

NM1 - 35

**GENERAL
CORRESPONDENCE**

YEAR(S):

2006 - 2000

TRANSACTION REPORT

P. 01

OCT-04-2006 WED 01:27 PM

FOR:

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
OCT-04	01:26 PM	915058857640	1' 17"	2	SEND	OK	400	

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TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
 1220 S. ST. FRANCIS DRIVE
 SANTA FE, NM 87505
 (505) 476-3440
 (505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO: Kir Slaughter Lea Land

FROM: Bob A. Jones



TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO: Kir Slaughter Lea Land

FROM: Brad A. Jones

DATE: 10/4/00

PAGES: 1 of 2 (includes coversheet)

SUBJECT: _____

IF YOU HAVE TROUBLE RECEIVING THIS FAX, PLEASE CALL THE OFFICE NUMBER ABOVE.

U.S. Postal Service
CERTIFIED MAIL RECEIPT
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7001 1940 0004 7923 4986

OFFICIAL USE

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Restricted Delivery Fee (Endorsement Required)	
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Sent To LEA LAND, INC.
 Street, Apt. No.;
 or PO Box No. 5644 WESTHEIMER #153
 City, State, ZIP+4 HOUSTON, TX 77056
 PS Form 3800, January 2001 See Reverse for Instructions



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

7001 1940 0004 7923 4986

March 4, 2005

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

Lea Land, Inc.
5644 Westheimer, #153
Houston, TX 77056

*RETURNED
RE-MAILED
3-29-05*

Permit Number: NM-1-0035

Re: Administrative Modification of Landfarm Permits

The Oil Conservation Division (OCD) issued the landfarm permit identified above under OCD Rule 711. As explained in the public notice given prior to the issuance of the permit, the permit was for landfarming to remediate hydrocarbon-contaminated soils. The language of the permit, however, is broader, allowing the facility to accept oilfield contaminated solids which are either exempt from the Federal RCRA Subtitle C (hazardous waste) regulations or are "nonhazardous" by characteristic testing. If this language were interpreted to allow the landfarm to accept oilfield waste contaminated with salts, the salts could compromise the biodegradation capacity of the landfarm. And because salts leach more easily than hydrocarbons, the landfarm may pose a greater threat to groundwater.

According to the terms of the permit identified above, the OCD may change the permit conditions administratively for good cause shown as necessary to protect fresh water, human health and the environment. The OCD has determined that it is necessary to protect fresh water, human health and the environment to modify the permit as follows:

Effective immediately, the NMOCD permitted landfarm identified above is prohibited from accepting oilfield waste contaminated with salts.

If the landfarm identified above wishes to accept oilfield waste contaminated with salts, you will need to file an application to modify the permit pursuant to OCD Rule 711.B(1) and follow the notice requirements of OCD Rule 711.B(2). If you have already filed a complete application for permit modification with this office and complied with the notice requirements, the OCD will process the application promptly.

Landfarms that wish to accept oilfield wastes contaminated with salts while their application for permit modification is pending may apply to the Division Director for an emergency order under OCD Rule 1202. Applications for emergency orders will be considered on a case-by-case basis.

This notice is being sent to all entities operating landfarm facilities in New Mexico permitted pursuant to OCD Rule 711, as shown on the attached list.

If you have any questions, please contact Ed Martin at (505) 476-3492 or emartin@state.nm.us.

Very truly yours,

Mark E. Fesmire, P.E



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

7001 1940 0004 7920 7669

March 4, 2005

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

Lea Land, Inc.
5644 Westheimer, #153
Houston, TX 77056

*RETURNED
BAD ADDRESS
RE-MAILING
3/29/05*

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If you have any questions, please contact Ed Martin at (505) 476-3492 or emartin@state.nm.us.

Very truly yours,

Mark E. Fesmire, P.E

DISTRIBUTION LIST

DD Landfarm, Inc. NM-1-0034
317 W. Blanco
Hobbs, NM 88242

C & C Landfarm, Inc. NM-1-0012
P.O. Box 55
Monument, NM 88265

Doom Landfarm NM-1-0033
Box 168
Jal, NM 88252

South Monument Waste
Management Facility, LLC NM-1-0032
P.O. Box 18
Hobbs, NM 88241

Lazy Ace Landfarm, LLC NM 1-0041
P.O. Box 160
Eunice, NM 88231

Lea Land, Inc. NM-1-0035
5644 Westheimer, #153
Houston, TX 77056

Gandy Marley, Inc. NM-1-0019
P.O. Box 1658
Roswell, NM 88202

Saunders Landfarm, LLC NM-1-0038
394 State Highway. 206
Lovington, NM 88260

Rhino Oilfield Disposal, Inc. NM-1-0021
c/o Diamondback Disposal Services, Inc.
P.O. Box 2491
Hobbs, NM 88241

J & L Landfarm, Inc. NM-1-0023
P.O. Box 356
Hobbs, NM 88241-0356

Artesia Aeration, LLC NM-1-0030
P.O. Box 310
Hobbs, NM 88240

Sid Richardson Energy Services Co.; NM-2-0019
610 Commerce
Jal, NM 88252

ChevronTexaco Exploration & Production, Inc.; NM-2-0013
15 Smith Rd.
Midland, TX 79705

John H. Hendrix Corp.; NM-2-0021
P.O. Box 3040
Midland, TX 79702-3040

Pitchfork Landfarm, LLC; NM-1-0039
524 Antelope Ridge
Jal, NM 88252

Commercial Exchange, Inc.; NM-1-0042
6906 Gary Ave.
Lubbock, TX 79413

Envirotech, Inc.; NM-1-0011
5796 U.S. Highway 64
Farmington, NM 87401

T-N-T Environmental, Inc.; NM-1-0008
HCR 74 P.O. Box 115
Lindrith, NM 87029

Giant Exploration & Production Co.; NM-2-0010
23733 North Scottsdale Rd.
Scottsdale, AZ 85255

Controlled Recovery, Inc. NM-1-006
P.O. Box 388
Hobbs, NM 88241-0388



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

October 7, 2004

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

Lea Land, Inc.
1300 W. Main St.
Oklahoma City, OK 73106

NM-1-35

To Whom It May Concern:

Since the New Mexico Oil Conservation Division (NMOCD) promulgated Rule 50 covering pits and below-grade tanks, there has arisen a need, in certain circumstances, for operators to transport their drill cuttings off-site and dispose of them.

NMOCD Rule 711, as it pertains to landfarms, does not specifically address the issue of exempt oilfield wastes that may be contaminated with salts. Your landfarm application and permit were written with only hydrocarbon-contaminated soils in mind. Salt-contaminated wastes cause the following problems:

1. Lessening the effectiveness of the biodegradation capacity of your landfarm
2. Rapid leachability causing adverse effects on groundwater

If you want to accept salt-contaminated cuttings or any other salt-contaminated wastes, your 711 permit must be modified to ensure that your acceptance of those wastes will not adversely affect public health or the environment.

Please check one of the following:

I have accepted or intend to accept salt-contaminated wastes in my landfarm. An OCD form C-137, applying for a modification to my 711 permit is attached. Included, as an attachment, is a demonstration that the accepted salt-contaminated soils will not adversely affect groundwater in the foreseeable future. (Closure requirements will also require modification to ensure the protection of groundwater. Should your acceptance of salt-contaminated wastes prove detrimental to groundwater, future liability for such damage rests with the landfarm operator).

I do not intend to accept salt-contaminated wastes in my landfarm. Should this condition change, I will submit an OCD Form C-137 for a modification to my 711 permit at that time.

New Mexico Oil Conservation Division
Attn: Ed Martin
1220 S. St. Francis
Santa Fe, NM 87505

This letter must be returned to the above address no later than October 31, 2004. An extension of time may be granted if you contact this office no later than that date.

If you have any questions, contact Ed Martin (505) 476-3492 or emartin@state.nm.us

Signed _____

Date _____



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

September 17, 2004

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

Mr. Robert G. Hall
Lea Land, Inc.
5644 Westheimer, #153
Houston, TX 77056

Dear Mr. Hall:

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NMOCD Rule 711, as it pertains to landfarms, does not specifically address the issue of exempt oilfield wastes that may be contaminated with salts. Your landfarm application and permit were written with only hydrocarbon-contaminated soils in mind. Salt-contaminated wastes cause the following problems:

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New Mexico Oil Conservation Division
Attn: Ed Martin
1220 S. St. Francis
Santa Fe, NM 87505

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If you have any questions, contact Ed Martin (505) 476-3492 or emartin@state.nm.us

Signed _____

Date _____

RECEIVED

OCT 20 2003

CIL CONSERVATION
DIVISION

THE HOUSTON OFFICE OF

Lea Land, Inc. Landfill

IS MOVING

(effective October 31, 2003)

New Address:

**5644 Westheimer, # 153
Houston, Texas 77056**

O: 713-927-4322

F: 832-252-1703

Kieling, Martyne

From: Kieling, Martyne
Sent: Friday, April 18, 2003 10:37 AM
To: 'buch_tongate@nmenv.state.nm.us'
Cc: 'don_beardsly@nmenv.state.nm.us'; 'lealand@prodigy.net'; 'lealand@coversns.com'
Subject: Lea Land Inc.

Butch,

The Oil Conservation Division (OCD) Hobbs district personnel inspected Lea Land, Inc. Surface Waste Management Facility Permit NM-01-0035 on April 16, 2003 in response to your request concerning a verbal complaint received by NMED. Our district personnel had limited time to devote to an inspection that day due appointments that were already scheduled. In addition, at the time of the unannounced inspection the facility manager, Ken Slaughter, was not at the facility. The OCD inspector was unable to do a records check due to limited time but was able to visually inspect the OCD landfill cell. Attached you will find photos of the OCD permitted portion of the landfill. When these photos are compared to the photos taken during my previous inspection on November 21, 2002 there seems to have been no change.

My Discussions with Saralyn Hall and Ken Slaughter with Lea Land, Inc. have resulted in the same information that was gathered from my November inspection. The waste in the OCD permitted portion of the landfill is oilfield exempt waste from two different jobs both received prior to November, 2002. This waste is primarily contaminated soil from cleanups. Currently any other oilfield type wastes that have been accepted by Lea Land are those type wastes listed in OCD Rule 712 and have gone into the NMED permitted portion of the landfill. These wastes are non-exempt and are most frequently, filters, pipe and demolition debris including wood & fiberglass from cooling towers.

Lea Land was permitted by the OCD on April 27, 2001 and has been inspected twice by the OCD while it was under construction and twice since they have been accepting waste. To date Lea Land, Inc. has been most corporative, is current on their financial assurance and has not received any notice of violations.

I hope this helps answer some of the concerns that were raised. If not please let me know. It always helps to have more specific information regarding the complaint to aid in our investigations.



photo1 4-03.jpg



photo2 4-03.jpg

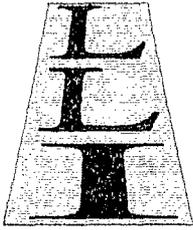


photo3 4-03.jpg

Sincerely,

Martyne J. Kieling

Martyne J. Kieling
Environmental Geologist



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

☎ Phone: (505) 887-4048 ☎ Fax: (505) 885-7640

February 6, 2003

RECEIVED

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

FEB 10 2003

Environmental Bureau
Oil Conservation Division

Martyne J. Kieling
Environmental Geologist
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

**RE: Inspection Report
Lea Land, Inc. – Permit # WM-1-035
Section 32, Township 20 South, Range 32 East
Lea County, New Mexico**

Dear Ms. Kieling:

In response to your letter of January 27, 2003, I am providing clarifications on the items that were noted in your report concerning: precipitation in the landfill cell, a migratory bird exception, and inspection and maintenance of the leachate collection system. The Lea Land landfill inspection was conducted on November 21, 2002.

Referring to the Overall Facility Operation section:

Item 5:

The landfill cell contained some precipitation in the low end from a recent rain. Subsequently, the rainwater evaporated before pumping equipment could be installed, which allowed any residuals to be contained in the lined cell. Should the rainfall not evaporate in a timely manner, it would be pumped to the lined, separate leachate collection pond and managed there.

Item 11:

Please refer to Form C-134 (attached). Four (4) copies of this form will be sent to the Hobbs District office.

O F F I C E S

5100 Westheimer, #200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

Martyne J. Kieling
February 6, 2003
Page 2

Items 16, 17 & 18:

Observations of the landfill cell, leachate collection system and leachate collection pond are made daily. To date, no leachate has ever been produced due to the arid conditions in the area. The leachate collection pond is also inspected after each rain event or windstorm where the volume of rainwater collected is minimal and is allowed to evaporate. The integrity of the berms has also been intact since the original construction and therefore, no maintenance has been required.

Please call me at 713-968-6511 if you need additional information.

Very truly yours,



Saralyn Hall, P. E.
Marketing Manager

O F F I C E S

5100 Westheimer, #200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-134
Revised March 17, 1999

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 4 Copies to
appropriate District Office

Permit No. _____
(For Division Use Only)

APPLICATION FOR EXCEPTION TO DIVISION ORDER R-8952
FOR PROTECTION OF MIGRATORY BIRDS Rule 8(b), Rule 105(b), Rule 312(h), Rule 313, or Rule 711(I)

Operator Name: Lea Land, Inc.

Operator Address: 1300 West Main St., Oklahoma City, OK 73106

Lease or Facility Name Lea Land, Inc. Location 32-20S-32E

Size of pit or tank: 50' x 50' (leachate collection pond) Ut. Ltr. Sec. Twp. Rge

Operator requests exception from the requirement to screen, net or cover the pit or tank at the above-described facility.

The pit or tank is not hazardous to migratory waterfowl. Describe completely the reason pit is non-hazardous.
The Lea Land landfill has never produced leachate. Therefore, any
water that is collected in the leachate collection pond is clean
rainfall that evaporates quickly.

1) If any oil or hydrocarbons should reach this facility, give method and time required for removal:

Not applicable.

2) If any oil or hydrocarbons reach the above-described facility, the operator is required to notify the appropriate District Office of the OCD with 24 hours.

Operator proposes the following alternate protective measures: _____

CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature Saralyn Hall Title Owner/Mrkt. Mang. Date 2/06/03

Printed Name Saralyn Hall Telephone No. 713-968-6511

FOR OIL CONSERVATION DIVISION USE

Date Facility Inspected _____ Approved by _____

Inspected by _____ Title _____

Date _____

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-134
Revised March 17, 1999

Submit 4 Copies to
appropriate District Office

Permit No. _____
(For Division Use Only)

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Operator Address: 1300 West Main St., Oklahoma City, OK 73106

Lease or Facility Name Lea Land, Inc. Location 32-20S-32E

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Ut. Ltr. Sec. Twp. Rge

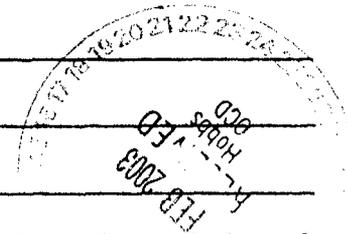
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CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature Saralyn Hall Title Owner/Mrkt. Mang. Date 2/06/03

Printed Name Saralyn Hall Telephone No. 713-968-6511

FOR OIL CONSERVATION DIVISION USE

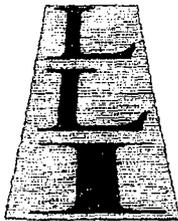
Date Facility Inspected _____

Inspected by _____

Approved by Chris Williams

Title District Supervisor

Date 2/11/03
Checked by martyn o.e.



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

☎ Phone: (505) 887-4048 ☎ Fax: (505) 885-7640

December 10, 2002

Martyne J. Kieling
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**RE: Lea Land, Inc.
S32 T20S R32E,
Lea County, New Mexico**

Dear Martyne:

I was reviewing the list of Commercial Surface Waste Management Facilities on your website recently. I noticed that Lea Land was listed, but the address and phone number were not.

Please add the following contact information to the website:

LEA LAND, INC.
1300 W. Main St.
Oklahoma City, OK 73106
405-236-4257

Thanks very much for your help. I hope you have a great holiday!

Very truly yours,

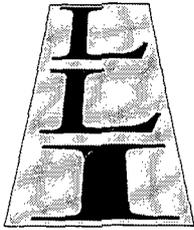
Saralyn Hall, P. E.
Marketing Manager

O F F I C E S

5100 Westheimer, #200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
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Fax: (405) 236-4261



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

Phone: (505) 887-4048 Fax: (505) 885-7640

CERTIFIED MAIL RETURN RECEIPT NO. P 103 658 047
May 23, 2001

Roger Anderson
New Mexico Energy, Minerals & Natural Resources
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

MAY 25 2001

RE: OCD Rule 711 Permit # WM-1-035
Lea Land, Inc. Commercial Surface Waste Management Facility
Lea County, New Mexico

Dear Roger:

We wanted to get clarification regarding notification requirements for the different waste streams we will be accepting for disposal into our OCD- and NMED-permitted cells. In general, we assume that the September 29, 1997 agreement between the OCD and the NMED is still in effect. In this letter it states: "The OCD assumes no disposal authority over out-of-state wastes to be landfilled in facilities located in New Mexico that are permitted and regulated by the New Mexico Environment Department." Please provide clarification on the following assumptions for out-of-state and in-state wastes:

Out-of-State Wastes

Based on your ruling of September 29, 1997, we assume that all petroleum industry wastes can be disposed in the Lea Land NMED cell, except those prohibited by House Bill 533, which include petroleum-contaminated soils, sludges and drill cuttings (see below):

Petroleum-contaminated soils:

Exempt:	Place directly into OCD cell
Non-exempt:	File Form C-138

Petroleum sludges:

Exempt:	Place directly into OCD cell
Non-exempt:	File Form C-138

O F F I C E S

5100 Westheimer, #200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
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1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

Roger Anderson
May 23, 2001
Page 2

All waste streams that are disposed in the NMED cell will be tested or process knowledge will be applied. Lea Land maintains a waste profile log where a number is assigned to each waste profile, which is also placed on each manifest for those waste streams. The waste profile is then filed with a copy of all manifests and the corresponding analytical data.

Regarding the Form C-138, will you require an original signature or will faxing be acceptable? Should the C-138 be directed to Donna Williams in Hobbs? Where will the final approval come from and about how long is the turnaround time? Also, how long will the C-138 be in effect once we receive approval, assuming the process does not change?

In-State Wastes

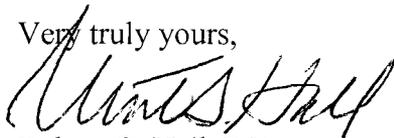
We plan to dispose of all in-state petroleum industry wastes in the OCD-permitted cell. This is assuming there would be a faster approval time using a Form C-138 versus obtaining approval to place the wastes in the NMED-permitted cell. Is this assumption correct? We also assume that exempt waste can be placed directly into the OCD cell and that non-exempt waste will require a Form C-138.

Waste Profile Form

The attached waste profile form will be completed by each generator prior to scheduling the wastes (exempt and non-exempt) for shipment. Please review this form to see if it meets your requirements for classification of oil field wastes. I have also attached a copy of the Lea Land waste manifest, which contains a certification by the transporter that the wastes delivered are only those consigned for transport.

If you have any questions, I can be reached at 405-236-4257.

Very truly yours,



Robert G. Hall, P.E.
President

cc: Martyne J. Kieling, OCD

O F F I C E S

5100 Westheimer, #200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261



LEA LAND SURFACE WASTE MANAGEMENT FACILITY

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO.

1. PAGE 1 OF ___

2. TRAILER NO.

G

3. COMPANY NAME

4. ADDRESS

5. PICK-UP DATE

E

PHONE NO.

CITY

STATE

ZIP

6. TNRCC I.D. NO.

N

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

8. CONTAINERS
No. Type

9. TOTAL
QUANTITY

10. UNIT
Wt/Vol.

11. TEXAS
WASTE ID #

E

a.

b.

c.

R

d.

12. COMMENTS OR SPECIAL INSTRUCTIONS:

A

13. IN CASE OF EMERGENCY OR SPILL, CONTACT

T

NAME

PHONE NO.

24-HOUR EMERGENCY NO.

J

14. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

R

PRINTED/TYPED NAME

SIGNATURE

DATE

T

15. **TRANSPORTER (1)**

16. **TRANSPORTER (2)**

NAME:

NAME:

TEXAS I.D. NO.

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

EMERGENCY PHONE:

R

17. **TRANSPORTER (1):** Acknowledgment of receipt of material

18. **TRANSPORTER (2):** Acknowledgment of receipt of material

PRINTED/TYPED NAME _____

PRINTED/TYPED NAME _____

SIGNATURE _____

DATE _____

SIGNATURE _____

DATE _____

D

Lea Land, Inc.

ADDRESS:

Mile Marker 64, U.S. Hwy 62/180,
30 Miles East of Carlsbad, NM

PHONE:

505-887-4048

I

PERMIT NO.

SWM #131401 - New Mexico

19. COMMENTS

S

20. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

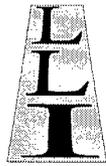
L

AUTHORIZED SIGNATURE

CELL NO.

DATE

TIME



LEA LAND, INC.

 NEW AMENDMENT

PAGE 1 OF 5

Material Profile No: _____

A. GENERATOR INFORMATION

Generator Name _____

Facility Address _____

City/County _____

State _____ Zip Code _____

State ID# _____

Technical Contact _____

Telephone () _____ Ext. _____ Fax () _____

Billing Name _____

Billing Address _____

City _____ State _____ Zip Code _____

Attention _____

Telephone () _____ Ext. _____

B. RCRA RCRA Non Hazardous/Exempt? Yes No

General Description of Process: _____

C. OIL FIELD WASTES ONLY (Check appropriate classification):

I, _____ representative for:

_____ do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the wastes described below are as designated: EXEMPT oil field waste, or NON-EXEMPT oil field waste, which are non-hazardous by characteristic analysis or by product identification and that no materials have been added to the exempt or non-exempt non-hazardous waste as defined below:

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1, Subpart 1403.C and D.

C. ANNUAL REPORT CODES CONT. (see attached lists)

SOURCE AND DESCRIPTION OF WASTE: _____

SIC Code: _____ Origin Code: _____
Source Code: _____ System Type: M 1 3 2 (Landfill)
Form Code: _____ Oil Field Waste: _____ EXEMPT
_____ NON-EXEMPT

SOURCE AND DESCRIPTION OF WASTE: _____

SIC Code: _____ Origin Code: _____
Source Code: _____ System Type: M 1 3 2 (Landfill)
Form Code: _____ Oil Field Waste: _____ EXEMPT
_____ NON-EXEMPT

SOURCE AND DESCRIPTION OF WASTE: _____

SIC Code: _____ Origin Code: _____
Source Code: _____ System Type: M 1 3 2 (Landfill)
Form Code: _____ Oil Field Waste: _____ EXEMPT
_____ NON-EXEMPT

SOURCE AND DESCRIPTION OF WASTE: _____

SIC Code: _____ Origin Code: _____
Source Code: _____ System Type: M 1 3 2 (Landfill)
Form Code: _____ Oil Field Waste: _____ EXEMPT
_____ NON-EXEMPT

SOURCE AND DESCRIPTION OF WASTE: _____

SIC Code: _____ Origin Code: _____
Source Code: _____ System Type: M 1 3 2 (Landfill)
Form Code: _____ Oil Field Waste: _____ EXEMPT
_____ NON-EXEMPT

D. OTHER COMPONENTS

Regulated NORM	<input type="checkbox"/> No	<input type="checkbox"/> Yes	
PCB's	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Total ppm _____*
Cyanides	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Total ppm _____
Sulfides	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Total ppm _____
Pesticides	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Total ppm _____
Dioxins	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Total ppm _____

*If contained in spill media, concentration of original chemical prior to spill.

E. PHYSICAL CHARACTERISTICS

1. Infectious or Biological Waste? Yes No
2. NRC Regulated Radioactive? Yes No
3. "Listed" Hazardous Wastes? Yes No
(coded in 40 CFR, Part 261)
4. Municipal Waste? Yes No
5. Asbestos Waste? Yes No
6. Reactivity? None Water Reactive
 Cyanides Shock Sensitive
 Sulfides DOT Explosive
 Pyrophoric Other _____
7. Solid _____ %
 Sludges _____ %
 Free Liquids _____ %
 100 %
8. **Weight**
 Density _____ lbs./cu. foot
9. **pH** N/A
 0 - 2 10.1 - 12.4
 2.1 - 4 ≥ 12.5
 4.1 - 10 Exact _____
10. Is this waste stored in vented drums? Yes No
 Do these drums contain free liquids? Yes No
 or Unfilled head space? Yes No

11. Does this waste contain scrap metal pieces greater than 2 inches in size or any protruding re-bar (from concrete pieces)? Yes No
 Please describe _____

F. METALS

NONE TCLP (mg/L)

	Reg. Limit	Below	Above
Arsenic	5 mg/L	_____	_____
Barium	100 mg/L	_____	_____
Cadmium	1 mg/L	_____	_____
Chromium	5 mg/L	_____	_____
Lead	5 mg/L	_____	_____
Mercury	0.2 mg/L	_____	_____
Selenium	1 mg/L	_____	_____
Silver	5 mg/L	_____	_____
Others:	_____		

G. PHYSICAL/CHEMICAL CONSTITUENTS

Attach all MSDS, Sample Analysis and Additional Information

H. ANTICIPATED VOLUME

Quantity	Container	Quantity	Container
_____	5-gal pail	_____	20 cu yd Roll Off
_____	15-gal carboy	_____	25 cu yd Roll Off
_____	30-gal drum	_____	30 cu yd Roll Off
_____	55-gal drum	_____	40 cu yd Roll Off
_____	85-gal drum	_____	# Bales (density = _____ lb/ft ³)
_____	Cu Yard Box	_____	Dump Trailer
_____	Super Sack	_____	Tanker
_____	Other _____		

Per Time Week Month Year Other _____

If empty containers which formerly contained hazardous waste are to be disposed:
Do they contain no more than 1 inch of residue on the bottom of the container?
 Yes No

Have they been rendered non-reusable (i.e., crushed, punctured, etc.)?
 Yes No

Generator's Certification:

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all material described by this profile.

Generator's Authorized Signature: _____

Title: _____

Date: _____



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

April 25, 2001

Via Facsimile and First Class Mail

Mr. Robert G. Hall
Lea Land, Inc.
1300 West Main St.
Oklahoma City, OK 73106

Michael H. Feldewert
Holland & Hart LLP
P.O. Box 2208
Santa Fe, New Mexico 87504-2208

Mayor Jimmy E. Woodfin
The City of Hobbs, New Mexico
300 North Turner
Hobbs, New Mexico 88240

Kurt Van Deren
Assistant General Counsel
Energy, Minerals and Natural Resources Department
1220 South Saint Francis Drive
Santa Fe, New Mexico 87504

Re: Case No. 12645, Application of Lea Land, Inc. for a permit to operate a commercial surface waste management facility; Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico

Gentlemen:

Please find enclosed an Order of the Oil Conservation Division which was issued today in response to Mr. Feldewert's letter of April 19. As you will see when you review the Order, the Director has rescinded the referral of this matter to the Oil Conservation

April 26, 2001

Commission, has found no hearing is now necessary, and directed that approval of the pending application be made forthwith.

Please give me a call if you have any questions.

Sincerely,



Stephen C. Ross
Assistant General Counsel

Cc: Oil Conservation Commission
Commission Secretary

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

**THE APPLICATION OF LEA LAND, INC. FOR A PERMIT TO OPERATE A
COMMERCIAL SURFACE WASTE MANAGEMENT FACILITY, SECTION 32,
TOWNSHIP 20 SOUTH, RANGE 32 EAST, NMPM, LEA COUNTY, NEW
MEXICO.**

**CASE NO. 12645
ORDER NO. R-11572**

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

THIS MATTER having come before the New Mexico Oil Conservation Division (hereinafter referred to as "the Division") on notice dated April 19, 2001 from Controlled Recovery Inc. (hereinafter referred to as "CRI"), by and through its attorneys, Holland & Hart LLP (Michael H. Feldewert, Esq.), that it now intends not to present any specific objections to the above-referenced application through witnesses, exhibits or otherwise, and the Director of the Division, having reviewed the letter of April 19, 2001 and the other submissions in this matter,

FINDS:

1. The Division previously issued its administrative order referring this matter for hearing before the New Mexico Oil Conservation Commission (hereinafter referred to as "the Commission") based on a finding that the application and hearing had the potential to generate significant public interest and the fact that CRI had specific objections to the pending application.
2. Now that the only party with specific objections to the application has withdrawn its objections, no specific objection exists to the application of Lea Land Inc.

3. The Oil Conservation Division has indicated that it intends to approve the application and that it meets all the criteria established for approval of such applications and, but for the requests for hearing and specific objections of CRI, the application would have already been approved.

4. The reasons that were previously present and justified referral of this matter to the Commission are no longer present and the referral is no longer needed and should be rescinded.

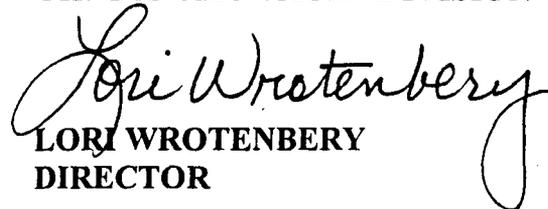
5. With the withdrawal of the specific objections of CRI, no potential for significant public interest remains and no hearing should therefore be conducted by the Division on the pending application.

6. The Division should issue approval of the application forthwith.

IT IS THEREFORE ORDERED that the referral of this matter to the Commission shall be and hereby is rescinded, the requests for hearing in this matter (to the extent they remain extant) should be and hereby are denied, and the application of Lea Land Inc. shall be approved by the Division forthwith.

DONE at Santa Fe, New Mexico, this 25th day of April, 2001.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**


**LORI WROTENBERY
DIRECTOR**

S E A L

HOLLAND & HART ^{LLP}
and
CAMPBELL & CARR
ATTORNEYS AT LAW

DENVER • ASPEN
BOULDER • COLORADO SPRINGS
DENVER TECH CENTER
BILLINGS • BOISE • CASPER
CHEYENNE • JACKSON HOLE
SALT LAKE CITY • SANTA FE
WASHINGTON, D.C.

P.O. BOX 2208
SANTA FE, NEW MEXICO 87504-2208
110 NORTH GUADALUPE, SUITE 1
SANTA FE, NEW MEXICO 87501-6525

TELEPHONE (505) 988-4421
FACSIMILE (505) 983-6043

Michael H. Feldewert

mfeldewert@hollandhart.com

April 19, 2001

Stephen C. Ross, Counsel
New Mexico Oil Conservation Commission
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: OCC Case No. 12645
Application of Lea Land, Inc. for a permit to operate a
commercial surface waste management facility;
Section 32, T-20-S, R-32-E, Lea County, NM

Dear Mr. Ross:

With reference to your April 2nd letter, please be advised that Controlled Recovery Inc. does not plan to call any witnesses or present any exhibits at the Commission hearing on April 27th on the above referenced matter. After consultation with its attorneys, engineers, and geologists, CRI has determined that it has no specific objections to the application as administratively approved by Mr. Anderson's March 1, 2001 letter to Lea Land, Inc.

If you have any questions, please feel free to call.

Sincerely,



Michael H. Feldewert

MHF/ras

cc: Lori Wrotenbery, Director, OCD
Roger C. Anderson, Chief, Environmental Bureau
Robert G. Hall, Lea Land Inc.
Jimmy E. Woodfin, Mayor, City of Hobbs

19.15.9.711 APPLICABLE TO SURFACE WASTE MANAGEMENT FACILITIES ONLY

A. A surface waste management facility is defined as any facility that receives for collection, disposal, evaporation, remediation, reclamation, treatment or storage any produced water, drilling fluids, drill cuttings, completion fluids, contaminated soils, bottom sediment and water (BS&W), tank bottoms, waste oil or, upon written approval by the Division, other oilfield related waste. Provided, however, if (a) a facility performing these functions utilizes underground injection wells subject to regulation by the Division pursuant to the federal Safe Drinking Water Act, and does not manage oilfield wastes on the ground in pits, ponds, below grade tanks or land application units, (b) if a facility, such as a tank only facility, does not manage oilfield wastes on the ground in pits, ponds below grade tanks or land application units or (c) if a facility performing these functions is subject to Water Quality Control Commission Regulations, then the facility shall not be subject to this rule.

(1) A commercial facility is defined as any surface waste management facility that does not meet the definition of centralized facility.

(2) A centralized facility is defined as a surface waste management facility that accepts only waste generated in New Mexico and that:

(a) does not receive compensation for waste management;

(b) is used exclusively by one generator subject to New Mexico's "Oil and Gas Conservation Tax Act" Section 7-30-1 NMSA-1978 as amended; or

(c) is used by more than one generator subject to New Mexico's "Oil and Gas Conservation Tax Act" Section 7-30-1 NMSA-1978 as amended under an operating agreement and which receives wastes that are generated from two or more production units or areas or from a set of jointly owned or operated leases.

(3) Centralized facilities exempt from permitting requirements are:

(a) facilities that receive wastes from a single well;

(b) facilities that receive less than 50 barrels of RCRA exempt liquid waste per day and have a capacity to hold 500 barrels of liquids or less or 1400 cubic yards of solids or less and when a showing can be made to the satisfaction of the Division that the facility will not harm fresh water, public health or the environment;

(c) emergency pits that are designed to capture fluids during an emergency upset period only and provided such fluids will be removed from the pit within twenty-four (24) hours from introduction;

(d) facilities that do not meet the requirements of the foregoing exemptions in Subsection A, Paragraph (3) of 19.15.9.711 NMAC, but that are shown by the facility operator to the satisfaction of the Division to not present a risk to public health and the environment.

B. Unless exempt from Section 19.15.9.711 NMAC, all commercial and centralized facilities including facilities in operation on the effective date of Section 19.15.9.711 NMAC, new facilities prior to construction and all existing facilities prior to major modification or major expansion shall be permitted by the Division in accordance with the following requirements:

(1) Application Requirements - An application, Form C-137, for a permit for a new facility or to modify an existing facility shall be filed in DUPLICATE with the Santa Fe Office of the Division and ONE COPY with the appropriate Division district office. The application shall comply with Division guidelines and shall include:

(a) The names and addresses of the applicant and all principal officers of the business if different from the applicant;

(b) A plat and topographic map showing the location of the facility in relation to governmental surveys (1/4 1/4 section, township, and range), highways or roads giving access to the facility site, watercourses, water sources, and dwellings within one (1) mile of the site;

(c) The names and addresses of the surface owners of the real property on which the management facility is sited and surface owners of the real property of record within one (1) mile of the site;

(d) A description of the facility with a diagram indicating location of fences and cattle guards, and detailed construction/installation diagrams of any pits, liners, dikes, piping, sprayers, and tanks on the facility;

(e) A plan for management of approved wastes.

(f) A contingency plan for reporting and cleanup of spills or releases;

- (g) A routine inspection and maintenance plan to ensure permit compliance;
- (h) A Hydrogen Sulfide Prevention and Contingency Plan to protect public health;
- (i) A closure plan including a cost estimate sufficient to close the facility to protect public health and the environment; said estimate to be based upon the use of equipment normally available to a third party contractor;
- (j) Geological/hydrological evidence, including depth to and quality of groundwater beneath the site, demonstrating that disposal of oilfield wastes will not adversely impact fresh water;
- (k) Proof that the notice requirements of Section 19.15.9.711 NMAC have been met;
- (l) Certification by an authorized representative of the applicant that information submitted in the application is true, accurate, and complete to the best of the applicant's knowledge.
- (m) Such other information as is necessary to demonstrate that the operation of the facility will not adversely impact public health or the environment and that the facility will be in compliance with OCD rules and orders.

