to load trucks
management official name is Jerry Jones. Owner is Jerry Clayton.

1910.106 (b)(7)(iv) ALL LEAKS OR DEFORMATIONS

SHALL BE CORRECTED IN AN ACCEPTABLE MANNER BEFORE A TANK IS PLACED IN SERVICE.

THE ABOVE STANDARDS HAS BEEN VIOLATED DUE TO THE LEAKING DIESEL STORAGE TANK.

9. Hazard Location. Specify the particular building or worksite where the alleged violation exists:

DIESEL TANK 100 YARDS EAST OF CONTROL ROOM.
HYDROGEN/PROPANE TANK 200 YARDS NE OF CONTROL ROOM.

10. Has this condition been brought to the attention of: (Mark "X" in all that apply)
 Employer Other Government Agency (specify) _____

11. Please indicate your desire:
 Do not reveal my name to the Employer My name may be revealed to the Employer.

12. The Undersigned: (Mark "X" in one box)
 Employee Federal Safety and Health Committee Employer
 Representative of Employees Other (specify) _____
believes that a violation of an Occupational Safety or Health standard exists which is a job safety or health hazard at the establishment named on this form

13. Complainant Name (Type or print name) _____ 14. Telephone Number _____

15. Address (Street, City, State, ZIP) _____

16. Signature _____ 17. Date 1-12-89

18. If you represent employees affected by this complaint, please state the name of the organization that you represent and your title:
Organization Name: _____ Your Title: _____

19. Reporting ID 653510 20. Previous Activity? Yes No
If Yes, enter Type _____ Number _____ 21. Optional Complaint Number 1979

22. Establishment Name Change? 23. Site Address Change? 24. Employer ID (State's option) _____ 25. City Code 115 26. County Code 45

27. Received by S3594 28. Send NMOSHB-7? Yes No 29. Date 1/8/90 30. Time 4:00 PM 31. Supervisor(s) Assigned a _____ b _____

32. Primary SIC 2911 33. Ownership (Mark "X" in one box)
a Private Sector b Local Government c State Government d Federal Agency/Code _____

34. Evaluated by CCS 35. Subject and Severity

36. Is This a Valid Complaint?
 Yes No
37. Formality
 Formal Nonformal
38. Migrant Farmworker Camp

Discrimination
Imminent Danger
Safety
Health

39. Send Letter
a No inspection — for Invalid Complaints
 Too Vague or Unsubstantiated
 Recent Inspection or Objective Evidence (Date of Inspection _____)
 Not in OSHB's Jurisdiction
b No Inspection — for Nonformal Complaints
 No Imminent Danger or No Standard
 No Direct Relation to S&H
 Not Enough Information To Evaluate
c NMOSHB-7 for Signature With Letter
 Complete or Partial
d Nonformal Complaint Notification to Employer
 Complainant Notified Explanation of Employee's Rights
e Complainant Notification With Letter d
 Name Not Revealed Explanation of Employee's Rights
f Acknowledgement to Complainant (Optional)
g Other (specify) _____

40. Date Letter Sent 1/10/90 41. Date Response Due (For letters c or d) 1/22/90

42. Inspection Planned? Yes No If Yes, Priority _____ If No, Reason _____

43. Transfer to (Name) _____ 44. Transfer Date _____
45. Transfer to (Category)
a Federal OSHA/Reporting ID _____
b State OSH/Reporting ID _____
c Other Federal Agency/Code _____
d State/Local Government
e Other

46. Optional Information

Type	ID	Value	Type	ID	Value

47. Total Entries _____

48. Close Complaint

49. Comments _____

For the General Public:

Form Approved
O.M.B. No. 1218-0064

This form is provided for the assistance of any complainant and is not intended to constitute the exclusive means by which a complaint may be registered with the Occupational Health and Safety Bureau of the Environmental Improvement Division

Section 50-9-10.B NMSA 1978 States: Any employee or representative of employees may file a written complaint with the Division concerning any alleged violation of a regulation or any hazardous condition. A copy of the complaint shall be provided the employer at the time of the inspection. However, upon the request of the complainant, the complainant's name shall not appear on the copy. The Division shall investigate the complaint and notify the complainant and employer in writing of the results of the investigation and any action to be taken. If no action is contemplated, the Division shall notify the complainant and include in the notice the reasons therefor. The Division shall provide for the informal review of decisions not to take compliance action at the request of the complainant. The review shall not be by those who investigated the complaint.

NOTE: Section 50-9-25, NSMA 1978 provides explicit protection for employees exercising their rights, including making safety and health complaints.

INSTRUCTIONS:

Open the form and complete items 2 through 18 as accurately and completely as possible. Describe each hazard you think exists in as much detail as you can. If the hazards described in your complaint are not all in the same area, please identify where each hazard can be found at the worksite. If there is any particular evidence that supports your suspicion that a hazard exists (for instance, a recent accident or physical symptoms of employees at your site) include the information in your description. If you need more space than is provided on the form, continue on any other sheet of paper.

After you have completed the form, return it to:

State of New Mexico
Occupational Health and Safety Bureau
Environmental Improvement Division
P. O. Box 968
Santa Fe, NM 87503

7/1 5 1980



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

January 18, 1990

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Thriftway Marketing Corporation
710 East 20th Street
Farmington, New Mexico 87401

Re: Refinery Operations

Gentlemen:

It has come to the attention of the Oil Conservation Division that discharges from your refinery operations on West Hammond Road resulted in contamination of shallow ground water in the vicinity of the refinery. Initial testing, (witnessed by two of your employees,) by our agency was conducted on January 11, 1990, and revealed petroleum contamination of the shallow ground water along the northern fenced area of the refinery. Those tests showed that oil is seeping into the Kutz Wash from a saturated layer of soil from the bank of the wash along the fence. The initial indication is that oil is coming from the refinery area.

It also appears that your past practices have been to allow waste water from your refinery to percolate into the ground at drain sites or from earthen pits. This water often contains varying amounts of oil or other contaminants.

You are hereby directed to immediately cease discharging waste water or produced water, or any other potential contaminant onto or beneath the ground or into unlined pits or any other manner not approved by this agency.

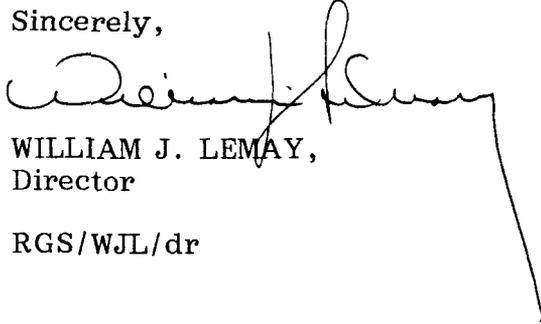
It is also our understanding that you are in the process of refurbishing and reinstalling various pressure vessels in order to restart certain refinery operations. All such activities must be reported to the Oil Conservation Division, and should be conducted to ensure compliance with our rules and regulations. In addition, we are requiring that you maintain copies of any other testing of the vessels and equipment which may be required by any other state or federal agencies and they should be available for our inspection at the refinery.

The Oil Conservation Division is responsible for enforcing the rules and regulations of the Division and is a constituent agency for enforcing the regulations of the Water Quality Control Commission. Your operation is subject to those regulations and the enforcement by the Oil Conservation Commission. You should make yourself familiar with and comply with those regulations.

Thriftway Marketing Corporation
January 18, 1990
Page 2

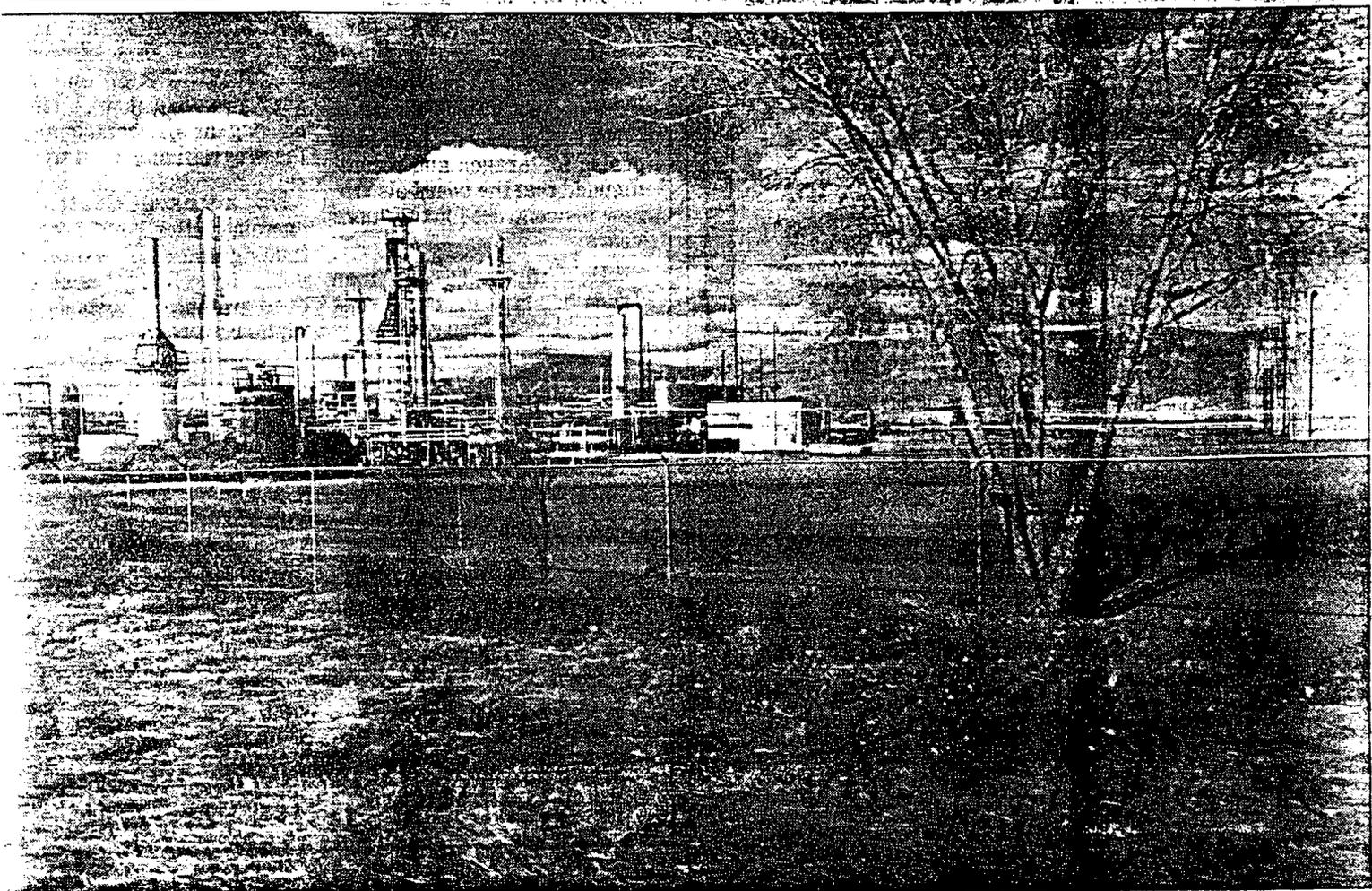
With respect to the existing contamination, our investigation will be continuing and we will require abatement of activities causing the contamination and clean-up as necessary. We will be communicating further with your company and look forward to your cooperation in remedying any problem which may exist.

Sincerely,

A handwritten signature in cursive script, appearing to read "William J. Lemay". The signature is written in black ink and is positioned above the typed name. A long, thin vertical line extends downwards from the end of the signature.

WILLIAM J. LEMAY,
Director

RGS/WJL/dr



Joe Kennedy staff photo

A possible source of oil contamination near the Thriftway Oil Co. refinery on West Hammond Road is being investigated.

State investigates contamination

Staff reports

The state Oil Conservation Division is investigating oil contamination of soil near a refinery south of Bloomfield. The contamination was discovered in a wash just beyond the north boundary of the Thriftway Oil Co. refinery on West Hammond

Road, said Bob Stovall, general counsel for the OCD. But the source of the contamination isn't known. "There appears to be oil seeping into Kutz Wash, indicating that it's coming from the refinery," Stovall said. "The initial sampling and testing is being done just to

determine if there's a problem," he said, adding that more tests are planned. Frank Chavez of the OCD office in Aztec, said Thriftway officials have been cooperating with OCD investigators. He said the OCD will be reviewing Thriftway's refining operations. The refinery manufactures motor

fuels, Chavez said. He noted there's other oil and gas activity in the area. "We just don't know that much right now," Chavez said. "We've got to do more testing to determine the extent of contamination and to determine the kind of contamination it is and where it's coming from."

cc Dan O'Neil, NPM
Bill Battell, Groundwater
Glenn Searns, Surface water

January 16, 1990

Thriftway Corporation
710 E. 20th Street
Farmington, NM 87401

RE: Refinery Operations

Gentlemen:

Tesing by our agency on Jaunary 11, 1990, in the presence of two of your employees, uncovered petroleum contamination of shallow ground water along the northern fenced area of your refinery. There is oil seeping into Kutz Wash from a saturated layer of soil on the bank of the wash along the fence, showing that there is oil coming from the refinery area.

Secondly, your past practices have been to allow all waste water from your refinery to percolate into the ground at drain sites or from earthern pits. This water often contains small amounts of oil.

You are hereby directed to immediately cease discharging waste water or produced water onto the ground or into unlined pits not approved by this agency.

We are aware that you are refurbishing and reinstalling pressured vessels in order to restart certain refinery operations. To prevent the waste caused by spillage or fire, special tests of these vessels may be required by other agencies. Records of the results of these tests are to be kept on file at the refinery for our examination.

We will be contacting you soon with further directions.

Sincerely,

Frank T.Chavez
Supervisor District #3
New Mexico Oil Conservation District

FTC:sh

OIL CONSERVATION DIVISION
SANTA FE, NEW MEXICO

TELECOPIER TRANSMITTAL SHEET

DATE:

1/16/90

TO:

Charles Cholsen

FROM:

Dave Boyer

PHONE NUMBER:

x5812

NUMBER OF PAGES (INCLUDING TRANSMITTAL SHEET):

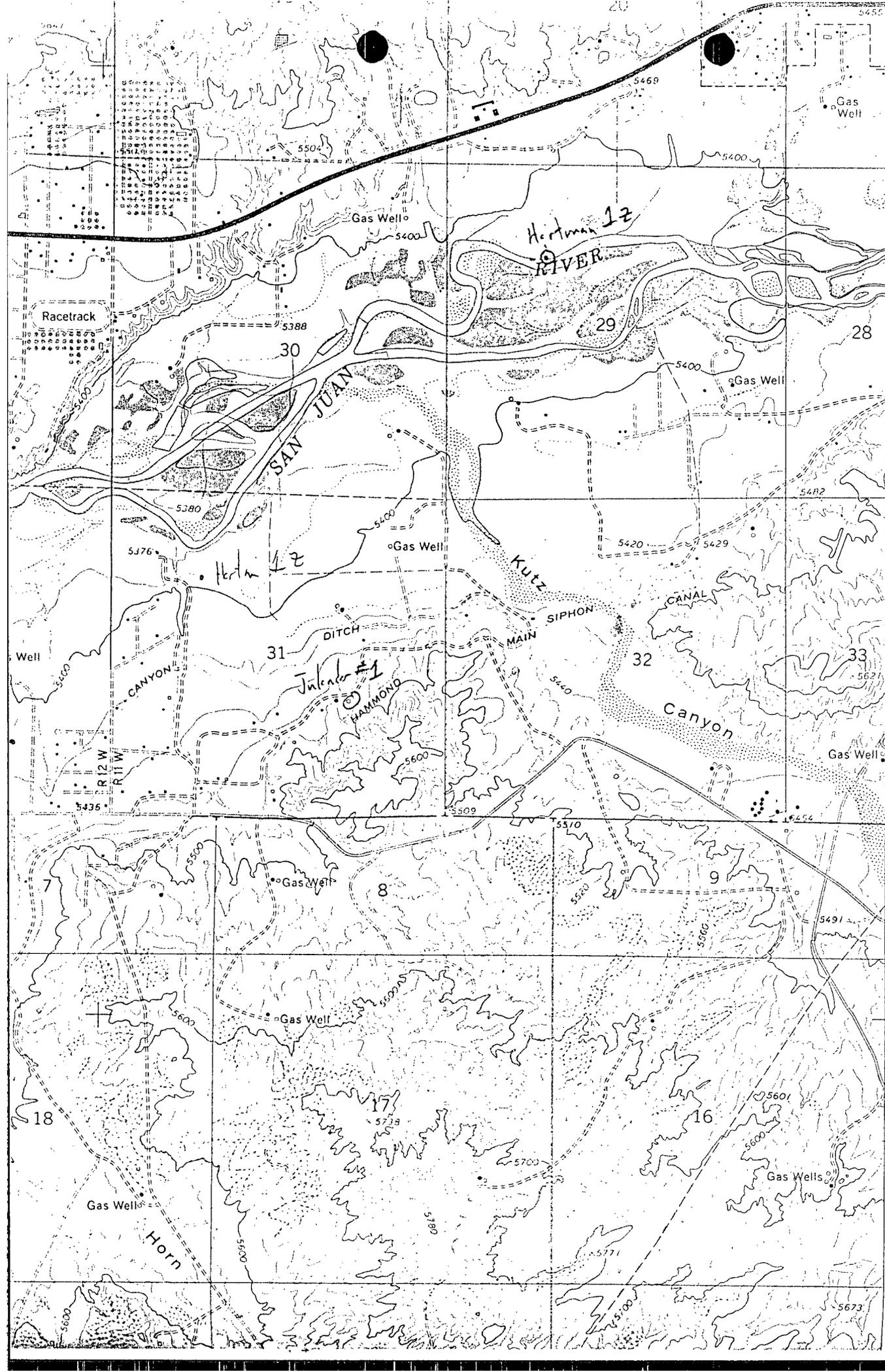
4

IF YOU HAVE ANY PROBLEMS WITH THE TRANSMISSION, PLEASE CALL
(505) 827-5806.

Charles - Only those marked are
directly down Canyon from thruway.
I'm sure that there are others not
shown.

Dave

FAX NUMBER: (505) 827-5741



42'30"

4066

4065

(BLOOMFIELD 1:62 500)
4457 III

4063

T. 29 N.

T. 28 N.

4062

40'

4061

ELD 4.5 MI.
2 MI.

Horn Canyon Quad ↑

Table 2.--Records of water wells in San Juan County, 1978-83 - Continued

LOCATION	NAME	WELL NUMBER	USE	DEPTH PERFORATIONS	AQUIFER
29.11.22.12	Jaramillo, Carlos W.	SJ-0704	dom	55	
29.11.22.12	Johnson, T. P.	SJ-0796	dom	50	
29.11.22.12	West, James R.	SJ-1703	dom	68	
29.11.22.13	Lafferton, Henry I.	SJ-1214	dom	49	
29.11.22.131	Wileman, Melvin W.	SJ-0320	dom	38	
29.11.22.133	Chacon, Gilbert A.	SJ-0484	dom	37	
29.11.22.134	Tomlinson, Clay	SJ-0151	dom	45	42-45
29.11.22.43	Wampler, Walter N.	SJ-0696	dom	34	
29.11.23.14	McCoy, Edward E.	SJ-0812	dom	44	
29.11.23.22	Boyles, C. M.	SJ-1610	dom	52	
29.11.23.23	Crabtree, T. V.	SJ-1573	dom	41	
29.11.25.14	Dunson, C. J.	SJ-0804	dom	37	
29.11.27.133	Brown, Edd H.	SJ-0700	dom	20	
29.11.28.22	McDonald, Eldeane	SJ-1606	dom	35	
29.11.29.2143	Hengst, Arthur W.	SJ-0292	dom	24	
29.11.29.222	Davis, W. R.	SJ-1554	dom	35	
29.11.29.43	Williams, Patricia	SJ-0822	dom	34	
29.11.30.2	Herrera, Ernie	SJ-1391	dom	40	
29.11.30.22	Bratcher, Brian L.	SJ-1264	dom	27	
29.11.30.22	DeHerrera, Willie	SJ-1260	dom	42	
29.11.30.22	Francisco, Rose A.	SJ-1328	dom	28	
29.11.30.41	Bump, Walter H.	SJ-0875	dom, stk	37	
29.11.31.343	Greenlee, Don	SJ-0579 (1)	dom, san	140	
29.11.32.22	Martin, Robert E.	SJ-0441	dom, stk	70	
29.11.32.4444	Thriftway Company	SJ-0103	min	263	TKoa
29.11.32.4444	Thriftway Company	SJ-0103-S	min	254	TKoa
29.12.04.21	Savage, Bob	SJ-1031	dom	275	
29.12.04.21	Thompson, Don R.	SJ-1504	dom	180	
29.12.06.122	Flores, Eli	SJ-0881	dom, stk	137	120-137
29.12.06.134	Billingsley, John	SJ-1385	dom, stk	31	
29.12.06.30	Pigford, Donald	SJ-0183	com	52	43-49
29.12.06.331	Allison, David L.	SJ-1662	dom, stk	25	
29.12.06.332	Ashcroft, N. L.	SJ-0254	dom	90	
29.12.07.1	Striplin, Arthur E.	SJ-1383	dom	125	105-125
29.12.07.11	Pierson, Miles G.	SJ-0121	dom, stk	160	110-160
29.12.08.312	World Instu of Relig	SJ-1566	dom	105	75-105

N. Side River?

1170

Date	Producing interval (feet)	Principal water-bearing unit(s)	Specific conductance (umhos at 25°C)	Data	Logs available	Reference	Draw-down (feet)	Discharge (gal/min)	Duration (hours)	Remarks
04-16-68	-	Tn	6,300	04-16-68	-	-	-	-	-	-
-	-	Qa1	748 *	04-09-68	-	-	-	-	-	-
04-09-68	-	Qa1	886 *	04-09-68	-	-	-	-	-	-
-	-	Kpc	-	-	TOP	-	-	-	-	Converted to water.
10-09-74	300	TKoa	-	-	-	-	-	-	-	Oil test plugged back.
-	-	TKoa	-	-	-	-	-	-	-	"Not fit to drink".
-	-	TKoa	-	-	TOP	-	-	-	-	Source for H ₂ injected; plugged back from ID of 1,355 feet
11-24-53	-	Qa1	2,250 *	11-24-53	-	B	-	10	-	-
10-08-74	-	Kxf, TKoa	2,500	10-08-74	-	-	-	-	-	-
-	1,435-1,448	Kpc	-	04-30-59	-	B	-	-	-	TDS = 29,800 mg/L, 1959.
04-05-68	-	Qa1	2,100	04-05-68	-	-	-	-	-	-
04-05-68	-	Qa1	900	04-05-68	-	-	-	-	-	-
-	1,550	Kpc	-	-	-	B	-	-	-	Analysis only, TDS = 30,200 mg/L, 1959.
-	1,378-1,388	Kpc	59,200 *	02-22-59	-	-	-	-	-	Gas well, sample from pit.
-	-	-	4,090 **	03-15-74	-	-	-	-	-	Analysis only
-	-	Kpc	-	04-30-59	-	-	-	-	-	Gas well; TDS = 57,800
11-07-74	-	TKoa	-	-	-	-	-	-	-	Unused.
-	-	Qa1	-	04-30-59	-	B	-	-	-	Reported casing depth TDS = 2,210 mg/L.
-	1,240	Kpc	-	-	-	B	-	-	-	WBF depth = 1,240 ft TDS = 45,600 mg/L.
10-21-74	-	Kxf	12,250	10-21-74	-	-	-	58	-	Hammond Canal Well.
04-17-68	-	Qa1	2,950 *	04-17-68	-	-	-	-	-	Stovepipe casing.
10-21-74	-	TKoa	-	-	-	-	-	-	-	-
04-18-68	-	Qa1	4,620 *	04-18-68	-	-	-	-	-	Stovepipe casing.

**FIRE MARSHAL**

SAN JUAN COUNTY
305 SOUTH OLIVER
AZTEC, NEW MEXICO 87410
PHONE: (505) 334-9431

R. E. KARLIN
CHAIRMAN

ROBERT L. BATLEY, JR.
MEMBER

LINN R. BLANCETT
MEMBER

SALLY WELLES
MANAGER

DON MCGONIGLE
FIRE MARSHAL

September 10, 1982

Mr. Glenn Jones
Thriftway Refinery
P.O. Box 1367
Farmington, NM 87401

Dear Mr. Jones:

On August 31, 1982, Mr. Darryl Dunlap and I inspected your refinery and bulk plant to assess your fire prevention needs. I was extremely impressed with the general appearance of this facility. It is not often that I enter this type of business and find so few deficiencies as were present during this inspection. The person or persons responsible for the safe operation of Thriftway Refinery should be congratulated.

Attached please find a listing of deficiencies and time frame in which to make the necessary repairs.

If I can be of any assistance to you, or answer any questions you may have, please do not hesitate to contact me at the above number.

Yours in fire protection.

Sincerely,

Don McGonigle
Fire Marshal

DM:lr

cc: Fire Prevention Bureau

Thriftyway Refinery

August 31, 1982

To insure an environment free from the dangers of fire, certain preventive precautions need to be taken. The following deficiencies should be corrected:

Tank #20 has many visual seeps and this is the same tank that has been repaired after previous inspections. It is evident that this tank will require major repair work therefore the usual 30 day time period for correction will be extended until November 30, 1982.

Uniform Fire Code Sec. 15.207 (b)

The pipe passing under the roadway between tanks #17 and 18 has become uncovered and subject to vehicular damage. This definitely should be corrected by October 18, 1982.

Uniform Fire Code Sec. 15.303



FIRE MARSHAL

SAN JUAN COUNTY
BOX 280

AZTEC, NEW MEXICO 87410
PHONE: (505) 334-9481

August 8, 1978

JIM T. DUNLAP
CHAIRMAN

JAMES D. CARPENTER
MEMBER

H.J. (JIM) YOUNG
MEMBER

DAVID A. VARGAS
MANAGER

DON MCGONIGLE
FIRE MARSHAL

Mr. F. L. Stark
Executive Vice President
Thrift-way Refinery
P. O. Box 1367
Farmington, NM 87401

Dear Mr. Stark:

During the inspection of Tuesday, August 1, 1978, leakage was evident in tanks #C-3 and #20. Repairs will have to be made and tests conducted in accordance with NFPA #30. Mr. Morris Young, of Redd-Redd & Associates, indicated that he would request a variance to this testing procedure. We have not, as yet, received his request.

Since leakage of a product in a refinery and a bulk plant is always a danger, discontinue using the aforementioned tanks until testing and compliance have been completed.

Yours in fire protection.

Sincerely,

Don McGonigle
Fire Marshal

DM:cl

cc: Mr. Morris Young
Redd-Redd & Associates
345 West 16th - South
Salt Lake City, Utah

F
013

August 3, 1978

REDD & ASSOCIATES
CONSULTING ENGINEERS

Mr. Don McGonigle
San Juan County Fire Marshal
Box 280
Bloomfield, New Mexico 87410

Re: Inspection of Thriftway Refinery

Dear Mr. McGonigle:

On Tuesday, August 1, 1978 an onsite inspection of the Thriftway Refining Plant near Bloomfield, New Mexico was conducted. Those present on the inspection tour were Mr. Don McGonigle, San Juan County Fire Marshal; Mr. Gerold Preston, Vice President and General Council of Thriftway; Mr. F. L. Stark, Vice President of Refining; and Mr. Morris Redd and Associates Consulting Engineers.

The following is a brief recap of the results of the inspection:

Tank Farm Area:

Tanks No. L-1, S-1 and D-2 had been previously inspected and drawings submitted showing design and construction to conform to API 650.

The above tanks and associated piping were authorized for operation on June 22, 1978.

Drawings and certification from the tank manufacturer for conformance to API 650 for all of the following tanks have been submitted to the San Juan County Fire Marshal's Office.

Tank C-1 was inspected full of product. The tank was found to be liquid tight with the vapor recovery system operating correctly. A cover plate on the tank level gauge was missing and had to be replaced. This tank was approved, but the vapor recovery system requires the following items to be corrected.

1. Replace 3 - 4" plug valves with gate valves.
2. Replace 1 - 2" screwed pipe elbow in the line to heater treater.

AUG 10 1978

450 SOUTH 900 WEST
SALT LAKE CITY, UTAH
TELEPHONE 525-1111

90'd 1 8:01 0H1 06-10-83F
Mr. Don McGonigle
August 3, 1978
page 2

3. Tighten bolts on mixer flange.
4. Clean area of weeds.
5. Hydrostatic test.

Tank C-2 evidenced structural damage to a portion of the tank top seam. Although the damage has been repaired, a hydrostatic test of the tank is to be required. Liquid level for the test must extend above the seam but care should be exercised not to overflow the tank because any hydrocarbon remaining in the tank would then be floated out on to the ground. Additionally a 4" plug valve requires replacement and a 1" bleed off line that apparently is not in use should be removed. Weeds were being removed from this tank area the day of the inspection.

Tank C-3 is a residual or heavy fuel oil storage tank. Inspection revealed several small seaps, indicating perhaps an air bubble or a small piece of slag was left in the weld and has since dissolved out resulting in a seap that becomes visible as the product catches dirt and accumulates on the tank surface.