(2) Notice Requirements:

- (a) Prior to public notice, the applicant shall give written notice of application to the surface owners of record within one (1) mile of the facility, the county commission where the facility is located or is proposed to be located, and the appropriate city official(s) if the facility is located or proposed to be located within city limits or within one (1) mile of the city limits. The distance requirements for notice may be extended by the Director if the Director determines the proposed facility has the potential to adversely impact public health or the environment at a distance greater than one (1) mile. The Director may require additional notice as needed. A copy and proof of such notice will be furnished to the Division.
- (b) The applicant will issue public notice in a form approved by the Division in a newspaper of general circulation in the county in which the facility is to be located. For permit modifications, the Division may require the applicant to issue public notice and give written notice as above.
- (c) Any person seeking to comment or request a public hearing on such application must file comments or hearing requests with the Division within 30 days of the date of public notice. Requests for a public hearing must be in writing to the Director and shall set forth the reasons why a hearing should be held. A public hearing shall be held if the Director determines there is significant public interest.
- (d) The Division will distribute notice of the filing of an application for a new facility or major modifications with the next OCD and OCC hearing docket following receipt of the application.

(3) Financial Assurance Requirements:

- (a) Centralized Facilities: Upon determination by the Director that the permit can be approved, any applicant of a centralized facility shall submit acceptable financial assurance in the amount of \$25,000 per facility or a statewide "blanket" financial assurance in the amount of \$50,000 to cover all of that applicant's facilities in a form approved by the Director.
- (b) New Commercial Facilities or major expansions or major modification of Existing Facilities: Upon determination by the Director that a permit for a commercial facility to commence operation after the effective date of this rule can be approved, or upon determination by the Director that a major modification or major expansion of an existing facility can be approved, any applicant of such a commercial facility shall submit acceptable financial assurance in the amount of the closure cost estimated in Subsection B, Paragraph (1), Subparagraph (i) above of 19.15.9.711 NMAC in a form approved by the Director according to the following schedule:
 - (i) within one (1) year of commencing operations or when the facility is filled to 25% of the permitted capacity, whichever comes first, the financial assurance must be increased to 25% of the estimated closure cost;
 - (ii) within two (2) years of commencing operations or when the facility is filled to 50% of the permitted capacity, whichever comes first, the financial assurance must be increased to 50% of the estimated closure cost;
 - (iii) within three (3) years of commencing operations or when the facility is filled to 75%

of the permitted capacity, whichever comes first, the financial assurance must be increased to 75% of the estimated closure cost;

(iv) within four (4) years of commencing operations or when the facility is filled to 100% of the permitted capacity, whichever comes first, the financial assurance must be increased to the estimated closure cost.

(c) Existing Commercial Facilities: All permittees of commercial facilities approved for operation at the time this rule becomes effective shall have submitted financial assurance in the amount of the closure cost estimated pursuant to Subsection B, Paragraph (1), Subparagraph (i) above of 19.15.9.711 NMAC but not less than \$25,000 nor more than \$250,000 per facility in a form approved by the Director.

(i) within one (1) year of the effective date of Section 19.15.9.711 NMAC the financial assurance amount must be increased to 25% of the estimated closure costs or \$62,500.00, whichever is less;

(ii) within two (2) years of the effective date of Section 19.15.9.711 NMAC the financial assurance amounts must be increased to 50% of the estimated closure costs or \$125,000.00, whichever is less;

(iii) within three (3) years of the effective date of Section 19.15.9.711 NMAC the financial assurance amounts must be increased to 75% of the estimated closure costs or \$187,000.00, whichever is less;

(iv) within four (4) years of the effective date of Section 19.15.9.711 NMAC the financial assurance amounts must be increased to the estimated closure cost or \$250,000.00, whichever is less.

(d) The financial assurance required in subparagraphs (a), (b), or (c), above shall be payable to the State of New Mexico and conditioned upon compliance with statutes of the State of New Mexico and rules of the Division, and acceptable closure of the site upon cessation of operation, in accordance with Subsection B, Paragraph (1), Subparagraph (i) of 19.15.9.711 NMAC. If adequate financial assurance is posted by the applicant with a federal or state agency and the financial assurance otherwise fulfills the requirements of this rule, the Division may consider the financial assurance as satisfying the requirement of Section 19.15.9.711 NMAC. The applicant must notify the Division of any material change affecting the financial assurance within 30 days of discovery of such change.

(4) The Director may accept the following forms of financial assurance:

(a) Surety Bonds

(i) A surety bond shall be executed by the permittee and a corporate surety licensed to do business in the State.

(ii) Surety bonds shall be noncancellable during their terms.

(b) Letter of Credit - Letter of credit shall be subject to the following conditions:

(i) The letter may be issued only by a bank organized or authorized to do business in the United States;

(ii) Letters of credit shall be irrevocable for a term of not less than five (5) years. A letter of credit used as security in areas requiring continuous financial assurance coverage shall be forfeited and shall be collected by the State of New Mexico if not replaced by other suitable financial assurance or letter of credit at least 90 days before its expiration date;

(iii) The letter of credit shall be payable to the State of New Mexico upon demand, in part or in full, upon receipt from the Director of a notice of forfeiture.

(c) Cash Accounts - Cash accounts shall be subject to the following conditions:

(i) The Director may authorize the permittee to supplement the financial assurance through the establishment of a cash account in one or more federally insured or equivalently protected accounts made payable upon demand to, or deposited directly with, the State of New Mexico.

(ii) Any interest paid on a cash account shall not be retained in the account and applied to the account unless the Director has required such action as a permit requirement.

(iii) Certificates of deposit may be substituted for a cash account with the approval of the Director.

(d) Replacement of Financial Assurances

(i) The Director may allow a permittee to replace existing financial assurances with other

financial assurances that provide equivalent coverage.

(ii) The Director shall not release existing financial assurances until the permittee has submitted, and the Director has approved, acceptable replacements.

(5) A permit may be denied, revoked or additional requirements imposed by a written finding by the Director that a permittee has a history of failure to comply with Division rules and orders and state or federal environmental laws.

(6) The Director may, for protection of public health and the environment, impose additional requirements such as setbacks from an existing occupied structure.

(7) The Director may issue a permit upon a finding that an acceptable application has been filed and that the conditions of paragraphs 2 and 3 above have been met. All permits are revocable upon showing of good cause after notice and, if requested, hearing. Permits shall be reviewed a minimum of once every five (5) years for compliance with state statutes, Division rules and permit requirements and conditions.

C. Operational Requirements

(1) All surface waste management facility permittees shall file forms C-117-A, C-118, and C-120-A as required by OCD rules.

(2) Facilities permitted as treating plants will not accept sediment oil, tank bottoms and other miscellaneous hydrocarbons for processing unless accompanied by an approved Form C-117A or C-138.

(3) Facilities will only accept oilfield related wastes except as provided in Subsection C, Paragraph (4), Subparagraph (c) of 19.15.9.711 NMAC below. Wastes which are determined to be RCRA Subtitle C hazardous wastes by either listing or characteristic testing will not be accepted at a permitted facility.

(4) The permittee shall require the following documentation for accepting wastes, other than wastes returned from the wellbore in the normal course of well operations such as produced water and spent treating fluids, at commercial waste management facilities:

(a) Exempt Oilfield Wastes: As a condition to acceptance of the materials shipped, a generator, or his authorized agent, shall sign a certificate which represents and warrants that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recovery Act (RCRA) Subtitle C regulations; and not mixed with non-exempt wastes. The permittee shall have the option to accept on a monthly, weekly, or per load basis a load certificate in a form of its choice. While the acceptance of such exempt oilfield waste materials does not require the prior approval of the Division, both the generator and permittee shall maintain and shall make said certificates available for inspection by the Division for compliance and enforcement purposes.

(b) Non-exempt, Non-hazardous Oilfield Wastes: Prior to acceptance, a "Request For Approval To Accept Solid Waste", OCD Form C-138, accompanied by acceptable documentation to determine that the waste is non-hazardous shall be submitted to the appropriate District office. Acceptance will be on a case-by-case basis after approval from the Division's Santa Fe office.

(c) Non-oilfield Wastes: Non-oilfield wastes may be accepted in an emergency if ordered by the Department of Public Safety. Prior to acceptance, a "Request To Accept Solid Waste", OCD Form C-138 accompanied by the Department of Public Safety order will be submitted to the appropriate District office and the Division's Santa Fe office.

(5) The permittee of a commercial facility shall maintain for inspection the records for each calendar month on the generator, location, volume and type of waste, date of disposal, and hauling company that disposes of fluids or material in the facility. Records shall be maintained in appropriate books and records for a period of not less than five years, covering their operations in New Mexico.

(6) Disposal at a facility shall occur only when an attendant is on duty unless loads can be monitored or otherwise isolated for inspection before disposal. The facility shall be secured to prevent unauthorized disposal when no attendant is present.

(7) No produced water shall be received at the facility from motor vehicles unless the transporter has a valid Form C-133, Authorization to Move Produced Water, on file with the Division.

(8) To protect migratory birds, all tanks exceeding 16 feet in diameter, and exposed pits and ponds

shall be screened, netted or covered. Upon written application by the permittee, an exception to screening, netting or covering of a facility may be granted by the district supervisor upon a showing that an alternative method will protect migratory birds or that the facility is not hazardous to migratory birds.

(9) All facilities will be fenced in a manner approved by the Director.

(10) A permit may not be transferred without the prior written approval of the Director. Until such transfer is approved by the Director and the required financial assurance is in place, the transferor's financial assurance will not be released.

D. Facility Closure

(1) The permittee shall notify the Division thirty (30) days prior to its intent to cease accepting wastes and close the facility. The permittee shall then begin closure operations unless an extension of time is granted by the Director. If disposal operations have ceased and there has been no significant activity at the facility for six (6) months and the permittee has not responded to written notice as defined in Subsection D, Paragraph (2), Subparagraph (a) of 19.15.9.711 NMAC, then the facility shall be considered abandoned and shall be closed utilizing the financial assurance pledged to the facility. Closure shall be in accordance with the approved closure plan and any modifications or additional requirements imposed by the Director to protect public health and the environment. At all times the permittee must maintain the facility to protect public health and the environment. Prior to release of the financial assurance covering the facility, the Division will inspect the site to determine that closure is complete.

(2) If a permittee refuses or is unable to conduct operations at the facility in a manner that protects public health or the environment or refuses or is unable to conduct or complete the closure plan, the terms of the permit are not met, or the permittee defaults on the conditions under which the financial assurance was accepted, the Director shall take the following actions to forfeit all or part of the financial assurance:

(a) Send written notice by certified mail, return receipt requested, to the permittee and the surety informing them of the decision to close the facility and to forfeit all or part of the financial assurance, including the reasons for the forfeiture and the amount to be forfeited and notifying the permittee and surety that a hearing request must be made within ten (10) days of receipt of the notice.

(b) Advise the permittee and surety of the conditions under which the forfeiture may be avoided. Such conditions may include but are not limited to:

(i) An agreement by the permittee or another party to perform closure operations in accordance with the conditions of the permit, the closure plan and these Rules, and that such party has the ability to satisfy the conditions.

(ii) The Director may allow a surety to complete closure if the surety can demonstrate an ability to complete the closure in accordance with the approved plan. No surety liability shall be released until successful completion of closure.

(c) In the event forfeiture of the financial assurance is required by this rule, the Director shall proceed to collect the forfeited amount and use the funds collected from the forfeiture to complete the closure. In the event the amount forfeited is insufficient for closure, the permittee shall be liable for the deficiency. The Director may complete or authorize completion of closure and may recover from the permittee all reasonably incurred costs of closure and forfeiture in excess of the amount forfeited. In the event the amount forfeited was more than the amount necessary to complete closure and all costs of forfeiture, the excess shall be returned to the party from whom it was collected.

(d) Upon showing of good cause, the Director may order immediate cessation of operations of the facility when it appears that such cessation is necessary to protect public health or the environment, or to assure compliance with Division rules and orders.

(e) In the event the permittee cannot fulfill the conditions and obligations of the permit, the State of New Mexico, its agencies, officers, employees, agents, contractors and other entities designated by the State shall have all rights of entry into, over and upon the facility property, including all necessary and convenient rights of ingress and egress with all materials and equipment to conduct operation, termination and closure of the facility, including but not limited to the temporary storage of equipment and materials, the right to borrow or dispose of

materials, and all other rights necessary for operation, termination and closure of the facility in accordance with the permit.

E. Waste management facilities in operation at the time Section 19.15.9.711 NMAC becomes effective shall:

(1) within one (1) year after the effective date permitted facilities submit the information required in Subsection B, Paragraph (1), Subparagraphs (a, h, i and l) of 19.15.9.711 NMAC not already on file with the Division;

(2) within one (1) year after the effective date unpermitted facilities submit the information required in Subsection B, Paragraph (1), Subparagraphs (a) through (j) and Subsection B, Paragraph (1), Subparagraph (l) of 19.15.9.711 NMAC;

(3) comply with Subsections C and D of 19.15.9.711 NMAC unless the Director grants an exemption from a requirement in these sections based upon a demonstration by the operator that such requirement is not necessary to protect public health and the environment.

[6-6-88...2-1-96; 19.15.9.711 NMAC - Rn, 19 NMAC 15.I.711, 11-30-00]

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

IN THE MATTER OF:

THE HEARING CALLED BY THE OIL CONSERVATION DIVISION TO ENACT A NEW RULE 712 PERMITTING DISPOSAL OF CERTAIN NON-DOMESTIC WASTE ARISING FROM THE EXPLORATION, DEVELOPMENT, PRODUCTION OR STORAGE OF CRUDE OIL OR NATURAL GAS, CERTAIN NON-DOMESTIC WASTE ARISING FROM THE OIL FIELD SERVICE INDUSTRY, AND CERTAIN NON-DOMESTIC WASTE ARISING FROM THE TRANSPORTATION, TREATMENT OR REFINEMENT OF CRUDE OIL OR NATURAL GAS, AT A SOLID WASTE FACILITY REGULATED BY THE NEW MEXICO ENVIRONMENT DEPARTMENT.

**CASE NO. 12626
ORDER NO. R-11558**

ORDER OF THE COMMISSION

BY THE COMMISSION:

THIS MATTER having come before the Oil Conservation Commission (hereinafter referred to as "the Commission") pursuant to its authority under the Oil and Gas Act and House Bill 533 of the 45th Legislature, First Session 2001, concerning disposal of certain non-domestic waste at solid waste facilities, and the Commission having conducted a public hearing on March 30, 2001 and carefully considered the matter,

FINDS:

1. The Oil and Gas Act delegates to the Commission the authority to regulate nondomestic wastes resulting from the exploration, development, production, transportation, storage, treatment or refinement of crude oil, natural gas, carbon dioxide gas or geothermal energy and the disposition of nondomestic waste resulting from the oilfield service industry.

2. House Bill 533 of the 45th Legislature, First Session 2001, was signed into law by Governor Gary E. Johnson on March 16, 2001. That bill provides for disposal of certain nondomestic oil, gas and geothermal waste at solid waste facilities. Section 2 of the bill contains an emergency clause, and it became effective upon signing.

3. Certain nondomestic waste arising from the exploration, development, production or storage of crude oil or natural gas, certain nondomestic waste arising from the oil field service industry, and certain non-domestic waste arising from the transportation, treatment or refinement of crude oil or natural gas has been disposed of at solid waste facilities for several years by unwritten agreement of the Oil Conservation Division (hereinafter referred to as "the Division") and the New Mexico Environment Department (hereinafter referred to as "the Environment Department"). The practice was challenged during an administrative proceeding before the Environment Department and was discontinued in early December, 2000.

4. House Bill 533 clarifies that certain nondomestic waste associated with the exploration, development, production, transportation, storage, treatment or refinement of crude oil, natural gas, carbon dioxide gas or geothermal energy, except drilling fluids, produced water, petroleum liquids, petroleum sludges or petroleum contaminated soils (except in an emergency declared by the Director), and the disposition of nondomestic waste resulting from the oilfield service industry, may be disposed of at a solid waste facility regulated by the Environment Department pursuant to the Solid Waste Act.

5. House Bill 533 permits disposal of certain nondomestic waste only upon approval of the Division. At this time, the Commission has no rules specifying which wastes may be disposed of as permitted by House Bill 533, how approval is granted, or any required testing.

6. On March 19, 2001, the Division promulgated its Emergency Rule E-34 which enacted a temporary rule codified in the New Mexico Administrative Code as NMAC 19.15.9.712 that permitted disposal of certain waste at solid waste facilities until the Commission could meet and discuss enacting a permanent rule on the subject.

7. The Emergency Rule adopted as a rule a matrix developed over a period of several years by staff of the Division and the Solid Waste Bureau of the Environment Department. The matrix set out which wastes could be disposed of at solid waste facilities and the testing required before disposal.

8. The rule proposed for adoption is identical with the rule enacted by the Division as an emergency rule, except for correction of several typographical errors that appear in the emergency rule.

9. Since an order of the Environment Department on December 8, 2000, options for disposal of waste previously disposed of at solid waste facilities under the unwritten agreement became limited. Some nondomestic waste has been stockpiled or transported out-of-state, raising concern that some waste may be improperly disposed of or improperly stockpiled.

10. The proposed rule is intended to restore the status quo that existed before December 8, 2000.

11. Any improper disposal or stockpiling of nondomestic waste presents an imminent threat to the public health and the environment.

12. The proposed rule treats wastes differently depending on the nature of the waste. Waste that is essentially household or office waste may be disposed of at a solid waste facility without prior authorization of the Division and without testing. This waste, listed in Subsection D, Paragraph (1) of Section 19.15.9.712, poses no threat to public health or the environment when disposed of at a solid waste facility permitted by the Environment Department to accept such waste.

13. Waste which, after testing, occasionally is found to contain hazardous constituents may be disposed of at a solid waste facility only upon prior authorization of the Division and after testing detailed in the proposed Rule shows it is free of hazardous constituents. This waste, listed in Subsection D, Paragraph (2) of Section 19.15.9.712, poses no threat to public health or the environment so long as it is tested and the test results are within the limits set in Subsection E of Section 19.15.9.712 and then disposed of at a solid waste facility permitted by the Environment Department to accept such waste.

14. Waste whose characteristics are unknown to the Division may be disposed of at a solid waste facility only upon a case-by-case basis and only upon prior authorization of the Division and after testing detailed in the proposed Rule. This waste, listed in Subsection D, Paragraph (2) of Section 19.15.9.712, poses no threat to public health or the environment so long as it is tested and the test results are within the limits set in Subsection E of Section 19.15.9.712 and then disposed of at a solid waste facility permitted by the Environment Department to accept such waste.

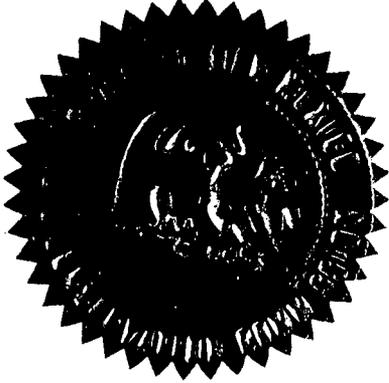
15. Because waste may be improperly stockpiled or improperly disposed of and because of the accompanying risks to human health and the environment posed by such practices, an emergency exists which justifies the proposed rule becoming effective immediately upon filing with the State Records Center.

IT IS THEREFORE ORDERED, AS FOLLOWS:

16. The attached Rule NMAC 19.15.9.712 concerning Disposal of Certain Non-domestic Waste at Solid Waste Facilities is hereby adopted.

DONE at Santa Fe, New Mexico, this 30th day of March, 2001.

**STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION**



Jami Bailey

JAMI BAILEY, Member

Robert L. Lee

ROBERT L. LEE, Member

Lori Wrotenbery

LORI WROTENBERY, Chairman

SEAL

(4) Simplified Procedure for Holders of Discharge Plans. Holders of an approved discharge plan may amend the discharge plan to provide for disposal of waste listed in Waste Listed in Subsection D, Paragraph (2) of Section 19.15.9.712 and, as applicable, Subsection D, Paragraph (3) of Section 19.15.9.712. If the amendment to the Discharge Plan is approved, wastes listed in Subsection D, Paragraph (2) of Section 19.15.9.712 and Subsection D, Paragraph (3) of Section 19.15.9.712 may be disposed of at a solid waste facility without the necessity of prior written authorization of the Division.

D. Waste Governed By This Section

(1) Waste That Does Not Require Testing Before Disposal:

- (a) Barrels, drums, 5-gallon buckets, 1-gallon containers so long as empty and EPA-clean.
- (b) Uncontaminated brush and vegetation arising from clearing operations.
- (c) Uncontaminated concrete.
- (d) Uncontaminated construction debris.
- (e) Non-friable asbestos and asbestos contaminated waste material, so long as the disposal complies with all applicable federal and state regulations for nonfriable asbestos materials and so long as asbestos is removed from steel pipes and boilers and, if applicable, the steel recycled.
- (f) Detergent buckets, so long as completely empty.
- (g) Fiberglass tanks so long as the tank is empty, cut up or shredded, and EPA clean.
- (h) Grease buckets, so long as empty and EPA clean.
- (i) Uncontaminated ferrous sulfate or elemental sulfur so long as recovery and sale as a raw material is not possible.
- (j) Metal plate and metal cable.
- (k) Office trash.
- (l) Paper and paper bags, so long as empty (paper bags).
- (m) Plastic pit liners, so long as cleaned well.
- (n) Soiled rags or gloves. If wet, must pass Paint Filter Test prior to disposal.
- (o) Uncontaminated wood pallets.

(2) Waste That Must Be Tested:

- (a) Activated alumina must be tested for TPH and BTEX.
- (b) Activated carbon must be tested for TPH and BTEX.
- (c) Amine filters must be tested for BTEX (and air-dried for at least 48 hours before testing).
- (d) Friable asbestos and asbestos-contaminated waste material must be tested pursuant to NESHAP (and so long as the disposal otherwise complies with all applicable federal and state regulations for friable asbestos materials, and so long as asbestos is removed from steel pipes and boilers and, if applicable, the steel should be recycled before disposal).
- (e) Cooling tower filters must be tested for TCLP/chromium (and drained and then air-dried for at least 48 hours before testing).
- (f) Dehydration filter media must be tested for TPH and BTEX (and drained and then air-dried for at least 48 hours before testing).
- (g) Gas condensate filters must be tested for BTEX (and drained and then air-dried for at least 48 hours before testing).
- (h) Glycol filters must be tested for BTEX (and drained and then air-dried for at least 48 hours before testing).
- (i) Iron sponge must be oxidized completely and then undergo Ignitability Testing.
- (j) Junked pipes, valves, and metal pipe must be tested for NORM.
- (k) Molecular sieve must be tested for TPH and BTEX (and must be cooled in a non-hydrocarbon inert atmosphere and hydrated in ambient air for at least 24 hours before testing).
- (l) Pipe scale and other deposits removed from pipeline and equipment must be tested for TPH, TCLP/metals and NORM.
- (m) Produced water filters must be tested for Corrosivity (and drained and then air-dried for at least 48 hours before testing).
- (n) Sandblasting sand must be tested for TCLP/metals or, at the discretion of the Division, TCLP/total metals.
- (o) Waste oil filters must be tested for TCLP/metals (and must be drained thoroughly of oil for at least 24 hours before testing and oil and metal parts must be recycled).

(3) Waste That May Be Disposed Of On A Case-By-Case Basis:

- (a) Sulfur contaminated soil.
- (b) Catalysts.

EXPLANATORY PARAGRAPH: This rule amends NMAC 19.15.9.712 with entirely new material. This is a rule of the Oil Conservation Division, adopted pursuant to the Oil and Gas Act and House Bill 533 of the 45th Legislature, 1st Session. The Rule permits disposal of certain non-domestic waste at solid waste facilities regulated by the New Mexico Environment Department.

19.15.9.712. DISPOSAL OF CERTAIN NON-DOMESTIC WASTE AT SOLID WASTE FACILITIES.

A. General - Certain non-domestic waste arising from the exploration, development, production or storage of crude oil or natural gas, certain nondomestic waste arising from the oil field service industry, and certain non-domestic waste arising from the transportation, treatment or refinement of crude oil or natural gas, may be disposed of at a solid waste facility.

B. Definitions - The following words and phrases have particular meanings for purposes of this section:

(1) "BTEX." The acronym "BTEX" in this section refers to benzene, toluene, ethylbenzene and xylene.

(2) "Discharge Plan." A "discharge plan" is a plan submitted and approved by the Division pursuant to NMSA 1978, Section 70-2-12(B)(22) (2000 Cum.Supp.) and rules and regulations of the Water Quality Control Commission.

(3) "EPA." The acronym "EPA" refers to the United States Environmental Protection Agency.

(4) "EPA Clean." The phrase "EPA Clean" refers to cleanliness standards established by the EPA in 40 C.F.R. Part 261, Section 261.7(b).

(5) "NESHAP." The acronym "NESHAP" refers to the National Emission Standards for Hazardous Air Pollutants of the EPA, 40 C.F.R. Part 61.

(6) "NORM." The acronym "NORM" refers to naturally occurring radioactive materials regulated by 20 NMAC 3.1, Subpart 14.

(7) "Section." "Section" or "this section" refers to Section 19.15.9.712.

(8) "Solid Waste Facility." A "solid waste facility" is a facility permitted or authorized as a solid waste facility by the New Mexico Environment Department pursuant to the Solid Waste Act, NMSA 1978, Sections 74-9-1 *et seq.* and rules and regulations of the Environmental Improvement Board, to accept industrial solid waste or other special waste.

(9) "TCLP" The acronym "TCLP" in this section refers to the testing protocol established by the EPA in 40 C.F.R. Part 261, entitled "Toxicity Characteristic Leaching Procedure" or an alternative hazardous constituent analysis approved by the Division.

(10) "TPH." The acronym "TPH" in this section refers to the phrase "total petroleum hydrocarbons."

(11) "Waste." The word "waste" refers to nondomestic waste resulting from the exploration, development, production or storage of crude oil or natural gas pursuant to NMSA 1978, Section 70-2-12(B)(21) and nondomestic waste arising from the oil field service industry, and certain non-domestic waste arising from the transportation, treatment or refinement of crude oil or natural gas pursuant to NMSA 1978, Section 70-2-12(B)(22).

C. Procedure

(1) Waste Listed in Subsection D, Paragraph (1) of Section 19.15.9.712. Waste listed in Subsection D, Paragraph (1) of Section 19.15.9.712 may be disposed of at a solid waste facility without prior written authorization of the Division.

(2) Waste Listed in Subsection D, Paragraph (2) of Section 19.15.9.712. Waste listed in Subsection D, Paragraph (2) of Section 19.15.9.712 may be disposed of at a solid waste facility after testing and prior written authorization of the Division. Before authorization is granted, copies of test results must be provided to the Division and to the solid waste facility where the waste is to be disposed. Disposal may commence only after written authorization of the Division. In appropriate cases and so long as a representative sample is tested, the Division may authorize disposal of a waste stream listed in Subsection D, Paragraph (2) of Section 19.15.9.712 without individual testing of each delivery.

(3) Waste Listed in Subsection D, Paragraph (3) of Section 19.15.9.712. Waste listed in Subsection D, Paragraph (3) of Section 19.15.9.712 may be disposed of at a solid waste facility on a case-by-case basis after testing required at the discretion of the Division and after prior written authorization of the Division. Before authorization is granted, copies of test results must be provided to the Division and to the solid waste facility where the waste is to be disposed. Disposal may commence only after written authorization of the Division.

(c) Contaminated soil other than petroleum contaminated soil.
(d) Petroleum contaminated soil in the event of an emergency declared by the director.
(e) Contaminated concrete.
(f) Demolition debris not otherwise specified herein.
(g) Unused dry chemicals (in addition to any testing required by the Division, a copy of the Material Safety Data Sheet shall be forwarded to the Division and the solid waste facility on each chemical proposed for disposal).

(h) Contaminated ferrous sulfate or elemental sulfur.

(i) Unused pipe dope.

(j) Support balls.

(k) Tower packing materials.

(l) Contaminated wood pallets.

(m) Partial sacks of unused drilling mud (in addition to any testing required by the Division, a copy of the Material Safety Data Sheet shall be forwarded to Division and the solid waste facility at which the partial sacks will be disposed).

(n) Other wastes as applicable.

E. Testing

(1) General - Testing required herein shall be conducted according to the Test Methods for Evaluating Solid Waste, EPA No. SW-846. Any questions concerning the standards or a particular testing facility should be directed to the Division.

(2) Methodology - Testing must be conducted according to the test method listed:

(a) TPH: EPA method 418.1 or 8015 (D-R-O and G-R-O only) or an alternative hydrocarbon analysis approved by the Division.

(b) TCLP: EPA Method 1311 or an alternative hazardous constituent analysis approved by the Division.

(c) Paint Filter Testing: EPA Method 9095A.

(d) Ignitability Test: EPA Method 1030.

(e) Corrosivity: EPA Method 1110.

(f) Reactivity: Test procedures and standards established on a case-by-case basis by the Division.

(g) NORM. 20 NMAC 3.1, Subpart 14.

(3) Limits - To be eligible for disposal pursuant to this section, substances found during testing shall not exceed the following limits:

(a) Benzene: Less than 10 mg/Kg.

(b) BTEX: Less than 500 mg/Kg (sum of all).

(c) TPH: Shall not exceed 1000 mg/Kg.

(d) Hazardous Air Pollutants: Shall not exceed the standards set forth in NESHAP.

(e) TCLP: Shall not exceed the following:

(i) Arsenic: 5.0 mg/l

(ii) Barium: 100.0 mg/l

(iii) Cadmium: 1.0 mg/l

(iv) Chromium: 5.0 mg/l

(v) Lead: 5.0 mg/l

(vi) Mercury: 0.2 mg/l

(vii) Selenium: 1.0 mg/l

(viii) Silver: 5.0 mg/l



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

March 30, 2001

Lori Wrotenbery
Director
Oil Conservation Division

Mr. Robert G. Hall
Lea Land, Inc.
1300 West Main St.
Oklahoma City, OK 73106

RE: **Lea Land, Inc.**
Commercial Surface Waste Management Facility Application
Section 32, Township 20 South, Range 32 East, NMPM,
Lea County, New Mexico

Dear Mr. Hall:

Please find enclosed copies of all protests that were received regarding the Lea Land, Inc. Commercial Surface Waste Management Facility Application.

If you have any questions please do not hesitate to contact me at (505) 476-3488.

Sincerely,

Martyne J. Kieling
Environmental Geologist

xc with attachments:
Hobbs OCD Office



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

March 30, 2001

Mr. Robert G. Hall
Lea Land, Inc.
1300 West Main Street
Oklahoma City, OK 73106

Re: Application of Lea Land, Inc. for a permit to operate a commercial surface waste management facility, Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico

Dear Mr. Hall,

A timely request for hearing on the above-referenced application has been filed by Controlled Recovery Inc. A copy of the request is enclosed. In addition, a letter has been received from the City of Hobbs suggesting that the application may be of interest to the public of Lea County.

For reasons set forth in the attached Administrative Order, this matter has been referred to the New Mexico Oil Conservation Commission for hearing pursuant to N.M.S.A. 1978, § 70-2-6(B).

The matter will be docketed for hearing during the April 27, 2001 meeting of the Oil Conservation Commission.

Please feel free to give me a call if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen C. Ross".

Stephen C. Ross
Special Assistant Attorney General
Counsel, New Mexico Oil Conservation Commission

Cc: Michael H. Feldewert, Esq.
Lori Wrotenbery, Director, OCD
Roger C. Anderson, Chief, Environmental Bureau
Commission Secretary

ADMINISTRATIVE ORDER NO. MISL.-02

**IN RE: APPLICATION OF LEA LAND, INC. FOR A PERMIT TO OPERATE
A COMMERCIAL SURFACE WASTE MANAGEMENT FACILITY,
SECTION 32, TOWNSHIP 20 SOUTH, RANGE 32 EAST, NMPM, LEA
COUNTY, NEW MEXICO.**

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

THIS MATTER having come before the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department (hereinafter referred to as "the Division") upon request for hearing on the application of Lea Land, Inc. for a permit to operate a commercial surface waste management facility in Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico, and the Director of the Division, having reviewed the above-referenced request for hearing,

FINDS:

1. This hearing has the potential to attract public interest. In addition, one attorney has contacted this office about the matter, representing Controlled Recovery Inc. The matters are highly technical and will require the testimony of experts as well as lay persons. There could be many witnesses to hear and a multitude of exhibits and technical information presented.
2. Were the Division to hear this matter, any resulting order may be appealed to the Oil Conservation Commission (hereinafter referred to as "the Commission") *de novo* pursuant to Rule 1220; if that occurred in this case, the end result would be two long hearings instead of one, at great expense in time and resources to all concerned.
3. The Oil and Gas Act provides that the Director of the Division may refer matters for hearing to the Commission if the Director, in her discretion, determines that the Commission should hear the matter. *See* N.M.S.A. 1978, § 70-2-6(B).
4. Because of the potential that two hearings may ultimately be held in this matter instead of one, this matter should be referred directly to the Commission for hearing.

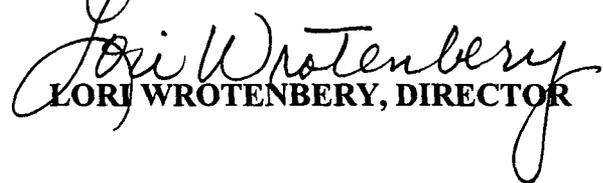
Administrative Order Misl.-02
Lea Land Incorporated
March 30, 2001
Page 2

IT IS THEREFORE ORDERED, AS FOLLOWS:

This matter is hereby referred to the Oil Conservation Commission for docketing before that body.

DONE at Santa Fe, New Mexico, this 30th day of March, 2001.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY, DIRECTOR

SEAL

Cc: Parties and attorneys of record
Roger C. Anderson, Chief, Environmental Bureau
Counsel, Oil Conservation Commission
Commission Secretary

HOLLAND & HART LLP
and
CAMPBELL & CARR

ATTORNEYS AT LAW

DENVER • ASPEN
BOULDER • COLORADO SPRINGS
DENVER TECH CENTER
BILLINGS • BOISE • CASPER
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FACSIMILE (505) 983-6043

Michael H. Feldewert
(505) 988-4421
(505) 983-6043 Fax
mfeldewert@hollandhart.com

March 22, 2001

Via Hand Delivery

Lori Wrotenbery, Director
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Lea Land Inc.
Commercial Surface Waste Management Facility Application
Section 32, T-20-S, R-32-E
Lea County, New Mexico

Dear Ms. Wrotenbery:

Controlled Recovery Inc. ("CRI") hereby requests a public hearing on the above referenced application to address engineering, geological, health, economic and environmental concerns raised by the application.

CRI was unable to obtain until Monday of this week (March 19th) a copy of the supplemental information submitted by Lea Land or the proposed conditions of approval. CRI is therefore not in a position to offer specific objections to the application at this time. CRI intends to have the complete application and proposed conditions of approval reviewed by an engineer (Mark Turnbough) and a geologist (James Woods) as quickly as possible and intends to call these individuals to testify at the hearing.

Mr. Woods has indicated that he requires at least thirty days to conduct his geologic, health and environmental evaluation of the application. Mr. Turnbough likewise requires additional time to review the recently acquired materials. Because of the schedules of these witnesses, counsel, and CRI's representatives, CRI respectfully requests that any hearing on this matter be set no earlier than June 1st.

Your attention to this request is appreciated.