Small amounts of water create an extremely hazardous situation in a hot residual oil tank. Water tends to lay on the bottom until it superheats and flashes to steam, creating an explosion which would rupture the tank and scatter fuel oil, creating a fire hazard.

We suggest the inherent dangers of hydrostatic testing this tank dictates you work closely with the refinery management in arriving at a workable method of repair and inspection of this tank.

Additionally the following items need to be corrected prior to final inspection:

1. Replace 2 - 4" plug valves with gate valves.
2. Tighten bolts on man-hole cover.
3. Replace 2" pipe fitting that evidence leakage on heater-treater line.
4. Remove weeds from diked area.
5. Provide a pipe support for 4" line.

Tank 21 and 22 are used to store unleaded gasoline which is purchased from other refiners to blend into gasoline for sale. These tanks were empty but appeared to be in excellent condition.

10 P.07 1
FEB-01-90 THU 10:18

Mr. Don McGonigle
August 3, 1978
page 3

One 4" pipe was not properly supported and several bolts were missing from the flange on the top manhole cover of tank 22.

Tank 12 appeared to be in very good condition except for a valve that was in progress of being changed out.

Tank 3 is a bolted tank that is used to store diesel fuel prior to final storage. Provide a support on the line leading to tank D-2.

Tank 5 is also used as a diesel settling tank. The 4" plug valve requires replacement, no other defects were noted.

Tank 8-A. No noted defects.

Tank 20 is a residual or heavy fuel oil tank. It has several seals that require repair. Recommendations for a repair and testing procedure as per tank C-3. Visual inspection showed a gate valve that apparently has not been correctly shut-off, the resultant oil drip should be cleaned up and the valve observed to see if it functions correctly.

Tank 25 needs additional support for the piping system. No other defect was noted except for a recommendation that the insulation be covered with a protective metal cover for both protection of the insulation and looks.

Tank 27 is a monograned API F-12 tank used for fuel oil storage. Inspection revealed no apparent defects. A slop oil sump located near tank 27 was recommended to be land filled.

Tanks 9 and 10 are small diesel holding tanks. No defects were noted.

Tanks 8, 6, 2, 3, 4, and 17 are either currently out of service or will be shortly removed.

The Process Unit Area:

Inspection showed great progress in refurbishing the fire damaged vessels, piping, pumps, etc. Units 1 and 2 were operating. Insulation of the hot oil piping has not yet been accomplished. Visual inspection of the operating units precluded the necessity of hydrostatic testing of any of the process lines.

The only leak in the process area our inspection detected was on 2 gate valves on the heavy oil discharge lines from the pot-still. Although these leaks appeared to be very minor, it is recommended that the packing be tightened or replaced as necessary.

80 P 1
FEB-01-90 THU 10:19
Mr. Don McGonigle
August 3, 1978
page 4

A drum of pour point depressant was located in the process area. This drum should be moved to the chemical storage area.

Provide proper supports for fuel gas lines for the pot still burner system.

All insulation of hot oil piping is to be completed within 20 days of this inspection or by August 21, 1978.

With compliance of the above deficiencies the units were authorized for continuing operation.

Fire Protection System

Redd and Associates presented a preliminary plot plan layout of the fire protection system. As soon as equipment can be located, final design and a construction schedule will be submitted for your approval. Any suggestions or applicable comments to assist in the final design are solicited.

A final inspection request and schedule will be submitted by Mr. Stark within the next several days.

We have appreciated your help and cooperation in working on compliances for the Thriftway Refinery.

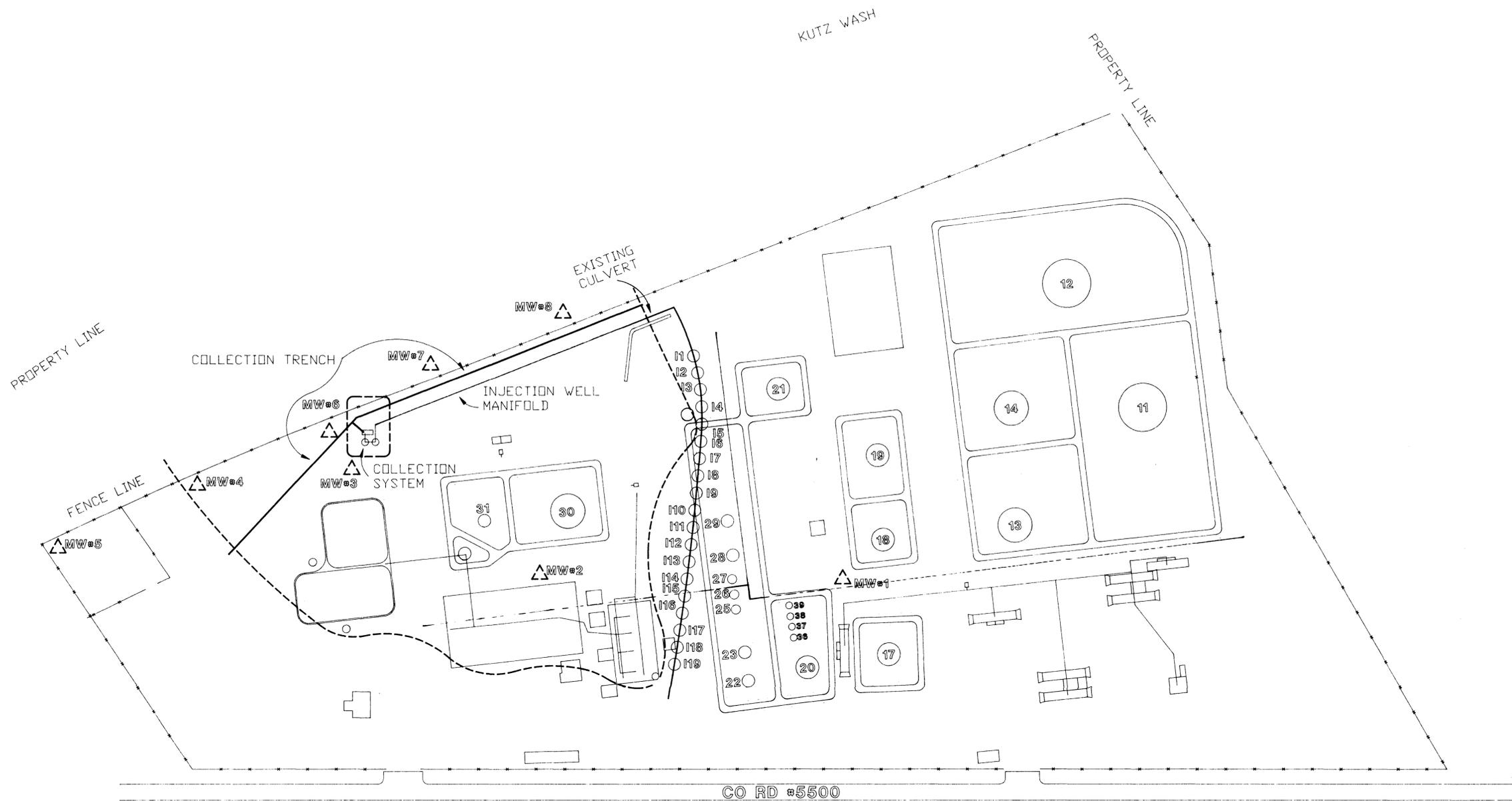
If we can provide any additional information or in any other way be helpful, please contact us.

Very truly yours,

Morris D. Young

Morris D. Young
Vice President

cc: Mr. Jerry Clayton
Mr. Gerold Preston



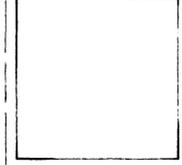
**THRIFTWAY REFINERY
REMEDIAION SYSTEM SITE PLAN**

SCALE 1" = 100FT

LEGEND	
OXX	INJECTION WELL NUMBER XX
ΔMW#XX	MONITORING WELL NUMBER XX

DATE	REVISION	BY
10/29/90	MW#6, #7, #8	GEB
2/16/91	RELOCATE MW-1, 4, 6, 7, 8	GEB

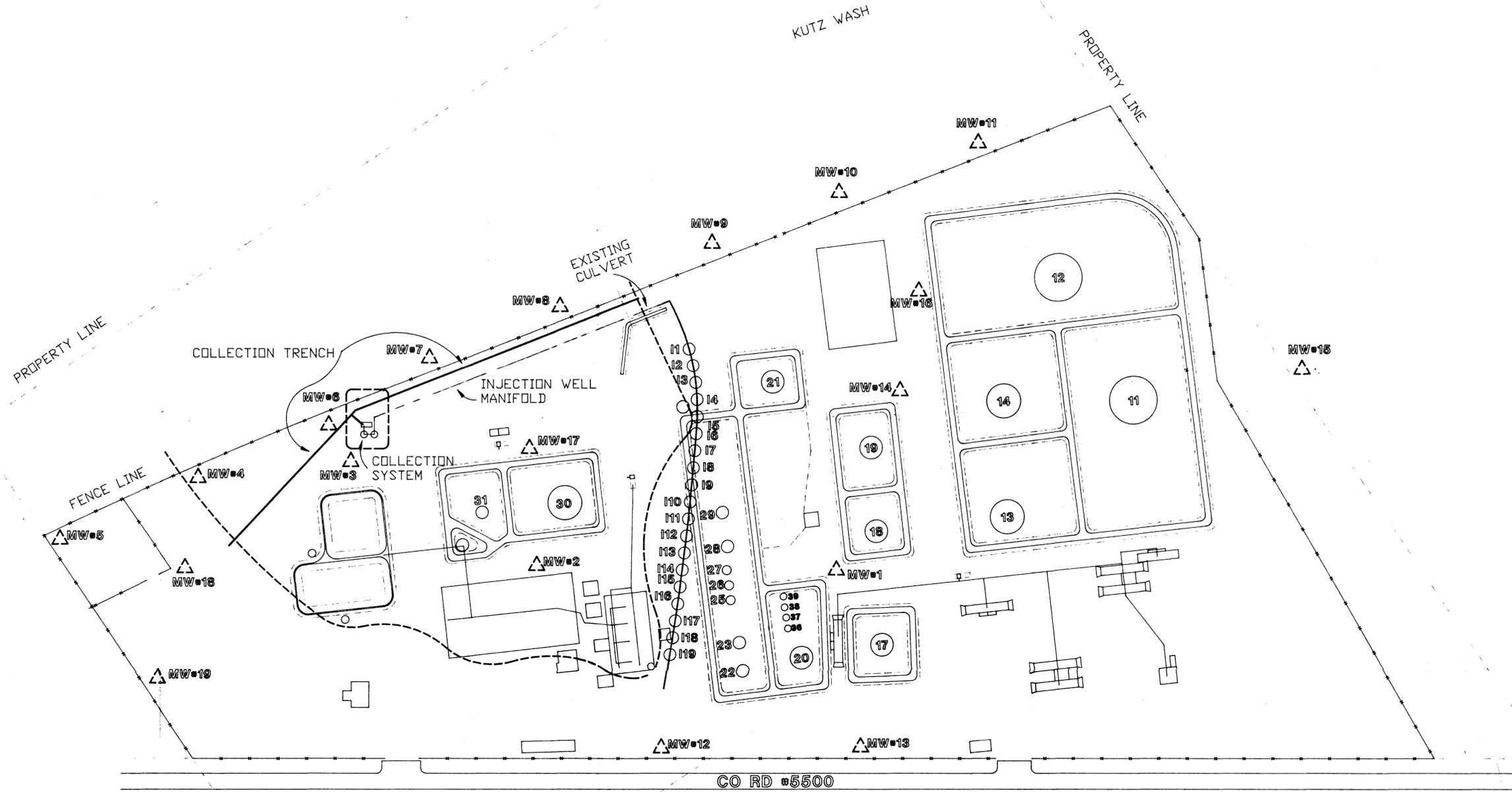
ENVIROTECH INC.
 ENVIRONMENTAL SCIENTISTS
 6505 632-0615
 5796 US 64-3014
 FARMINGTON, NH 07401



REMEDIAION SYSTEM SITE PLAN
 THRIFTWAY REFINERY
 BLOOMFIELD, NEW MEXICO
 THRIFTWAY MARKETING CORP
 710 E 20th ST, FARMINGTON, NM, 87401

DATE: JULY'90
 DRAWN: GEB
 PROJ. 91810
 SCALE: 1"=100'
 SHEET **C3**
 OF 4

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 FEB 21 1991
 OIL CONSERVATION DIV.
 SANTA FE



THRIFTWAY REFINERY
SITE INVESTIGATION MONITOR WELL LOCATION

SCALE 1" = 100FT

LEGEND

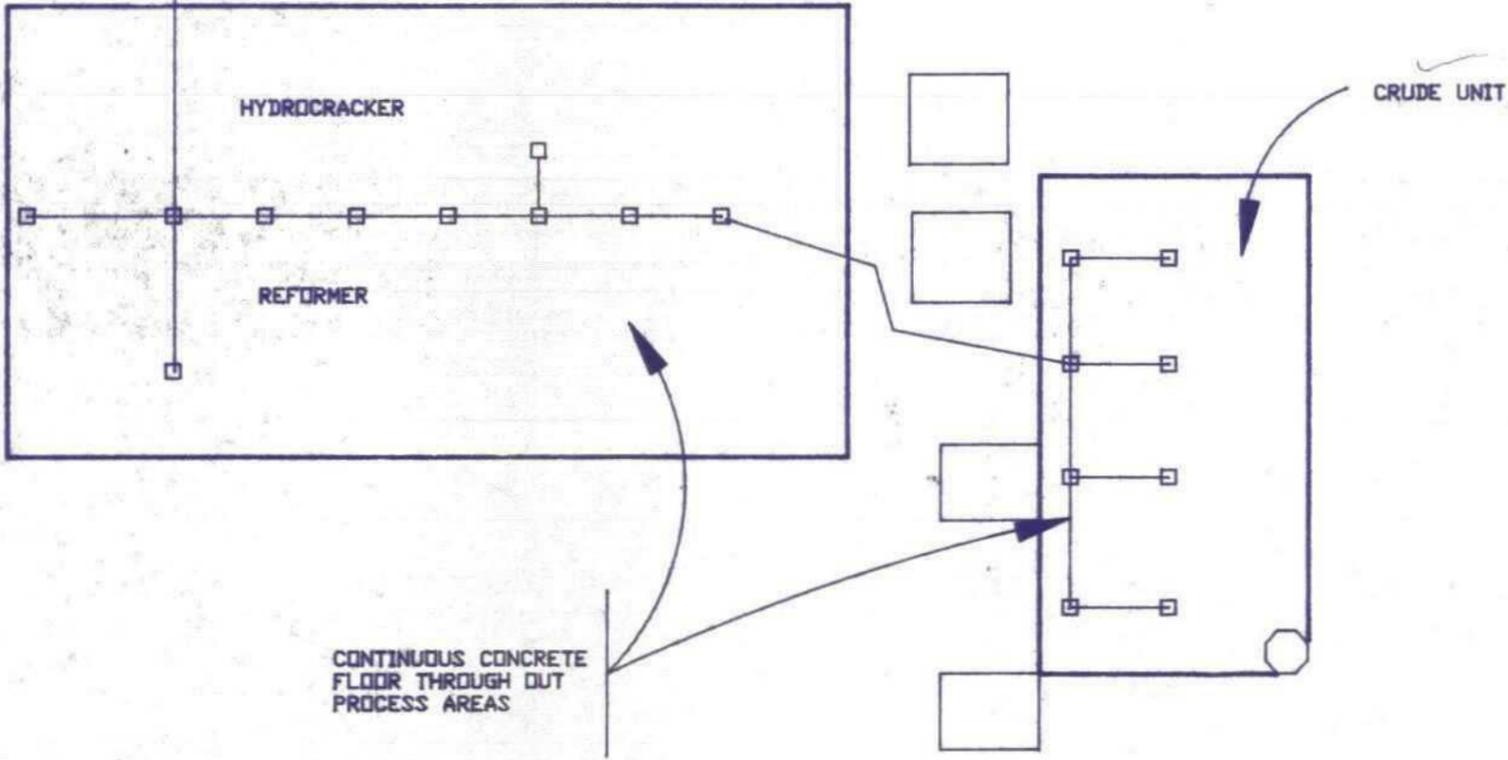
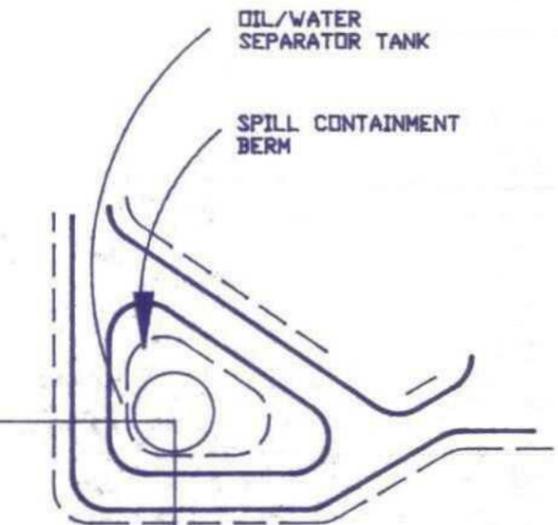
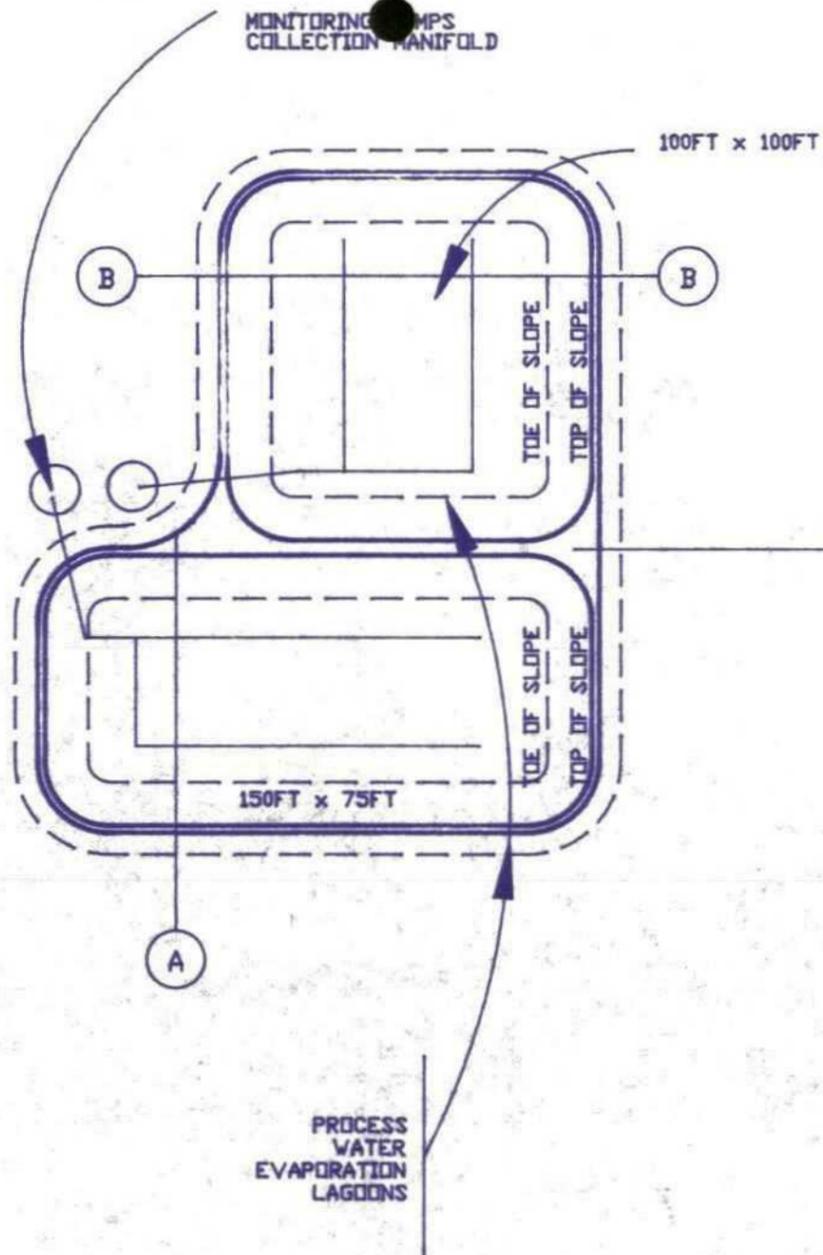
- IXX INJECTION WELL
NUMBER XX
- △ MW-XX MONITORING WELL
NUMBER XX

DATE	REVISION	BY
2/15/91	REVISE MW LOCATIONS	GB

ENVIROTECH INC.
 ENVIRONMENTAL SCIENTISTS
 6505 632-0615
 640 US HIGHWAY 64
 FARMINGTON, NM 87401

SITE INVESTIGATION
 MONITOR WELL LOCATION
 THRIFTWAY REFINERY
 BLOOMFIELD, NEW MEXICO
 THRIFTWAY MARKETING CORP
 710 E 20th ST, FARMINGTON, NM, 87401

DATE: OCT'90
 DRAWN: GEB
 PROJ. 9023
 SCALE: 1"=100'
 SHEET **C5**
 OF 4



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OIL CONSERVATION DIV.
SANTA FE

DATE	REVISION	BY

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS
C/O 305-0022
3111 KENNEDY
FARMINGTON, NH 07401

PROCESS WATER SYSTEM LAYOUT
THRIFTWAY REFINERY
BLOOMFIELD, NEW MEXICO
THRIFTWAY MARKETING CORP
710 E 20th ST, FARMINGTON, N.M., 87401

DATE: JULY 90
DRAWN: GEB
PROJ. 9023
SCALE: 1" = 50FT
SHEET **A1**
OF 5



PROCESS WATER SYSTEM LAYOUT

SCALE 1" 50FT

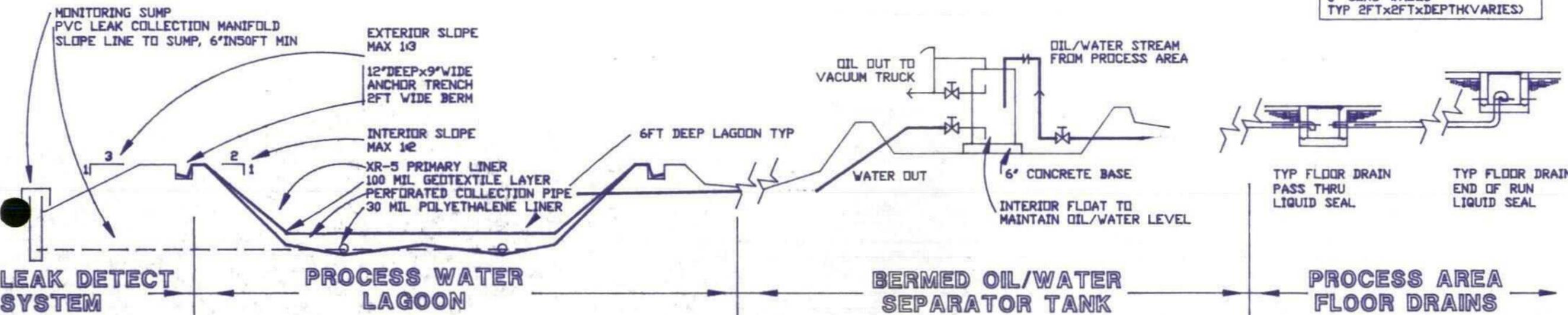
BY	
REVISION	
DATE	

ENVIROTECH INC.
 ENVIRONMENTAL SCIENTISTS
 CHICAGO-AREA
 SALT LAKECITY
 FARMINGTON, NH 07401

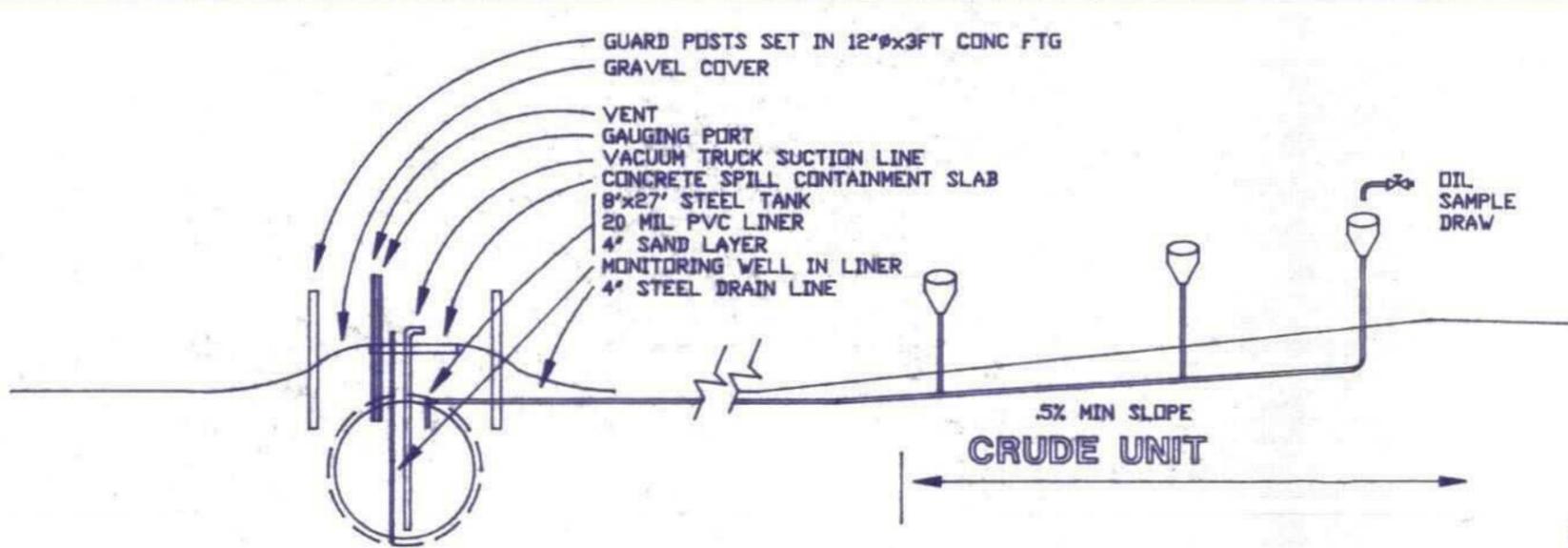
PROCESS WATER SYSTEM OIL COLLECTION SYSTEM
 THRIFTWAY REFINERY
 BLOOMFIELD, NEW MEXICO
 THRIFTWAY MARKETING CORP
 710 E 20th ST, FARMINGTON, NM, 87401

DATE: JULY 90
 DRAWN: GEB
 PROJ: 9023
 SCALE: NA
 SHEET: **A2**
 OF 5

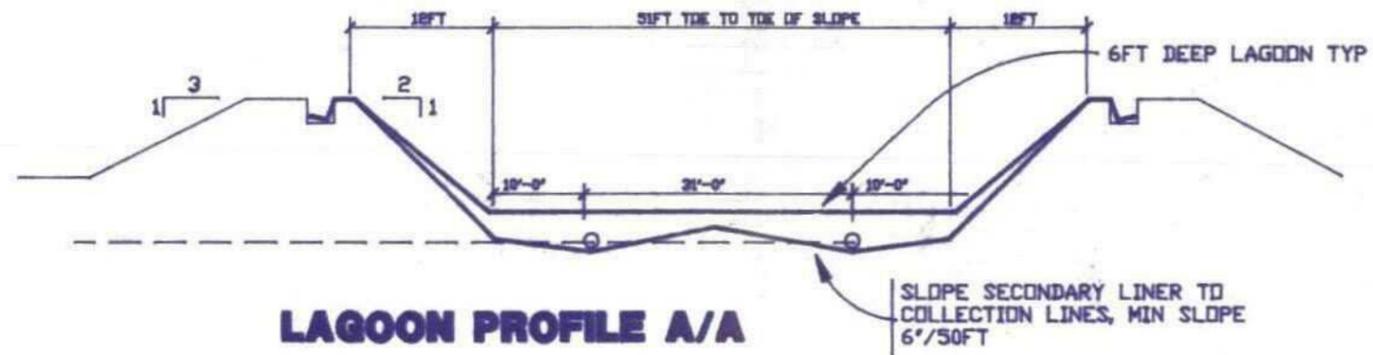
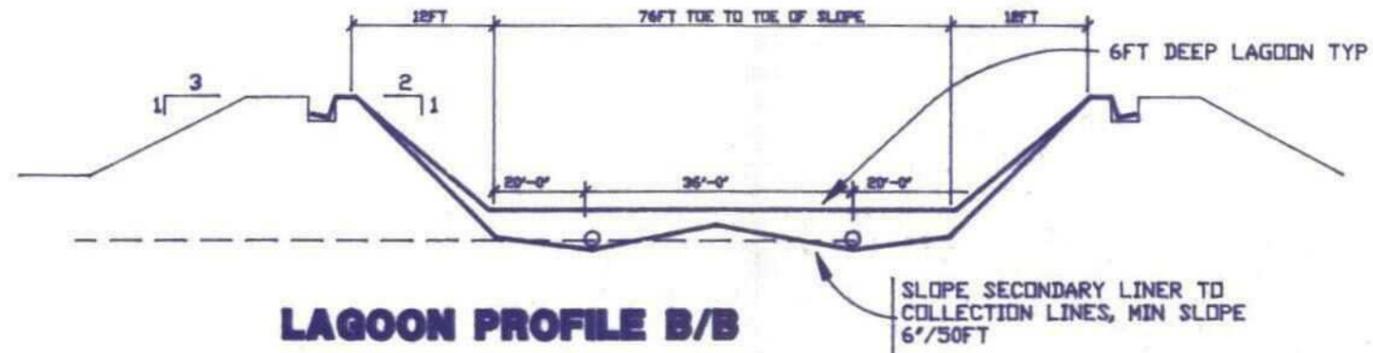
4" CONCRETE FLOOR
 STEEL GRATE
 4" STEEL PIPE, .5% MIN SLOPE
 6" CONC BASE
 6" CONC WALLS
 TYP 2FTx2FTxDEPTH(VARIES)