OIL CONSERVATION DIV.
01 MAR 22 PM 3:35

HOLLAND & HART^{LLP}
ATTORNEYS AT LAW

Roger Anderson
March 22, 2001
Page 2

Sincerely,



Michael H. Feldewert

MHF

cc: Roger Anderson, Environmental Bureau Chief
Ken Marsh

Mark Turnbough, PhD
Systems & Environmental
Consulting
213 South Camino Del Pueblo
Bernallilo, New Mexico 87004
Ph 505 867 6990
Fax 505 867 6991

RECEIVED
MAR 22 2001
CONSERVATION DIVISION

March 20, 2001

Mr. Roger Anderson
Environmental Bureau Chief
Oil Conservation Division
Energy, Minerals and Natural Resources Department
1220 South St Francis Drive
Santa Fe, New Mexico 87505

Subject: Lea Land, Inc.
Commercial Surface Waste Management Facility Application
Section 32, Township 20 South, Range 32 East, NMPM,
Lea County, New Mexico

Dear Mr. Anderson:

I have been retained by CRI, Inc. to review the Lea Land, Inc. application for an OCD permit to operate a Commercial Surface Waste Management Facility at the Lea Land Subtitle D disposal facility located near Halfway.

Based on available information, it appears that the land area under consideration for an OCD permit overlaps part of the Lea Land property that is included within the solid waste facility boundary established under the solid waste permit issued by the New Mexico Environment Department (NMED). Given the lack of regulatory clarity regarding the co-management and disposal of "solid waste" as defined by NMED and non-hazardous "oil and gas waste" as defined by NMED and OCD, as well as changes interjected into the process by New Mexico House Bill 533 which was signed into law on March 16, 2001 by Governor Johnson, we think that the Lea Land application is deficient with respect to the need for a detailed waste acceptance plan and a disposal management plan for handling co-mingled waste streams inside overlapping jurisdictional boundaries.

In part, we are requesting a hearing on the permit because we think that the application does not adequately deal with waste acceptance criteria for at least two jurisdictionally different waste streams on the same property.

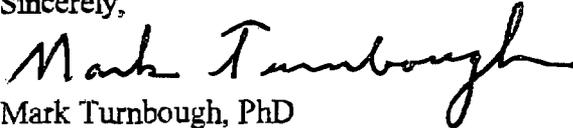
If given the opportunity to participate at a hearing, we would be prepared to discuss in detail what we think is required for a waste acceptance plan that would comply with OCD rules under the unique circumstances created by the applicant on the Lea Land property.

Moreover, it is our opinion that OCD's decision to permit a second Commercial Surface Waste Management Facility within a radius of two miles requires a hearing to assure the public that conditions controlling operations at Lea Land would not result in unfair competition between two facilities essentially co-located at the virtual centroid of the same market area. In some respects, this concern is related to questions previously raised about waste acceptance requirements.

If you have questions about this request on behalf of CRI, Inc. please contact me at 505 867 6990.

We appreciate your attention to this matter.

Sincerely,

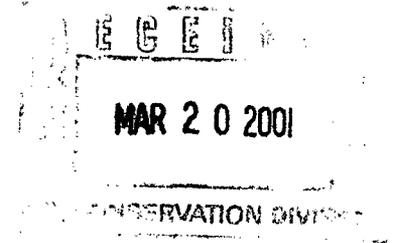


Mark Turnbough, PhD
Consultant



**NESCO - NEW MEXICO, INC.
ECOLO SOUTHWEST LLC**

P.O. Box 1417
Socorro, New Mexico 87801
(505) 835-0377 • 835-0573



March 19, 2000

Mr. Roger C. Anderson
Environmental Bureau Chief
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Lea Land, Ic.
Commercial Surface WasteManagement Facility Application
Section 32, Township 20 South, Range 32 East
Lea County, New Mexico

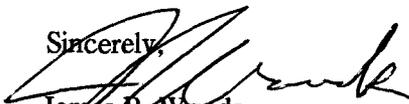
Dear Mr. Roger Anderson:

I herewith request a hearing on the proposed application.

I am very concerned abput how this facility could affect the health and environmental welfare of humans as well as livestock and wildlife in the surrounding area.

I request a thirty day period to research the environmental and health problems that this facility may cause to Lea County and New Mexico.

Sincerely,



James R. Woods
Geologist

NMPRC Corporation Information Inquiry

- [Follow this link to start a new search.](#)
-

NESCO, INC.

(OKLAHOMA Corporation)

SCC Number: **1578103**
Tax & Revenue Number:
Qualification Date: **AUGUST 19, 1992, in NEW MEXICO**
Corporation Type: **FOREIGN PROFIT**
Corporation Status: **ACTIVE**
Good Standing: **In GOOD STANDING through 3/15/2002**
Purpose: **ENVIRONMENTAL SERVICES RE: UST'S**

CORPORATION DATES

Taxable Year End Date: 12/31/99
Filing Date: 03/15/00
Expiration Date:

SUPPLEMENTAL POST MARK DATES

Supplemental: 03/10/98
Name Change:
Purpose Change:

MAILING ADDRESS

12331 EAST 60TH ST. TULSA , OKLAHOMA 74146

PRINCIPAL ADDRESS

PRINCIPAL ADDRESS (Outside New Mexico)

12331 EAST 60TH ST. TULSA OKLAHOMA 74146

REGISTERED AGENT

UNITED CORPORATE SERVICES, INC.

200 W. MARCY ST. #129 SANTA FE NEW MEXICO 87501

Designation date: 03/15/00

Agent Post Mark Date:

Resignation date:

COOP LICENSE INFORMATION

Number:

Type:

Expiration Year:

OFFICERS

President *AOWELL, JAMES*

Vice President *JOHNSON, LARRY*

Secretary *NONE*

Treasurer *NONE*

DIRECTORS

Date Election of Directors:

BAGLEY, DALLIN F 12331 EAST 60TH ST. TULSA , OK 74146

FORAKER, EDWARD R 12331 EAST 60TH ST. TULSA , OK 74146

MCCUTCHAN, ALBERT G 12331 EAST 60TH ST. TULSA , OK 74146

PATTERSON, EDDY 12331 EAST 60TH ST. TULSA , OK 74146

NMPRC Corporation Information Inquiry

- [Follow this link to start a new search.](#)

ECOLO SOUTHWEST, L.L.C.

SCC Number: **2032217**
Tax & Revenue Number:
Organization Date: **SEPTEMBER 29, 1999, in NEW MEXICO**
Organization Type: **DOMESTIC LIMITED LIABILITY**
Organization Status: **EXEMPT**
Good Standing:
Purpose: **NOT REQUIRED**

ORGANIZATION DATES

Taxable Year End Date:
Filing Date: //
Expiration Date: 12/31/2028

SUPPLEMENTAL POST MARK DATES

Supplemental:
Name Change:
Purpose Change:

MAILING ADDRESS

115 COURT ST SOCORRO , NEW MEXICO 87801

PRINCIPAL ADDRESS

115 COURT ST SOCORRO NEW MEXICO 87801

PRINCIPAL ADDRESS (Outside New Mexico)

REGISTERED AGENT

JAMES R. WOODS

115 COURT ST SOCORRO NEW MEXICO 87801

Designation date: 09/29/99

Agent Post Mark Date:

Resignation date:

COOP LICENSE INFORMATION

Number:

Type:

Expiration Year:

ORGANIZERS

WOODS, JAMES R.

DIRECTORS

Date Election of Directors:



THE CITY OF
HOBBS, NEW MEXICO

(505) 397-9206 • 300 NORTH TURNER • HOBBS, NEW MEXICO 88240
FAX (505) 397-9334

OFFICE OF THE MAYOR

RECEIVED

MAR 23 2001

Environmental Bureau
Oil Conservation Division

March 20, 2001

Mr. Roger C. Anderson
Environmental Bureau Chief
New Mexico Energy, Minerals and
Natural Resources Department
Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

RE: Lea Land, Inc.
Commercial Surface Waste Management Facility Application
Section 32, Township 20 South, Range 32 East, NMPM
Lea County, New Mexico

Dear Mr. Anderson:

The City of Hobbs has been approached by several local businesses to ask that you proceed with a public hearing on the application for Lea Land, Inc. The City of Hobbs does not have an adverse position to this application, but we think it may be beneficial for the local business climate in our area to have a public hearing in order to have a public record of these activities.

Again, we do not have an objection to this application and make this suggestion in hopes of keeping open lines of communications for the businesses in our area.

If you have any questions or require additional information, please feel to contact me.

Sincerely,

THE CITY OF HOBBS, NEW MEXICO

Jimmy E. Woodfin
Mayor

JEW/bc

**Mark Turnbough, PhD
Systems & Environmental
Consulting
213 South Camino Del Pueblo
Bernallilo, New Mexico 87004
Ph 505 867 6990
Fax 505 867 6991**

March 20, 2001

Mr. Roger Anderson
Environmental Bureau Chief
Oil Conservation Division
Energy, Minerals and Natural Resources Department
1220 South St Francis Drive
Santa Fe, New Mexico 87505

Subject: **Lea Land, Inc.
Commercial Surface Waste Management Facility Application
Section 32, Township 20 South, Range 32 East, NMPM,
Lea County, New Mexico**

Dear Mr. Anderson:

I have been retained by CRI, Inc. to review the Lea Land, Inc. application for an OCD permit to operate a Commercial Surface Waste Management Facility at the Lea Land Subtitle D disposal facility located near Halfway.

Based on available information, it appears that the land area under consideration for an OCD permit overlaps part of the Lea Land property that is included within the solid waste facility boundary established under the solid waste permit issued by the New Mexico Environment Department (NMED). Given the lack of regulatory clarity regarding the co-management and disposal of "solid waste" as defined by NMED and non-hazardous "oil and gas waste" as defined by NMED and OCD, as well as changes interjected into the process by New Mexico House Bill 533 which was signed into law on March 16, 2001 by Governor Johnson, we think that the Lea Land application is deficient with respect to the need for a detailed waste acceptance plan and a disposal management plan for handling co-mingled waste streams inside overlapping jurisdictional boundaries.

In part, we are requesting a hearing on the permit because we think that the application does not adequately deal with waste acceptance criteria for at least two jurisdictionally different waste streams on the same property.

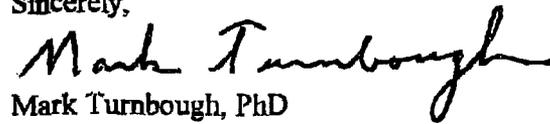
If given the opportunity to participate at a hearing, we would be prepared to discuss in detail what we think is required for a waste acceptance plan that would comply with OCD rules under the unique circumstances created by the applicant on the Lea Land property.

Moreover, it is our opinion that OCD's decision to permit a second Commercial Surface Waste Management Facility within a radius of two miles requires a hearing to assure the public that conditions controlling operations at Lea Land would not result in unfair competition between two facilities essentially co-located at the virtual centroid of the same market area. In some respects, this concern is related to questions previously raised about waste acceptance requirements.

If you have questions about this request on behalf of CRI, Inc. please contact me at 505 867 6990.

We appreciate your attention to this matter.

Sincerely,



Mark Turnbough, PhD
Consultant

Controlled Recovery, Inc.
P.O. Box 388 Hobbs, NM 88241
Phone: (505)393-1079 Fax: (505)393-3615



To: ROGER ANDERSON **From:** KEN MARSH

Fax: 505-476-3462 **Pages:** 3, INCLUDING COVER

Phone: **Date:** 3-20-01

Re: **CC:**

Urgent For Review Please Comment Please Reply Please Recycle

● **Comments**



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

March 1, 2001

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFIED MAIL

RETURN RECEIPT NO. 7099-3220-0000-5051-2085

Mr. Robert G. Hall
Lea Land, Inc.
1300 West Main St.
Oklahoma City, OK 73106

**RE: Lea Land, Inc.
Commercial Surface Waste Management Facility Application
Section 32, Township 20 South, Range 32 East, NMPM,
Lea County, New Mexico**

Dear Mr. Hall:

Lea Land, Inc.'s proposed commercial surface waste management facility application and supplemental information has been reviewed by the OCD and it has been determined that it is in compliance with all Division rules and regulations and could be administratively approved subject to the attached conditions.

If Lea Land, Inc. has any objections to the permit conditions and you wish to present testimony at a hearing, please submit a request for hearing by March 22, 2001. The request should include a concise statement of objections or concerns and a summary of the evidence you will present at hearing. If the Director determines that Lea Land has significant additional information to offer, the matter will be set for hearing. At the hearing the applicant and intervenors will present technical testimony to an examiner. Based on the merits of the testimony the examiner will make an independent decision regarding the permit application.

If no request for hearing is received by March 22, 2001 then the application will be administratively approved. If you have any questions please do not hesitate to contact me at (505) 476-3490.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

xc with attachments:
Hobbs OCD Office

DRAFT OCD 711 PERMIT CONDITIONS
LEA LAND, INC.
SURFACE WASTE MANAGEMENT FACILITY
Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico
(March 1, 2001)

LANDFILL CONSTRUCTION

1. Construction must commence on the landfill facility within one (1) year of the permit approval date. If construction does not commence within one (1) year of the permit approval date, this permit will be of no effect.
2. The facility must be fenced and have a sign at the entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) permit number; c) location by section, township and range; and c) emergency phone number.
3. Landfill waste cells may not be constructed within one hundred (100) feet of the boundary of the facility.
4. Landfill cells may not be constructed within twenty (20) feet of any pipeline crossing the facility. In addition, no equipment will be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.
5. The landfill waste cells, storm water runoff collection system and leachate collection pond must be constructed according to Attachment 7, "Facility Design and Construction," of the Lea Land application proposal dated December 20, 1999, the corrected application proposal dated November 20, 2000, and the supplemental information dated February 06, 2001.
6. The leachate collection system within Waste Cell 1 will consist of four (4) inch slotted pipes sloped 2% north and 2% east to form a sump in the northeast corner. A four (4) inch riser pipe will extend from the sump to above the lined berm. Nested within the four (4) inch riser pipe will be a two (2) inch pipe. The exterior four (4) inch pipe will have a locking cover and cap. The riser will allow for a measuring devise to be lowered to check for the presence of leachate and for a pump to be inserted to drain any leachate that collects. Additional cells will be constructed to these specifications.
7. All above-ground tanks, saddle tanks, drums, buckets or containers located at the facility and containing materials other than fresh water must be placed on an impermeable pad with curb containment. The pad and curb containment must be able to hold one and one-third the volume of the largest tank or all interconnected tanks. The tanks and containers must be labeled as to contents and hazards.

OVERALL FACILITY OPERATION

1. Disposal may occur only when an attendant is on duty. The facility must be secured to prevent unauthorized disposal when no attendant is present.
2. The facility must be maintained such that there will be no contaminated storm water runoff beyond the boundaries of the facility.
3. No more than two, two and three quarter ($2 \frac{3}{4}$) acre landfill cells will be constructed and open at any given time.
4. The OCD must be notified prior to the construction of a new cell. Lea Land must submit the design and placement plan for the cell to the OCD.
5. The OCD must be notified when final closure of a cell has been attained.
6. The landfill cells may not contain any free liquid. Any ponding of precipitation must be removed within 24 hours of discovery.
7. Landfill cell inspection and maintenance must be conducted on at least a daily basis and immediately following each consequential rainstorm or windstorm. If any defect is noted, repairs must be made as soon as possible. If the defect will jeopardize the integrity of the landfill, the OCD Hobbs office must be notified within 24 hours and the landfill may not be operated until repairs have been completed. Records of such inspections must be made available to the OCD upon request.
8. Cover material must be applied to the working face of the landfill at the end of each day to control odors, vectors, and blowing litter.
9. The facility must be inspected on a regular basis for litter that may have blown out of the landfill. Stray litter including trapped litter in vegetation or fencing, must be picked up and returned to the landfill cell.
10. To prevent over-topping all ponds that contain liquids must have a minimum freeboard of one and a half ($1 \frac{1}{2}$) feet. A device or mark must be installed in the ponds to accurately measure freeboard.
11. Pond inspections must be conducted on a weekly basis or immediately following a consequential rainstorm or windstorm. If any defect is noted, repairs must be made as soon as possible. If the defect will jeopardize the integrity of the pond, the OCD Santa Fe and Hobbs office must be notified within 24 hours and additional wastes may not be placed into the pond until repairs have been completed. Records of such inspections must be made available to the OCD upon request.

12. The leachate collection sump of each cell must be inspected on a weekly basis and fluid must be removed when detected to prevent overflow. Records of such inspections must be made available to the OCD upon request.
 13. Analytical results regarding leachate collection pond solids or liquids must be submitted to the OCD Santa Fe office, with a copy to the Hobbs District office, along with any request to remove the liquids or solids.
 14. Free oil within the ponds must be removed daily. Per Division Rule 310, oil shall not be stored or retained in earthen reservoirs or in open receptacles.
 15. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits and ponds shall be screened, netted or covered. An exception may be granted upon showing through written application that an alternative method will protect migratory birds or that the facility is not hazardous to migratory birds. OCD application Form C-134 must be used.
 16. Within 24 hours of receiving notification from the OCD that an objectionable odor has been detected or reported, the facility must implement the following response procedure:
 - a. log date and approximate time of notice that an odor exists;
 - b. log investigative steps taken, including date and time, and conclusions reached; and
 - c. log actions taken to alleviate the odor, which may include covering, landfarming, adjusting chemical treatment, air sparging or other similar responses.
- A copy of the log, signed and dated by the facility manager, must be maintained for OCD review.
17. Any major design changes to the surface waste management facility must be submitted to the OCD Santa Fe office for approval.
 18. The OCD must be notified prior to the installation of any pipelines or wells or other construction within the boundaries of the facility.

LANDFARMING OPERATION

1. Treatment of petroleum contaminated soils by landfarming may be done inside the landfill cells.
2. All petroleum contaminated soils received at the facility with greater than 1500 ppm total petroleum hydrocarbons (TPH), 50 ppm benzene, toluene, ethylbenzene and xylene (BTEX), and 10 ppm benzene must be spread for treatment within 72 hours of receipt.

3. Soils must be spread on the surface in lifts of six inches or less.
4. Soils must be disked or turned a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
5. Landfarmed petroleum contaminated soils may be used as daily cover within the landfill when a laboratory measurement of TPH is less than or equal to 1500 ppm, BTEX is less than or equal to 50 ppm, and benzene is less than or equal to 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations must be maintained at the facility for OCD review.
6. The soil samples must be analyzed using EPA-approved methods TPH and BTEX.
7. Authorization from the OCD must be obtained prior to removal of the remediated soils for beneficial use outside of the landfill cell.

REPORTING AND RECORD KEEPING

1. Lea Land must notify the **OCD Santa Fe and Hobbs offices within 24 hours** of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
2. Records of facility, landfill cell and pond inspections and any maintenance must be kept and maintained for OCD review.
3. Records of leachate collection system inspection and any maintenance must be kept and maintained for OCD review.
4. Lea Land must submit a yearly report regarding the leachate collection system and collection pond. The report must include the volume of leachate removed from the system, dates fluid was removed, and any maintenance or repairs on the system.
5. Records of the landfarm soil laboratory analyses and the sampling locations must be maintained at the facility for OCD review.
6. The Attachment 9, "Routine Inspection and Maintenance Plan," of the Lea Land corrected application proposal dated November 20, 2000 must be followed.
7. Comprehensive records of all material disposed of at the facility must be maintained at the facility. Lea Land must maintain for inspection the records for each calendar month on the generator, location, volume and type of waste, date of disposal, and hauling company that disposes of material in the facility. Records shall be maintained for a period of not less than five years.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only:
 - a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material regulated pursuant to 20 NMAC 3.1 Subpart 1403 (NORM). All loads of these wastes other than wastes returned from the well bore in the normal course of well operations, such as produced water and spent treating fluids, received at the facility shall be accompanied by a "Generator Certificate of Waste Status" signed by the generator.
 - b. "Non-hazardous" non-exempt oilfield wastes that do not contain NORM. These wastes may be accepted on a case-by-case basis after a hazardous waste determination is made. Samples, if required, must be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures. All "non-hazardous" non-exempt wastes received at the facility must be accompanied by:
 - i. An approved OCD Form C-138 "Request For Approval To Accept Solid Waste."
 - ii. A "Generator Certificate of Waste Status" signed by the generator.
 - iii. A verification of waste status issued by the appropriate agency, for wastes generated outside OCD jurisdiction. The agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the exempt or non-hazardous classification of the waste.
 - c. Non-oilfield wastes that are non-hazardous if ordered by the Department of Public Safety in a public health emergency. OCD approval must be obtained prior to accepting the wastes.
2. At no time may any OCD-permitted surface waste management facility accept wastes that are hazardous by either listing or characteristic testing.
3. Waste containing mercaptans (Thiols) must be treated to eliminate odor prior to receipt into the facility.
4. No free liquids or waste with free liquids may be accepted into the landfill. Materials that may be accepted into the landfill facility must pass a paint filter test by EPA Method 9095A prior to disposal.

5. Petroleum contaminated soils may be accepted for disposal or cover material without treatment by landfarming if the TPH is less than 1500 parts per million (ppm), the sum of all BTEX is less than 50 ppm, and benzene is less than 10 ppm.
6. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

FINANCIAL ASSURANCE

1. Financial assurance in the amount of **\$66,447** in the form of a surety or cash bond or a letter of credit, which is approved by the Division, is required from Lea Land, Inc. for the commercial surface waste management facility.

By April 23, 2001 Lea Land, Inc. must submit financial assurance in the amount of **\$25,000**.

By April 23, 2002 or when the facility is filled to 50% of the permitted capacity that is allowed to be open at any one time, whichever comes first, Lea Land, Inc. must submit financial assurance in the amount of **\$33,223**.

By April 23, 2003 or when the facility is filled to 75% of the permitted capacity that is allowed to be open at any one time, whichever comes first, Lea Land, Inc. must submit financial assurance in the amount of **\$49,835**.

By April 23, 2003 or when the facility is filled to 100% of the permitted capacity that is allowed to be open at any one time, whichever comes first, Lea Land, Inc. must submit financial assurance in the amount of **\$66,447**.

2. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed no later than five (5) years from the date of this approval. In addition, the closure cost estimate will be reviewed according to prices and remedial work estimates at the time of review. The financial assurance may be adjusted to incorporate any closure cost changes.

CLOSURE

1. The OCD Santa Fe and Hobbs offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility, the operator must submit a closure plan to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan

approval, unless an extension of time is granted by the Director.

2. The closure plan to be submitted must include the following procedures:

- a. When the facility is to be closed no new material may be accepted.
- b. The storm water and leachate collection ponds must be allowed to evaporate and must be closed according to an approved closure plan. Any leachate water not evaporated will be hauled to an OCD-approved facility. Any storm water not evaporated may be used beneficially to close the facility.
- c. The ponds must be surveyed for NORM.
- d. The landfill cells must be closed according to an approved closure plan that includes a post closure care period.
- e. Contaminated soils exceeding 1500 parts per million (ppm) total petroleum hydrocarbons (TPH), 50 ppm benzene, toluene, ethylbenzene and xylene (BTEX) and 10 ppm benzene must be landfarmed prior to closure of the landfill or removed to an OCD-approved facility.
- f. The area must be contoured, seeded with a native seed mix and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, and fences for future alternative uses the structures may be left in place.
- g. Closure must be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

Lea Land, Inc. by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Lea Land, Inc. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, public health and the environment.

Accepted:

LEA LAND, INC.

Signature _____ Title _____ Date _____



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

March 1, 2001

Lori Wrotenbery

Director

Oil Conservation Division

CERTIFIED MAIL

RETURN RECEIPT NO. 7099-3220-0000-5051-2078

Mr. Ken Marsh
Controlled Recovery, Inc.
P.O. Box 388
Hobbs, NM 88241-0388

RE: **Lea Land, Inc.
Commercial Surface Waste Management Facility Application
Section 32, Township 20 South, Range 32 East, NMPM,
Lea County, New Mexico**

Dear Mr. Marsh:

Lea Land, Inc.'s proposed commercial surface waste management facility application and supplemental information has been reviewed by the OCD and it has been determined that it is in compliance with all Division rules and regulations and could be administratively approved subject to the attached conditions.

You have filed an objection to the application of Lea Land, Inc. If your objections to the application have not been addressed here in and you wish to present testimony at a hearing, please submit a request for hearing by March 22, 2001. The request should include a concise statement of objections or concerns and a summary of the evidence you will present at hearing. If the Director determines that intervenors have significant additional information to offer, the matter will be set for hearing. At the hearing the applicant and intervenors will present technical testimony to an examiner. Based on the merits of the testimony the examiner will make an independent decision regarding the permit application. Please be advised that the OCD cannot consider land use or zoning requirements when evaluating surface waste management applications.

If no request for hearing is received by March 22, 2001 then the application will be administratively approved. If you have any questions please do not hesitate to contact me at (505) 476-3490.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

xc: Hobbs OCD Office
Mr. Bob Hall, Lea Land Inc.
Mr. Michael Feldewert

DRAFT OCD 711 PERMIT CONDITIONS
LEA LAND, INC.
SURFACE WASTE MANAGEMENT FACILITY
Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico
(March 1, 2001)

LANDFILL CONSTRUCTION

1. Construction must commence on the landfill facility within one (1) year of the permit approval date. If construction does not commence within one (1) year of the permit approval date, this permit will be of no effect.
2. The facility must be fenced and have a sign at the entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) permit number; c) location by section, township and range; and c) emergency phone number.
3. Landfill waste cells may not be constructed within one hundred (100) feet of the boundary of the facility.
4. Landfill cells may not be constructed within twenty (20) feet of any pipeline crossing the facility. In addition, no equipment will be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.
5. The landfill waste cells, storm water runoff collection system and leachate collection pond must be constructed according to Attachment 7, "Facility Design and Construction," of the Lea Land application proposal dated December 20, 1999, the corrected application proposal dated November 20, 2000, and the supplemental information dated February 06, 2001.
6. The leachate collection system within Waste Cell 1 will consist of four (4) inch slotted pipes sloped 2% north and 2% east to form a sump in the northeast corner. A four (4) inch riser pipe will extend from the sump to above the lined berm. Nested within the four (4) inch riser pipe will be a two (2) inch pipe. The exterior four (4) inch pipe will have a locking cover and cap. The riser will allow for a measuring devise to be lowered to check for the presence of leachate and for a pump to be inserted to drain any leachate that collects. Additional cells will be constructed to these specifications.
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OVERALL FACILITY OPERATION

1. Disposal may occur only when an attendant is on duty. The facility must be secured to prevent unauthorized disposal when no attendant is present.
2. The facility must be maintained such that there will be no contaminated storm water runoff beyond the boundaries of the facility.
3. No more than two, two and three quarter ($2 \frac{3}{4}$) acre landfill cells will be constructed and open at any given time.
4. The OCD must be notified prior to the construction of a new cell. Lea Land must submit the design and placement plan for the cell to the OCD.
5. The OCD must be notified when final closure of a cell has been attained.
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8. Cover material must be applied to the working face of the landfill at the end of each day to control odors, vectors, and blowing litter.
9. The facility must be inspected on a regular basis for litter that may have blown out of the landfill. Stray litter including trapped litter in vegetation or fencing, must be picked up and returned to the landfill cell.
10. To prevent over-topping all ponds that contain liquids must have a minimum freeboard of one and a half ($1 \frac{1}{2}$) feet. A device or mark must be installed in the ponds to accurately measure freeboard.
11. Pond inspections must be conducted on a weekly basis or immediately following a consequential rainstorm or windstorm. If any defect is noted, repairs must be made as soon as possible. If the defect will jeopardize the integrity of the pond, the OCD Santa Fe and Hobbs office must be notified within 24 hours and additional wastes may not be placed into the pond until repairs have been completed. Records of such inspections must be made available to the OCD upon request.

12. The leachate collection sump of each cell must be inspected on a weekly basis and fluid must be removed when detected to prevent overflow. Records of such inspections must be made available to the OCD upon request.
13. Analytical results regarding leachate collection pond solids or liquids must be submitted to the OCD Santa Fe office, with a copy to the Hobbs District office, along with any request to remove the liquids or solids.
14. Free oil within the ponds must be removed daily. Per Division Rule 310, oil shall not be stored or retained in earthen reservoirs or in open receptacles.
15. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits and ponds shall be screened, netted or covered. An exception may be granted upon showing through written application that an alternative method will protect migratory birds or that the facility is not hazardous to migratory birds. OCD application Form C-134 must be used.
16. Within 24 hours of receiving notification from the OCD that an objectionable odor has been detected or reported, the facility must implement the following response procedure:
 - a. log date and approximate time of notice that an odor exists;
 - b. log investigative steps taken, including date and time, and conclusions reached; and
 - c. log actions taken to alleviate the odor, which may include covering, landfarming, adjusting chemical treatment, air sparging or other similar responses.

A copy of the log, signed and dated by the facility manager, must be maintained for OCD review.
17. Any major design changes to the surface waste management facility must be submitted to the OCD Santa Fe office for approval.
18. The OCD must be notified prior to the installation of any pipelines or wells or other construction within the boundaries of the facility.

LANDFARMING OPERATION

1. Treatment of petroleum contaminated soils by landfarming may be done inside the landfill cells.
2. All petroleum contaminated soils received at the facility with greater than 1500 ppm total petroleum hydrocarbons (TPH), 50 ppm benzene, toluene, ethylbenzene and xylene (BTEX), and 10 ppm benzene must be spread for treatment within 72 hours of receipt.

3. Soils must be spread on the surface in lifts of six inches or less.
4. Soils must be disked or turned a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
5. Landfarmed petroleum contaminated soils may be used as daily cover within the landfill when a laboratory measurement of TPH is less than or equal to 1500 ppm, BTEX is less than or equal to 50 ppm, and benzene is less than or equal to 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations must be maintained at the facility for OCD review.
6. The soil samples must be analyzed using EPA-approved methods TPH and BTEX.
7. Authorization from the OCD must be obtained prior to removal of the remediated soils for beneficial use outside of the landfill cell.

REPORTING AND RECORD KEEPING

1. Lea Land must notify the **OCD Santa Fe and Hobbs offices within 24 hours** of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
2. Records of facility, landfill cell and pond inspections and any maintenance must be kept and maintained for OCD review.
3. Records of leachate collection system inspection and any maintenance must be kept and maintained for OCD review.
4. Lea Land must submit a yearly report regarding the leachate collection system and collection pond. The report must include the volume of leachate removed from the system, dates fluid was removed, and any maintenance or repairs on the system.
5. Records of the landfarm soil laboratory analyses and the sampling locations must be maintained at the facility for OCD review.
6. The Attachment 9, "Routine Inspection and Maintenance Plan," of the Lea Land corrected application proposal dated November 20, 2000 must be followed.
7. Comprehensive records of all material disposed of at the facility must be maintained at the facility. Lea Land must maintain for inspection the records for each calendar month on the generator, location, volume and type of waste, date of disposal, and hauling company that disposes of material in the facility. Records shall be maintained for a period of not less than five years.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only:
 - a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material regulated pursuant to 20 NMAC 3.1 Subpart 1403 (NORM). All loads of these wastes other than wastes returned from the well bore in the normal course of well operations, such as produced water and spent treating fluids, received at the facility shall be accompanied by a "Generator Certificate of Waste Status" signed by the generator.
 - b. "Non-hazardous" non-exempt oilfield wastes that do not contain NORM. These wastes may be accepted on a case-by-case basis after a hazardous waste determination is made. Samples, if required, must be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures. All "non-hazardous" non-exempt wastes received at the facility must be accompanied by:
 - i. An approved OCD Form C-138 "Request For Approval To Accept Solid Waste."
 - ii. A "Generator Certificate of Waste Status" signed by the generator.
 - iii. A verification of waste status issued by the appropriate agency, for wastes generated outside OCD jurisdiction. The agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the exempt or non-hazardous classification of the waste.
 - c. Non-oilfield wastes that are non-hazardous if ordered by the Department of Public Safety in a public health emergency. OCD approval must be obtained prior to accepting the wastes.
2. At no time may any OCD-permitted surface waste management facility accept wastes that are hazardous by either listing or characteristic testing.
3. Waste containing mercaptans (Thiols) must be treated to eliminate odor prior to receipt into the facility.
4. No free liquids or waste with free liquids may be accepted into the landfill. Materials that may be accepted into the landfill facility must pass a paint filter test by EPA Method 9095A prior to disposal.

5. Petroleum contaminated soils may be accepted for disposal or cover material without treatment by landfarming if the TPH is less than 1500 parts per million (ppm), the sum of all BTEX is less than 50 ppm, and benzene is less than 10 ppm.
6. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

FINANCIAL ASSURANCE

1. Financial assurance in the amount of **\$66,447** in the form of a surety or cash bond or a letter of credit, which is approved by the Division, is required from Lea Land, Inc. for the commercial surface waste management facility.

By April 23, 2001 Lea Land, Inc. must submit financial assurance in the amount of **\$25,000**.

By April 23, 2002 or when the facility is filled to 50% of the permitted capacity that is allowed to be open at any one time, whichever comes first, Lea Land, Inc. must submit financial assurance in the amount of **\$33,223**.

By April 23, 2003 or when the facility is filled to 75% of the permitted capacity that is allowed to be open at any one time, whichever comes first, Lea Land, Inc. must submit financial assurance in the amount of **\$49,835**.

By April 23, 2003 or when the facility is filled to 100% of the permitted capacity that is allowed to be open at any one time, whichever comes first, Lea Land, Inc. must submit financial assurance in the amount of **\$66,447**.

2. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed no later than five (5) years from the date of this approval. In addition, the closure cost estimate will be reviewed according to prices and remedial work estimates at the time of review. The financial assurance may be adjusted to incorporate any closure cost changes.

CLOSURE

1. The OCD Santa Fe and Hobbs offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility, the operator must submit a closure plan to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan

approval, unless an extension of time is granted by the Director.

2. The closure plan to be submitted must include the following procedures:
 - a. When the facility is to be closed no new material may be accepted.
 - b. The storm water and leachate collection ponds must be allowed to evaporate and must be closed according to an approved closure plan. Any leachate water not evaporated will be hauled to an OCD-approved facility. Any storm water not evaporated may be used beneficially to close the facility.
 - c. The ponds must be surveyed for NORM.
 - d. The landfill cells must be closed according to an approved closure plan that includes a post closure care period.
 - e. Contaminated soils exceeding 1500 parts per million (ppm) total petroleum hydrocarbons (TPH), 50 ppm benzene, toluene, ethylbenzene and xylene (BTEX) and 10 ppm benzene must be landfarmed prior to closure of the landfill or removed to an OCD-approved facility.
 - f. The area must be contoured, seeded with a native seed mix and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, and fences for future alternative uses the structures may be left in place.
 - g. Closure must be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

Lea Land, Inc. by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Lea Land, Inc. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, public health and the environment.

Accepted:

LEA LAND, INC.

Signature _____ Title _____ Date _____

HOLLAND & HART^{LLP}
and
CAMPBELL & CARR

ATTORNEYS AT LAW

P.O. BOX 2208

SANTA FE, NEW MEXICO 87504-2208

110 NORTH GUADALUPE, SUITE 1

SANTA FE, NEW MEXICO 87501

TELEPHONE (505) 988-4421

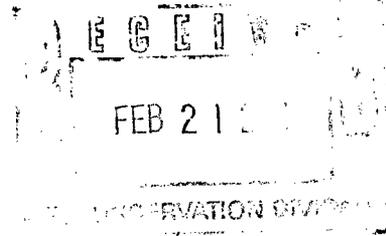
FACSIMILE (505) 983-6043

MICHAEL H. FELDEWERT

mfeldewert@westofpecos.com

DENVER • ASPEN
BOULDER • COLORADO SPRINGS
DENVER TECH CENTER
BILLINGS • BOISE • CASPER
CHEYENNE • JACKSON HOLE
SALT LAKE CITY • SANTA FE
WASHINGTON, D.C.

February 20, 2001



Ms. Martyne Kieling
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87504

Re: Lea Land, Inc.
Commercial Surface Waste Disposal Permit Application
Section 32, T-20-S, R-32-E, NMPM
Lea County, New Mexico

Dear Martyne:

I have received your January 31, 2001 letter to Lea Land and understand your letter to be a request for additional information for the above-referenced application.