PROCESS WATER SYSTEM
 NOT TO SCALE



PROCESS OIL COLLECTION SYSTEM
 NOT TO SCALE



RECEIVED

AUG 03 1990

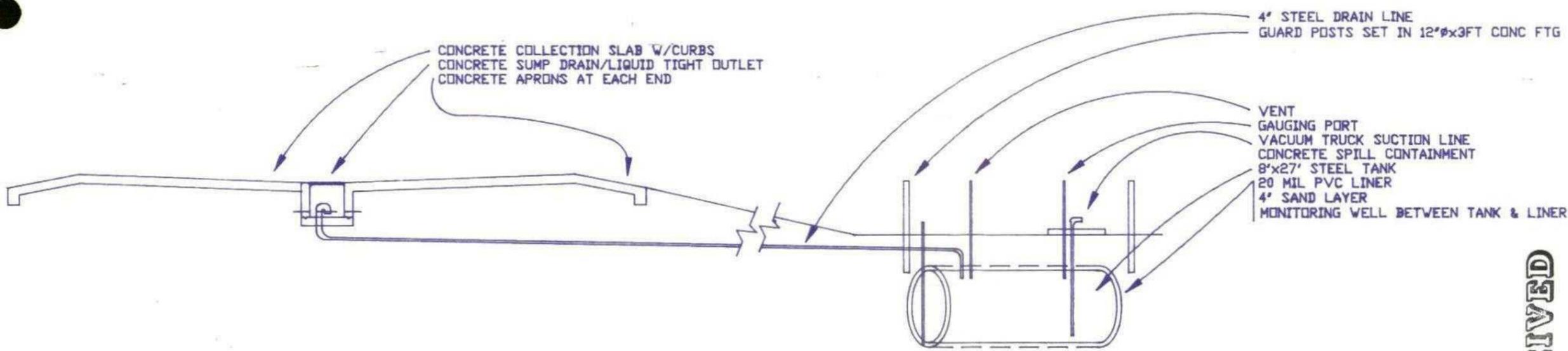
OIL CONSERVATION DIV.
SANTA FE

DATE	REVISION	BY

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS
C/O 300-400
BILL HALLIDAY
FARMINGTON, NH 07401

LAGOON PROFILES A/A, B/B
THRIFTWAY REFINERY
BLOOMFIELD, NEW MEXICO
THRIFTWAY MARKETING CORP
710 E 20th ST, FARMINGTON, NH, 07401

DATE: JULY 90
DRAWN: GEB
PROJ: 9023
SCALE: NA
SHEET **A3**
OF 5



**LOAD/UNLOAD
SPILL CONTAINMENT SYSTEM**

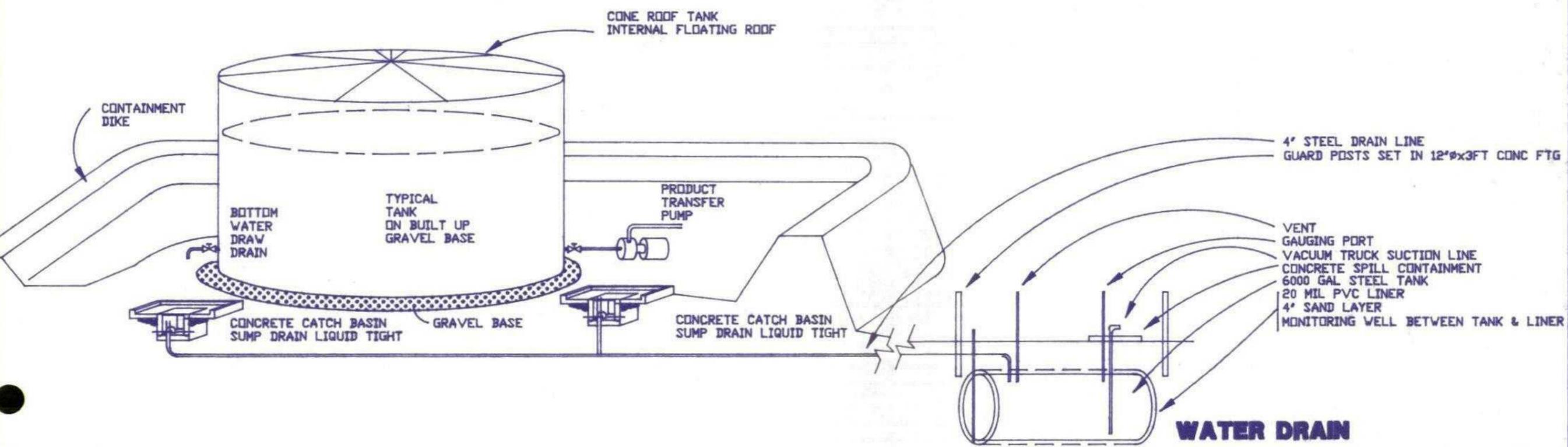
NOT TO SCALE

RECEIVED

AUG 03 1990
OIL CONSERVATION DIV.
SANTA FE

BY	
REVISION	
DATE	

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS
3050 354-8822
3011 ENLISEN
FARMINGTON, NM 87401

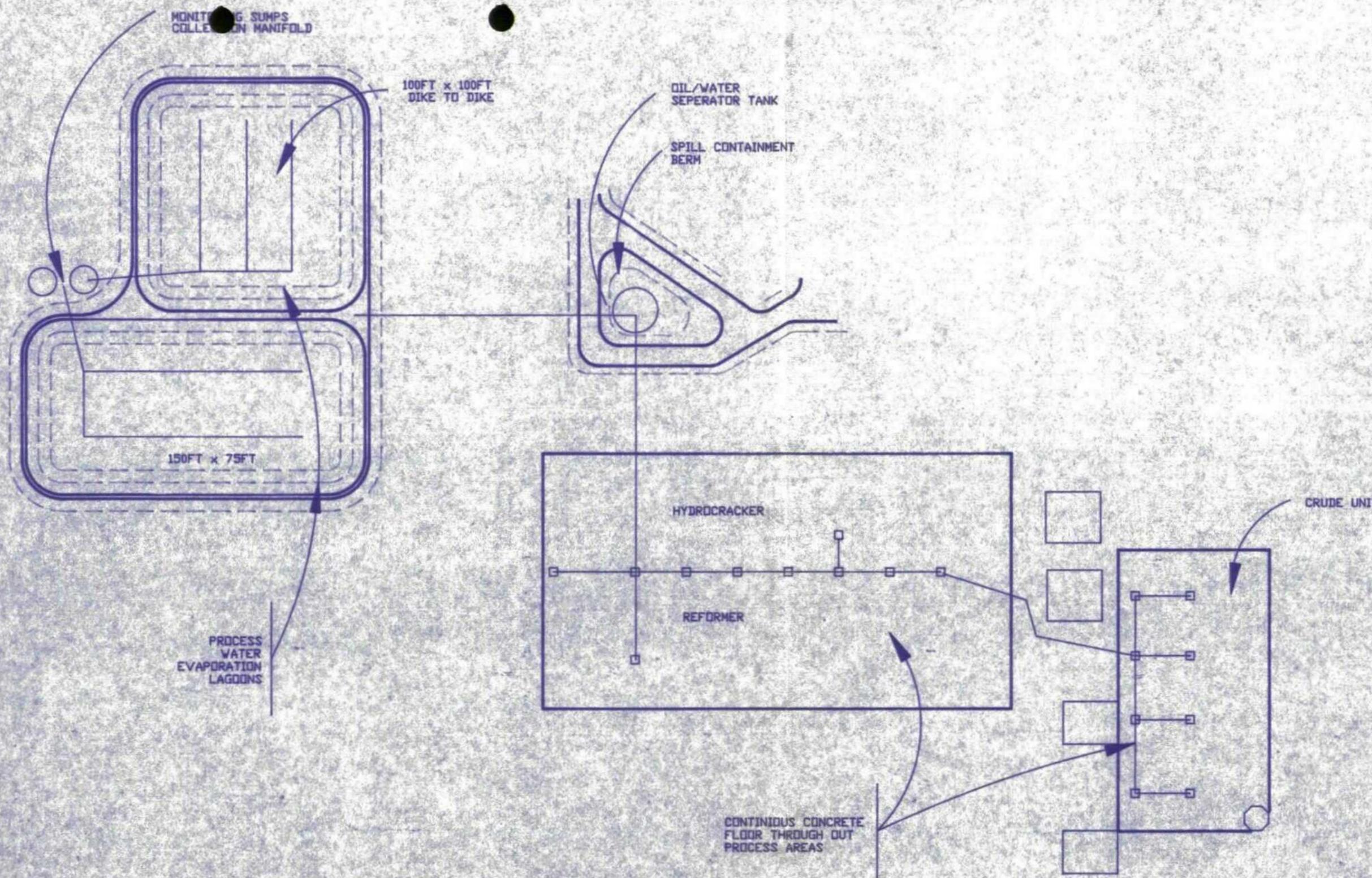


**WATER DRAIN
SPILL CONTAINMENT SYSTEM**

NOT TO SCALE

LOAD/UNLOAD SPILL CONTAINMENT SYS
WATER DRAIN SPILL CONTAINMENT SYS
THRIFTWAY REFINERY
BLOOMFIELD, NEW MEXICO
THRIFTWAY MARKETING CORP
710 E 20th ST, FARMINGTON, NM, 87401

DATE:	JULY'90
DRAWN:	GEB
PROJ.	9023
SCALE:	NA
SHEET	A4
OF	5



DATE	REVISION	BY

ENVIROTECH INC.
 ENVIRONMENTAL SCIENTISTS
 5000 355 AVENUE
 SUITE 300
 FARMINGTON, NH 07401

PROCESS WATER SYSTEM LAYOUT
 THRIFTWAY REFINERY
 BLOOMFIELD, NEW MEXICO
 THRIFTWAY MARKETING CORP
 710 E 20th ST, FARMINGTON, NM, 87401

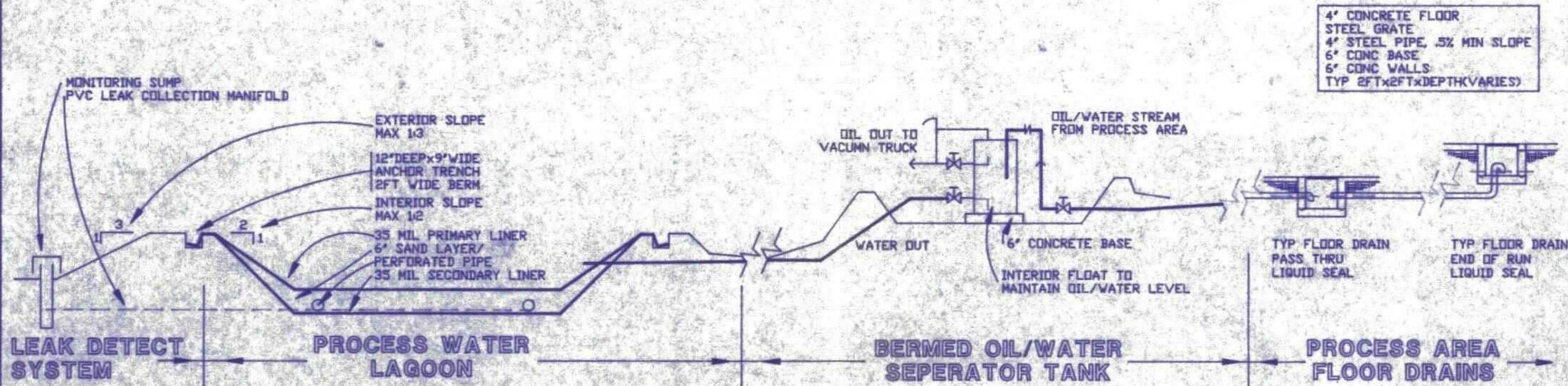
DATE: JULY 90
 DRAWN: GEB
 PROJ: 9023
 SCALE: 1"=50FT
 SHEET **A1**
 OF 3

OIL CONSERVATION DIVISION
 RECEIVED
 90 JUL 27 AM 11 34



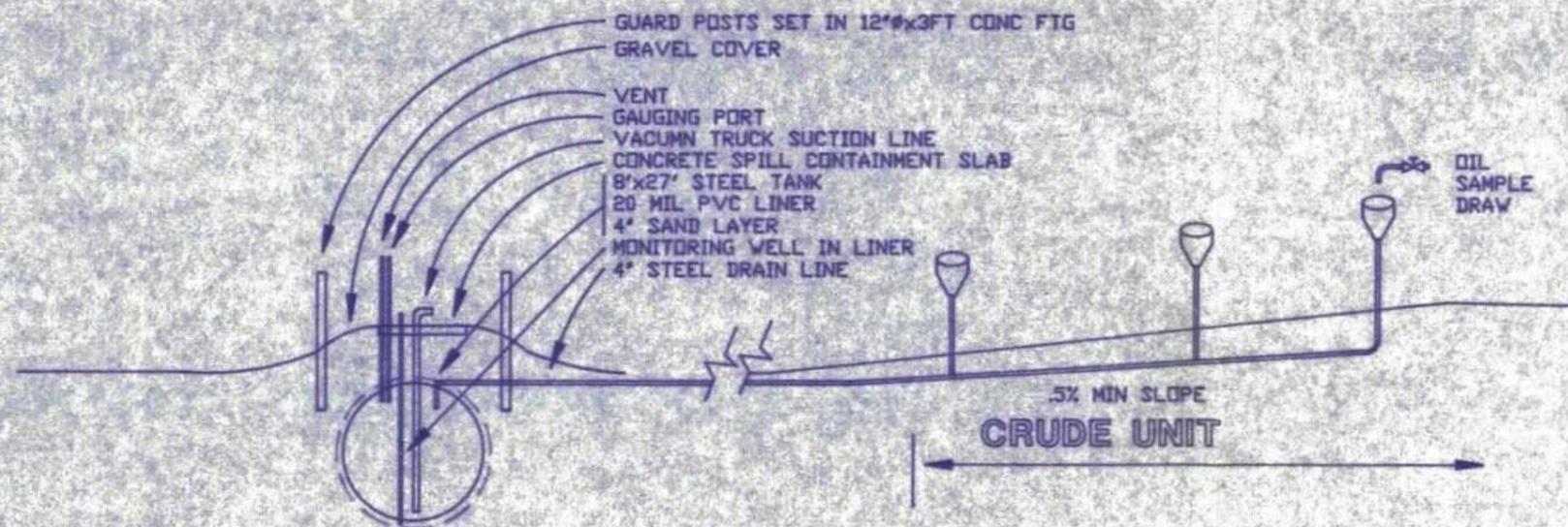
PROCESS WATER SYSTEM LAYOUT

SCALE 1"=50FT



PROCESS WATER SYSTEM

NOT TO SCALE



90 JUL 27 AM 11 34

RECEIVED
OIL CONSERVATION DIVISION

PROCESS OIL COLLECTION SYSTEM

NOT TO SCALE

BY	REVISION	DATE

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS
CORP. 205-CRUISE
3111 BOUTWELL
FARMINGTON, IN 47404

PROCESS WATER SYSTEM
PROCESS OIL COLLECTION SYSTEM
THRIFTWAY REFINERY
BLOOMFIELD, NEW MEXICO
THRIFTWAY MARKETING CORP
710 E 20th ST, FARMINGTON, NM, 87401

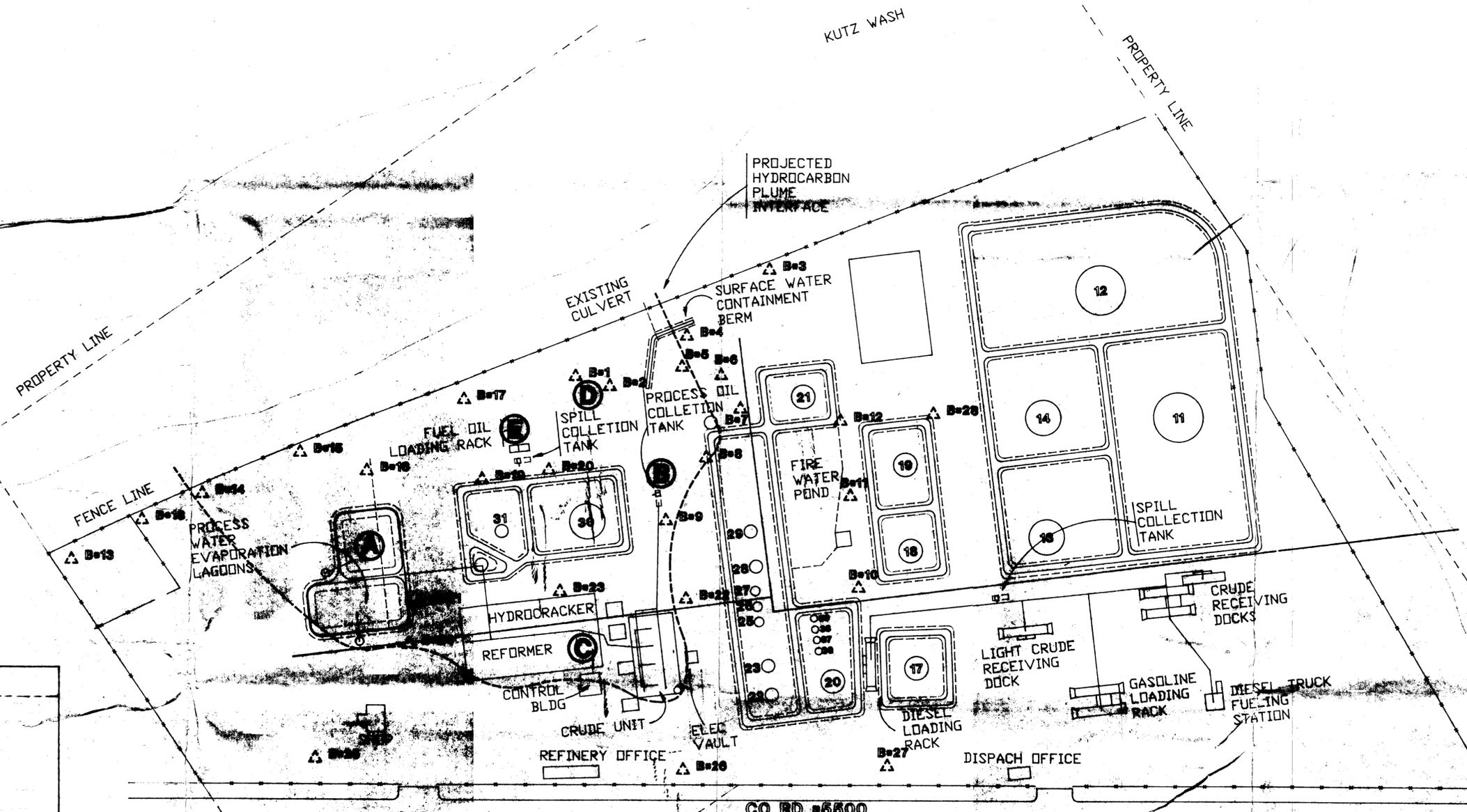
DATE: JULY 90
DRAWN: GEB
PROJ: 9023
SCALE: NA
SHEET: A2
OF: 3

HYDROCARBON POINT SOURCES

- A** UNLINED WASTE WATER LAGOONS
- B** CRUDE UNIT PROCESS OIL COLLECTION TANK
- C** CRUDE UNIT REFORMER PROCESS UNIT AREAS
- D** ABANDONED WASTE WATER LAGOON
- E** FUEL OIL LOADING DOCK

TANK LEGEND

- 11 CRUDE OIL
- 12 CRUDE OIL
- 13 REFORMATE
- 14 LIGHT NAPHTHA
- 17 UNLEADED GASOLINE
- 18 LIGHT NATURAL
- 19 UNLEADED GASOLINE
- 20 DIESEL
- 21 NAPHTHA
- 22 REGULAR GASOLINE
- 23 SUPER UNLEADED GASOLINE
- 25 DIESEL
- 26 DIESEL
- 27 ETHANOL
- 28 UNLEADED GASOLINE
- 29 REGULAR GASOLINE
- 30 RESIDUAL FUEL OIL
- 31 RESIDUAL FUEL OIL
- 36 ETHANOL
- 37 ETHANOL
- 38 ETHANOL
- 39 ETHANOL



THRIFTWAY REFINERY SITE PLAN

SCALE 1" = 100FT

RECEIVED

SEP 21 1990
OIL CONSERVATION DIV.
SANTA FE

BY	
REVISION	
DATE	

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS
3503 365-2882
3111 RANDISEN
FARMINGTON, NM 87401

SITE PLAN
THRIFTWAY REFINERY
BLOOMFIELD, NEW MEXICO
THRIFTWAY MARKETING CORP
710 E 20th ST, FARMINGTON, NM, 87401

DATE: JULY 90
DRAWN: GEB
PROJ. 9023
SCALE: 1" = 100'
SHEET **C1**
OF 3

90 SEP 21 1990

HYDROCARBON POINT SOURCES

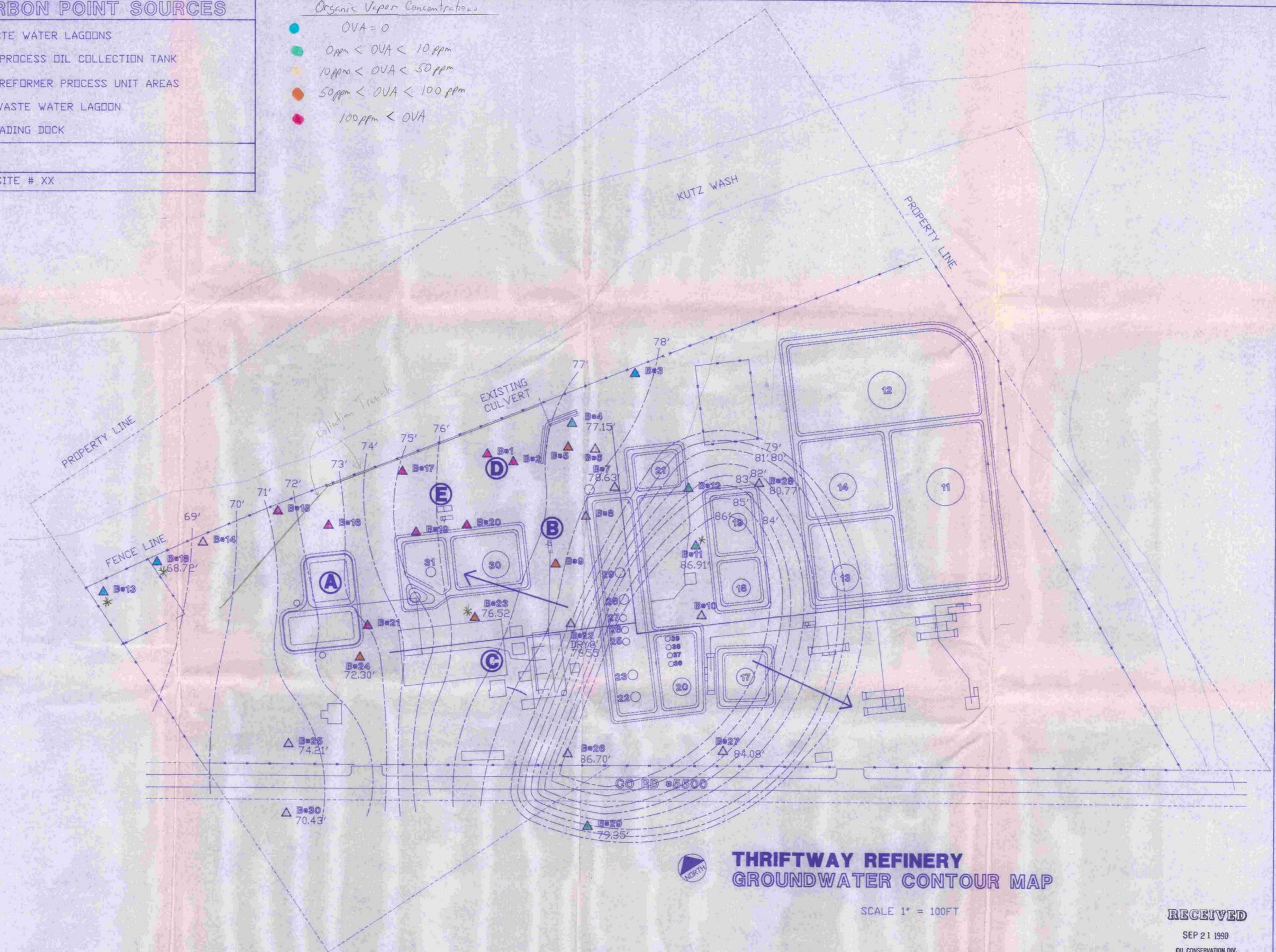
- (A)** UNLINED WASTE WATER LAGOONS
- (B)** CRUDE UNIT PROCESS OIL COLLECTION TANK
- (C)** CRUDE UNIT REFORMER PROCESS UNIT AREAS
- (D)** ABANDONED WASTE WATER LAGOON
- (E)** FUEL OIL LOADING DOCK

LEGEND

△ B-XX BORING SITE # XX

Organic Vapor Concentrations

- OVA = 0
- 0 ppm < OVA < 10 ppm
- 10 ppm < OVA < 50 ppm
- 50 ppm < OVA < 100 ppm
- 100 ppm < OVA



THRIFTWAY REFINERY GROUNDWATER CONTOUR MAP

SCALE 1" = 100FT

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OIL CONSERVATION DIV.
SANTA FE

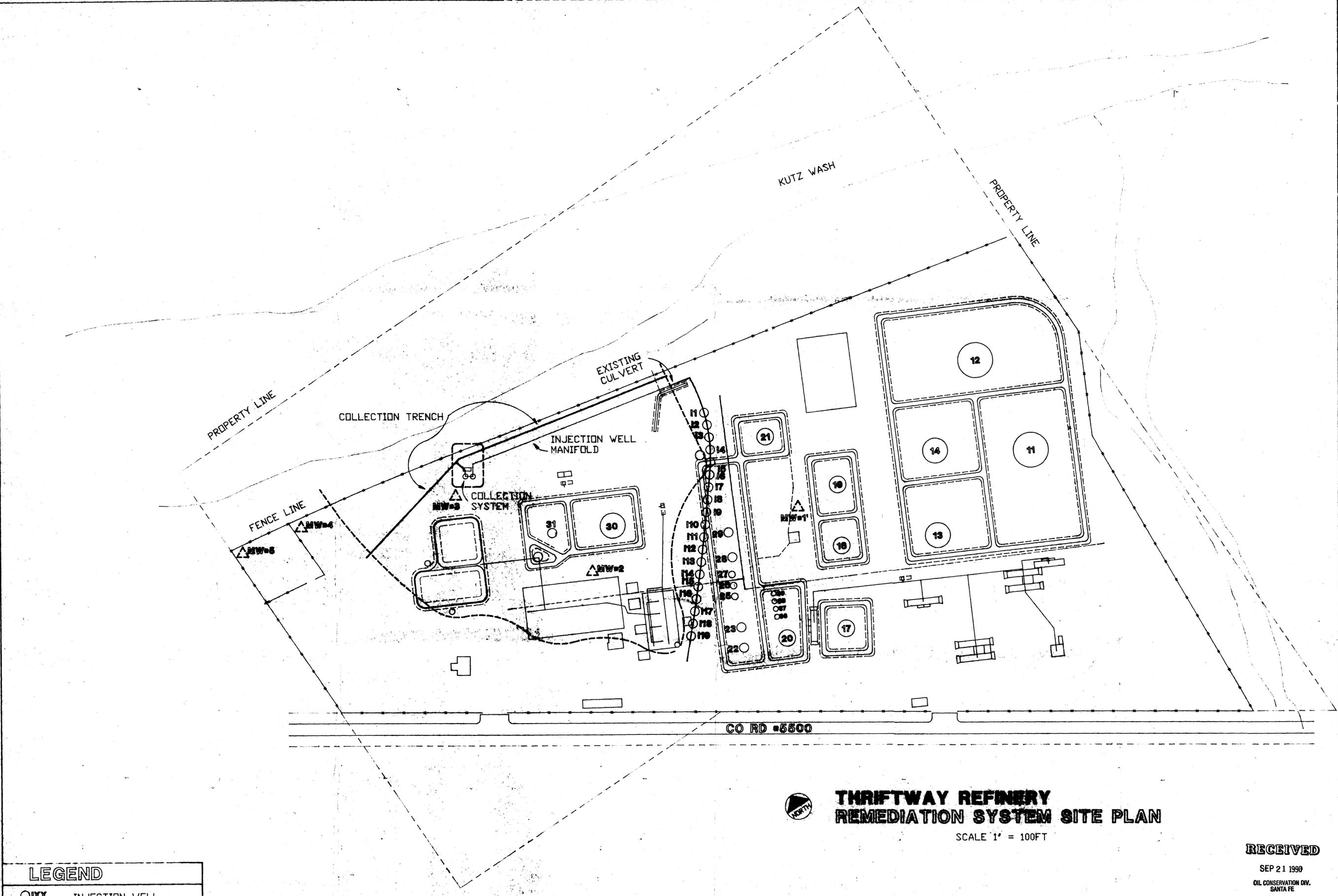
90 SEP 21 AM 11 20
RECEIVED
OIL CONSERVATION DIVISION

DATE	REVISION	BY

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS
5505 395-2882
3111 KNUDSEN
FARMINGTON, NM 87401