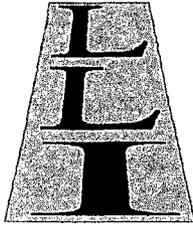
Controlled Recovery Inc. would like the opportunity to copy any additional information provided by Lea Land pursuant to your request. Also, please let me know when Lea Land's application is deemed complete so that Controlled Recovery, Inc. is afforded an opportunity to comment and request a hearing on Lea Land's application.

Sincerely,

Michael H. Feldewert

MHF

cc: Ken Marsh

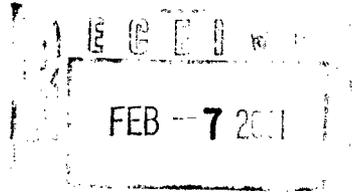


Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

Phone: (505) 887-4048 Fax: (505) 885-7640



February 06, 2001

Martyne J. Kieling
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Lea Land, Inc.
Commercial Surface Waste Disposal Permit Application
Section 32, Township 20 South, Range 32 East, NMPM
Lea County, New Mexico
Letter Dated January 31, 2001

Dear Ms. Kieling

In reply to the above referenced letter, we agree to the following changes:

1. Attachment 6, last page, "Non-Exempt Waste", first sentence to read "Non-hazardous non-exempt oil industry related contaminated solids from OCD regulated facilities."

2. Attachment 7, Page 1, 2. Leachate Collection System:

The leachate collection system will be constructed to ensure the hydraulic leachate head on the liner never exceeds one foot. We have run the EPA 'HELP' (Hydrologic Evaluation of Landfill Performance) model simulations, using worst case climatological data, materials characteristics, and the leachate collection system design, indicate that the potential to generate leachate at the site is MINIMAL. In addition, there is no useable ground water below the site. Cells will have berms to divert storm water around the cells but no surface water can contaminate streams or rivers. The area is in a very large geologic sink and no surface water flows from the area. All water used at the site comes from a water pipeline that serves the WHIPP site.

The leachate collection line will be a slotted pipe installed in the north side of the solid waste disposal cell that is slopped 2% north and 2% east to form a sump in the NE corner of the cell. The pipe extends up and over the berm and goes north to the leachate collection pond. The pipe will be on top of the liner in a shallow ditch and covered with

O F F I C E S

5100 Westheimer, #200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261 ✓

netting and coarse gravel to keep the line from becoming clogged. The line will not penetrate the liner of the disposal cell or the leachate collection pond.

3. Figure 2:

The facility will have its own leachate collection evaporation pond that will be located 320 feet north of the disposal unit and will be down gradient from the facility. The pond will be 60 feet by 60 feet and lined with a geosynthetic clay liner under a 60 mil HDPE liner. This location is shown in Exhibit "A".

4. Attachment 10, Closure Plan, Closure Plan:

The disposal cells are built individually, in a size suitable for the anticipated market demands and in a size that is operationally suitable for handling the various transportation modes in which the waste is received. Disposal cell size is maintained at a minimum surface area and accommodates closure in stages. The size of the first and subsequent cells will be 2.75 acres or 300 feet by 400 feet and they will have a usable surface area of 2 acres prior to expansion of the next cell. By the time the next cell expansion begins, about 70 % of the required soil for cover on the active cell is in place. The balance of the required soil is obtained during the construction of the next cell. This constant placing of cover on areas in the active cell that has reached design volume capacity minimizes the surface area to a maximum of five acres including the leachate pond that will have to be closed in the event of a default. (See Exhibits "B", "C" and "D") In addition, a surface stock pile of 200,000 cubic yards of mixed clay and sandy soil and very rocky soil presently exists on site. This soil weathers in a very short time and provides an excellent rock armor cover, resistant to wind and water erosion. We have experienced no erosion of this pile in three years because this material absorbs the limited rainfall.

The final cover will consist of 18 inches of sandy clay material and capped with 6 inches of vegetative cover soil to support vegetation. Mr. Wallace Cox of the New Mexico Lea County Co-op Extension advises Side Oats Grama Grass, Sand Drop Seed Grass and Little or Big Blue Stem are good native grasses for cover.

The following equipment will be necessary to close the open cells:

1. - loader - \$50.00 per hour with operator and fuel
2. - Dump trucks - \$40.00 per hour with operator and fuel
3. - Grader- compactor - \$50.00 per hour with operator and fuel

These costs were furnished by a Hobbs dirt contractor that has long experience in closing pits. They estimate loading cost at \$0.50 cubic yard, hauling at \$0.75 per cubic yard, grader- compactor at \$0.50 per cubic yard and \$1,200.00 per acre to place vegetative cover.

O F F I C E S

5100 Westheimer, #200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

5. 5. Attachment 10, Closure Plan, Closure Costs and Table 1:

To cover a maximum of 5 five acres with 2 feet of soil will require 12,100 cubic yards of soil to be compacted and 4,033 cubic yards of soil for vegetative cover. These costs will be as follows:

Loader - 16,133 cubic yards @ \$0.50/cuyd	\$8,067
Dump Trucks - 16,133 cubic yards @ \$0.75/cu yd	\$12,100
Grader-compacto - 16,133 cubic yards @\$0.50/cuyd	\$8,067
Spreading vegetative cover @\$1,200.00/ac	\$6,000

Sub-Total \$34,234

These prices include supervision.

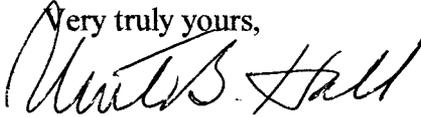
Estimated cost to monitor erosion : 2 years @\$3,000/yr \$6,000

Contingency @10% \$4,000

Total \$44,234

It is our intention to fund the financial assurance by a five (5) year irrevocable Letter of Credit to be issued by Guaranty Bank and Trust Company of Oklahoma City, Oklahoma. The Letter of Credit will be in the form approved as of January 23, 2001.

If you have any questions, please call me.

Very truly yours,

Robert G. Hall
President

O F F I C E S

5100 Westheimer, #200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

EXHIBIT "A"
LOCATION OF THE LEACHATE
COLLECTION EVAPORATION POND

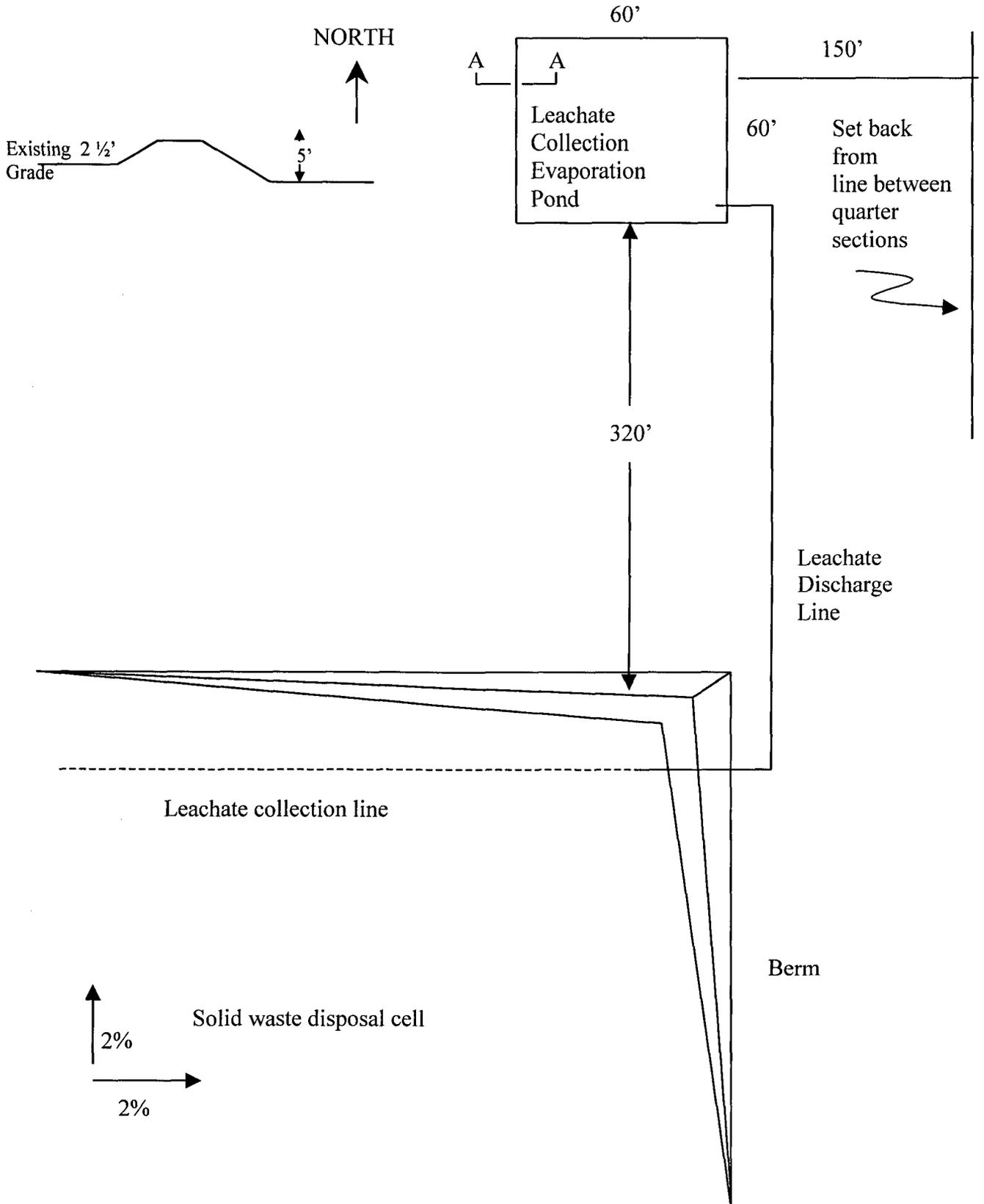


EXHIBIT "B"
INITIAL WASTE PLACEMENT IN ACTIVE CELL

Stage 1

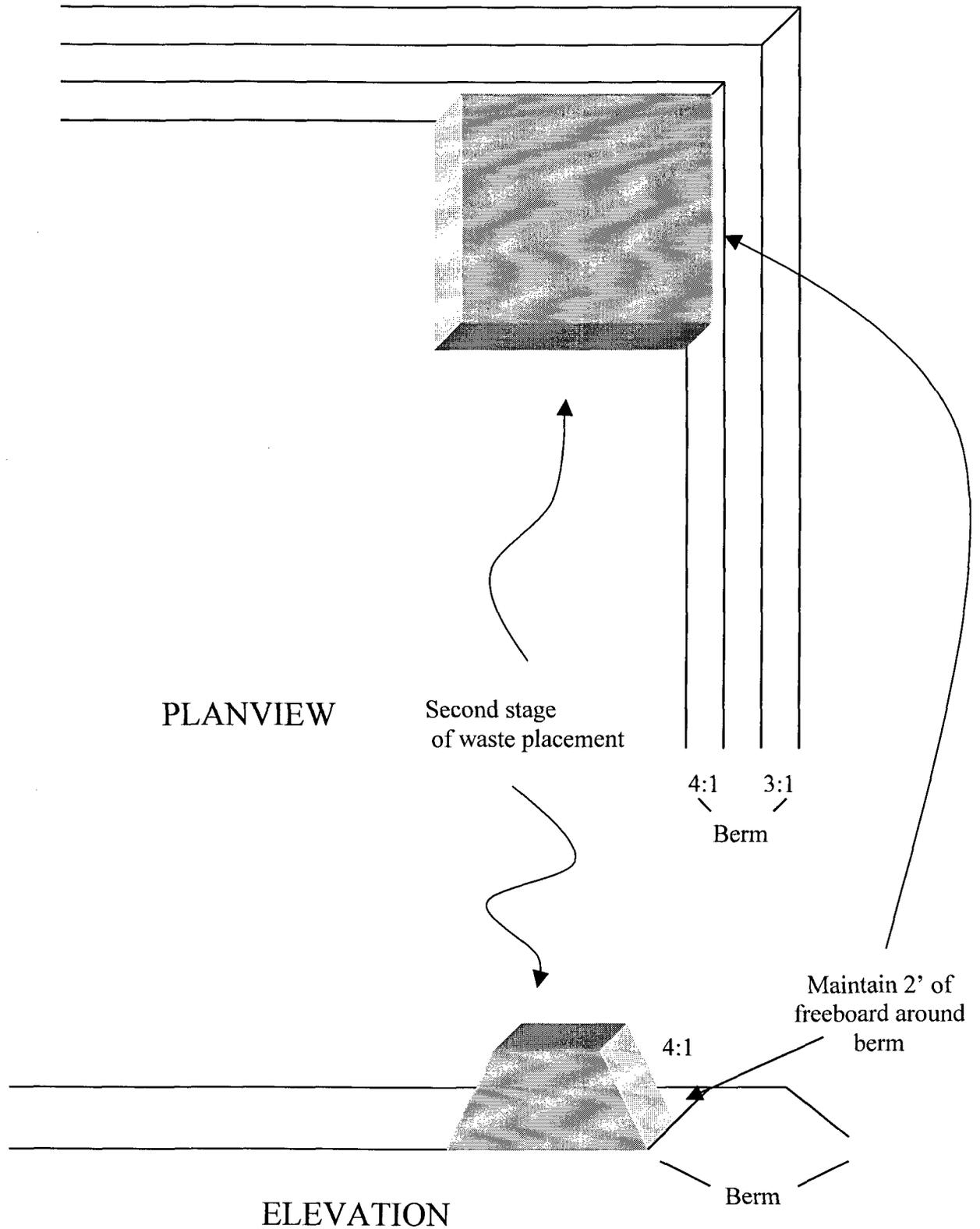


EXHIBIT "C"
FURTHER WASTE PLACEMENT IN ACTIVE CELL
AND BEGINNING PERMANENT COVER OF FIRST WASTE

Stage 2

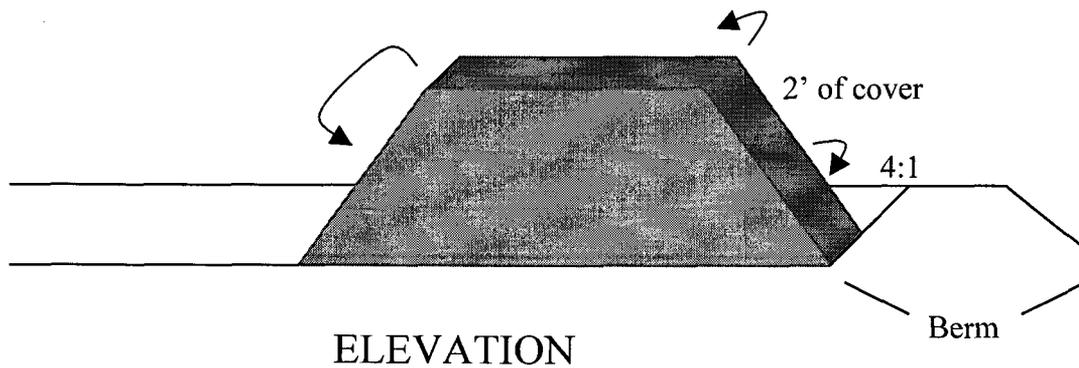
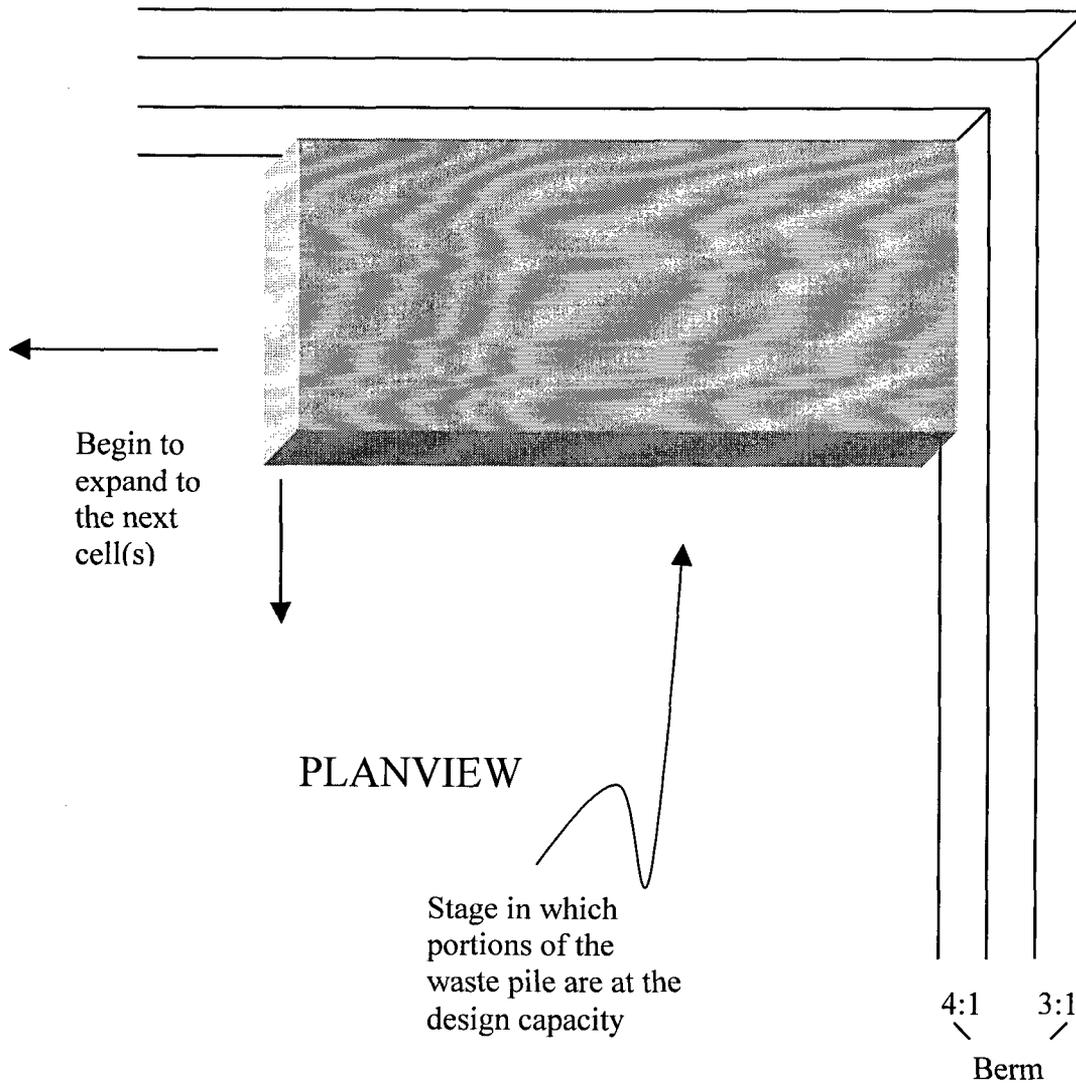
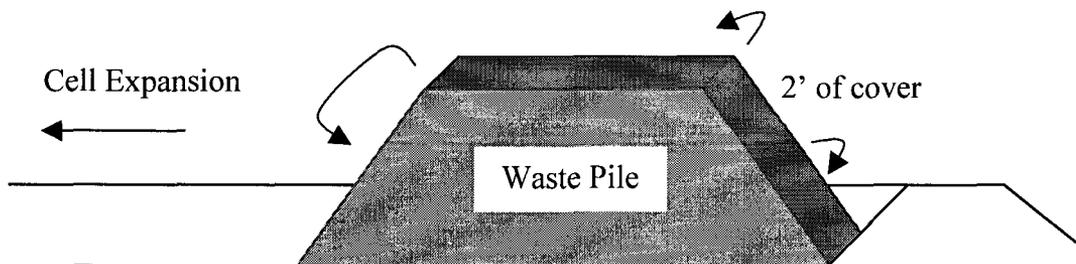
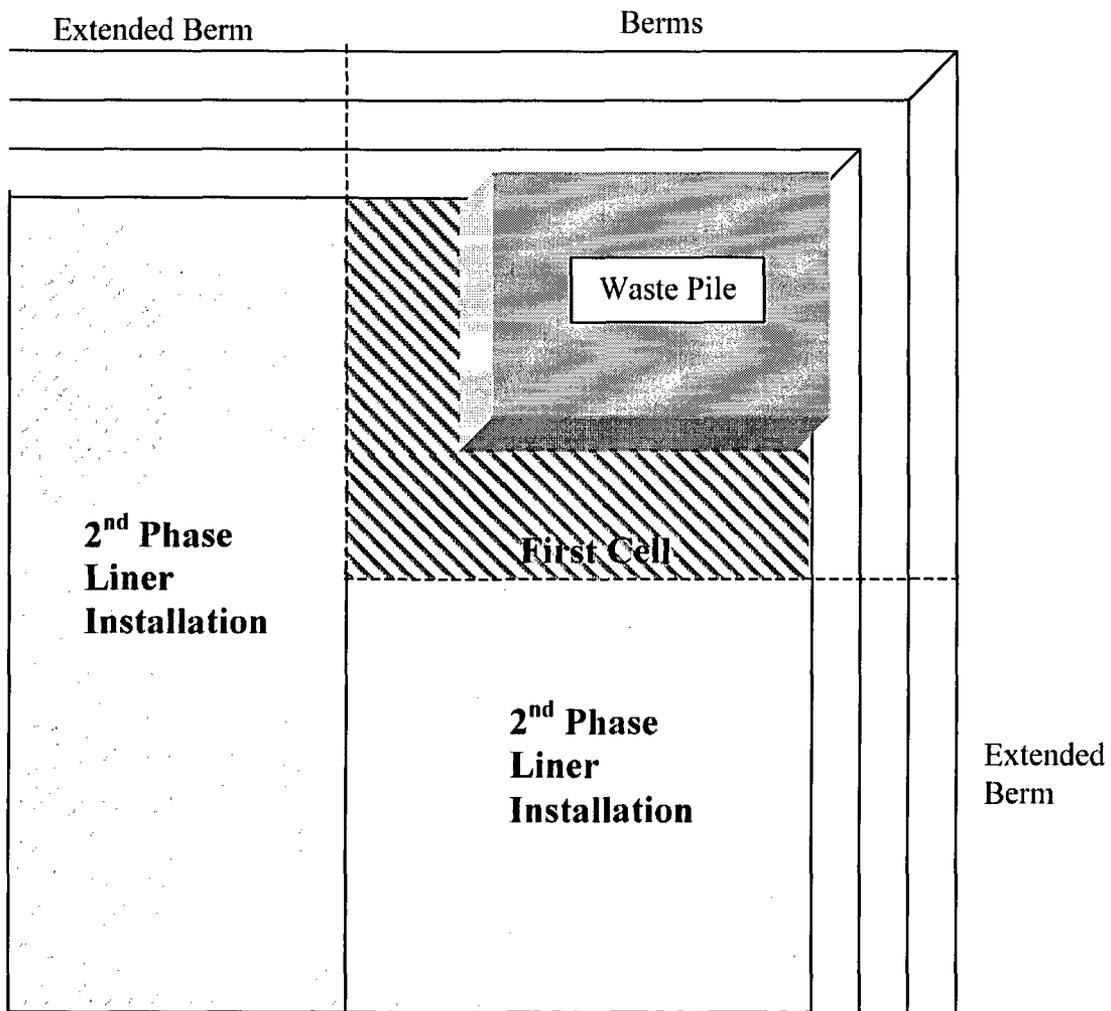


EXHIBIT "D"

Cell Expansion



OC Environmental Bureau Closure Cost Estimate

For

Lea Land, Inc.
5 acres lined landfill facility

February 28, 2001

Analytical analysis at the leachate collection pond or other potential contaminated site location.

State Contract Laboratory Prices per analysis:

BTEX	\$ 40.00 x 4	=	\$160.00
TPH	\$ 50.00 x 4	=	\$200.00
Metals	\$200.00 x 4	=	\$800.00
			<u>\$1,160.00 Analytical</u>

Sampling time and labor for 4 samples

Labor \$55.00/hour
Sample time 1 hour
Travel 2 hour
Delivery & Paperwork 1 hour

Total Time = 4 hours
4 hours x \$55.00/hour = \$220.00/sampling event

Dirt work to close the 5 acre facility.

Hours based on the Lea Land estimate submitted February 6,2001.

OCD hourly rate based on equipment proposals from 5 separate companies received January 2001.

Loader \$76.00./hr loader/operator	162 hours	=	\$12,312.00
Dumptrucks \$63.00/hr 12-14 yard/operator	303 hours	=	\$19,089.00
Grader-compact \$73.50./hr large grader/operator	162 hours	=	\$11,907.00
			<u>\$43,308.00</u>

Empty leachate and storm water ponds and remove sediment and liner for disposal into landfill.

Vacuum truck with 70bbl tank 63.00/hr 8 hours = \$504.00

Use storm water during compaction

Revegetation for 5 Acres

Placement of 5 acres of vegetative cover side oats grama, sand drop seed, little or big blue stem

\$1,200/acre * 5 acres = \$6,000.00

Estimate cost to monitor erosion: 2Years @ \$3000.00/year \$6,000.00

10% contingency \$5,719.00

Total Closure and Revegetation Cost for Lea Land 5 acre double lined Landfill.

\$62,909.00
\$ 3,538.00 NMGRT .05625
\$ 66,447.00 Total Financial Assurance



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

January 31, 2001

CERTIFIED MAIL
RETURN RECEIPT NO. 7099-3220-0000-5051-1217

Mr. Robert G. Hall
Lea Land, Inc.
1300 West Main St.
Oklahoma City, OK 73106

RE: Lea Land, Inc.
Commercial Surface Waste Disposal Permit Application
Section 32, Township 20 South, Range 32 East, NMPM,
Lea County, New Mexico

Dear Mr. Hall:

The New Mexico Oil Conservation Division (OCD) has received Lea Land, Inc. modified application for a commercial surface waste management facility dated November 21, 2000. The application proposes the construction of a lined solids landfill 711 facility. The proposed facility is located in Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico.

The OCD has inspected the proposed facility location and reviewed the information provided with the application and the concerns submitted by interested parties. The OCD requires additional information to complete the application Form C-137 that has been filed. Lea Land, Inc. must submit the following information:

1. Attachment 6, last page, Non-Exempt Waste: Non-hazardous non-exempt oil industry related contaminated solids from OCD permitted facilities.

This statement should read: Non-hazardous non-exempt oil industry related contaminated solids from OCD regulated facilities.

2. Attachment 7, Page 1, 2. Leachate Collection System:

It is not clear in the text or figure 4 how the leachate line is installed. Is the leachate pipe above the 60 mil HDPE liner within the one foot of protective soil cover? The last sentence states that "The leachate collection pipes are sloped to drain to a leachate evaporation pond. How does the leachate pipe exit the lined cell to reach the pond without putting the liner integrity at risk? Please provide a written explanation and additional figures to document the explanation.

3. Figure 2:

The current leachate collection pond at the facility is designed to receive leachate from the NMED permitted Solid Waste facility. Because of the potential for leachate from the Surface Waste Management Facility to be derived from exempt materials the OCD requires that the leachate collected from the facility be kept separate from the leachate collected from the NMED facility. This will mean the construction of a separate leachate collection pond. Please provide the construction details for this pond.

4. Attachment 10, Closure Plan, Closure Plan:

Lea Land, Inc. must submit a detailed plan as to how the facility will be closed including the materials, equipment, and compaction. This information is necessary to allow the OCD to evaluate the closure cost estimate.

5. Attachment 10, Closure Plan, Closure Costs and Table 1: Please review Rule 711.B.1(i); A closure plan including a cost estimate sufficient to close the facility to protect public health and the environment; said estimate to be based upon the use of equipment normally available to a third party contractor;

The closure costs provided are not based on a third party. That is, a party that would have to be contracted by the State of New Mexico to complete the closure of the facility if Lea Land, Inc. were not available. The use of local soil on the property may be used if the soil is stockpiled. If creating a borrow pit for soil is proposed, the pit would need to be contoured, covered with topsoil and seeded to prevent erosion. Those costs must be listed in the cost estimate. Trucking, equipment and contract workers would not be those owned or employed by Lea Land, Inc.

The cost estimate in Table 1 is very brief. Please itemize the costs and include separate categories for trucking, equipment, engineer and contract workers. In addition, please specify cost for seed, labor and at a minimum a two year post-closure-care period for checking on the landfill cap and vegetation growth. Additional costs would include a final report as to the cover installation and semi-annual reporting as to the post-closure-care of the cap and vegetation.

The Paragraph on Closure Costs and the Table do not agree on the acres. It is my understanding that each cell will be approximately 5 acres in size and there is the potential that as one cell is being closed the second will be under construction or receiving waste. The leachate collection pond and storm water collection pond should also be included in the acres to be closed. The closure cost should be for a minimum of 10 acres if not slightly more. Lea Land, Inc. must submit a new closure cost estimate that addresses all of these issues.

Based on the information to be provided the OCD will re-evaluate the application for the Lea Land, Inc. Waste Management Facility.

If you have any questions please do not hesitate to contact me at (505) 476-3488.

Sincerely,



Martyne J. Kieling
Environmental Geologist

Attachments

xc with attachments: Hobbs OCD Office
Mr. Michael Feldewert



Scale at Lea Land Inc. entrance.



Cell 1 construction looking southwest.



711 landfill East line looking south.



Lined storm water collection pond looking north.
Contains snow, rain water and clean soil to hold the
liner in place. Propose to use for both facilities.



Cell 1 construction looking south.



Leachate Collection Pond for the NMED Landfill.
Contains snow, rain water and clean soil to hold the
liner in place.

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

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal Time 2:00 Date 11-30-00

Originating Party Robert Hall Other Parties Monty Kiehl

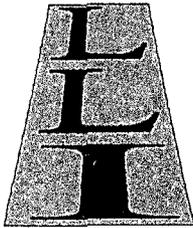
Subject Public Notice - - - - - Not Required
January - To Start Processing →

Discussion _____

Conclusions or Agreements _____

Distribution

Signed Monty J. Kiehl



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

☎ Phone: (505) 887-4048 ☎ Fax: (505) 885-7640

RECEIVED

November 21, 2000

NOV 28 2000

Environmental Bureau
Oil Conservation Division

Martyne J. Kieling
New Mexico Energy, Minerals & Natural Resources
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, NM 87505

Dear Ms. Kieling:

Enclosed are two (2) copies of our corrected Permit Application that are necessary to comply with recent administrative decisions. We are no longer requesting permission to permit our NMED permitted landfill for oil field waste disposal. This correction requests a permit for a 72.69 acre tract within the 640 acre tract of land we own in Lea County. This 640 acre tract also has a 160 acre tract which is permitted by the NMED. In this permit application we have elected to double line disposal cells and install a leachate collection system. The oilfield waste will be covered and replanted as each cell reaches completion. We have elected this procedure because many operators have expressed interest in using lined cells rather than surface disposal.

If you have any questions, please contact me at 405-236-4257.

Very truly yours,

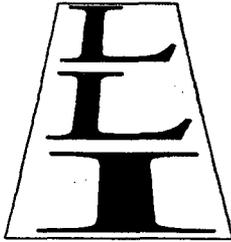
Robert G. Hall
President

O F F I C E S

5100 Westheimer, #200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

NM-1-0035

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division

Permit Application

Application for Commercial Surface Waste Management Facility

January 2000

(Corrected – November 20, 2000)

RECEIVED

NOV 28 2000

Environmental Bureau
Oil Conservation Division

NEW MEXICO OIL CONSERVATION DIVISION
COMMERCIAL SURFACE WASTE MANAGEMENT FACILITY
FORM C-137

This permit application includes the following information, including exhibits (drawings) and appendices:

OCD Rules and Guidelines:

Rule 711 (Solid Waste Management Facilities)
Rule 116 (Release Notification and Corrective Action)
Guidelines for Permit Application, Design and Construction of Surface Waste Management Facilities

FORM C-137

Executive Summary

Attachments 1 through 4:

Found on Form C-137
Topographic Map – Sheet 1

Attachment 5 (Names and Addresses of Facility Landowner and Landowners Within One Mile)

Attachment 6 (Description of Facility):

Anticipated Waste Streams
Fences, Signs and Netting (Pictures of Lea Land signs)
Figure 2 (Site Plan)

Attachment 7 (Facility Design and Construction)

QA/QC Data and Liner Specifications
Figure 3 & 4 (Liner and Leachate Collection System Plan)

Attachment 8 (Contingency Plan)

Figure S-1 (Emergency Exit Route)
Figure S-2 (Emergency Response Contacts)

Page 2 of Contents of Commercial Surface Waste Management Facility Permit Application

Attachment 9 (Routine Inspection and Maintenance Plan)

Waste Acceptance Guidelines
Plan to Accept Loads to Detect and Prevent the Disposal of Regulated Hazardous
Waste and Unauthorized Waste
Site Inspections and Maintenance
Frequency of Sampling Guidelines
Inspection Record
Waste Profile Form
Manifest

Attachment 10 (Closure Plan)

Closure Plan

Attachment 11 (Geological/Hydrological Information)

Ground Water Monitoring
Hydrologic Testing
Description of Site Geology and Hydrology
Laboratory Analysis of Ground Water (Exhibit N)
Soil Boring Data (Exhibit N)
Figure 2 (Site Plan)

Attachment 12 (Proof of Notice Requirements of OCD Rule 711)

Return Receipts of Letters to Landowners and County Commissioners

Attachment 13 (H₂S Contingency Plan)

Not Applicable (No Liquids Accepted)

APPENDIX A (Storm Water Discharge Pollution Prevention Plan)

Figures 1 and 2

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Commercial Centralized

1. Type: Evaporation Injection Other
 Solids/Landfarm Treating Plant

2. Operator: Lea Land, Inc.

Address: 1300 West Main St., Oklahoma City, Oklahoma 73106

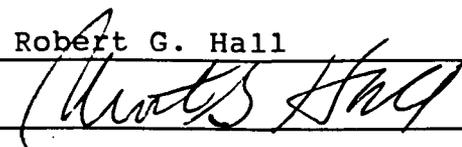
Contact Person: Robert G. Hall Phone: 405-236-4257

3. Location: --- /4 --- /4 Section 32 Township 20 South Range 32 East
Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? Yes No Current permit is w/NMED
5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.
6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.
7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.
8. Attach a contingency plan for reporting and clean-up for spills or releases.
9. Attach a routine inspection and maintenance plan to ensure permit compliance.
10. Attach a closure plan.
11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.
12. Attach proof that the notice requirements of OCD Rule 711 have been met.
13. Attach a contingency plan in the event of a release of H₂S. (NOT APPLICABLE)
14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Robert G. Hall Title: President/Owner
Signature:  Date: 12-20-99

EXECUTIVE SUMMARY

LEA LAND, INC.

COMMERCIAL SURFACE WASTE MANAGEMENT FACILITY

Lea Land , Inc. is submitting a permit application for a commercial surface waste management facility to be used to dispose of oil field wastes classified as exempt and non-exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations. The following permit application was developed in accordance with the New Mexico Oil Conservation Division (OCD) Rule 711 and the "Guidelines for Permit Application, Design, and Construction of Surface Waste Management Facilities" (Revision 7-97).

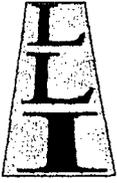
The proposed site is located in Lea County within a 640 acre tract of land located in Section 32, Township 20 South, Range 32 East, and the land is owned by Lea Land, Inc.

Only scheduled loads will be accepted and a certified manifest must accompany each load. The manifest must attest to the physical and chemical characteristics of the waste certifying the waste as non-hazardous. Upon arrival at the facility, the waste will be inspected to ensure that it coincides with the information supplied on the manifest.

The waste cell is designed with a liner and leachate collection system. Retention ditches will be constructed around the active portion of the cell to prevent the run-on of storm water onto the waste. Storm water is collected and pumped to our storm water retention pond.

The nearest water well to the landfill is located over 25 miles away. The supply of water to the site is provided via a pipeline from water field wells that are also greater than 25 miles away.

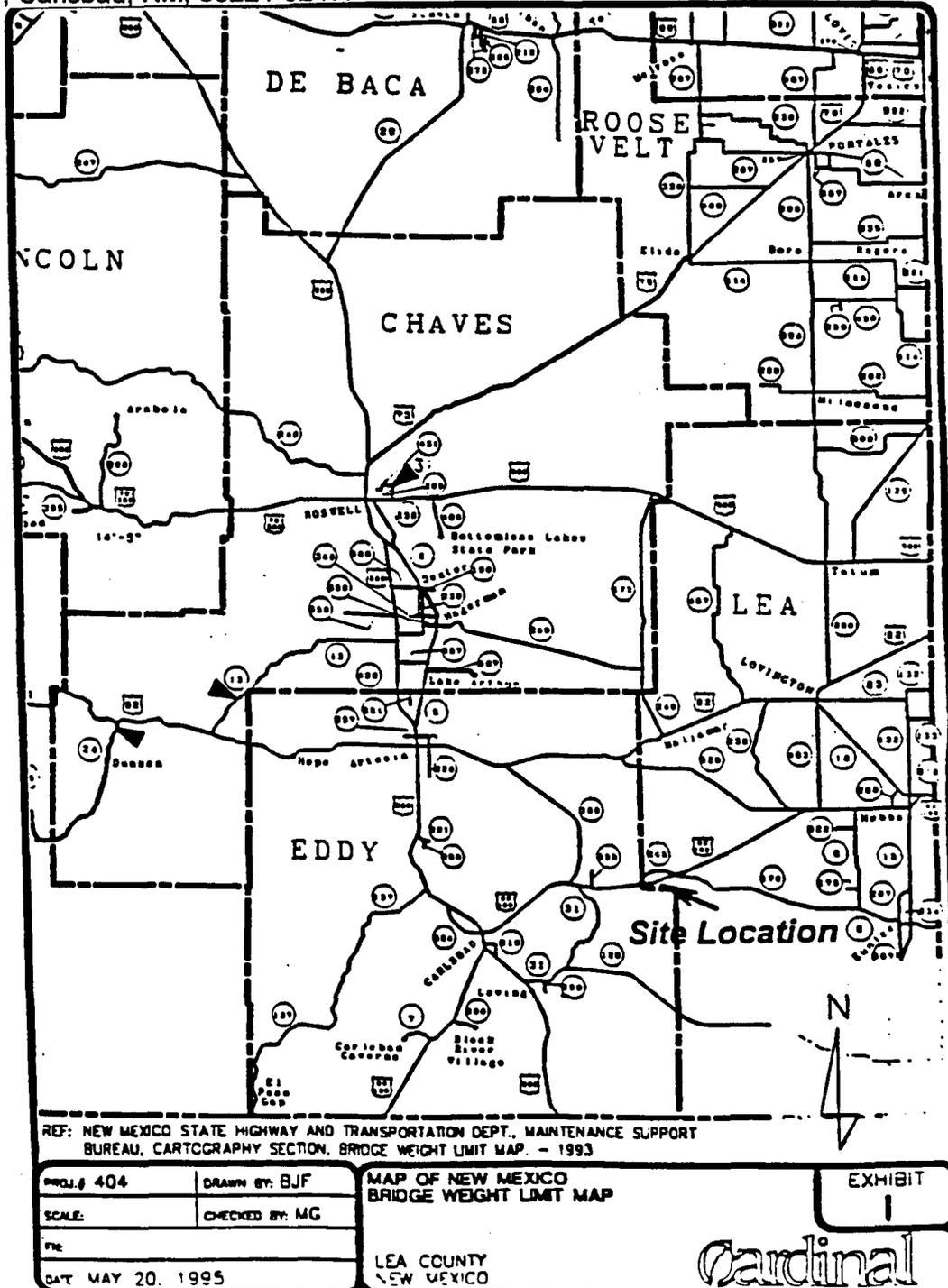
Four groundwater monitor wells were drilled on the section to a depth of 220 feet in the Triassic Santa Rosa sandstone. These wells are used to monitor zones of moisture at the site. Subsequent hydraulic tests conducted on the #3 and #4 monitor wells indicated the maximum groundwater movement in the zone is only 6 meters per 1000 years, and it is not a groundwater source but is a perched water lense (see Attachment 11).



Lea Land Inc. Facility

B. LOCATION:

Lea Land is located on U.S. Highway 180(62), at mile marker 64, 32 miles west of Hobbs, New Mexico and 30 miles east of Carlsbad, New Mexico. The site is easily accessible from the four-lane divided highway directly into the landfill. Operating hours are Monday through Friday from 8:00am to 5:00pm and Saturday from 8:00am to 12:00pm. Lea Land mailing address is: P.O. Box 3247, Carlsbad, NM, 88221-3247.



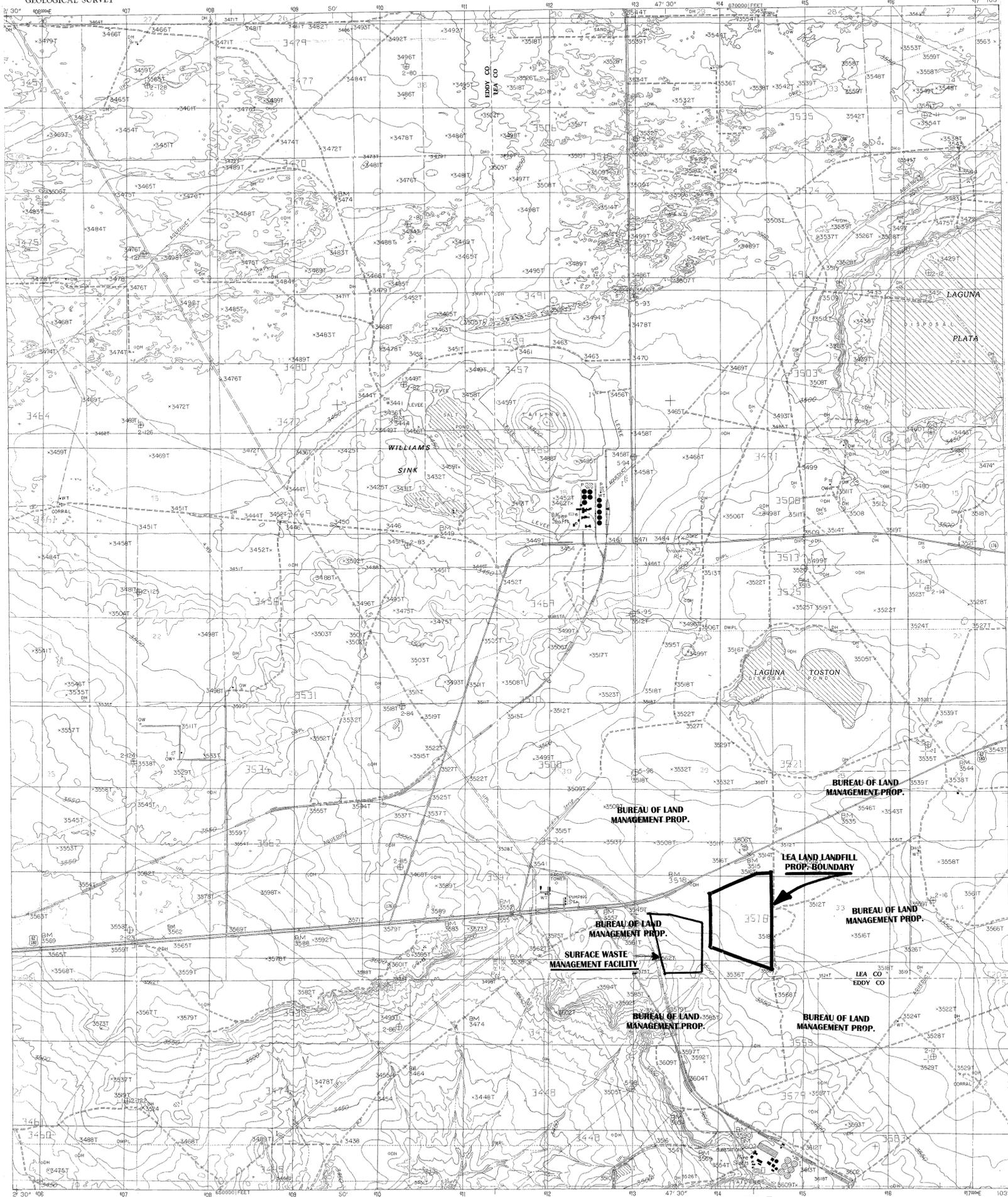
REF: NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPT., MAINTENANCE SUPPORT BUREAU, CARTOGRAPHY SECTION, BRIDGE WEIGHT LIMIT MAP. - 1993

PROJ. 404
SCALE:
FILE:
DATE MAY 20, 1995

DRAWN BY: BJF
CHECKED BY: MC
LEA COUNTY
NEW MEXICO

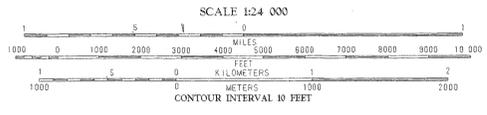
Cardinal

**ATTACHMENTS 1 THROUGH 4
ARE INCLUDED ON FORM C-137**



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY THE UNITED STATES GEOLOGICAL SURVEY
DERIVED FROM AERIAL PHOTOGRAPHS TAKEN IN 1977
FIELD CHECKED 1978 MAP EDITED 1985
REDUCTION 1:24,000 FROM 1:50,000
MERCATOR UNIVERSAL TRANSVERSE MERCATOR ZONE 13
NAD 83 STATE GRID TIE TO NEW MEXICO EAST ZONE
7.5M GRID DECLINATION 0.38 EAST
MAGNETIC NORTH DECLINATION 0.38 EAST
TERRESTRIAL DATUM 1983 NORTH AMERICAN DATUM
1983 DATUM
To place on the predicted North American Datum of 1983,
move the projection lines as shown by dashed corner ticks
9 meters south and 46 meters east
There may be private inholdings within the boundaries of any
Federal and State Reservations shown on this map
All marginal data and lettering generated and positioned by
automated type placement procedures

PROVISIONAL MAP
Produced from original
manuscript drawings. Informa-
tion shown as of date of
field check. 3



ROAD LEGEND

- Improved Road
- Unimproved Road
- Trail
- Interstate Route
- U.S. Route
- State Route

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225
OR RESTON, VIRGINIA 22092

QUADRANGLE LOCATION

1	2	3	4
5	6	7	8

ADJACENT 7.5 QUADRANGLE NAMES

WILLIAMS SINK, NEW MEXICO
PROVISIONAL EDITION 1985
3203-F7-TP-024

SHEET

1

RECEIVED
NOV 28 2000
Environmental Bureau
Oil Conservation Division

REVISIONS			
NO.	DATE	DESCRIPTION	BY

USGS TOPOGRAPHIC MAP WITH PROPERTY OWNERSHIP
LEA LAND SURFACE WASTE MANAGEMENT FACILITY
LEA COUNTY, NEW MEXICO

**ATTACHMENT 5
OF
FORM C-137**

**NAMES AND ADDRESSES OF FACILITY
LANDOWNER AND
LANDOWNERS WITHIN ONE MILE
OF SITE**

**Names and Addresses of Facility Landowner
and Landowners
Within One Mile of Site**

The landowner of the facility site is as follows:

Lea Land, Inc.
1300 West Main Street
Oklahoma City, Oklahoma 73106

The Bureau of Land Management is the only owner of land of record which has been identified within one mile of the proposed facility. Their address is as follows:

Ms. Leslie Theiss
Field Manager
Carlsbad Field Office
Department of Interior
Bureau of Land Management
P. O. Box 1778
Carlsbad, NM 88220

(505) 887-6544

Receipt of the notice of application by means of certified mail receipts for Lea County and Eddy County authorities may be found in Attachment 12.

**ATTACHMENT 6
OF
FORM C-137**

DESCRIPTION OF FACILITY

DESCRIPTION OF FACILITY

General

Attached is the Site Plan (Figure 2) for the Lea Land, Inc. surface waste management facility. A complete description of the structures and equipment, including stormwater run-on and run-off from these areas, is found in Sections 2.2 through 2.5 of the Storm Water Discharge Pollution Prevention Plan (see Appendix A).

The main entrance to the facility is located directly off of Highway 62/180 and is the only entrance that is open during operating hours of the facility. The Facility Manager lives on site in a large trailer, which further ensures that no unauthorized loads will be delivered.

Anticipated Waste Streams

Attached are the anticipated waste streams that may be disposed at the Lea Land facility. Information on Lea Land's waste acceptance guidelines can be found in Attachment 9 of this document.

Fences, Signs and Netting

A fence is constructed around the Lea Land property, as shown in Figure 2, and is maintained as described in Attachment 9 of this document. No part of the fence is constructed on a levee.

A sign will be posted at the entrance of the landfill, which includes the company name, type of facility, permit number, emergency phone number, hours of operation and the location by section, township, and range. Attached are pictures of current Lea Land signs.

All tanks at the site are covered. The Storm Water Retention and the Leachate Evaporation Ponds are not covered, but if any accumulations occur, the fluids will evaporate very quickly due to the arid conditions in the area.





**Anticipated Non-Hazardous Oil Industry Waste Streams
Lea Land Inc. Commercial Surface Waste
Disposal Management Facility**

Description

The following list identifies the non-hazardous oil industry related wastes that may be received at the proposed facility on a regular basis. The wastes will be generated by oilfield related generators. Prior approval will be required on the waste shipments. The wastes will only be accepted with a certified waste manifest. The generator will certify the waste is a pre-approved non-hazardous oilfield related waste.

Waste

Exempt Waste

Oilfield contaminated solids which are exempt from RCRA Subtitle C regulations. These wastes will be accompanied by a "Certification of Waste Status" from the generator. These wastes are exploration and production related wastes only.

Non-Exempt Waste

Non-hazardous non-exempt oil industry related contaminated solids from OCD permitted facilities. These wastes are all associated with activities for transportation before refinement, refinement, storage or treatment of unrefined oil and natural gas, and oil or gas products on refinery premises. These wastes also include wastes associated with activities of the oil field service industry.

**ATTACHMENT 7
OF
FORM C-137**

FACILITY DESIGN AND CONSTRUCTION

SURFACE WASTE MANAGEMENT FACILITY

1. LINERS:

Lea Land is designed with a composite liner system beneath the waste consisting of two components: The upper component is a 60 mil high density polyethylene (HDPE) geomembrane liner. The lower component is a self-healing geosynthetic clay liner which sits on top of six inches of in-situ compacted soil. The liner system will be constructed with a two percent slope to promote positive drainage and facilitate leachate collection. The Liner and Leachate Collection System Plan may be found in Figure 3 and 4.

The liners are designed to be able to withstand the projected loading stresses and disturbances from overlying waste, waste cover materials, and equipment operation. Liners on the sidewall slopes of the cell are textured to prevent sliding.

2. LEACHATE COLLECTION SYSTEM:

The leachate collection system will be constructed to ensure the hydraulic leachate head on the liner never exceeds one foot. EPA "HELP" (Hydrologic Evaluation of Landfill Performance) model simulations, utilizing worst case climatological data, materials characteristics, and the leachate collection system design, indicate that the potential to generate leachate at the site is MINIMAL.

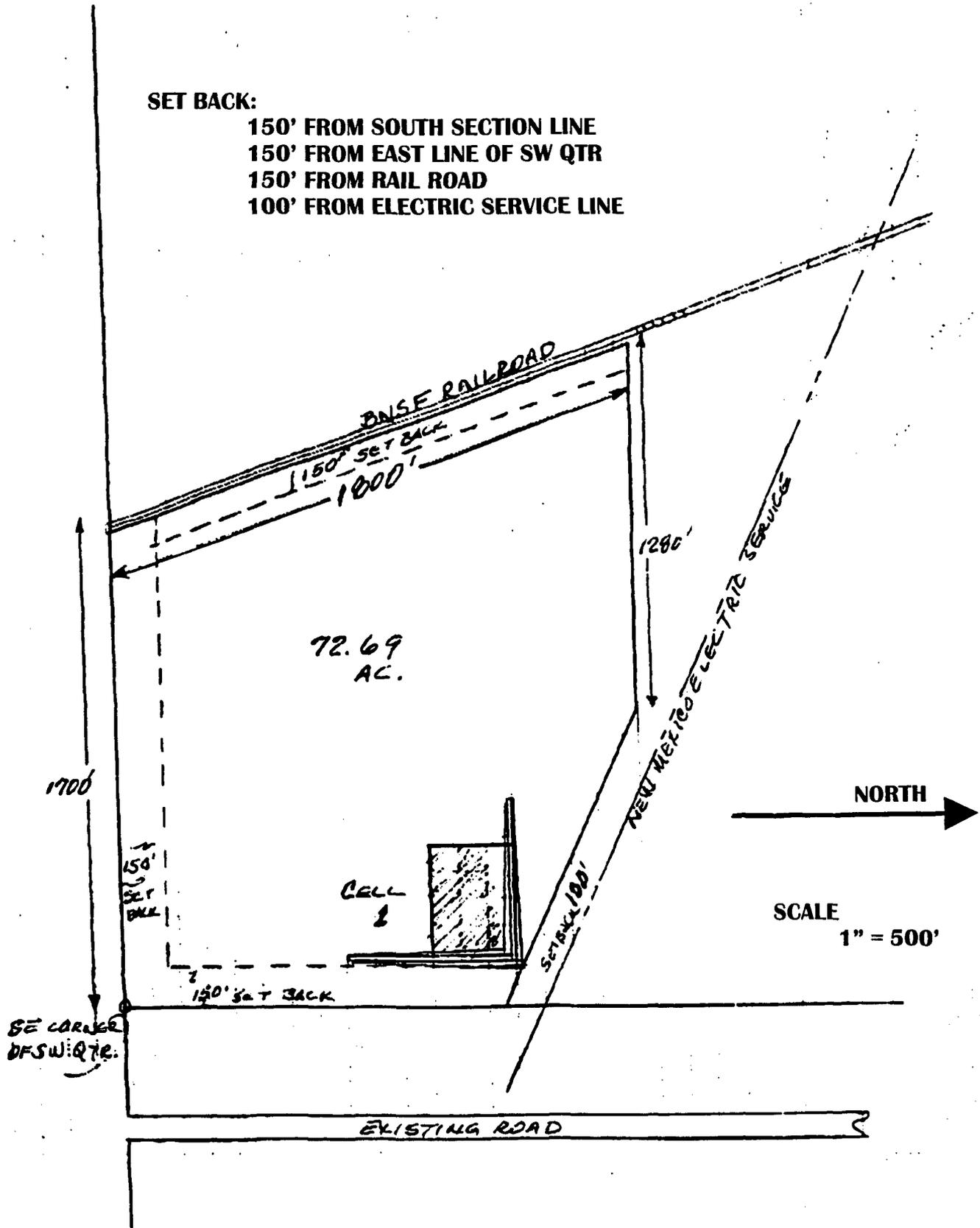
One foot of soil is located on top of the liner as a protective cover. The soil cover facilitates the collection of leachate in the leachate collection system.

Retention ditches or diversion ditches will be constructed around the active portions of the cells to prevent the run-on of stormwater onto the waste and the active portions. If any stormwater is collected during cell development, it will be pumped to the stormwater retention ponds located on site.

The perforated pipe used for leachate collection is four inches in diameter with a pipe wall thickness of Schedule-80 as specified by ASTM. The leachate collection pipes are sloped to drain to a leachate evaporation pond.

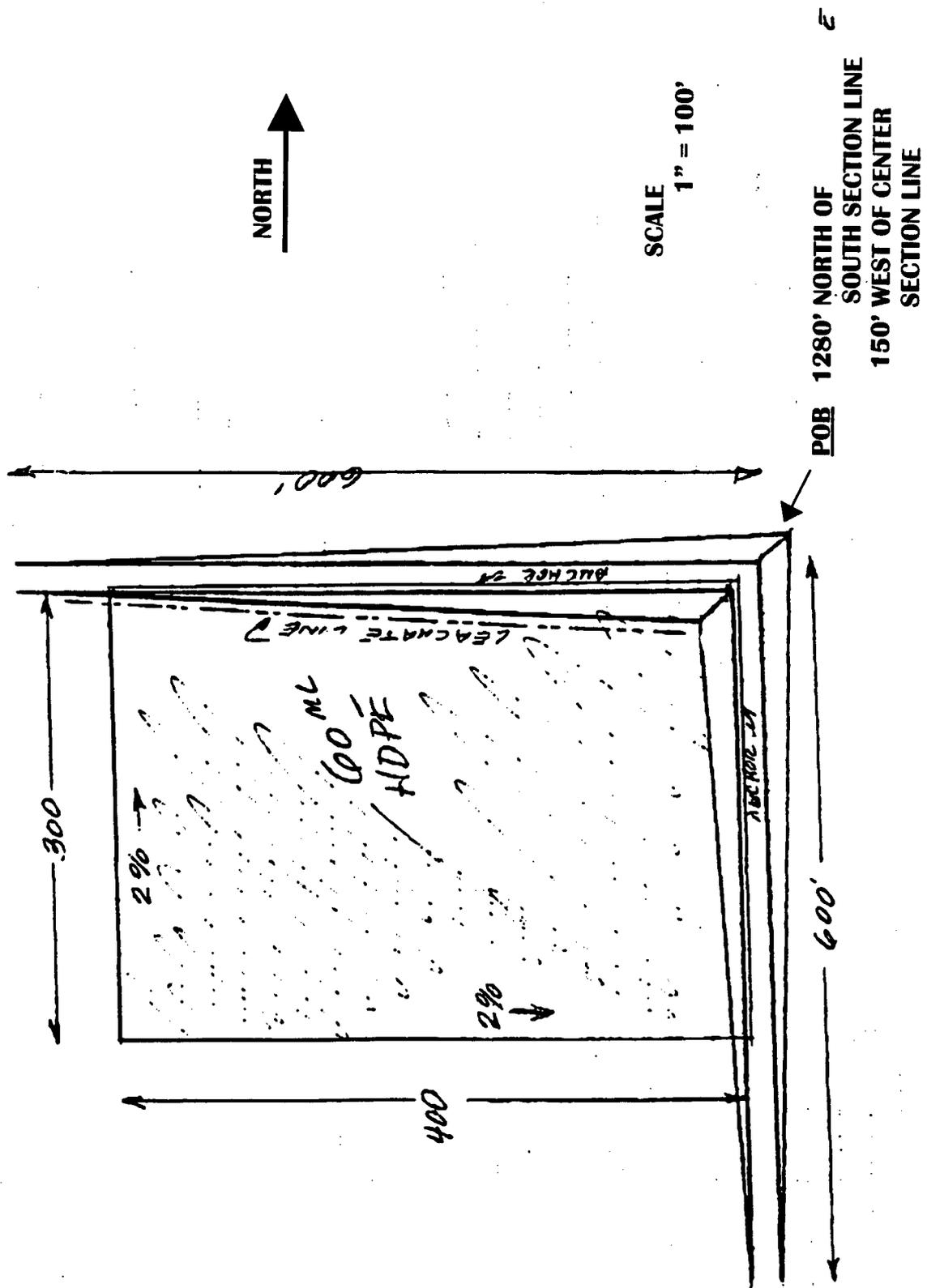
SET BACK:

- 150' FROM SOUTH SECTION LINE
- 150' FROM EAST LINE OF SW QTR
- 150' FROM RAIL ROAD
- 100' FROM ELECTRIC SERVICE LINE



LOCATION OF CELL 1

FIGURE 3



CELL 1 DETAILS

FIGURE 4

**ATTACHMENT 8
OF
FORM C-137**

CONTINGENCY PLAN

TABLE OF CONTENTS

I. INTRODUCTION

II. PERSONNEL AND USER SAFETY

- A. Emergency Coordinators and Chain of Command
- B. Duties and Responsibilities of the Emergency Coordinator

III. SITE OPERATIONS

- A. Dust Control
- B. Litter Control
- C. Noise Control
- D. Fire Prevention and Control
- E. Unusual Traffic Conditions
- F. Equipment Breakdown
- G. Alternative Waste Disposal

IV. EMERGENCY EQUIPMENT

- A. Personal Protective Equipment
- B. Emergency Response Equipment

V. EVACUATION PLAN

FIGURE S-1 LEA LAND INC. EVACUATION DIAGRAM

FIGURE S-2 EMERGENCY RESPONSE CONTACTS AND AGENCIES

I. INTRODUCTION

Lea Land Inc. Commercial Surface Waste Management Facility will be located in Lea County, New Mexico, within a 640 acre tract of land, also owned by Lea Land. An area of 160 acres is permitted by the New Mexico Environment Department (NMED) for non-hazardous industrial solid waste disposal.

The Contingency Plan for Lea Land addresses measures that will be taken to address a range of potential situations that may occur during the operation of the facility. The plan was prepared to meet the requirements of the New Mexico Oil Conservation (OCD) Rules 711 and 116 and other related requirements regarding the management of emergencies.

The purpose of this Contingency Plan is to present organized, coordinated, and technically/financially feasible courses of action to be taken in response to contingencies during the operation of the Lea Land Inc. facility. This Plan will be implemented in the unlikely event that emergency situations develop which could endanger public health, welfare or the environment. The Plan will be amended whenever: the facility permit is revised or modified; the plan fails emergency; the facility changes, design, construction, operation, maintenance or other circumstances in a way that increase the potential for fires, explosions, or changes the response necessary in an emergency; the list of Emergency Coordinators changes; or the list of emergency equipment changes.

II. PERSONNEL AND USER SAFETY

An emergency response program has been established for the Lea Land Inc. facility to ensure that safety of site personnel and users in the event of emergency situations at the landfill. The program includes:

- Identification of Emergency Coordinator(s)
- Identification of Duties and Responsibilities of Emergency Coordinator(s)
- Identification of Communication Systems
- Development of an Evacuation Plan
- Summary of Available Emergency Services

a. Notification

In the event of an imminent or actual emergency, the first person on the scene will notify the Emergency Coordinator, who in turn, will initiate a proper response to the situation. Having been appraised of the situation, the Emergency Coordinator will proceed to notify all facility personnel by initiating the internal communication system and aid in evacuation, if necessary. OCD will be notified in accordance with Rule 116. Major spills will be reported by giving both an immediate verbal notice within (24 hours of discovery), followed by a timely written notice within 15 days by filing Form C-141. A list of the Emergency Response Agencies and Contacts is included in Figure S-2, and is also posted in various locations on site.

b. Identification

Whenever there is a fire, explosion, or other incident presenting a potential threat to the public health, welfare or the environment, the Emergency Coordinator must immediately identify the character, exact source, and extent of the situation.

c. Assessment

In case of an emergency situation, an assessment of the possible hazard must be made. The assessment will consider both the direct and indirect hazard of any release, fire, explosion, or other incident that present a possible hazard to public health, welfare or the environment, he must then initiate the Contingency Plan. This will include contact with local authorities in order to inform them of the situation, particularly when an evacuation of the surrounding area is necessary. The OCD will also be advised of all the pertinent facts regarding the incident prior to the commencement of clean-up activities.

d. Control Procedures

In the event of any emergency situation, the Emergency Coordinator must take all reasonable measures to prevent the occurrence, recurrence, or spread of a fire or explosion to other portions of the facility or the surrounding environs. These measures include, when applicable and necessary, ceasing facility operations, and containing and collecting materials released. In the event that the facility ceases operations in response to fire, or explosion, the Emergency Coordinator will monitor for leaks, pressure build up, gas generation or rupture in valves, pipes, or the equipment, wherever this may be appropriate.

e. Emergency Response Personnel

If an emergency occurs, fully trained response personnel will be contacted as soon as possible. Request for assistance will include the following information:

- Name, address, telephone number of facility
- Type and time of incident occurrence
- Extent of any injuries
- Possible hazard to public health, welfare, or the environment surrounding the facility
- Type and quantities of materials involved, if known

Immediate action by on-site personnel will concentrate on preventing the spread of any fire/explosive, or spill/leak situation that occurs, and immediate emergency medical attention will be provided to injured personnel. Any possible sources of ignition will be removed from the incident area, if this can be done without risk, and vehicular traffic will be suspended and work ceased until the fire or incident can be safely contained and controlled.

f. Storage and Treatment or Released Materials

Immediately after an emergency situation, the Emergency Coordinator must make arrangements for the treatment, storage, or disposal of any recovered wastes, or other material resulting from a release, fire, or explosion at the facility. The Emergency Coordinator will ensure that waste which may be incompatible is not treated, stored, or disposed of until cleanup procedures are complete. The Emergency Coordinator may do this by observation or review of facility records or manifests, and if necessary, by chemical analysis.

g. Post-Emergency Equipment Maintenance

Following an emergency incident, all emergency response equipment used must be cleaned and made fit for re-use, or replaced if necessary, so that the equipment will be available when facility operations resume. An inspection of all equipment must take place before operations resume to ensure that each item is in proper working condition. Remedial activities, as a result of this inspection, may include recharging of fire extinguishers, replacement of personal protective gear, restocking of disposable items, etc.

3. Internal Communication/Warning System

An internal communication system containing telephones and two-way radios is available at the Lea Land site for notifying facility personnel in the event of an emergency episode. Units are located in readily accessible areas on site. This system provides facility personnel with immediate emergency notification capabilities, and the opportunity to receive necessary instructions in the event of any incident.

4. External Communication/Warning System

The Emergency Response Contact list is displayed prominently at the facility for easy employee accessibility in the event of an emergency. Personnel training includes familiarizing employees and regular site visitors with the posted lists and other contingency plan elements. 24-hour security is used on site and Lea Land's facility manager lives on site. An emergency answering service is also available and is posted at the main entrance gate.

5. Evacuation Plan for Facility Personnel

In an emergency situation, the Emergency Coordinator is the individual responsible for determining when evacuation of the facility is required. The Evacuation Map is found in Figure S-1. Imminent or actual dangers that constitute a situation requiring evacuation include:

- A generalized fire or threat of generalized fire that cannot be avoided
- An explosion or the threat of explosion that cannot be averted
- A major spill or leak that cannot be contained or constitutes a potential threat to human health

When evacuation is required, the following procedures will be followed:

- Alert all personnel using the facility telephone/two-way radio system
- Shut down all facility equipment
- All personnel will proceed to the designated meeting point. Once assembled, this will permit a determination and identification of any missing persons
- Once assembled, standby to afford assistance if and as needed or evacuate through the main entrance

When time does not permit, proceed to the evacuation route:

- Personnel will exercise judgment and common sense in finding the best evacuation route in this instance.

In the event evacuation through the main entrance is not possible due to fire, an alternate evacuation will be utilized. The alternate evacuation route will be to the northwest corner of the property.

6. Emergency Equipment

Various emergency equipment is available at the Lea Land facility as described below. Personnel are thoroughly trained in the use of emergency equipment.

a. Warning System

The Facility's telephone and two-way radio system will be utilized to provide notification and instruction to on-site personnel, as well as to contact local, State, or Federal agencies in order to obtain emergency assistance.

Telephone and two-way radios are located in areas of the facility that are readily accessible to site personnel. Mobile phones are carried in facility vehicles and equipment as well.

b. Fire Fighting Equipment

The Lea Land facility maintains several types of equipment on site that may be used in fire fighting efforts. Earthmoving equipment that is utilized on a regular basis for landfill operations can be used to move and apply cover material to smother fires. Cover material is readily available on site for fire control purposes. A tank truck filled with water and hoses attached is kept on site, and is available for use in controlling fires.

The facility will also maintain a supply of fire extinguishers that may be used in the event of an emergency incident. These extinguishers are located at strategic points in the facility for easy accessibility. Extinguishers are maintained in conformance with state and local fire codes and regulations.

c. First-Aid/Safety Equipment

First-aid and safety equipment are located in strategic locations on site, and some items are kept in facility vehicles and on facility equipment. First-aid kits are readily accessible and contain a full range of items necessary to care for minor injuries needing prompt attention.

7. Medical Emergencies/First-Aid

In cases of medical emergency, trained medical response personnel will be contacted immediately. First-aid administered by on-site facility personnel will continue until professional assistance arrives. Personnel training will include first-aid measures and emergency response contact.

First-aid is the immediate care of a person who has been injured or taken ill. It is intended to prevent further illness and injury, and to relieve pain until additional, professional medical aid can be obtained. The objectives of first-aid are:

1. To control conditions that might endanger life.
2. To prevent further injury.
3. To relieve pain, prevent contamination, and treat for shock.

4. To make the patient as comfortable as possible.

The initial responsibility for first-aid rests with the first person at the scene who will react quickly, but in a calm and reassuring manner. The person assuming responsibility will immediately summon medical assistance, being as explicit as possible in reporting suspected types of injury or illness. The injured person will not be moved, except when necessary to prevent further injury.

III. SITE OPERATIONS

Conditions may be encountered at the site during normal disposal activities that will require response actions that are not included as part of typical daily site operations.

A. Dust Control

During dry periods, fugitive dust may be a nuisance resulting from the facility operation. The water truck kept at the site is used to control dust whenever a potential problem exists. In the event of unusually dusty conditions, Lea Land will lease another water truck to assist in dust control.

B. Litter Control

Every practicable measure is taken to contain litter as close to the working area as possible. Employees manually pick up any litter on a daily basis.

Restriction of the active working area to as small an area as possible will greatly assist in the control of litter. Cover material or approved tarp is spread on the waste during the on-going operation when wind presents a problem. The active portion of the fill will generally progress in a direction perpendicular with respect to the prevailing wind direction.

C. Noise Control

Since the landfill operations are concentrated in an area a significant distance (25 miles) from local residences, the noise generated from facility operations will not represent an off-site impact. All facility equipment has muffler systems to diminish any potential nuisance from noise.

D. Fire Prevention and Control

The possibility of a fire, whether in the waste or within a piece of equipment, is a potential hazard associated with the daily operation at waste facilities. Fire prevention includes cleaning combustible materials from on-site equipment, particularly heat sources (e.g. radiators).

The use of cover material to cut off the oxygen supply is an effective and practical means of fire control. Water can be used to supplement the use of cover soil or serve as an alternative means of controlling fires. The Lea Land water truck is available for use during emergency situations. For larger or more serious outbreaks the local fire department will be contacted. Additionally, portable fire extinguishers are kept as a precautionary measure.

E. Unusual Traffic Conditions

Traffic will not pose problems at the Site for the following reasons:

- The local traffic and regional roadways are more than adequate to manage facility related traffic.
- Facility personnel are available to direct incoming and outgoing traffic as needed.
- Roadways are designed to manage the type of traffic that will use the landfill at maximum daily volumes and during inclement weather.

F. Equipment Breakdown

The routine preventive maintenance program minimizes equipment downtime. When a piece of equipment is unavailable, other suitable pieces of equipment are used to perform the required task. In the event of multiple breakdowns, or for major earth-moving efforts, additional equipment can be leased from local contractors or suppliers.

G. Alternative Waste Disposal

Lea Land facility accepts scheduled waste only. Therefore, in the event the facility is not in operation, waste will not be scheduled for acceptance.

IV. EMERGENCY EQUIPMENT

As part of an effort to prevent emergencies, prevent personal injury, and efficiently respond to an emergency, the following equipment is utilized and available for utilization at the Lea Land facility.

A. Personal Protective Equipment

Personnel are required to utilize the following equipment during daily operations:

Gloves - Gloves are worn by personnel working with waste.

Steel-toed boots - Steel toed boots are worn by personnel while working around heavy equipment.

Goggles Goggles are worn while working with air tools, welding equipment, or any other time when the potential for eye injury exists.

Long pants and shirts - Personnel are required to wear long pants and shirts.

Reflective vests - Reflective vests are worn while directing traffic.

B. Emergency Response Equipment

The following emergency response equipment is available to personnel to be used in the event of an emergency. Personnel are familiarized with the location of the equipment upon employment at the site.