GROUNDWATER CONTOUR MAP
THRIFTWAY REFINERY
BLOOMFIELD, NEW MEXICO
THRIFTWAY MARKETING CORP
710 E 20th ST, FARMINGTON, NM, 87401

DATE: JULY 90
DRAWN: GEB
PROJ: 9023
SCALE: 1"=100'
SHEET **C2**
OF 4



LEGEND	
○ IXX	INJECTION WELL NUMBER XX
△ MW-XX	MONITORING WELL NUMBER XX



**THRIFTWAY REFINERY
REMEDATION SYSTEM SITE PLAN**

SCALE 1" = 100FT

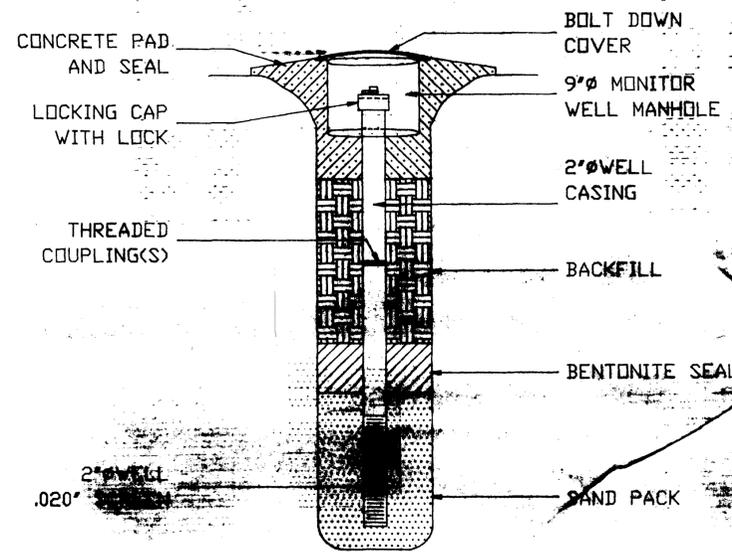
RECEIVED
 SEP 21 1990
 OIL CONSERVATION DIV.
 SANTA FE
 90 SEP 21 AM 11 20
 OIL CONSERVATION DIVISION

DATE	REVISION	BY

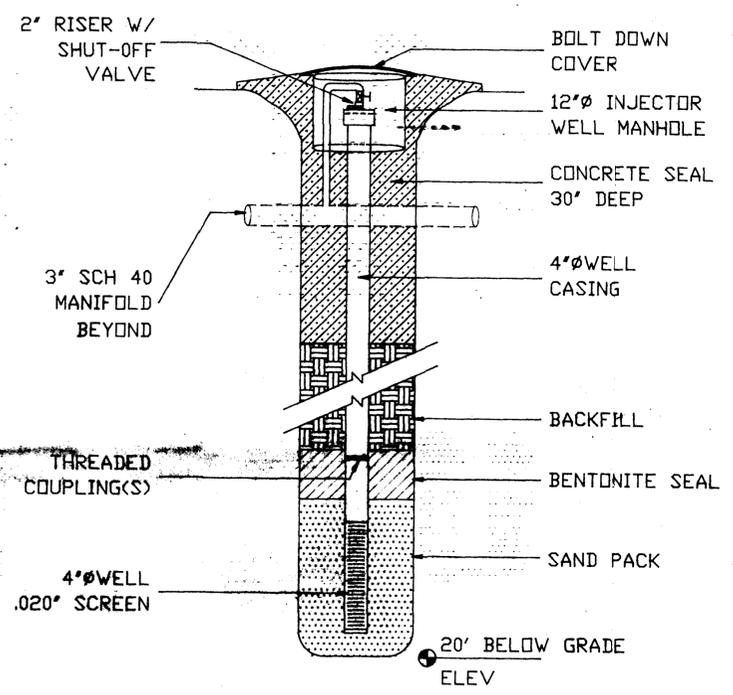
ENVIROTECH INC.
 ENVIRONMENTAL SCIENTISTS
 3013 KNUDSEN
 FARMINGTON, NH 07401

REMEDATION SYSTEM SITE PLAN
 THRIFTWAY REFINERY
 BLOOMFIELD, NEW MEXICO
 THRIFTWAY MARKETING CORP
 710 E 20th ST, FARMINGTON, NM, 87401

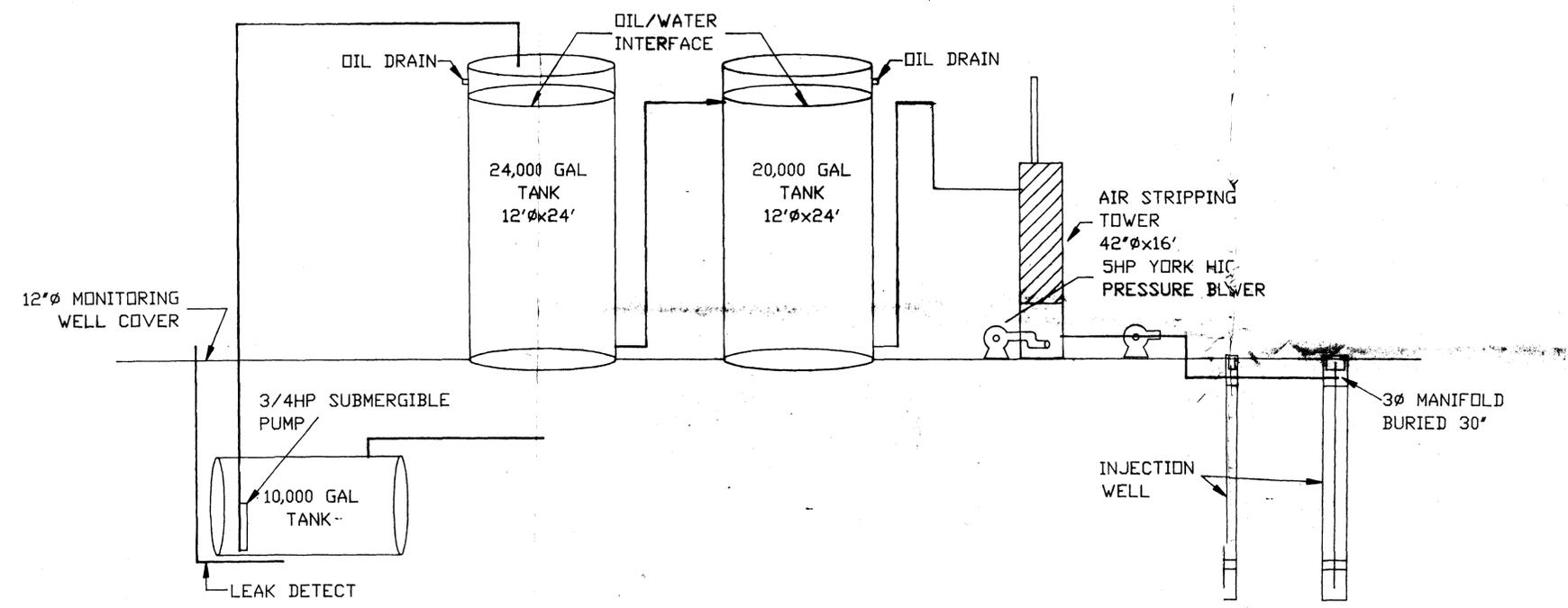
DATE: JULY 90
 DRAWN: GEB
 PROJ. 9023
 SCALE: 1"=100'
 SHEET **C3**
 OF 4



TYPICAL MONITORING WELL
NOT TO SCALE



TYPICAL INJECTION WELL
NOT TO SCALE



REMEDIATION SYSTEM
NOT TO SCALE

BY	
REVISION	
DATE	

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS
C/O 325-6882
FARMINGTON, NM 87401

TYPICAL DETAILS

THRIFTWAY REFINERY
BLOOMFIELD, NEW MEXICO
THRIFTWAY MARKETING CORP
710 E 20th ST, FARMINGTON, NM, 87401

RECEIVED

SEP 21 1990

OIL CONSERVATION DIV.
SANTA FE

90 SEP 21 AM 11 20
OIL CONSERVATION DIVISION
RECEIVED

DATE: JULY '90
DRAWN: GEB
PROJ. 9023
SCALE: NA
SHEET **C4**
OF 4

DATE	10/29/90
REVISION	SEPTIC & OIL/WATER SYS
BY	MY

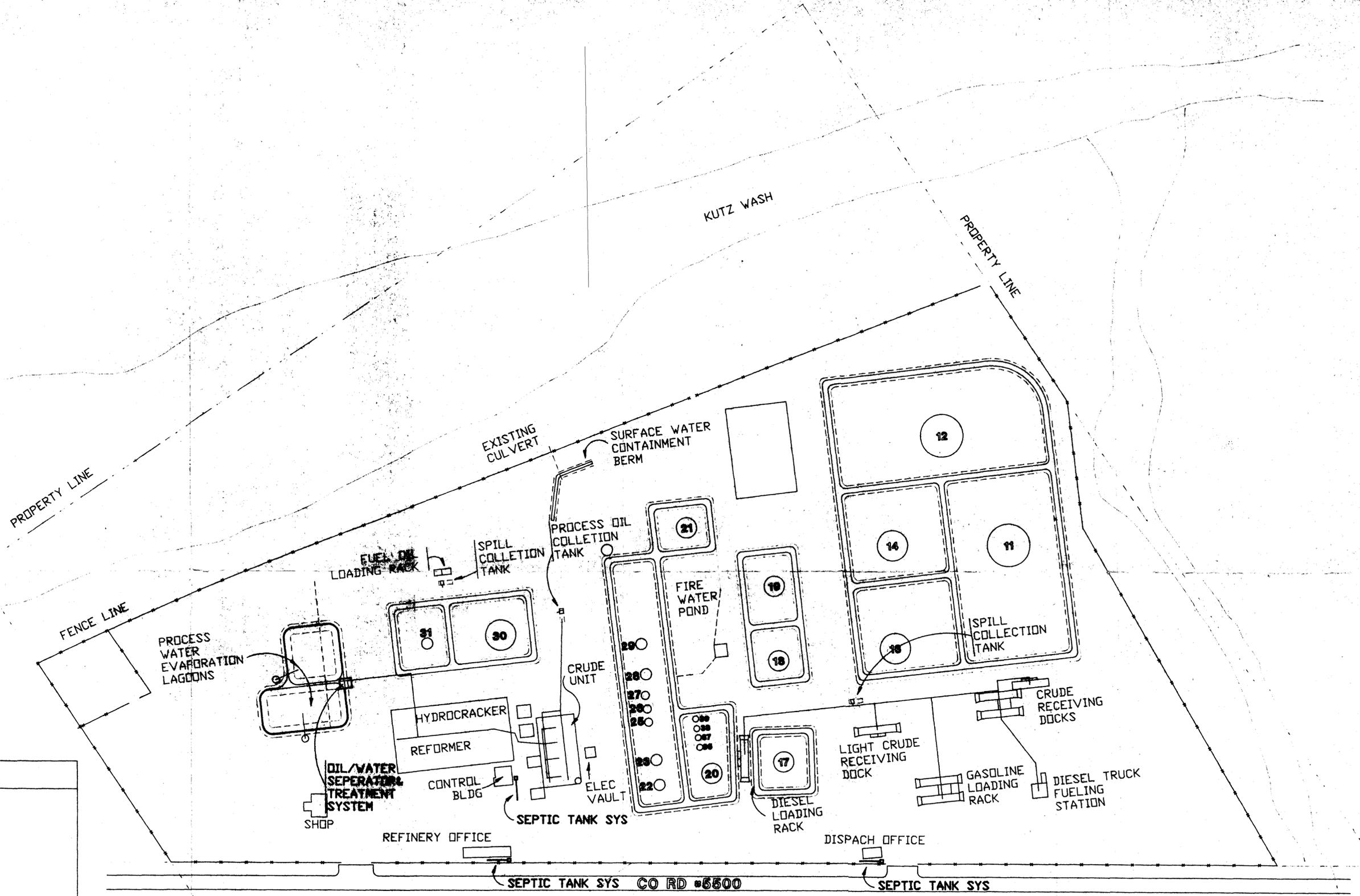
ENVROTECH INC.
 Environmental Scientists
 218 MADISON
 FARMINGTON, NM 87401