Fire Extinguishers - Approved fire extinguishers are available at strategic locations on site. All extinguishers are tested and recharged at least once per year.

Soil - Soil can be used to extinguish fires occurring at the working face of the landfill by smothering.

First-Aid Kits -First-aid kits are stored in the office and some vehicles located on site. The kits are inspected periodically to ensure contents are complete.

Tanker Truck - The site tanker truck is available and hoses are attached to control fires if necessary.

Telephone System & Mobile Phone - A telephone system located in the office on site and a mobile phone are available for contacting the fire department, police department, and/or rescue personnel.

Two-Way Radios - Two-way radios are available for notifying facility personnel in the event of an emergency episode. Units are located in readily accessible areas on site.

Telephone List - A list of emergency telephone numbers is located near each telephone.

Flares - Flares are available for redirecting traffic during an emergency.

V. EVACUATION PLAN

All emergencies require prompt and deliberate action. In the event of a major emergency, it will be necessary to follow an established set of procedures. Such established procedures are followed as closely as possible; however, in specific emergency situations, the Emergency Coordinator may deviate from procedures to provide a more effective plan for bringing the situation under control. The Emergency Coordinator is responsible for determining which emergency situations require facility evacuation. Imminent or actual dangers that constitute a situation requiring evacuation include the following:

- A generalized fire or threat of a generalized fire that cannot be avoided
- An explosion or the threat of an explosion that cannot be averted
- A major spill or leak that cannot be contained or constitutes a potential threat to human health

Lea Land Inc. has a telephone/two-way radio and mobile phone system to alert all personnel. The systems are used to announce "evacuate the facility". The telephone and mobile phones are used for internal and external communication in an emergency situation. In the event site evacuation is required by the Emergency Coordinator, the following actions will be taken:

1. The call for site evacuation will given over the telephone/two-way radio system
2. Shut down all facility equipment.
3. No further entry of visitors, contractors, or trucks will be permitted. All vehicular traffic within the site will cease to allow safe exit of personnel and movement of emergency equipment.
4. All personnel will proceed to the designed meeting point.
5. Once all personnel, visitors, and contractors are assembled, standby to afford assistance if and as needed or evacuate through the main entrance gate.
6. No persons shall remain or re-enter the facility unless specifically authorized by the person or persons calling for the evacuation. In allowing this, the person in charge assumes responsibility for those persons within the

perimeter. Those inside the facility boundary will normally only include fire containment personnel or emergency teams.

7. All person will be accounted for by their immediate supervisors. Supervisors will designate the safest exits for his employees and will choose an alternate exit if the first choice is inaccessible. To assist in this endeavor, the Emergency Coordinator will use the telephone/two-way radio system to inform the supervisor of the nature of the emergency.

8. During exit, the supervisor should try to keep his employees together. The rally point for the site will be outside the main gate as shown in Figure S-1. Immediately upon exit through the main gate, the supervisor or Emergency Coordinator will prepare a list of all personnel at the gate for final accounting.

9. Upon completion of the employee list, the supervisor in charge will hand carry the list to the Emergency Coordinator. All other personnel will remain at the rally point.

10. Contract personnel should also be listed with the name of their company. Contract foremen should report at the main gate.

11. The names of the Fire Department personnel and/or emergency team members involved in emergency response will be reported, in writing to the main gate by designated response team personnel.

12. A final tally of persons will be made by the Emergency Coordinator.

13. No attempt to find persons not accounted for will involve endangering lives of others by re-entry into the emergency area.

14. A site supervisor at the gate will maintain an updated list of all personnel to aid in the accountability procedure.

15. Re-entry into the fenced area will be made only after clearance is given by the Emergency Coordinator.

16. In all questions of accountability, immediate supervisors will be held responsible for those persons reporting to them. Visitors will be the responsibility of the employees they are visiting. Contractors are the responsibility of the persons administering the individual contracts. Truck drivers are the responsibility of the supervisor. Employees will aid in accounting for visitors, contractors and truckers by reference to the sign-in sheets.

17. Emergency drills are held semi-annually to practice all of these procedures and will be treated with the same seriousness as an actual emergency.

In the event evacuation through the main entrance is not possible due to fire, an alternate evacuation will be utilized. The alternate evacuation route is to the northwest corner of the property. The alternate evacuation route is also indicated in Figure S-1.

FIGURE S-2

Lea Land, Inc.

EMERGENCY RESPONSE CONTACTS

Hobbs and Carlsbad have 911 emergency services available.

<u>Agency/Organization</u>	<u>Telephone Number</u>
<u>Fire</u>	
City of Carlsbad Fire Dept	(505) 885-2111 or 911
City of Hobbs Fire Dept	(505) 397-9308 “
<u>Police</u>	
City of Carlsbad Police Dept	(505) 885-2111 or 911
City of Hobbs Police Dept	(505) 397-9265 “
Sheriff's Dept - Carlsbad	(505) 887-7553
Sheriff's Dept - Hobbs	(505) 393-2515
New Mexico State Police - Carlsbad	(505) 885-3137
New Mexico State Police - Hobbs	(505) 392-5588
<u>Medical</u>	
Guadalupe Hospital - Carlsbad	(505) 887-4100
Ambulance Service	911
WIPP Site Health Services	(505) 234-8493
Poison Information Center	(800) 432-6866
<u>State Emergency Response Contacts</u>	
New Mexico Environmental Dept	
Santa Fe	(505) 827-0020
Hobbs	(505) 393-4302
Spill Emergencies	(505) 827-4300
<u>Federal Emergency Response Contacts</u>	
Environmental Protection Agency (EPA)	(214) 655-6644
Region VI Emergency Response Hotline	(214) 665-2222

**ATTACHMENT 9
OF
FORM C-137**

**ROUTINE INSPECTION AND MAINTENANCE
PLAN TO ENSURE
PERMIT COMPLIANCE**

ROUTINE INSPECTION AND MAINTENANCE PLAN TO ENSURE PERMIT COMPLIANCE

Lea Land's routine inspection and maintenance plan consists of three parts:

- Waste Acceptance Guidelines
- Plan to Inspect Loads to Detect and Prevent the Disposal of Regulated Hazardous Waste and Unauthorized Waste
- Site Inspections and Maintenance

The waste acceptance guidelines include Lea Land's procedures for waste profiling and manifesting of the waste streams. Attached is the Waste Profile Form, which contains a certification from the generator that the waste profile is accurate and that the materials tested are representative of the waste that is profiled.

This section also contains procedures for manifesting of the waste loads (see attached manifest) and procedures that will be followed when waste loads arrive at the landfill and are inspected and eventually unloaded. Also included are procedures for inspection of the facility site and surrounding roads.

Waste Acceptance Guidelines

Lea Land will accept pre-approved oilfield related wastes only. A list of waste streams that may be received for disposal is found in Attachment 6. Lea Land plans to mix RCRA exempt and non-exempt oil field wastes. **Therefore, all RCRA exempt oil and gas wastes will also be tested prior to disposal.**

Data requirements for waste materials to be disposed in the Lea Land facility will be determined on a case-by-case basis, unless the process that generates the waste stream does not change. The Waste Approval personnel will determine, based on historical activities at the site, what testing needs to be conducted or if process knowledge can be used.

The number of samples will be determined based on Lea Land's Frequency of Sampling Guidelines (see attached). The amount of analytical data and/or process knowledge must be adequate to characterize the waste as not being characteristically hazardous nor being a listed hazardous waste (40 CFR Part 261).

When using process knowledge rather than testing, the generator must show comprehensive knowledge of the waste and how it was generated. Any documents such as MSDS sheets are helpful in supporting the generator's knowledge of process.

Once it is determined that the waste is approved for disposal in the Lea Land facility, the attached Waste Profile Form (Rev. 05-08-97) is completed and submitted to the Waste Approval personnel along with the associated analytical data and other supporting information.

A certified manifest will accompany each load of waste scheduled to be brought to the facility. The manifest must attest to the physical and chemical characteristics of the waste certifying the waste as non-hazardous. Upon arrival at the facility, the waste will be inspected to ensure that it coincides with the information supplied on the manifest.

2. Manifest Requirements

The manifest will include the following information:

- a. Name, address and phone number of the generator of the waste.
- b. Name, address and phone number of any and all commercial haulers in the order each will be transporting the waste.
- c. Name, site address, phone number, and identification number of the Lea Land facility.
- d. Type and proper name of waste being shipped.
- e. Total weight or volume of waste prior to shipment from generator.
- f. Total weight or volume of waste received at Lea Land, Inc.
- g. Type and number of containers in shipment.
- h. Any special handling instructions.
- i. Date and location the waste was delivered.
- j. Date and receipt from the generator and total weight or volume of the waste shall be provided by the transporter; and
- k. If more than one commercial hauler is used, each commercial hauler shall provide the date of receipt and total weight or volume of said waste from the previous commercial hauler.

The manifest will accurately reflect the information and be signed by the generator and each commercial hauler of the waste, and by Lea Land, Inc. The signature will acknowledge delivery, quantity, and receipt of the waste. The signatories will be duly authorized agents of their organizations.

Upon discovery of any significant discrepancy including but not limited to factual misrepresentation on the manifest, irregularities in transportation, discharges, or any unauthorized action in regard to shipment, delivery, or disposal of the solid waste, the person discovering the discrepancy will notify the OCD, the generator, transporter, and Lea Land within 24 hours.

Upon receipt of a waste shipment at the facility, Lea Land will send a signed copy of the manifest back to the generator.

A copy of the manifest will be retained by the transporter and Lea Land for their permanent records. The generator will retain both the original copy and returned copy signed by Lea Land for the generator's permanent records.

Copies of the manifest will be retained by Lea Land for two (2) years or as deemed necessary by the Oil Conservation Division.

3. Petroleum Contaminated Soils

All petroleum contaminated soils to be disposed of at the facility will be tested for Total Petroleum Hydrocarbons (TPH) and other tests. Copies of the results of the laboratory analyses will be placed in the Lea Land daily operating record.

Petroleum contaminated soils containing free liquids will be not accepted. However, petroleum contaminated soils may be accepted for treatment on site and subsequent disposal with prior approval.

Petroleum contaminated soils may be accepted for disposal or cover material if the TPH concentration is less than 1500 mg/Kg and the sum of benzene, toluene, ethylbenzene, and xylene isomer concentration is less than 500 mg/Kg, with benzene individually less than 10 mg/Kg.

Uncontaminated or remediated soils will not be mixed with contaminated soils.

4. Waste Hauling and Vehicles Entering the Site

Containers accepted at the site include Roll Off's, Dump Trailers, Tandems, and Drums. Vehicles transporting the waste from the generators to the facility will comply with all state and local laws and regulations. Vehicles will not be allowed to litter the area or local road ways. This will be accomplished by all vehicles loads being covered or the waste completely contained until waste reaches the working face. Vehicles will comply with all posted speed limits.

The facility entrance may accommodate up to 10 vehicles at one time.

5. Access and Weighing of Vehicles

Vehicles disposing of waste at the facility will enter and exit the facility through the main access gate located in the northwestern portion of the site. The main access gate is the only entrance to the facility and is located just south directly off of U.S. Highway 62/180. Upon entering the main access gate the vehicles will proceed to the Scales and the gross vehicle weight will be measured and recorded. The site can accept up to 1000 tons per day of material, (40,000 lbs per truck per day from 50 trucks).

6. Unloading of Waste from Vehicles

After the vehicle weight has been measured and recorded, the vehicles will advance to the working face where the vehicle will be directed to the appropriate unloading point near the vicinity of the working face. The waste hauling vehicles will be positioned so that the waste may be spread, compacted, and covered.

7. Operation at the Working Cell

Initial operations include the unloading of waste at the top of the active ramp. The waste is then spread toward the base and compacted to proper compaction and to its smallest practical volume. Lea Land personnel will monitor and control cell width, height and slope at the working face.

LEA LAND, INC.

FREQUENCY OF SAMPLING GUIDELINES ⁽¹⁾

SAMPLE MEDIA

FREQUENCY

Excavations / Waste Piles

Petroleum contaminated soils/sludges

Every 100 CY (4 grab samples
combined to obtain 1
composite sample)

Soils/sludges contaminated w/metals

Every 20 CY (4 grab samples
combined to obtain 1
composite sample)

Drums

Soils/sludges contaminated with
organics or metals

Every 10 drums (1 composite
sample)

⁽¹⁾ These frequencies are based on the assumption that the waste material is uniform. Frequency of sampling for non-uniform waste will be determined on a case-by-case basis.



LEA LAND SURFACE WASTE MANAGEMENT FACILITY

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO.

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME		4. ADDRESS			5. PICK-UP DATE	
	PHONE NO.		CITY	STATE	ZIP	6. TNRCC I.D. NO.	
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No.	9. TOTAL QUANTITY	10. UNIT Wt/Vol.
	a.						
b.							
c.							
d.							
12. COMMENTS OR SPECIAL INSTRUCTIONS:							
13. IN CASE OF EMERGENCY OR SPILL, CONTACT							
NAME		PHONE NO.		24-HOUR EMERGENCY NO.			
14. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.							
PRINTED/TYPED NAME			SIGNATURE		DATE		
T R A N S P O R T E R S	15. TRANSPORTER (1)			16. TRANSPORTER (2)			
	NAME:			NAME:			
	TEXAS I.D. NO.			TEXAS I.D. NO.			
	IN CASE OF EMERGENCY CONTACT:			IN CASE OF EMERGENCY CONTACT:			
EMERGENCY PHONE:			EMERGENCY PHONE:				
17. TRANSPORTER (1): Acknowledgment of receipt of material			18. TRANSPORTER (2): Acknowledgment of receipt of material				
PRINTED/TYPED NAME _____			PRINTED/TYPED NAME _____				
SIGNATURE _____ DATE _____			SIGNATURE _____ DATE _____				
D I S P O S I T A L Y	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048		
	PERMIT NO. SWM #131401 - New Mexico		19. COMMENTS				
	20. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.						
AUTHORIZED SIGNATURE			CELL NO.	DATE	TIME		

Plan to Inspect Loads to Detect and Prevent the Disposal of Regulated Hazardous Waste and Unauthorized Waste

Lea Land has established strict acceptance standards for non-hazardous waste streams. Only waste which has been certified by the generator as being non-hazardous will be scheduled for disposal. The facility employees will supervise the unloading of waste into the cell or unloading area. Non-hazardous oil related solid waste will be accepted only if the following conditions are fulfilled:

- a. The generator shall be notified as to which waste streams are acceptable for disposal at the facility.
- b. The generator shall collect a representative sample from the waste stream and arrange for testing by a laboratory prior to shipment of the waste. The sample shall be appropriately tested using the accepted EPA test methods to determine that a waste is non-hazardous.
- c. If the generator's knowledge of the waste stream is determined to be adequate, the generator may submit a chemical and/or physical description of the waste and a signed certification that the waste stream is not hazardous prior to shipment of the waste instead of testing as discussed in item (b) above.
- d. Lea Land personnel shall examine the Generator's manifest to determine if the waste stream is acceptable for management and disposal at the facility. The test results of item (b) above must satisfy the acceptance criteria identified in the EPA test methods.
- e. Lea Land personnel will visually inspect a minimum of ten percent (10%) of the waste stream for physical conformance with the manifest.
- f. Any load which does not comply with these conditions shall be rejected and returned to the generator or stored in the unauthorized waste area until the non-conformance is resolved.

Inspection Record

Lea Land personnel will inspect every load upon arrival. The following information will be recorded on the attached Inspection Record and retained by Lea Land, Inc.

- a. Inspector name
- b. Date
- c. Time
- d. Name of transportation company
- e. Truck license number and state
- f. Truck description
- g. Source of the waste
- h. Does waste coincide with the scheduled waste listed on manifest?
- i. Any pertinent observations made during the inspection?
- j. Inspector signature
- k. Driver signature

Manifest No. _____

LEA LAND INC. FACILITY INSPECTION RECORD

Inspector: _____

Date: _____

Time: _____

Name of Transportation Company: _____

Driver's Name: _____

Truck License No.: _____ State: _____

Truck Description: _____

Source of Waste: _____

Does waste coincide with the scheduled waste listed on the manifest? _____

Any pertinent observations made during the inspection: _____

Inspector: _____

(signature)

Driver: _____

(signature)

Site Maintenance and Inspections

1. Daily

Daily inspections will be performed for the following items to ensure materials and equipment are in good working order.

- a. Inspect liner quality to verify tears or deformities do not exist
- b. Inspect cell and perimeter for any erosional features that need to be corrected
- c. Verify the cover material is in good condition
- d. Check to ensure adequate and uniform compaction is being achieved
- e. Inspections of all site equipment for any necessary maintenance
- f. Verify all gates are securely locked
- g. Check water level in water storage tank and for freezing in cold weather
- h. A water truck will be used to control dust if needed
- i. Remove any litter on site roads and surrounding area

2. Weekly

Weekly inspections include:

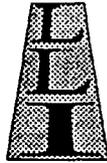
- a. Check for adequate fuel storage
- b. Verify no leaks in tanks and check for visible wet spots in area
- c. Inspect condition of site roads for any necessary repairs

3. Monthly

All fencing and site perimeter will be inspected monthly for any necessary repairs.

4. Annually

Calibration of site scales will be performed annually as recommended by the manufacturer.



LEA LAND, INC.

 NEW AMENDMENT

PAGE 1 OF 5

Material Profile No: _____

A. GENERATOR INFORMATION

Generator Name _____
Facility Address _____

City/County _____
State _____ Zip Code _____
State ID# _____

Technical Contact _____
Telephone () _____ Ext. _____ Fax () _____
Billing Name _____
Billing Address _____

City _____ State _____ Zip Code _____
Attention _____
Telephone () _____ Ext. _____

B. RCRA RCRA Non Hazardous/Exempt? Yes No

General Description of Process: _____

C. ANNUAL REPORT CODES (see attached lists)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

C. ANNUAL REPORT CODES CONT. (see attached lists)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

11. Does this waste contain scrap metal pieces greater than 2 inches in size or any protruding re-bar (from concrete pieces)? Yes No
 Please describe _____

F. METALS

NONE TCLP (mg/L)

	<u>Reg. Limit</u>	<u>Below</u>	<u>Above</u>
Arsenic	5 mg/L	_____	_____
Barium	100 mg/L	_____	_____
Cadmium	1 mg/L	_____	_____
Chromium	5 mg/L	_____	_____
Lead	5 mg/L	_____	_____
Mercury	0.2 mg/L	_____	_____
Selenium	1 mg/L	_____	_____
Silver	5 mg/L	_____	_____
Others:	_____		

G. PHYSICAL/CHEMICAL CONSTITUENTS

Attach all MSDS, Sample Analysis and Additional Information

H. ANTICIPATED VOLUME

<u>Quantity</u>	<u>Container</u>	<u>Quantity</u>	<u>Container</u>
_____	5-gal pail	_____	Cubic Yard Box
_____	15-gal carboy	_____	Super Sack
_____	30-gal drum	_____	Rolloff/Dump Trailer
_____	55-gal drum	_____	Tanker
_____	85-gal drum	_____	Other _____

Per Time Week Month Year Other _____

LEA LAND, INC.

WASTE PROFILE - PAGE 5 OF 5

If empty containers which formerly contained hazardous waste are to be disposed:

Do they contain no more than 1 inch of residue on the bottom of the container?

Yes No

Have they been rendered non-reusable (i.e., crushed, punctured, etc.)?

Yes No

Generator's Certification:

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all material described by this profile.

Generator's Authorized Signature: _____ Date _____

SOURCE CODES

CODE SYSTEM TYPE

CLEANING AND DEGREASING

- A01 Stripping
- A02 Acid cleaning
- A03 Caustic (alkali) cleaning
- A04 Flush rinsing
- A05 Metals recovery - type unknown
- A07 Vapor degreasing
- A08 Physical scraping and removal
- A09 Clean out process equipment
- A19 Other cleaning and degreasing

SURFACE PREPARATION AND FINISHING

- A21 Painting
- A22 Electroplating
- A23 Electroless plating
- A24 Phosphating
- A25 Heat treating
- A26 Pickling
- A27 Etching
- A29 Other surface coating/preparation
(specify in Comments)

PROCESSES OTHER THAN SURFACE PREPARATION

- A31 Product rinsing
- Product filtering
- Product distillation
- A34 Product solvent extraction
- A35 By-product processing
- A37 Spent process liquids removal
- A38 Tank sludge removal
- A39 Slag removal
- A40 Metal forming
- A41 Plastics forming
- A49 Other processes other than surface
preparation
(specify in Comments)

PRODUCTION OR SERVICE DERIVED ONE- TIME AND INTERMITTENT PROCESSES

- A51 Leak collection
- A53 Cleanup of spill residues
- A54 Oil changes
- A55 Filter/battery replacement
- A56 Discontinue use of process equipment
- A57 Discarding off-spec material
- A58 Discarding out-of-date products
or chemicals
- A59 Other production-derived one-time &
intermittent processes
- A60 Sludge removal

CODE SYSTEM TYPE

REMEDIAION DERIVED WASTE

- A61 Superfund Remedial Action
- A62 Superfund Emergency Response
- A63 RCRA Corrective Action at solid waste
management unit
- A64 RCRA closure of hazardous waste
management unit
- A65 Underground storage tank cleanup
- A69 Other remediation

POLLUTION CONTROL OR WASTE TREATMENT PROCESSES

- A71 Filtering/screening
- A72 Metals recovery
- A73 Solvents recovery
- A74 Incineration/thermal treatment
- A75 Wastewater treatment
- A76 Sludge dewatering
- A77 Stabilization
- A78 Air pollution control devices
- A79 Leachate collection
- A89 Other pollution control or waste
treatment

OTHER PROCESSES

- A91 Clothing and personal protective
equipment
- A92 Routine cleanup wastes
(e.g., floor sweepings)
- A93 Closure of management unit(s) or
equipment other than by remediation
specified in codes A61-A69
- A94 Laboratory wastes
- A99 Other

FORM CODES

.....
Code Waste Description
.....

SOLIDS

INORGANIC SOLIDS - Waste that is primarily inorganic and solid, with low organic content and low-to-moderate water content; not pumpable

301	Soil contaminated with organics
302	Soil contaminated with inorganics only
303	Ash, slag, or other residue from incineration of wastes
304	Other "dry" ash, slag, or thermal residue
305	"Dry" lime or metal hydroxide solids chemically "fixed"
306	"Dry" lime or metal hydroxide solids not "fixed"
307	Metal scale, filings, or scrap
308	Empty or crushed metal drums or containers
309	Batteries or battery parts, casings, cores
310	Spent solid filters or adsorbents
311	Asbestos solids and debris
312	Metal-cyanide salts/chemicals
313	Reactive cyanide salts/chemicals
314	Reactive sulfide salts/chemicals
315	Other reactive salts/chemicals
316	Other metal salts/chemicals
319	Other waste inorganic solids (Specify in Comments)
388	Empty or crushed glass containers
389	Nonhazardous sandblasting waste
390	Nonhazardous concrete/cement/construction debris
391	Nonhazardous dewatered wastewater treatment sludge
392	Nonhazardous dewatered air pollution control device sludge
393	Catalyst waste
394	Nonhazardous solids containing less than 50 ppm PCB's
396	Nonhazardous electrical equipment/devices containing less than 50 ppm PCB's
398	Nonhazardous soils containing less than 50 ppm PCB's

ORGANIC SOLIDS - Waste that is primarily organic and solid, with low-to-moderate inorganic content and water content; not pumpable

401	Halogenated pesticide solid
402	Non-halogenated pesticide solid
403	Solids, resins, or polymerized organics
404	Spent carbon
405	Reactive organic solid
406	Empty fiber or plastic containers
407	Other halogenated organic solids (Specify in Comments)
409	Other non-halogenated organic solids (Specify in Comments)
488	Wood debris
489	Petroleum contaminated solids

ORGANIC SOLIDS - (continued)

Code	Waste Description
490	Sandblasting waste
491	Dewatered biological treatment sludge
492	Dewatered sewage or other untreated biological sludge
493	Catalyst waste
494	Solids containing less than 50 ppm PCB's.
496	Electrical equipment/devices containing less than 50 ppm PCB's.
498	Soil containing less than 50 ppm PCB's.

INORGANIC SLUDGES - Waste that is primarily inorganic, with moderate-to-high water content and low organic content, and pumpable

501	Lime sludge without metals
502	Lime sludge with metals/metal hydroxide sludge
503	Wastewater treatment sludge with toxic organics
504	Other wastewater treatment sludge
505	Untreated plating sludge without cyanides
506	Untreated plating sludge with cyanides
507	Other sludge with cyanides
508	Sludge with reactive sulfides
509	Sludge with other reactives
510	Degreasing sludge with metal scale or filings
511	Air pollution control device sludge (e.g., fly ash, wet scrubber sludge)
512	Sediment or lagoon dragout contaminated with organics only
513	Sediment or lagoon dragout contaminated with inorganics only
514	Drilling mud
516	Chloride or other brine sludge
519	Other inorganic sludges (specify in Comments)
597	Catalyst waste
598	Nonhazardous sludges containing less than 50 ppm PCB's.

ORGANIC SLUDGES - Waste that is primarily organic with low-to-moderate inorganic solids content and water content, and pumpable

601	Still bottoms of halogenated (e.g., chlorinated) solvents or other organic liquids
602	Still bottoms of non-halogenated solvents or other organic liquids
603	Oily sludge
604	Organic paint or ink sludge
605	Reactive or polymerizable organics
606	Resins, tars, or tarry sludge
607	Biological treatment sludge
608	Sewage or other untreated biological sludge

ORGANIC SLUDGES - (continued)

Code	Waste Description
609	Other organic sludges (Specify in Comments)
695	Petroleum contaminated sludges other than still bottoms and oily sludges
696	Grease
697	Catalyst waste
698	Nonhazardous sludges containing less than 50 ppm PCB's

OTHER

OTHER - Waste streams not included in the above descriptions

902	Supplemental plant production refuse
999	Plant trash

ORIGIN CODES

Please review the origin codes below and select the code that best indicates the process or type of activity that generated this waste stream.

.....
CODE #
.....

- 1 Generated on-site from a product process or service activity.
- 2 Spill clean-up, equipment decommissioning, or emergency removal by company.
- 3 Derived from the on-site management of a nonhazardous waste.
- 4 Waste received from off-site and not recycled or treated on-site.
- 5 Residual from on-site treatment, disposal or recycling of hazardous waste.
- 6 State, federal or locally funded cleanup.
- 7 Corrective action or closure.
- 8 Reserved.

**ATTACHMENT 10
OF
FORM C-137**

CLOSURE PLAN

Lea Land Inc. Commercial Surface Waste Management Facility Closure Plan

The following closure plan has been developed to comply with the requirements of the New Mexico Oil Conservation Division.

The following closure plan has been developed to determine the Financial Assurance for closure of the facility.

Closure Notification

Thirty (30) days prior to the beginning of closure, Lea Land Inc. will notify OCD of its intent to cease taking waste and close the facility.

Closure Plan

Lea Land Inc. will then submit to OCD a Closure Plan detailing plans as necessary for cover of all wastes, placement of final cover and revegetation of all cover with native grasses such as Side Oats, Grama Grass, Sand Drop Seed Grass, Little for Big Blue Stem, or native cover for soil stabilization. The closure plan shall be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

Closure Schedule

The closure requirements will begin after the Lea Land facility receives the known final receipt of waste. The closure will be completed within 180 days following the beginning of closure, unless an extension has been granted by the OCD. Upon closure, Lea Land Inc. will notify the OCD that closure has been completed in accordance with the closure plan.

Closure Costs

A portion of the materials used for final cover will be transported to the needed cell area from borrow areas located on the facility property. The material will be hauled and placed by trucks and other on-site equipment. Due to the fact that the material will be transported from on-site, the cost of material is insignificant. The cost to haul, compact, and shape the material will be approximately \$1.50 per cubic yard. The hauling and grading of the final cover material will be performed by facility personnel. Waste cells will be closed and covered as soon as the cells reach maximum height. The maximum estimated area for final closure will thus be five (5) acres. The closure costs required to close this area of the facility are shown in Table 1.

Table 1

CLOSURE COST FOR 10.00 ACRES

Media	Amount of Media	Unit Cost	Cost
Top Soil (6")	4,633 cubic yards	\$1.50/cubic yard	\$ 6,050
(18") Cover	12,100 cubic yards	\$1.50/cubic yard	\$ 18,150
Vegetation material/labor/equipment	217,800 square feet	\$12.16/thousand square feet	\$ 2,648
		Sub-Total	\$ 26,848
Contingency		15%	\$ 4,027
		Total Cost	\$ 30,875

**ATTACHMENT 11
OF
FORM C-137**

GEOLOGICAL/HYDROLOGICAL INFORMATION

Ground Water Monitoring

Hydrologic Testing

Description of Site Geology and Hydrology

Laboratory Analysis of Ground Water

Soil Boring Data

Ground Water Monitoring

The ground water monitoring system at Lea Land consists of one upgradient well located north of the existing landfill and three downgradient monitoring wells located south of the landfill. The wells were constructed in a manner that the integrity of the bore-hole and well is maintained and is in accordance with ASTM method 5092.

The ground water monitoring program includes consistent sampling and analysis procedures and are conducted in accordance with the RCRA Ground-Water Monitoring: Draft Technical Guidance. The ground water program includes procedures and techniques for:

- a. Sample collection
- b. Sample preservation and shipment
- c. Analytical procedures
- d. Chain of custody control; and
- e. Quality assurance and quality control
- f. Statistical methods
- g. Reporting requirements

The ground water monitoring program at Lea Land includes consistent sampling and analysis procedures that are designed to ensure monitoring results which will provide an accurate representation of ground water quality at the upgradient and downgradient wells. Lea Land notifies the New Mexico Waste Management Secretary that the sampling and analysis program has been placed in the operating record.

1. Sampling Frequency

Samples are collected and background levels and concentrations established for each parameter or constituent for each individual well from four independent samples during the first six months (once per six weeks) and at least one from the second six months.

Samples will be collected semi-annually after the first year of operation unless the New Mexico Secretary approves annual sampling. Sampling will continue for the life of the facility and the post-closure period.

HYDROLOGIC TESTING ON WELL MW#4

Prepared for:

Lea Land Inc.
P.O. Box 3247
Carlsbad, New Mexico 88221

Prepared by:



1012A West Pierce St.
Carlsbad, New Mexico 88220

6850 Austin Center Blvd. Suite 300
Austin, Texas 78731

February 27, 1997

1.0 SUMMARY

A series of hydraulic tests were performed on two monitor wells (MW #3 and MW #4) at the Lea Land, Inc. non-hazardous industrial waste landfill as part of the permitting process. The landfill is located approximately thirty miles east of Carlsbad, New Mexico on state highway 62/180. Each of the monitor wells tested was completed within the Triassic Santa Rosa Sandstone, a silty shale and siltstone, with a 30 foot screened interval in the water bearing unit (saturated thickness). The hydrologic testing between February 17 and February 20, 1997 was carried out in order to provide aquifer parameter estimates of both transmissivity (T) and of specific storage (Ss) of the water bearing unit.

Evaluation of preliminary data from slug tests that were performed on MW #3 and MW #4 suggested that the permeability of the water bearing unit at these location was very similar and so low that a constant-rate pumping test would not be feasible. The reason for this was that the formation would not be able to sustain an appreciable flow rate. Therefore, it was decided that a slug test of longer duration (~15 hours) would be performed on MW #4 to define the hydraulic parameters. The results of analysis of this slug test are as follows:

$$T = 3.53e-7 \text{ m}^2/\text{s}$$
$$Ss = 3.71e-9 \text{ 1/m}$$

In addition, the analysis suggests that under a 16 psig head difference, the fluid flow into the formation attained a maximum value of only ~0.04 gallons per minute (gpm). It would not have been possible to maintain a flow rate this small with the equipment available.

It should be noted that water levels were monitored in three additional wells indicated in Figure 1.1 (MW #1, MW #2, and MW #3) during the slug test recovery. Though the four wells appear to be completed in the same hydrostratigraphic horizon, there was no detectable response in the three monitoring wells during the MW #4 slug test. The lack of response is consistent with the low permeability calculated from the MW#4 slug test. The coordinates and elevations of the four monitoring wells are indicated in Figure 1.2.

The maximum hydraulic gradient based on pretest water-level measurements and survey data from wells MW#1, MW#2, MW#3, and MW#4 is $5.11e-3$ meters/meter. Based on the hydraulic conductivity value calculated from the slug test data in MW#4 of $3.86e-8$ m/s, the average velocity is $6.21e-3$ m/year (6 m/1000 years) in a south-southeast direction.

Note: The use of brand names in this report is for identification purposes only and does not imply any endorsement of specific products by INTERA Inc.

Cardinal

ENVIRONMENTAL, INC.

March 14, 1997

Mr. Bob Hall
Lea Land Inc.
1300 W. Main St.
Oklahoma City, OK 73106

Dear Mr. Hall:

We have completed an evaluation of the hydrogeologic setting of the Lea Land facility to determine the potential for ground water contamination. The information used in this analysis was derived from the four monitor wells and 10 soil borings completed at this site.

The facility is underlain by the low permeability Santa Rosa formation (silty shale and siltstone) to a depth of greater than 200 feet. The first subsurface water encountered under the disposal cells is a thin saturated layer at a depth of 195-200 feet. Hydraulic testing of this wet zone demonstrates that it is not a viable aquifer because its water production capacity is very low (estimated at less than 0.04 gpm). The calculated rate of horizontal flow in this wet zone is only approximately 20 feet in 1000 years.

The potential for contamination of the wet zone by water seeping from the surface is very low. This facility is located in a semi-arid area with unsaturated soil and rock between the surface and the water table. Even if a source of water was available, (such as a perforation of the composite liner system), the time required for water to "wet" the unsaturated materials and allow migration to the water table is calculated to be greater than the life of the landfill or the subsequent 30 year post closure monitoring period.

Based on the above discussion, it is our professional opinion that the Lea Land facility is located an ideal geologic environment. Operation of this landfill will have no negative impact on ground water occurring under this site.

Sincerely,



Duane L. Winegardner, P.E.
Senior Hydrogeologist

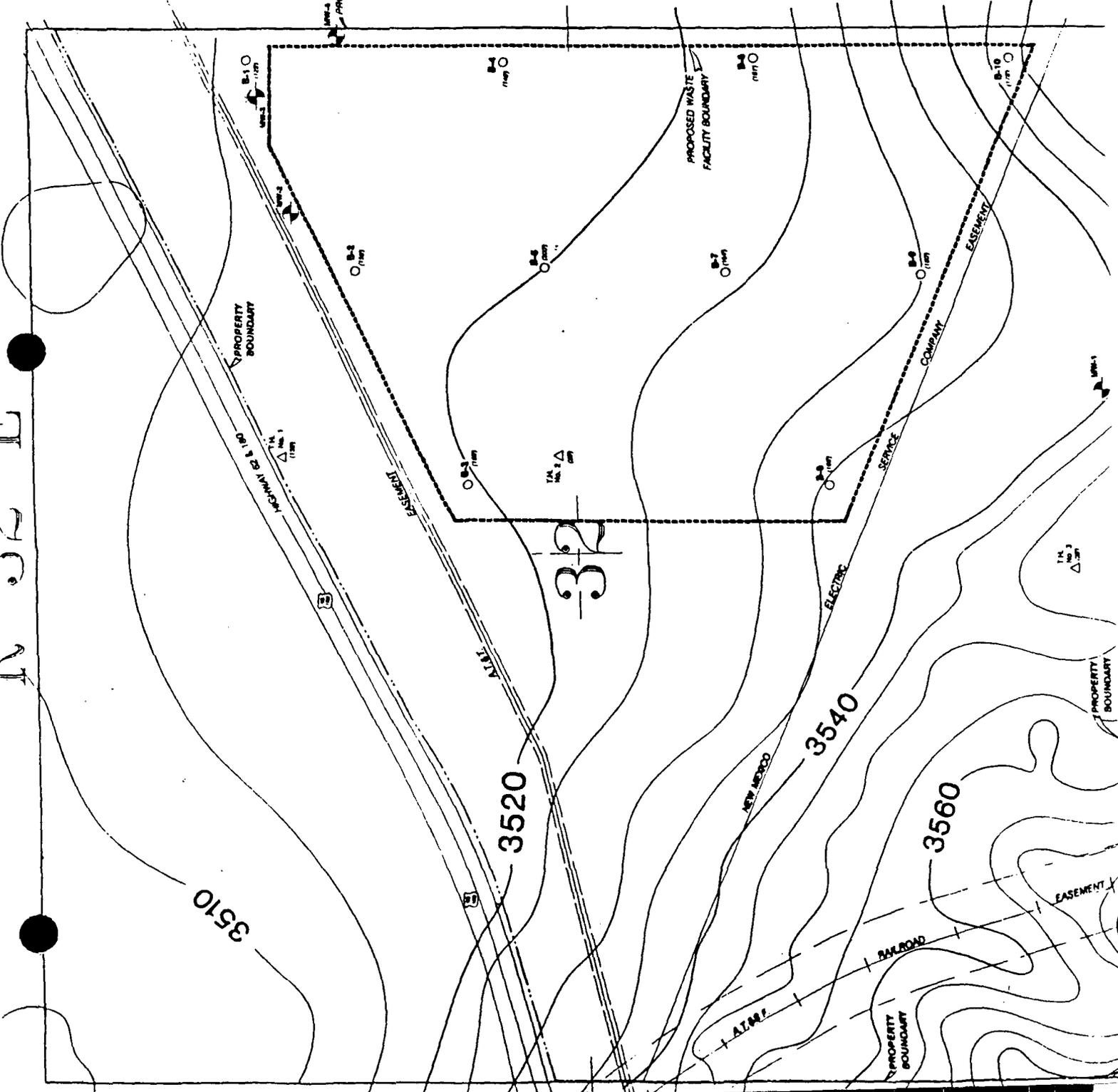
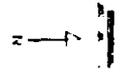
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R 32 E

T 20 S

- LEGEND:
- B-1 ○ BORING LOCATIONS (Depth of Boring)
 - TK No. 1 △ PREVIOUSLY DRILLED TEST-HOLE (Depth of Test Hole)
 - W-1 → PROPOSED MONITORING WELL

TOPOGRAPHIC MAP
 24.466 N. 24.466 W.
 LA COUNTY 4th MERIDIAN



DESCRIPTION OF SITE GEOLOGY AND HYDROLOGY

Lea Land, Inc.
Lea County, New Mexico
June 14, 1995

Page 31

The general information pertaining to the geologic regime was obtained from the following published reports: USGS Groundwater Report 6 (Nicholson, A. and Clebsch, A., 1961); and New Mexico Geological Society, Special Publication No. 10, Environmental Geology and Hydrology of New Mexico, 1981. The proposed landfill facility is located in the Pecos Valley section of the Great Plains physiographic province. The Pecos Valley section is a very irregular erosional surface which slopes towards the west and south, towards the Pecos River. The major structural feature of the area is the Delaware Basin. There has been virtually no tectonic movement in the basin since the close of Permian time 245 million years ago.

A regional geologic map obtained from the U.S. Geological Survey (~~Exhibit M,~~ (Figures 1 and 1a) shows the surface geology of the Site to consist of Alluvium deposits of Recent and Pleistocene age. The Quaternary, Recent, and Pleistocene age deposits are channel and lake deposits of alternating thickbedded calcareous silt, fine sand, and clay. The alluvium was deposited in topographically low areas where the (Miocene, Pliocene, and Pleistocene) Ogallala formation had been stripped away. The U.S. Geological Survey map also shows that the southwest corner of the Section consists of the Upper Triassic, Santa Rosa sandstone which is a red to white, poorly sorted, coarse-grained, crossbedded sandstone.

The literature indicates that the Triassic rocks of the area have a regional dip of less than 1 degree to the southeast. At the proposed location, the dips are reversed and are in the northerly direction, towards the Laguna Toston and Laguna Plata. Collapse structures are not identified in the literature or by visual inspection at the proposed location.

The literature also indicated that the ground water in the Ogallala formation and the Quaternary sediments of southern Lea County is unconfined where the underlying red beds are relatively impermeable. The beds may form a lower confining layer, which prevents further downward movement and it is possible that the Ogallala formation and the Quaternary sediments of southern Lea County may contain perched aquifers. Since the Ogallala is absent in the area of the proposed landfill perched aquifers may occur in the Quaternary deposits. However, no such wells are known to be completed in such a zone as indicated by the literature.

Piezometric maps of the Triassic formation were obtained from literature published by the U.S.G.S. in the ground water report 6 by Clebsch and Nicholson (~~Exhibit M~~, (Figures 2 and 2a). The piezometric map indicates that the Triassic aquifer is approximately 200 to 300 feet below the surface of the ground. The recharge area of the Triassic rocks is in the western part of southern Lea County and the eastern

part of Eddy County. Some recharge probably is derived from precipitation on the sand dunes, by precipitation and runoff directly on the outcrop, and probably from ground water from the overlying Ogallala formation and Quaternary alluvium where they overlie permeable beds of Triassic age in the subsurface. The contours of the previously discussed map indicate that water discharges from the Triassic rocks (Santa Rosa sandstone) in the vicinity of the Lagunas which are located north of the proposed facility. The water does not discharge to the lakes because the aquifer is located approximately 200 feet below the lake surfaces.

Three initial test holes were air drilled at the Site to test for groundwater, identify water bearing zones, and to gain geologic information. The holes were drilled to depths of 139 feet, 29 feet, and 39 feet, respectively. Test hole #1 is located north of the proposed landfill area, test hole #2 is located in the proposed landfill area, and test hole #3 is located south of the proposed landfill area. (See Figure J). Ground water was not encountered in any of the initial test holes. Test hole #1 was drilled in the north central portion of Section 32. Test hole #2 was drilled south of hole #1 in the east central portion of Section 32. Test hole #3 was drilled in the approximate SE/4 SE/4 SW/4 of Section 32. The test holes revealed that the geology of the area consisted of surficial deposits of fine grained gypsiferous sand, silt, and clay with occasional caliche stringers from 1 inch to 4 inches thick. Hole

#1 contained approximately 44 feet of surficial deposits, hole #2 contained approximately 29 feet of surficial deposits, and hole #3 contained 9 feet of surficial deposits. The Gatuna Formation (Quaternary Age) was then encountered containing dark reddish to orange, very fine grained sand and siltstone with occasional clay. Hole #1 contained 20 feet, hole #2 was not drilled deep enough to encounter the formation, and hole #3 had 3.5 feet. The Santa Rosa sandstone (Triassic age) was encountered next. The Santa Rosa sandstone consisted of hard, tight, gray to light brown, medium grained sandstone with occasional dark brown conglomerate shales. Hole #1 contained 50 feet of the Santa Rosa and hole #3 did not contain any Santa Rosa. The Dewey Lake Redbed was encountered last. The formation consisted of light red to reddish orange shale with thin stringers of siltstone and sandstone. Hole #1 drilled 20 feet of this zone and hole #3 drilled 26.5 feet. Drilling in both holes ceased in this formation. The test holes were plugged in accordance with the State Engineer's requirements. As previously mentioned, the test holes did not encounter any ground water and revealed that the beds were dipping to the north. The laboratory analyses of the soil sample obtained from these borings may found in Exhibit N.

A subsurface investigation plan was submitted to the department on September 3, 1993 to further define the subsurface geologic regime at the proposed facility. The plan provided for the drilling of ten (10) boreholes on the proposed landfill Site in order to obtain geologic information and characterize the aquifer below. The plan was approved by the Department. The drilling of the borings was initiated on October 5, 1993 with drilling completed on October 10, 1993. Pool Environmental Drilling drilled the borings from the surface to total depth utilizing air rotary drilling rig. The ten boring were spaced evenly throughout the proposed landfill site. The depths of borings were as follows: B-1 (125'), B-2 (155'), B-3 (150'), B-4(148'), B-5 (200'), B-6 (151'), B-7 (154'), B-8 (166'), B-9 (160'), an B-10 (178'). The locations of the borings may be found in Figure J. Samples were collected at intervals of every (5) five feet. The lithology of each boring was logged by a qualified geologist and was described according to the Unified Soil Classification System, ASTM D2487-66T. Graphical logs of these boring are provided in Exhibit N.

The subsurface materials encountered at the Site were comprised of surficial deposits consisting of light tan to buff gypsiferous sand and clay with caliche stringers to depths of twenty (20) to fifty (50) feet below the surface of the ground. This zone graded into a light reddish brown to orange shale, siltstone, and fine grained sandstone with some caliche stringers to depths of approximately one

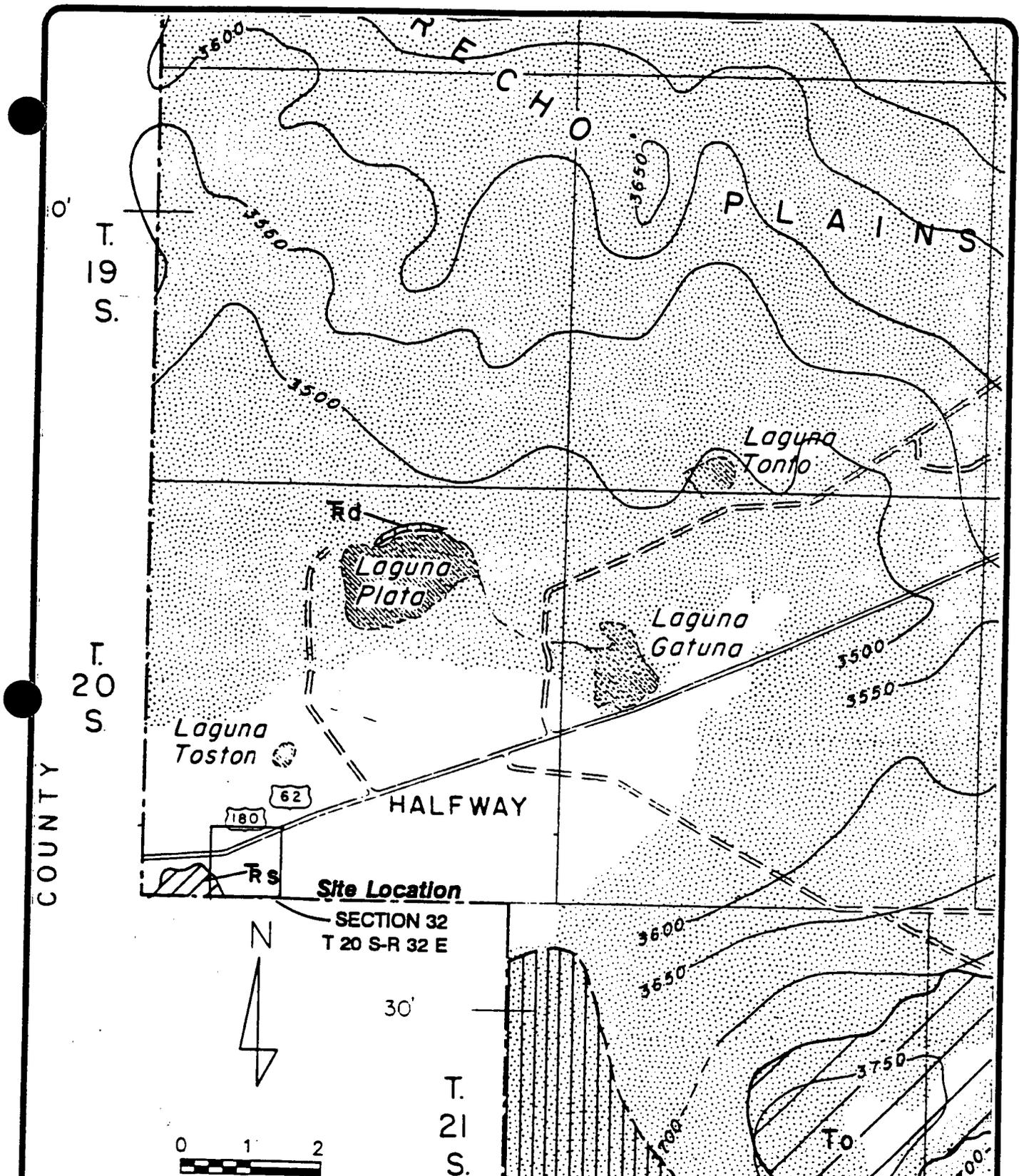
hundred (100) to one hundred and twenty five (125) feet. This zone contained some hard streaks of light brown and dark reddish orange clay, silt, and sandstone. Dark reddish brown to orange shales with siltstone stringers were encountered to the total depths drilled ranging from one hundred and twenty five (125) feet to two hundred (200) feet. Gray shales and siltstone stringers were observed in this zone at depths ranging from one hundred (100) feet to two hundred (200) feet.

Only two of the ten borings encountered ground water. Boring B-1 encountered ground water at a depth of one hundred and twenty five (125) feet. Boring B-5 encountered ground water at a depth of one hundred and ninety nine (199) feet. One sample was obtained from each of the borings and laboratory analyses were performed on each sample for the major anions, major cations, alkalinity, total hardness, resistivity, specific gravity, and pH. The U.S.G.S. Ground-water report 6 (Nicholson and Clebsch 1961) identifies the distinctive character of water from the Triassic rocks as having a sulfate (SO₄) to chloride (Cl) ratio (equivalents per million) greater than 2. The ground water samples from Tertiary and Quaternary deposits have sulfate-chloride ratios generally less than 2 but greater than 0.1. The laboratory analysis of the groundwater sample obtained from boring B-1 had a sulfate-chloride ratio of 1.44 (equivalents per million) which is indicative of Tertiary and Quaternary deposits. The laboratory analysis of the groundwater sample

obtained from boring B-5 had a sulfate-chloride ratio of 3.6 (equivalents per million) indicative of Triassic deposits. The laboratory analysis of the ground water, the U.S.G.S. report 6 sulfate-chloride ratio determination (Nicholson and Clebsch 1961), the dip of the beds to the north, and ground water not being encountered at shallower depths south of boring B-1, indicate groundwater from the Tertiary and Quaternary deposits to be restricted to the extreme northeast portion of the proposed landfill. The laboratory analysis of the groundwater samples obtained from B-1 and B-5 are located in Exhibit N.

Materials testing was performed on soil samples obtained from the drilling of the borings. The materials testing included the following: description, sieve analysis, atterberg limits, percentage carbonates, and USCS soil classification. The materials testing results are provided in Exhibit N.

The boreholes were abandoned by backfilling each from total depth to grade with bentonite chips activated with water (refer to Exhibit N for certification for borehole closure).



REF: GEOLOGIC MAP OF SOUTHERN LEA COUNTY, NEW MEXICO. GEOL: BY ALEXANDER NICHOLSON, JR., 1953-54. CONTOURS ON BURIED RED-BED SURFACE COMPILED BY ALEXANDER NICHOLSON, JR., AND S.R. ASH FROM SHOTHOLE LOGS, 1960.

PROJ.# 404	DRAWN BY: BJJ
SCALE: 1" = 2 MILES	CHECKED BY: MG
FN:	
DATE: AUGUST 20, 1993	

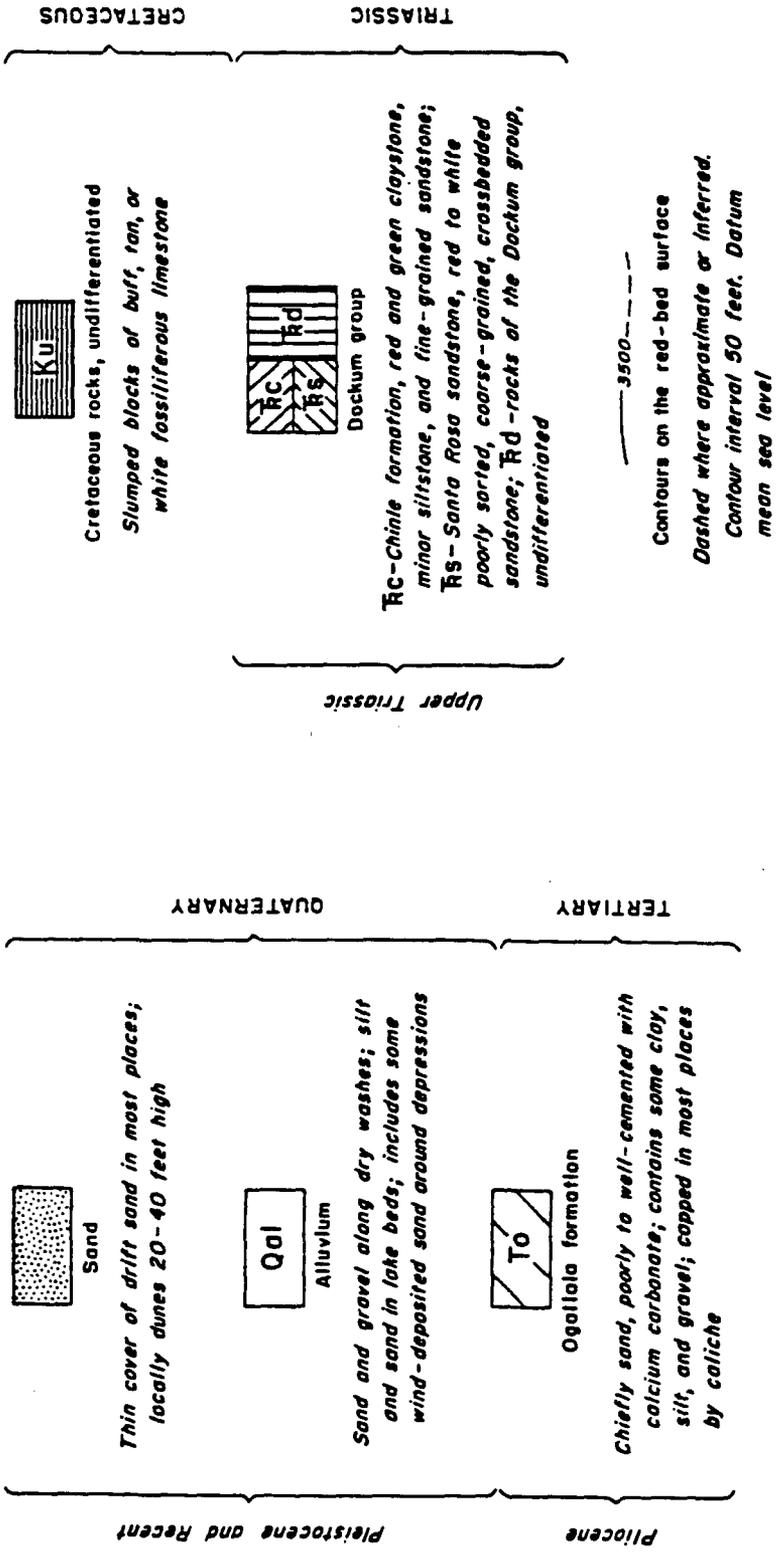
GEOLOGIC MAP

FIGURE 1

LEA LAND, INC.
OKLAHOMA CITY, OKLAHOMA



EXPLANATION



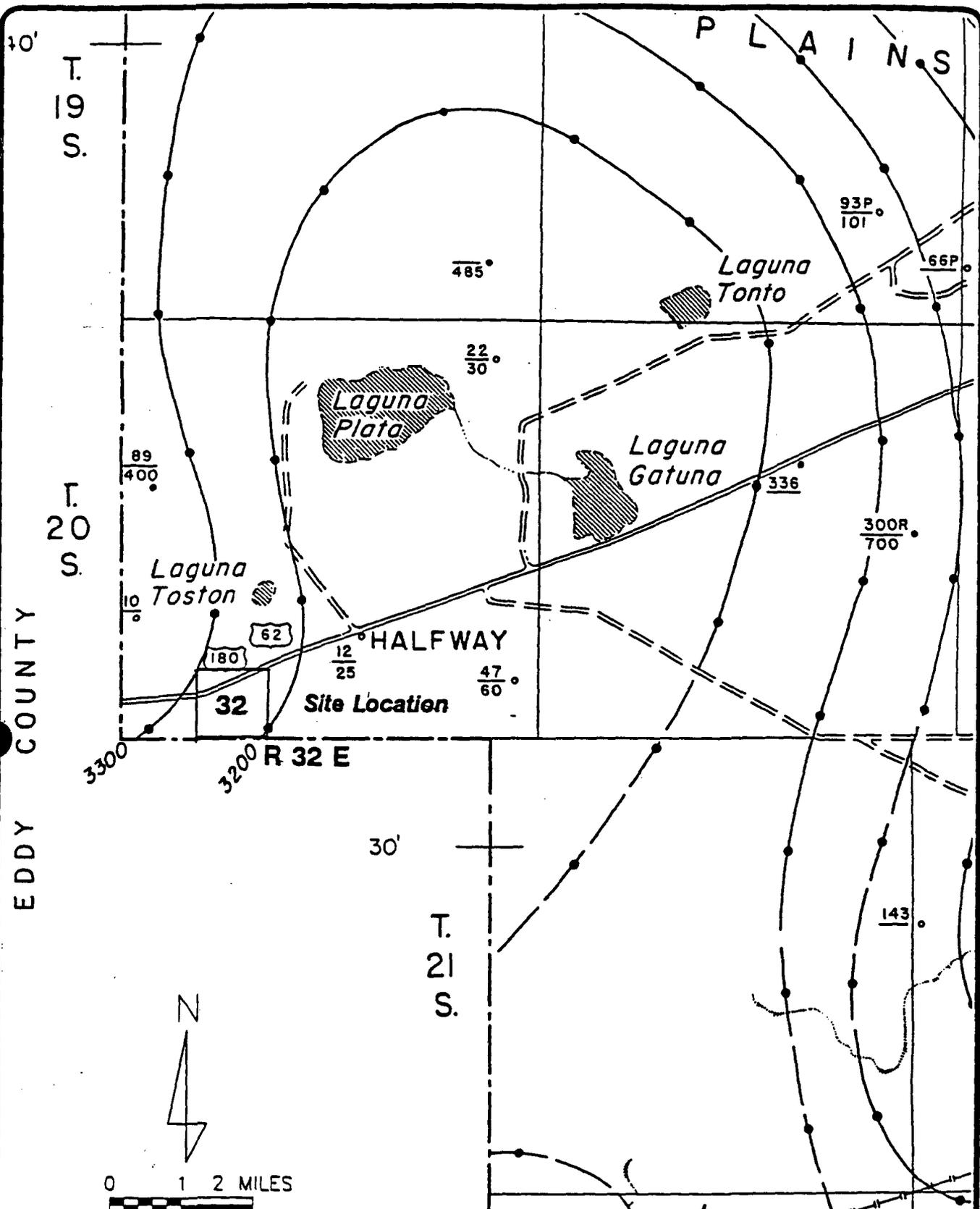
EXPLANATION OF GEOLOGIC MAP SYMBOLS

PROJ.# 404	DRAWN BY: BJB
SCALE:	CHECKED BY: MG
FN:	
DATE: AUGUST 20, 1993	

FIGURE
1a

LEA LAND, INC.
OKLAHOMA CITY, OKLAHOMA





REF: COMPILED BY ALFRED CLEBSCH, JR., 1960, USING DATA COLLECTED MAINLY BY ALEXANDER NICHOLSON, JR., IN 1953 AND 1954.

PROJ.# 404.1	DRAWN BY: BJF
SCALE: 1" = 2 MILES	CHECKED BY: MG
FN:	
DATE: AUGUST 30, 1994	

GEOLOGIC MAP

LEA LAND, INC
OKLAHOMA CITY, OKLAHOMA

FIGURE
2



**ATTACHMENT 12
OF
FORM C-137**

**NOTICE REQUIREMENTS
OF
OCD RULE 711**

Affidavit of Publication

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

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising Director of **THE LOVINGTON DAILY LEADER**, a daily newspaper or 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

was published in a regular and entire issue of **THE LOVINGTON DAILY LEADER** and not in any supplement thereof, for one (1) day, beginning with the issue of March 31, 2000 and ending with the issue of March 31, 2000.

And that the cost of publishing said notice is the sum of \$ 52.76 which sum has been (Paid) as Court Costs.

Joyce Clemens

Subscribed and sworn to before me this 31st day of March 2000.

Debbie Schilling

Debbie Schilling
Notary Public, Lea County, New Mexico
My Commission Expires June 22, 2002

LEGAL NOTICE

NOTICE OF PUBLICATION

Notice is hereby given that pursuant to the New Mexico Oil Conservation Division Regulations, the following application has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

Lea Land, Inc., Robert G. Hall, Owner, 1300 West Main St., Oklahoma City, Oklahoma, 73106, has submitted for approval an application to operate a Rule 711 commercial surface waste management facility at the Lea Land, Inc. non-hazardous industrial solid waste landfill (New Mexico

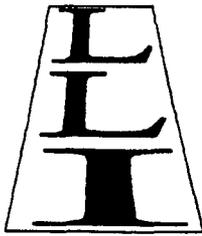
Environment Department Permit SWM-131401) located in Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico. Non-hazardous, solid waste associated with oil and gas industry operations will be disposed of by burial in a lined landfill. Hydrocarbon contaminated soils associated with oil and gas industry operations will be remediated by spreading them on a lined cell in 6 inch lifts or less and periodically disk-ing them to enhance biodegradation of contaminants. Ground water most likely to be affected by any accidental discharges at the surface is at a depth of approximately 195-200 feet with chloride concentration of approximately 100 to 250 parts per million. The facility is underlain by Quaternary alluvium which rests unconformably upon the Triassic Santa Rosa sandstone. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be incorporated at the proposed site.

Any interested person may obtain further information from the Oil

Conservation Division a may submit written comments to the Director the Oil Conservation Division at the address given above. The application may be viewed at above address between 8:00 a.m. and 4:00 p.m. Monday thru Friday. Prior to ruling on any proposed application, 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 and public hearing may be requested by an interested person. Request for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the director determines that there is significant public interest.

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

Published in the Lovington Daily Leader March 31, 2000.



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

Phone: (505) 887-4048 Fax: (505) 885-7640

Main Office: 1300 West Main, Oklahoma City, OK 73106
Phone: (405) 236-4257 - Fax: (405) 236-4261

December 14, 1999

Ms. Leslie Theiss
Field Manager
Carlsbad Field Office
Department of Interior
Bureau of Land Management
P.O. Box 1778
Carlsbad, NM 88220

****CERTIFIED MAIL****
#P 103 658 016

Dear Ms Theiss:

Lea Land, Inc. plans to submit a permit application through the New Mexico Oil Conservation Division for a commercial surface waste management facility to be used to dispose of oil field wastes classified as exempt and non-exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations.

The Lea Land, Inc. landfill is an existing non-hazardous solid industrial waste only facility that began operations in April 1997 and will be operated in the same manner under this new permit. Specifically, the RCRA-exempt oil field waste will be tested, as have all other wastes that have been disposed in the Lea Land landfill. We are seeking to obtain this permit upon request from oil and gas operators that wish to dispose of oil field wastes in an economical, lined facility.

If you have any questions or comments, please contact me at 405-236-4257.

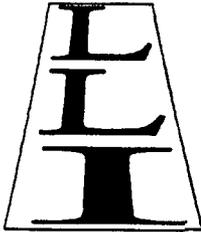
Yours very truly,

is your RETURN ADDRESS completed on the reverse side?

SENDER: ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee..	
3. Article Addressed to: Ms. Leslie THEISS, Field Manager Dept of Interior Bureau of Land Management P.O. Box 1778 Carlsbad, NM 88220		4a. Article Number P 103 658 016	
		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
		7. Date of Delivery 12-20-99	
5. Received By: (Print Name) [Signature] HILL		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature: (Addressee or Agent) X [Signature]			

Thank you for using Return Receipt Service.

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

Phone: (505) 887-4048 Fax: (505) 885-7640

Main Office: 1300 West Main, Oklahoma City, OK 73106
Phone: (405) 236-4257 - Fax: (405) 236-4261

December 14, 1999

Mr. Dennis Holmberg
County Manager
Lea County Commissioner
Lea County Court House
P.O. Box 4-C
Lovington, NM 88260

****CERTIFIED MAIL****
#P 103 658 017

Dear Mr. Holmberg:

Lea Land, Inc. plans to submit a permit application through the New Mexico Oil Conservation Division for a commercial surface waste management facility to be used to dispose of oil field wastes classified as exempt and non-exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations.

The Lea Land, Inc. landfill is an existing non-hazardous solid industrial waste only facility that began operations in April 1997 and will be operated in the same manner under this new permit. Specifically, the RCRA-exempt oil field waste will be tested, as have all other wastes that have been disposed in the Lea Land landfill. We are seeking to obtain this permit upon request from oil and gas operators that wish to dispose of oil field wastes in an economical, lined facility.

If you have any questions or comments, please contact me at 405-236-4257.

Yours very truly,

is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee) \$99

- Addressee's Address
 - Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to:

Dennis Holmberg, County Manager
Lea County Court House
P.O. Box 4-C
Lovington, NM 88260

4a. Article Number

P 103 658 017

4b. Service Type

- Registered Certified
- Express Mail Insured
- Return Receipt for Merchandise COD

7. Date of Delivery

12-17-99

5. Received By: (Print Name)

Andrea Martinez

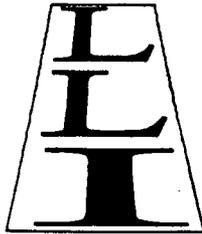
6. Signature: (Addressee or Agent)

X *Andrea Martinez*

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service!

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

Phone: (505) 887-4048 Fax: (505) 885-7640

Main Office: 1300 West Main, Oklahoma City, OK 73106
Phone: (405) 236-4257 - Fax: (405) 236-4261

December 14, 1999

Mr. Steve Massey
County Manager
Eddy County Commissioner
101 W. Greene Street, #225
Carlsbad, NM 88220

****CERTIFIED MAIL****
#P 103 658 018

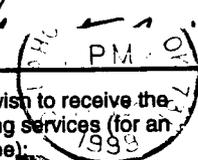
Dear Mr. Massey:

Lea Land, Inc. plans to submit a permit application through the New Mexico Oil Conservation Division for a commercial surface waste management facility to be used to dispose of oil field wastes classified as exempt and non-exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations.

The Lea Land, Inc. landfill is an existing non-hazardous solid industrial waste only facility that began operations in April 1997 and will be operated in the same manner under this new permit. Specifically, the RCRA-exempt oil field waste will be tested, as have all other wastes that have been disposed in the Lea Land landfill. We are seeking to obtain this permit upon request from oil and gas operators that wish to dispose of oil field wastes in an economical, lined facility.

If you have any questions or comments, please contact me at 405-236-4257.

Yours very truly,



Is your RETURN ADDRESS completed on the reverse side?

SENDER:
 Complete items 1 and/or 2 for additional services.
 Complete items 3, 4a, and 4b.
 Print your name and address on the reverse of this form so that we can return this card to you.
 Attach this form to the front of the mailpiece, or on the back if space does not permit.
 Write "Return Receipt Requested" on the mailpiece below the article number.
 The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. Addressee's Address
2. Restricted Delivery
Consult postmaster for fee.

3. Article Addressed to:
Steve Massey, County Mgr.
Eddy County Commissioner
101 W. Greene St., #225
Carlsbad, NM 88220

4a. Article Number
P 103 658 018
4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD
7. Date of Delivery
12-17-99

5. Received By: (Print Name)
Janet Cox

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

Thank you for using Return Receipt Service.

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

**ATTACHMENT 13
OF
FORM C-137**

**CONTINGENCY PLAN
IN THE EVENT
OF A
RELEASE OF H₂S**

(NOT APPLICABLE)

APPENDIX A

**STORM WATER DISCHARGE
POLLUTION PREVENTION PLAN**

LEA LAND, INC. LANDFILL

**STORM WATER DISCHARGE
POLLUTION PREVENTION PLAN**

Prepared By:

**Cardinal Environmental, Inc.
6520 North Western Avenue, Suite 206
Oklahoma City, Oklahoma 73116
(405) 842-1066
cardenv@aol.com**

December 23, 1997

Annual Certification

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

Ant S. Hall

Signature - Responsible Official

12-23-97
Date

President

Title - Responsible Official

1. GENERAL INFORMATION

1.1 Introduction

Landfills that discharge storm water runoff from any active or inactive areas without a stabilized final cover and that have received any industrial wastes are considered to meet the definition of "storm water discharge associated with industrial activity" in 40 CFR 122.26(b)(14) and are required to obtain an NPDES permit. Landfills seeking coverage under an NPDES General Multi Sector permit are required to submit a Notice of Intent (NOI) and prepare a Storm Water Pollution Prevention Plan (SWPPP). Lea Land, Inc. has submitted the NOI (see Appendix) with this prepared SWPPP. The SWPPP will be maintained on site.

1.2 Facility Information

Lea Land, Inc. Landfill is a privately owned landfill. The Lea Land, Inc. Landfill operates under a permit obtained from the New Mexico Department of the Environment. Solid waste landfills are regulated by the New Mexico Department of the Environment. The landfill is approved to receive non-hazardous solid waste from commercial and industrial sources. The construction of the first landfill cell (or waste disposal area) was completed on April 2, 1997.

The Lea Land, Inc. Landfill is located in southwest Lea County, New Mexico generally, between Carlsbad, NM and Hobbs, NM. The finding location is the 64 mile marker east of Carlsbad on U.S. Highway 180(62). Figure 1 presents a United States Geological Survey (USGS) topographic map showing the location of the Lea Land, Inc. Landfill. The permitted disposal area occupies 160 acres within a 460 acre tract in Section 32, Township 20 South, Range 32 East, N.M.P.M, Lea County, New Mexico.

1.3 Description of Facility Storm Water Discharge

The general surface drainage pattern of the Lea Land, Inc. Landfill is to the north. According to the USGS Topographic map, there are no bodies of water in the vicinity of the landfill. Due to the relatively arid and flat terrain with highly permeable soils and deep groundwater, erosion is not indicated into or out of the landfill property. There is a shallow bar ditch associated with U.S. Highway 180 (62) which flanks the northern portion of the landfill property. The highway bar ditch essentially receives all runoff from the landfill property which is diverted to the other side of the highway to the open plains via culverts.

A detailed surface water management design is presented in the June 1996 Permit Application for the Lea Land, Inc. Landfill. The principal drainage structures for routing storm water are

Team Member: Kin Slaughter

Title: Site (Landfill) Manager

Office Phone: (505)887-4048

Responsibilities:

Coordinate and implement all facets of developing and administering the plan, monitoring and analysis reporting, record keeping, and employee training. Oversight of spill response, clean up activities, and housekeeping. Implement preventive maintenance program.

Team Member: Cardinal Environmental

Office Phone: (405) 842-1066

Responsibilities:

Evaluate and recommend pollution control measures and spill prevention procedures. Review and revise the plan. Recommend and design control measures to reduce or prevent significant pollution sources affecting the storm water runoff. Analyze, design, and implement erosion prevention measures when needed and possible. Review and comment on the impact of proposed construction or process modifications on storm water discharges.

Conduct storm water sampling and visual inspections. Design, coordinate, and complete employee training.

2. ASSESSMENT

2.1 Description of Potential Pollutant Sources

Potential sources of pollutants which may reasonably be expected to add a significant amount of pollutant to storm water discharges shall be identified below. The description of potential pollutant sources will include the following items:

- Site map for identification of potential sources including location of waste disposal, diesel fuel tank, storm water retention pond, leachate evaporation pond, and location of stockpiled cover material;
- Description of structural controls implemented to reduce pollutant levels;
- Prediction of the direction of flow and identification of flows with significant potential for causing erosion;
- Inventory of exposed chemicals handled and stored at the facility;
- List of significant spills and leaks that have occurred in the three years prior to the issuance of this permit;

- Description of all significant potential pollutants;

Potential storm water pollutant sources within the facility are: paved and unpaved hauling roads and parking areas, heavy equipment maintenance, refueling and product storage (lubricants, fuels, etc).