SITE PLAN

THRIFTWAY REFINERY
 BLOOMFIELD, NEW MEXICO
 THRIFTWAY MARKETING CORP
 710 E 20th ST, FARMINGTON, NM, 87401

DATE: JULY 90
 DRAWN: GEB
 PROJ: 9023
 SCALE: 1" = 100'
 SHEET: **C1**
 OF 3

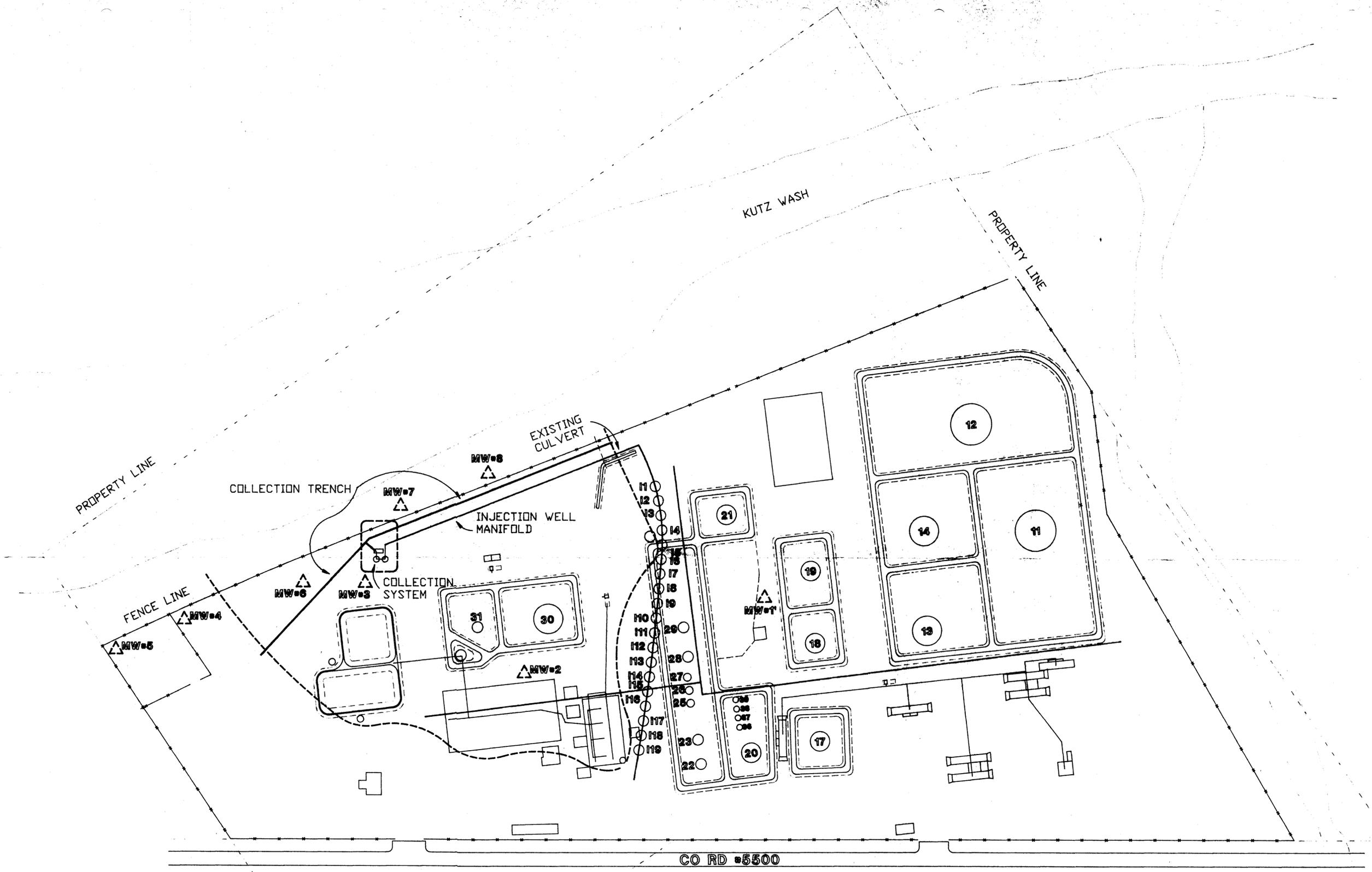
- TANK LEGEND**
- 11 CRUDE OIL
 - 12 CRUDE OIL
 - 13 REFORMATE
 - 14 LIGHT NAPHTHA
 - 17 UNLEADED GASOLINE
 - 18 LIGHT NATURAL
 - 19 UNLEADED GASOLINE
 - 20 DIESEL
 - 21 NAPHTHA
 - 22 REGULAR GASOLINE
 - 23 SUPER UNLEADED GASOLINE
 - 25 DIESEL
 - 26 DIESEL
 - 27 ETHANOL
 - 28 UNLEADED GASOLINE
 - 29 REGULAR GASOLINE
 - 30 RESIDUAL FUEL OIL
 - 31 RESIDUAL FUEL OIL
 - 36 ETHANOL
 - 37 ETHANOL
 - 38 ETHANOL
 - 39 ETHANOL



THRIFTWAY REFINERY
SITE PLAN SCALE 1" = 100FT

30 NOV 90
 REVISION
 DIVISION

LEGEND	
○ XX	INJECTION WELL NUMBER XX
△ MW-XX	MONITORING WELL NUMBER XX



**THRIFTWAY REFINERY
REMEDICATION SYSTEM SITE PLAN**

SCALE 1" = 100FT

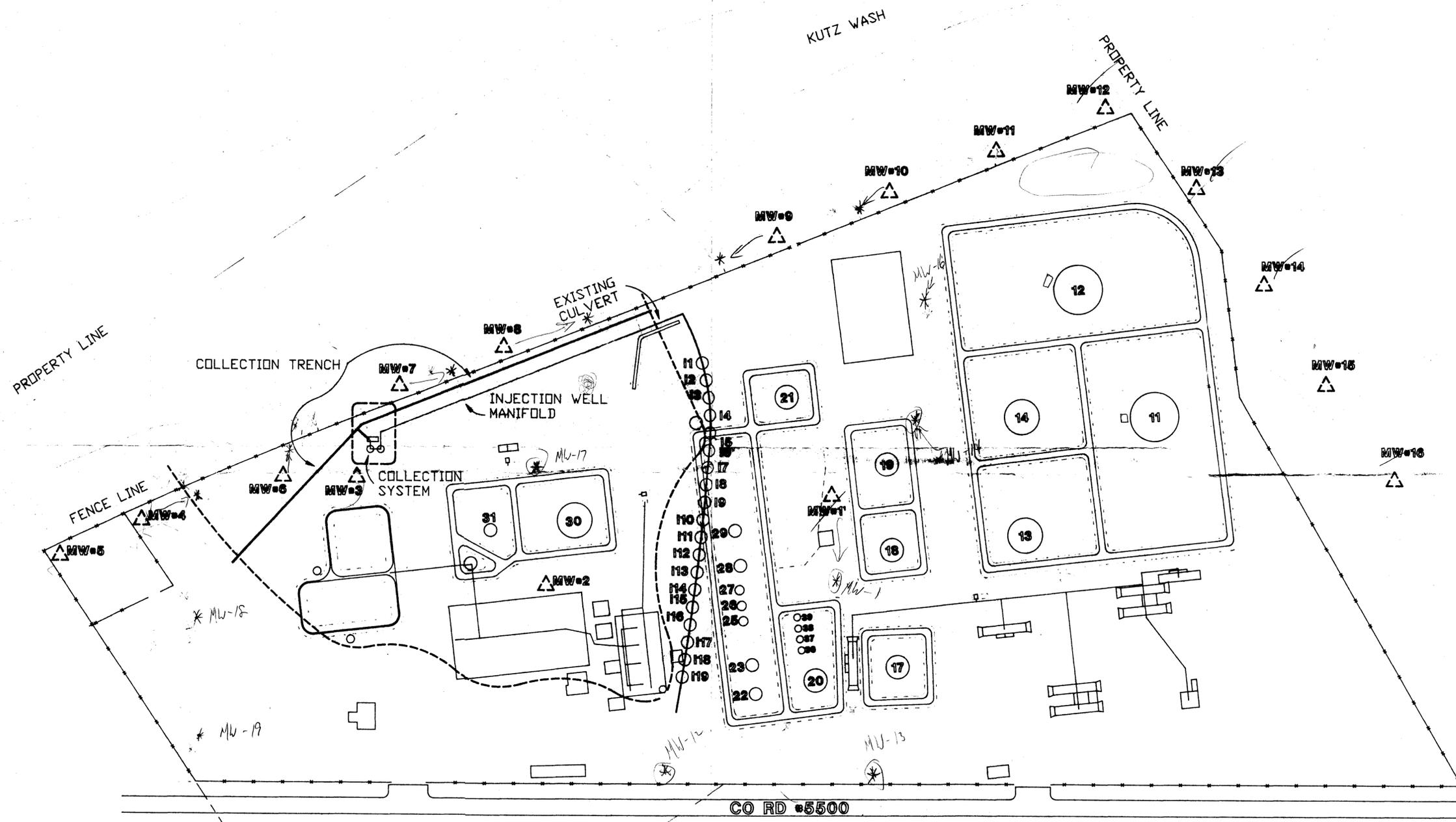
DATE: JULY '90
DRAWN: GEB
PROJ. 9023
SCALE: 1"=100'
SHEET **C3**
OF 4

DATE	10/29/90
REVISION	MW#6, #7, #8
BY	GEB

ENVIROTECH INC.
ENVIRONMENTAL SCIENTISTS
3053 366-2882
3111 KNUDSEN
FARMINGTON, NM 87401

REMEDICATION SYSTEM SITE PLAN
THRIFTWAY REFINERY
BLOOMFIELD, NEW MEXICO
THRIFTWAY MARKETING CORP
710 E 20th ST., FARMINGTON, NM. 87401

DATE: JULY '90
DRAWN: GEB
PROJ. 9023
SCALE: 1"=100'
SHEET **C3**
OF 4



THRIFTWAY REFINERY
SITE INVESTIGATION MONITOR WELL LOCATION

SCALE 1" = 100FT

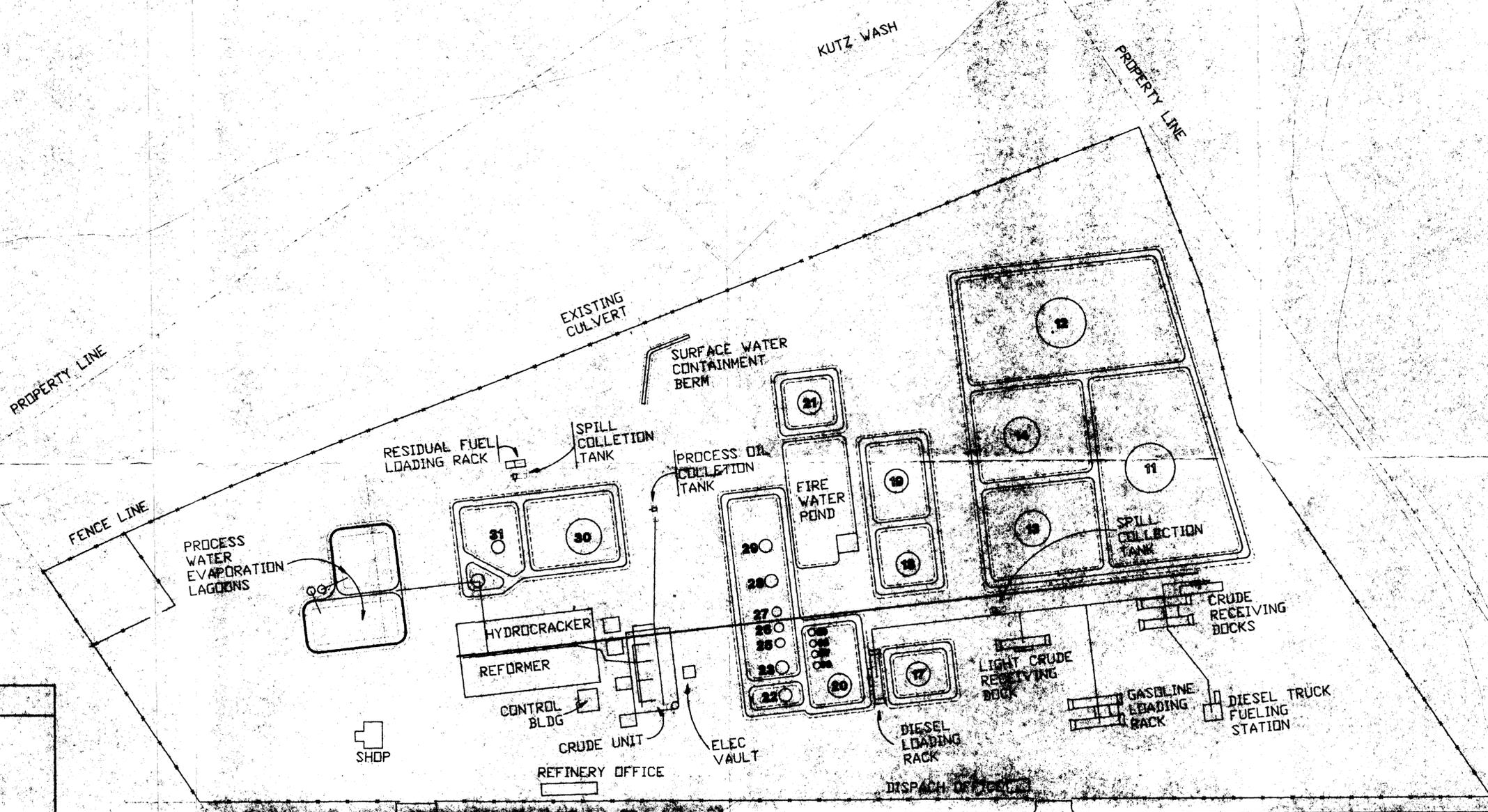
LEGEND	
○ IXX	INJECTION WELL NUMBER XX
△ MW-XX	MONITORING WELL NUMBER XX

DATE	REVISION	BY

ENVIROTECH INC.
 ENVIRONMENTAL SCIENTISTS
 3111 KNUDSEN
 FARMINGTON, NM 87401

SITE INVESTIGATION
 MONITOR WELL LOCATION
 THRIFTWAY REFINERY
 BLOOMFIELD, NEW MEXICO
 THRIFTWAY MARKETING CORP
 710 E 20th ST. FARMINGTON, NM. 87401

DATE:	OCT'90
DRAWN:	GEB
PROJ.	9023
SCALE:	1"=100'
SHEET	C5
OF	4



TANK LEGEND

- 11 CRUDE OIL
- 12 CRUDE OIL
- 13 REFORMATE
- 14 LIGHT NAPHTHA
- 17 UNLEADED GASOLINE
- 18 LIGHT NATURAL
- 19 UNLEADED GASOLINE
- 20 DIESEL
- 21 NAPHTHA
- 22 REGULAR GASOLINE
- 23 SUPER UNLEADED GASOLINE
- 25 DIESEL
- 26 DIESEL
- 27 ETHANOL
- 28 UNLEADED GASOLINE
- 29 REGULAR GASOLINE
- 30 RESIDUAL FUEL OIL
- 31 RESIDUAL FUEL OIL
- 36 ETHANOL
- 37 ETHANOL
- 38 ETHANOL
- 39 ETHANOL



**THRIFTYWAY REFINERY
SITE PLAN** SCALE 1" = 100FT

BY	REVISION	DATE



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DATE: JULY 90
 DRAWN: GEB
 PROJ: 9023
 SCALE: 1"=100'
 SHEET: 01

90 JUL 22 10 06 AM '90

RECEIVED
 OIL COMPANY