2.2 Site Map

Figure 2 shows U.S. Highway 180(62), surface drainage flow direction, landfill property boundaries, stockpile area, an approximately 21,000 gallon water storage tank, main entrance, unauthorized waste (parking) area, office building, storage shelter, parking area, scale, storm water retention pond, leachate evaporation pond, permitted waste disposal boundaries, the first landfill cell of about 6 acres, equipment parking, fueling and maintenance area that includes the impounded 4,000 gallon diesel fuel tank, paved and unpaved hauling roads, and diversion trenches.

2.3 Description of Structural Controls

The landfill property is located within a drainage area, and without indication of erosion, receives run on water from an open field to the south. Run on and essentially all runoff is directed to the north, draining into a bar ditch between the northern boundary of the landfill property and U.S. Highway 180(62), into culverts beneath the highway and into open field. Other runoff from the waste disposal area is collected and impounded onsite for evaporation.

Diversion trenches and intracell berms prevent storm water from entering the waste disposal area.

Local runoff from the equipment fueling, maintenance and parking area and the up gradient portion of the unpaved hauling road encircling the waste disposal area are all prevented from entering the waste disposal area and are impounded via intracell berms. Storm water which falls on the working face drains to the lowest elevation of lined cell where it collected and transferred via pipeline to the onsite storm water retention pond.

The storm water retention and leachate evaporation ponds have flexible membrane liners and are diked above grade. The storm water retention pond is designed to hold more water that can be collected in the waste disposal area during a 24 hour-25 year rain event. The leachate evaporation pond is also designed to retain leachate during the same probable rain event.

Storm water and leachate from the landfill are collected and transferred separately. The leachate is collected via riser pipe, over the eastern slope of the landfill cell. Any spills that may occur during the loading of leachate or contaminated storm water, or rain fall that comes in contact with the spill residue, will drain back into the lined cell.

The diesel tank is within the equipment fueling, maintenance and parking area. The tank is diked and has a flexible membrane liner on the floor. This area is presently near the entrance ramp into the first landfill cell. Tank refilling and equipment fueling is partially conducted outside of diesel tank impoundment. Runoff from this area drains toward the cell but is prevented from contacting the waste and impounded via intracell berms located on the inside perimeter of the presently below grade cell.

The stockpile presently occupies an approximate area of 700 and 250 square feet and about 40 feet tall. The side slopes of the stockpile are very steep. An onsite and unpaved access road is located between the highway and stockpile, on the stockpile side of the boundary fence. Although near the highway bar ditch, the access road, the surrounding vegetation, highly permeable soils and flat terrain prevents a significant amount of sediment from being discharged into the bar ditch. Therefore, additional structural controls for the stockpile is not necessary at this time. However, if erosion via drainage becomes evident during the routine inspection of the stockpile area, then this SWPPP plan will be changed to prevent and/or sample the discharge.

The facility uses asphalt paving on the main entrance, office area, storage shelter, parking and on the main hauling road outside the permitted disposal area. Since the paved surface prevents percolation and graded to the north, runoff from the pavement drains to the highway via main entrance/exit.

The storage shelter is located on pavement near the office/scale area. A truck bed with a shell shelters all products such as unleaded gasoline, heavy lubricants, oil and portable equipment such as a pump, welding equipment, and air compressor. Used oil is not stored onsite. Therefore, no structural controls are needed for this area.

The unauthorized waste area is an unpaved parking area near the main entrance where loads "in-dispute" (e.g. having incomplete manifests) are parked off the highway. The waste remains inside trailers while parked, therefore, no structural controls are needed.

The landfill facility has a petroleum contaminated soil treatment area and plans to add an ash mono-fill cell and both will be impounded by diking. Equipment maintenance, parking, and product storage will be moved inside the proposed maintenance building once constructed.

2.4 Direction of Flow

The flow pattern noted on Figures 1 and 2 was developed from the surface gradients. The normal flow pattern at the site has been altered because of the landfill construction, but the general drainage pattern remains the same. The highway collects the landfill property run off and diverts storm water from the south bar ditch to open field via culverts beneath the highway. Care will be taken to impound water coming in contact with landfill wastes, preventing landfill contaminates from leaving off site.

2.5 Inventory of Exposed Chemicals and Potential Pollutant Sources

No chemicals are stored outside of this facility without proper packaging to reduce contamination of water or soil from spills, accidental releases, or exposure to storm water. Used oil is not stored onsite. The onsite equipment is maintained by a vendor which transports the used oil to a recycler. Smaller equipment and product other than diesel are stored in a shelled truck bed parked on asphalt, near the office and scale area.

The following list of materials is stored outside or potentially exposed to storm water through loading activities.

Compound	Storage Location	Dispensed Outside?	Storage form	Qty. Used/month	Qty. Stored
Diesel Fuel	Near active landfill cell	yes	4,000 gallon tank	1,000 gallons*	1 - 4,000 gallons

* - estimated since waste disposal activity is still pending.

The diesel storage tank is stored within a diked area. Storm water collected within the impoundment will be transferred via pipeline to the storm water retention pond.

Herbicides and pesticides are not used outdoors at the facility.

All maintenance on vehicles and equipment takes place outdoors (construction of a maintenance building is pending). Waste moving equipment is not driven off-site, nor is it driven beyond the diversion ditches/hauling road encircling the waste disposal area without waste being removed from the equipment with a shovel.

Leachate springs are not present at the landfill property or vicinity. All rain water which contacts the landfill waste is collected and impounded.

The major potential pollutant is runoff from the paved hauling and parking areas which includes the scale area. Thus, total suspended solids (TSS) represents the pollutant parameter of concern at the facility.

2.6 Other Exposed Material

The landfill facility stores equipment outside. The equipment is considered an insignificant pollutant source.

2.7 Significant Leaks and Spills

No significant spills or leaks have occurred at this site. All significant spills and leaks will be recorded by the Spill Prevention and Response Team as noted in Section 4 of this document. The annual revisions of this document will include all records of significant spills and leaks that have occurred at the facility since the last revision.

2.8 Non-Storm Water Discharges Authorized by this Permit

This permit allows for the following items to be discharged from the facility

- Fire fighting activities
- Fire hydrant flushings
- Potable water sources including waterline flushings
- Irrigation drainage
- Lawn watering (water removed from the impoundments and used to support vegetation along the slopes and inactive areas)
- Air conditioning condensate
- Compressor condensate
- Uncontaminated groundwater
- Foundation and footing drains where flows are not contaminated with process waters

Other than the 21,000 gallon water storage tank, there are not any other significant sources of water at the facility. Measures as discussed in Section 3 will be used to minimize erosion and protect water quality.

2.9 Historical Monitoring of Discharges from the Facility

Historical storm water quality information does not exist.

3. BEST MANAGEMENT PRACTICES

3.1 Description of Best Management Practices

Potential sources of pollution at a facility require controls and practices to reduce the pollutants that could be discharged off-site. Storm water management controls can significantly reduce the potential for storm water pollutants if developed and implemented properly in conjunction with facility operation practices. These controls and practices are dynamic; thus, operations will be amended as necessary to provide the maximum control of potential pollutants at this facility. The description of best management practices (BMP) developed for this site include:

- Good housekeeping practices developed to control materials and substances at the facility, especially in areas of material storage, waste disposal areas, and with regard to vehicle tracking of sediment and waste.
- Preventive maintenance methods developed to reduce the number of potential pollutant sources at the facility.
- Spill prevention and response procedures to reduce the potential of spills as a pollutant source.
- Sediment and erosion control measures to reduce the impact of erosion as a pollutant source.
- Visual inspection schedules and methods for early detection of potential pollutant source problems.
- Runoff management measures and controls designed and implemented to reduce pollutant discharges.
- Storm water management practices to reduce the source of potential pollutants.
- Employee training to develop knowledgeable and responsible employees to enhance the control potential pollutants.

3.2 Good Housekeeping Practices

Good housekeeping practices are developed to maintain a clean, efficient, and safe work environment. A clean workplace not only benefits the employees as a safe work environment; it

will also reduce pollutant sources which could pose both environmental and employee hazards. The Lea Land, Inc. Landfill is a safety- and housekeeping-conscious facility. All employees will be trained to regularly inspect for leaks or conditions that could lead to discharges of chemicals to storm water.

Good housekeeping in areas of material storage (active cells, inactive cells, roads, and building area) will include minimizing erosional opportunities for storm water, adhering to daily cover provisions of permit, and maintaining grass/ground cover in areas of run off or potential surface erosion location. Good housekeeping procedures to reduce tracking of sediment and waste are also used. For instance, waste is removed from the waste handling equipment by physical means and does not use water washes.

3.2.1 Operation and Maintenance

Operationally, blowing trash is sometimes a concern for landfills. At Lea Land, Inc. Landfill, the nature of the non-hazardous industrial waste received does not typically contain a significant amount of "blowable" trash which is minimized from migrating off site by mesquite bushes, boundary fencing and from the routine policing of litter.

The storm water retention and leachate evaporation ponds will be periodically regraded to remove any accumulated sediment. The excavated material is used for cover material within the landfill if tested as non-hazardous.

The facility is operated and maintained to the highest quality standards with each employee trained to observe and report (to the Site Manager) any maintenance that may be required. Maintenance personnel provide checks of machines and tanks on an ongoing basis. All maintenance on equipment is completed outside but will be conducted inside once the proposed maintenance building is constructed. This will prevent the potential contact of vehicle fluids to the environment.

Dust control is conducted by the use of an onsite water truck which is filled via onsite storage tank located on top of the stockpiled soils. This storage tank is filled via public water line located between the highway and northern boundary.

3.2.2 Material Inventory Procedures

Only employees trained to handle the heavy equipment are allowed to operate machinery. Loads are weighed in and out of the site to determine total amount of waste delivered to the landfill.

Liquid materials are not accepted. Shipments are randomly searched for unauthorized materials (PCBs, liquids, oils, etc).

3.3 Preventive Maintenance

A preventive maintenance program is established by maintenance personnel who methodically inspect and correct any problems throughout the facility before storm water pollution occurs.

Equipment or areas to be regularly inspected include:

- ▶ Diversion berms and storm water routing channels;
- ▶ Equipment fueling, maintenance and parking area, including diesel fuel tank;
- ▶ Product storage area;
- ▶ Active waste disposal area;
- ▶ Storm water Retention Pond;
- ▶ Leachate Collection Pond;
- ▶ Paved and unpaved hauling roads.

3.4 Spill Prevention and Response

Spill prevention and response (SPR) is coordinated by the Site Manager. A general policy of containing and immediately cleaning up all spills is enforced at the facility.

The drainage areas will be inspected as described in Section 3.6 to determine if remedial action is necessary to minimize the potential for spills.

The Site Manager is responsible for identifying the facility spill response team to respond to spills and ensuring spill response equipment is readily available. The Site Manager is also responsible for notifying the appropriate authorities for assistance.

3.5 Sediment and Erosion Control

The area where erosion may be of the most concern is the stock pile soil area. Wind erosion and not water erosion is of significant concern for the stockpile. The landfill is located within an arid terrain and only receives about 16 inches of annual precipitation. Runoff is relatively low because the surface is highly permeable with no shallow groundwater. The grade of the stockpile will eventually be near the natural grade at landfill closure. If drainage via erosion leading offsite becomes evident, then this SWPPP plan will be modified to address and/or sample this drainage.

The above grade landfill at closure will be have established vegetation. Dust control measures will be implemented to control dispersal of sediment from roads and areas that do not have vegetative cover.

Water from the water storage tank will be used for dust suppression. Erosion in other areas of the landfill property has not been observed. During the site inspections, any erosion which occurs will be noted and addressed appropriately as the Site Manager directs.

3.6 Visual Inspection of Pollutant Sources

A regular visual inspection of areas identified as potential pollutant source areas are performed by facility management personnel. This inspection includes a walk of the facility grounds. These visual inspections are not documented except for the weekly inspections as discussed below.

The contiguous bar ditch, impoundments' diking, onsite diversion ditches and berms, locations where trucks and waste enter/exit the facility, and maintenance and storage areas will be inspected every seven days. These visual inspections will be recorded in the Pollution Prevention Plan and maintained until one year after the permit expires. (See weekly checklist in appendix).

In addition to visually examining the storm water discharge points, the Site Manager will also visually inspect the quality of storm water on a quarterly basis at each outfall throughout the term of the permit. See Section 4.3 for details.

3.7 Runoff Measures and Controls

Further measures are not needed except for the impoundment of additional waste storing areas.

3.8 Storm Water Management Practices

Whenever practicable Lea Land, Inc. Landfill will implement storm water management practices to reduce the source of potential storm water pollutants. The specific storm water management practices for the industrial activities identified in the drainage areas are present in the following text.

Raw materials, tools, and empty containers are presently stored behind the office building. Tools and product is stored in the storage shelter, in vehicles or in the office building. Heavy earth work equipment (dozers, scrapers, graders, and compactors) are well maintained to prevent break

downs and leaks. The Spill Prevention Control and Countermeasures (SPCC) plan will be followed for all impoundments.

The storm water drainage channels have been designed to handle the flow from at least a 24-hour, 25-year storm event. The drainage channels and berms will be inspected regularly and excess sediment or debris will be removed.

Cover material will be applied to the working face at the end of each day to control odors, vectors, and blowing litter.

3.9 Employee Training

Employees shall be trained on the implementation and goals of the SWPPP. Training will address the following components of the SWPPP:

- ▶ Good housekeeping
- ▶ Preventive maintenance
- ▶ Spill prevention and response
- ▶ Purpose and maintenance of storm water management control equipment

Points to be covered in the training include:

- ▶ Locations of housekeeping and spill response equipment
- ▶ Instruction for housekeeping and preventive maintenance inspections
- ▶ Appropriate spill response procedures
- ▶ Recording of all inspections, maintenance, and spill response activities.

Training shall be conducted at least annually, or whenever a change in facility operation requires an update or change in training.

4. EVALUATION

4.1 Comprehensive Site Compliance Evaluation

As required by the multi sector permit conditions an annual site compliance evaluation must be conducted at this facility. The permit dictates the following minimum requirements:

- Inspect storm water drainage areas for evidence of pollutants entering the drainage system.

- Evaluate the effectiveness of measures to reduce pollutant loadings and whether additional measures are needed.
- Observe structural measures, sediment controls, and other storm water BMP's to ensure proper operation.
- Inspect any equipment needed to implement the plan, such as spill response equipment.
- Revise the plan as needed within two weeks of inspection (potential pollutant source description, description of measures and controls, and spills).
- Implement any changes in a timely manner, but at least within 12 weeks of the inspection.
- Prepare a report summarizing inspection results and follow up actions, the date of inspection and personnel who conducted the inspection; identify any incidents of noncompliance or certify that the facility is in compliance with the plan.
- All incidents of noncompliance must be documented in the inspection report. Where there are no incidents of noncompliance, the inspection report must contain a certification that the facility is in compliance with the plan.
- Sign the report in accordance with Section 6 and keep it with the plan.

4.2 Quarterly Visual Examination of Storm Water Quality

Lea Land, Inc. Landfill shall perform and document a visual examination of storm water discharge associated with industrial activity from the entrance drive outfall prior to entering the culvert at the northwest corner landfill property. The exam shall be conducted according to the directions on the worksheet in the appendix.

4.3 Storm water Analysis - Required by Permit

During each quarter of the second year of the permit, the Site Manager will collect a grab sample from the outfall on the southern end of the impoundment during a measurable storm (greater than 0.1 inch more than 72 hours from the last storm). Collected waters shall be tested for Total Suspended Solids (TSS) and Total Recoverable Iron. Records shall indicate when the last storm event occurred and the estimate flow of water discharged.

By ninety days after the close of the second year of the permit, the Landfill will submit a Discharge Monitoring Report (DMR) for each sampling event during the second year. Additionally, the site will compute an average value for the parameters monitored. If values are less than the cut off concentrations noted in the Federal Register and listed below, then no laboratory analyses are required in the fourth year of the permit. For outfalls where the average value exceeds the cut off concentration, quarterly sampling during the fourth year is required with the same reporting deadline as for the second year's sampling.

Parameter	Cut Off Concentration (mg/L)
Total Suspended Solids	100
Total Recoverable Iron	1.0

4.4 Record Keeping and Internal Reporting

Incidents such as spills and other discharges, along with other information describing the quality and quantity of storm water discharges must be included in the records. Inspections and maintenance activities shall be documented and recorded in the Plan. Records must be maintained for three years.

5.0 PLAN REVISIONS

This plan will be revised whenever there is a change in design, operation, or maintenance which may impact the potential for pollutants to be discharged off-site or if the Plan proves to be ineffective to control the discharge of pollutants.

6.0 REQUIRED SIGNATURES

All pollution prevention plans, reports, certifications, or other information submitted to the permitting authority or required to be maintained on-site must be signed by a "principal executive officer or ranking elected official."

Any person signing documents under this permit shall make the following certification:

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

7.0 PLAN LOCATION AND PUBLIC ACCESS

This Plan is required to be signed and maintained on-site at the facility near Carlsbad, New Mexico. The Plan and all required records must be kept until at least one year after coverage under the permit expires. This Plan is available to the public by request through the permitting authority. The annual site compliance checks must be kept for three years after the inspection was completed.

Quarterly Storm water Quality Check:

Outfall: (circle one) South

Complete a Storm water Quality Check at each outfall once a quarter

Date: _____ Quarter (circle one): 1 2 3 4

Nature of the Discharge: (circle one) Storm water Snow melt runoff

Time Grab Sampled Collected: _____ (must be within thirty minutes of the time the storm water starts flowing)

Time the storm started: _____ OR Date/Time of most recent rainfall _____

Total amount of rainfall event: _____ (must be greater than 0.1 inches) (Watch the evening news or use rain gauge)

The storm event for this monitoring must occur more than seventy two hours since the last qualifying (greater than 0.1 inches) storm event. Is this true? (Circle one) Yes No

Person performing assessment must be a member of the Pollution Prevention Team:

Name: _____ Member of Pollution Prevention Team? (Circle one) Yes No

Assess the following parameters in a well lit area.

Observed Quality			
Parameter	Value (circle one)		Notes/Remedies
	Note possible source in "Notes" column and implement remedies as needed.	No action necessary	
Color	Color _____	Colorless	
Odor	Smells like	None	
Floating solids present?	Yes	No	
Suspended solids present?	Yes	No	
Settled solids present?	Yes	No	
Foam present	Yes	No	
Clarity	Cloudy	Clear	
Oil sheen present?	Yes	No	

Reviewed by: _____, Site Manager

Site Manager: Any probable source of contamination needs to be investigated in a timely manner and any improvement measures must be documented. The Site Manager needs to insure with existing tracking methods that necessary work is completed.

Once this checklist is completed and reviewed, it needs to be filed in the appropriate section of the Pollution Prevention Plan.

WATER ANALYSIS DURING THE SECOND YEAR OF THE PERMIT

During the second year a grab sample must be taken each quarter from the outfall. Requirements for the grab sample are as follows:

Circle One: Yes No	Taken from a storm event of greater than 0.1 inches of precipitation and within the first 30 minutes of the storm event.
Circle One: Yes No	Taken from a storm event which occurs more than 72 hours since the previous reportable (greater than 0.1 inches) storm event
Circle One: Yes No	Ideally taken by the same person every time
Circle One: Yes No	Must be taken by a member of the pollution prevention team
precipitation amount (in) _____ Duration (hours) _____	Estimate the total precipitation (inches) and duration (hours) (Needed for the Discharge Monitoring Report)
Estimated volume (gpm) during sampling _____	Estimate the volume of the runoff at each outfall (gallons per minute) (Needed for the Discharge Monitoring Report)
Estimated flow rate (fps) during sampling _____	Estimate the flow rate of the runoff at each outfall (feet per second) (Needed for the Discharge Monitoring Report)
Days between this/most recent storm event and the storm event previous to it _____	Estimate the duration between sampled storm water event and end of the previous measurable storm water event. (Needed for the Discharge Monitoring Report)

The samples must be sent to a laboratory and analyzed for Total Suspended Solids (mg/L) and Total Recoverable Iron (mg/L) Within ninety days of the end of the year, the following items must be completed:

1. Complete a Discharge Monitoring Report (DMR) for each sample event at each outfall (there should be at least four sample event for each of the outfalls). Complete a separate DMR for any other sampling done during the year (i.e. any sampling done for your landfill permit).

Be sure the DMR is signed by General Manager.

Keep copy of all analysis, calculations, and DMRs in the appropriate section of the Pollution Prevention Plan.

Mail the DMRs to: EPA, Region VI, Enforcement and Compliance Assurance Division, (GEN-WC), EPA SW MSGP, First Interstate Bank Tower at Fountain Place, P.O. Box 50625, Dallas, Texas, 75025

2. Compute an arithmetic average for each parameter at each outfall.
3. Compare the average value for Total Suspended Solids and Total Recoverable Iron to the table below on an outfall by outfall basis.

Total Suspended Solids (TSS)	100 mg/L
Total Recoverable Iron (Fe)	1.0 mg/L

4. Complete the following table:

Outfall	Parameter	Calculated average: Equal to/Greater Than or Less Than Cut Off Value (circle one)	
#1	TSS	Equal to/Greater Than	Less Than
#1	Fe	Equal to/Greater Than	Less Than

For any line with "equal to/greater than" circled, monitoring at that outfall for that parameter will be required during each quarter of the fourth year of the permit. Again, DMRs will need to be turned in within ninety days of the end of the year for those locations which are monitored.

Note: Visual monitoring continues during each quarter of every year at each outfall regardless of the results of this testing.

WEEKLY INSPECTION CHECK SHEET

Date: _____

Time: _____

Personnel Conducting Inspection: _____

Visually inspect the following areas and complete the table reflecting current status of the area.

Area	Condition (Circle One)	Notes -- For any line with a "Need Improvement" rating
Intracell Berms (check for integrity)	Satisfactory Needs Improvement	
Diesel Storage Tank Impoundment (check capacity and integrity)	Satisfactory Needs Improvement	
Diversion Trenches (check for debris or sediment)	Satisfactory Needs Improvement	
Storm water Retention Pond (check for capacity and integrity)	Satisfactory Needs Improvement	
Leachate Evaporation Pond (check for capacity and integrity)	Satisfactory Needs Improvement	
Paved Area and Scale (check for contamination)	Satisfactory Needs Improvement	
Unpaved Hauling Roads (check for contamination)	Satisfactory Needs Improvement	
Unauthorized Waste (Parking) Area (check for contamination)	Satisfactory Needs Improvement	
Stockpile (check for drainage/erosion leading offsite)	Satisfactory Needs Improvement	

Reviewed by: _____ Site Manager

Site Manager: Any items with a "Needs Improvement" rating should be incorporated into the maintenance activities of the plant within two weeks. Items requiring significant construction can take up to twelve weeks.

After the Site Manager has reviewed this checklist, please file the document in the appropriate section of the Pollution Prevention Plan.

COMPREHENSIVE SITE COMPLIANCE EVALUATION

Must be conducted at least once per year by a qualified facility personnel

Steps to Follow:

1. Inspect the following areas of the facility
 - Visually inspect areas contributing to storm water discharge associated with industrial activity for evidence of or potential for pollutants entering the drainage system.
 - Evaluate measures to reduce pollutant loadings to determine if adequate and properly implemented or whether additional controls are necessary.
 - Observe structural storm water control measures and other structural pollution prevention measures to ensure they are operating correctly
 - Visually examine any equipment needed to implement the plan
 - Review the training methods for adequacy and the training records to insure all training needed has been completed.
2. Revise the Storm Water Pollution Prevention Plan within two weeks of this evaluation incorporating description of potential pollutant sources and pollution prevention measures. Any changes must be implemented within twelve weeks of the evaluation.
3. Prepare report summarizing scope of the evaluation, personnel conducting the evaluation, date of the evaluation, any major observations relating to the implementation of the storm water pollution prevention plan.
4. The report shall identify any incidents of non compliance or a certification that the facility is in compliance with the storm water pollution prevention plan and the permit. Such a certification would simply be, for instance, "The Plant has been in compliance with the terms of the general storm water permit for the period ____ to _____. No unauthorized discharges to storm water have occurred."
5. This report needs to be signed by the Team member designated with signatory authority. If the signatory authority rests with anyone other than Mr. Hall, an assignment needs to be sent to the Director.
6. The Site Manager must ensure any revisions to the Plan or the storm water program are implemented within twelve weeks of the evaluation.
7. The report must be filed with the Storm Water Pollution Prevention Plan. The report must be maintained with the Storm Water Pollution Prevention Plan for a period of three years from the date of the evaluation.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

September 18, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. 7099-3220-0000-5051-1217

Mr. Robert G. Hall
Lea Land, Inc.
1300 West Main St.
Oklahoma City, OK 73106

RE: Pending permit application

Dear Mr. Hall

The Oil Conservation Division has received your application for a permit for your facility located at Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico. However, the division cannot permit the facility as described in the application.

Pursuant to the division's Rule 711:C.(4)(c), permitted facilities may accept non-oilfield waste only in an emergency. The division understands that Lea Land accepts non-oilfield waste. Consequently, the division cannot issue a permit to Lea Land unless non-oilfield waste is segregated from oilfield waste. If oilfield and non-oilfield wastes are segregated, the division could continue to process this application for the area dedicated to oilfield waste in accordance with Rule 711.

If you have any questions please do not hesitate to contact me at (505) 827-7152.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

RCA/mk

cc: Don Beardsley, NMED SWB
Tannis Fox, NMED, Legal Counsel



GARY E. JOHNSON
Governor

ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502-6110
Telephone (505) 827-2855
Fax: (505) 827-2836



PETER MAGGIORE
Secretary

SOLID WASTE BUREAU

Telecopier Transmittal

Date: 8/23 Time: _____ Page: 1 of 3

PLEASE DELIVER THE FOLLOWING PAGES:

TO: MARTYNE

LOCATION: OCD

TEL. NUMBER: _____

FAX NUMBER: 7-8177

FROM: Don

LOCATION: Environment Department - Solid Waste Bureau

TEL. NUMBER: _____

FAX NUMBER: _____

COMMENTS: _____

JUL 31 2000

Exhibit _____

SOLID WASTE BUREAU

The following list identifies, but is not limited to, the non-hazardous solid oil industry wastes which are regulated by the New Mexico Oil Conservation Division that may be received at the Lea Land, Inc. landfill:

1. gas condensate filters
2. glycol filters
3. grease buckets
4. iron sponge
5. junked pumps, valves, rusted pipe
6. metal plate, metal cable
7. molecular sieves
8. office trash
9. paper, paper bags
10. pipe dope, unused
11. pipe scale & other deposits removed from piping and equipment
12. plastic pit liners
13. produced water filters
14. sacks of unused drilling mud
15. sandblasting sand
16. soiled rags, gloves
17. sulfur contaminated soil
18. support balls – generated at gas processing plants
19. support balls – generated at other facilities
20. activated aluminum
21. activated carbon
22. amine filters
23. barrels, drums – 5 gallon buckets – 1 gallon containers
24. brush & vegetation from clearing land
25. catalysts
26. chemical contaminated soil
27. contaminated concrete from gas plants, compressor stations
and other oil & gas facilities
28. construction debris
29. cooling tower filters
30. dehydration filter media
31. demolition debris
32. detergent buckets
33. dry chemicals
34. ferrous sulfate, elemental sulfur
35. fiberglass tanks
36. Gas plant tower packing materials
37. tower packing materials generated at other facilities

Prior approval and waste profiles will be required on all waste shipments and they must meet all testing requirements of the New Mexico Environment Department including the paint filter test.

COPY

STATE OF NEW MEXICO

BEFORE THE SECRETARY OF THE ENVIRONMENT

DOCKETED
By The Hearing Clerk

IN THE MATTER OF THE APPLICATION
OF THE LEA LAND, INC., NON-
HAZARDOUS INDUSTRIAL SOLID
WASTE LANDFILL, LEA COUNTY,
NEW MEXICO.

FEB 27 1996
No. SW 95-08 (P)

No. _____

Before the Secretary
of Environment

FINAL ORDER BY THE SECRETARY OF THE ENVIRONMENT

This matter having come me on the Recommended Final Decision with supporting Findings of Fact and Conclusions of Law by the duly appointed or designated Hearing Officer, R Morgan Lyman, and, having reviewed said Recommended Final Decision, and being otherwise advised in the premises, finds that his Recommended Final Decision should be adopted in its entirety and that Applicant's request is, therefore, well-taken and should be approved, consistent with the following conditions:

1. The Authority shall comply with all applicable requirements of the New Mexico Solid Waste Management Regulations, the Solid Waste Act and any other conditions set forth in the permit, and shall construct and operate the landfill in accordance with the permit application of June 20, 1995.
2. Before any construction is begun at the site, the Applicant shall provide the Department with proof of ownership of all lands upon which any part of the proposed landfill or appurtenances will be located.

3. At least 30 days prior to the start of construction, the Applicant shall furnish the Department with a major milestone schedule in order for NMED to effectively monitor construction of the landfill.
4. Quality assurance/quality control plans shall be approved by the Department prior to construction of the liner, leachate collection system and final cover.
5. Before start of construction, the Applicant shall execute the Trust Agreement for financial assurance and shall submit a copy of the executed document to the Department.
6. When construction is complete, but prior to acceptance of waste, the Applicant shall provide the Department written notice the facility is ready for Departmental inspections and approval.
7. Within 30 days of the Secretary's issuance of the permit, the Applicant shall submit to NMED confirmation of filing of a copy of the Permit Certificate, Final Order of the Secretary or Notation of the Permit and legal description of the property on which the facility is located in the office of the Lea County Clerk.
8. No petroleum waste or other substance

regulated by the New Mexico Oil Conservation Division shall be disposed of in the proposed landfill.

- 9. Phases III and IV of the landfill shall not be excavated below 3490 feet above mean sea level unless a demonstration is made that the perched Gatuna aquifer does not underlie this area of the landfill or it is determined not to be a groundwater resource.

THEREFORE, IT IS ORDERED:

- 1. That the Hearing Officer's Recommended Decision with his Proposed Findings and Conclusions of Law, as reasons therefore, shall be, and hereby are, adopted;
 - 2. That the application shall be, and hereby is, approved;
- and
- 3. That the permit shall be, and hereby is, issued for a 10 year term, consistent with the terms and conditions herein.



 SECRETARY OF THE ENVIRONMENT

Respectfully submitted by:



 R Morgan Lyman, Hearing Officer

IN THE MATTER OF THE APPLICATION
OF THE LEA LAND, INC. NON-HAZARDOUS
INDUSTRIAL SOLID WASTE LANDFILL
LEA COUNTY, NEW MEXICO

NO. SW 95-08(P)

CERTIFICATE OF SERVICE

I hereby certify that a copy of the FINAL ORDER BY THE
SECRETARY OF THE ENVIRONMENT in the above mentioned case was mailed
on this 28th day of February 1996, to:

Morgan Lyman, Esq.
1018-2 S. Main Street
Las Cruces, NM 88005

Anna Marie Ortiz, Esq.
Asst. General Counsel
New Mexico Environment Department
P.O. Box 26110
Santa Fe, NM 87502

Bob Hall
Lea Land, Inc.
1300 W. Main Street
Oklahoma City, OK 73106

Mark Gray
Cardinal Environmental Inc.
6520 N Western, Ste 206
Oklahoma City, OK 73116



Gloria C. Miller, Hearing Clerk
New Mexico Environment Department

FIFTH JUDICIAL DISTRICT COURT
COUNTY OF EDDY
STATE OF NEW MEXICO

LEA LAND, INC., a New Mexico
corporation.

Petitioner,

v

No. CV-2000-283

NEW MEXICO ENVIRONMENT
DEPARTMENT and PETER
MAGGIORE, Secretary,

Respondents.

Post-it® Fax Note	7671	Date	7/28/00	# of pages	2
To	Roger Anderson	From	Tannis Fox		
Co./Dept.	OCED	Co.	NMED		
Phone #		Phone #	827-1003		
Fax #	827-8177	Fax #			

STIPULATED ORDER FOR PRELIMINARY INJUNCTION

This matter having come for hearing on June 21, 2000 before the Court upon the verified Complaint of the Plaintiff, and the parties appearing through counsel and having stipulated to the terms of a Preliminary Injunction, the Court ORDERS as follows.

- 1 Plaintiff has alleged certain violations of law against Respondents; Respondents do not admit liability.
- 2 Respondents shall comply with the terms of the July 1, 1997 letter from Don Beardsley, New Mexico Environment Department ("Department"), to Robert Hall, Lea Land, Inc
- 3 This Order shall remain in effect until the Department issues a final decision on Plaintiff's application to modify Permit No. SWA 95-08(P) ("Permit"), submitted by Plaintiff to the Department on June 1, 2000.
- 4 Plaintiff's application to modify the Permit shall be administratively complete by June 27, 2000. In the event that the Department does not deem the application to modify the

Permit administratively complete by that date, this Order shall, upon written notice from the Department to Plaintiff, automatically expire and shall have no further force or effect

5 Upon issuance by the Department of a final decision on Plaintiff's application to modify its Permit, this Order shall automatically expire and shall have no further force or effect.

6 During the time that this Order is in effect, Plaintiff shall supply copies of its manifests to the Department on a weekly basis by facsimile.

7 The Department may inspect all manifests of Plaintiff. If, upon inspection, the Department determines that Plaintiff has accepted waste that does not comply with the terms of the July 1, 1997 letter from the Department, this Order shall, upon written notice from the Department to Plaintiff, automatically expire and shall have no further force or effect, and the Plaintiff may request the Court to set this matter for hearing.

8 Upon issuance by the Department of a final decision on Plaintiff's request to modify its Permit, Plaintiff shall dismiss its Complaint in this matter with prejudice.

IT IS SO ORDERED.

JAMES L. SHULER
District Judge

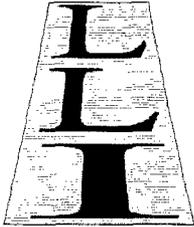
Approved by:



Dick Blenden
Attorney for Plaintiff

Tannis L. Fox
Tannis L. Fox
Attorney for Defendants

Post-it Fax Note	7671	Date	6/21/00	# of Pages	2
To	Annex 317	From	Dick Blenden		
On Behalf		City			
Phone #		Phone #	505 887-3671		
Fax #	505 827-1628	Fax #	505 885-6453		



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

Phone: (505) 887-4048 Fax: (505) 885-7640

August 9, 2000

AUG 2 1 2000

Mr. Roger C. Anderson
Bureau Chief
OCD – Environmental Bureau
2040 South Pacheco St.
Santa Fe, NM 87505

Dear Roger:

Please make a note that effective August 29, 2000 the Houston office of Lea Land, Inc. will be moving to a new location at:

5100 Westheimer, Suite 200
Houston, Texas 77056

Phone: 713-968-6511
Fax: 713-968-6513
Cell: 832-444-3557

Email: lealand@prodigy.net

You should not expect any delays in service due to this change. I look forward to working with you in the future.

Very truly yours,

Saralyn Hall, P. E.
Marketing Manager

O F F I C E S

5100 Westheimer, # 200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Office of the Secretary
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502-6110

Telephone (505) 827-2855
Fax (505) 827-2836



PETER MAGGIORE
SECRETARY

PAUL R. RITZMA
DEPUTY SECRETARY

AUG - 4 2000

Certified Mail-Return Receipt Requested # 7099 3220 0006 3436 9135

August 2, 2000

Mr. Roger Anderson, Chief
Env. Bureau, Oil Conservation Division
New Mexico Energy & Minerals & Natural Resources Dept.
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Public Hearing on the Application of the Lea Land, Inc. for the Modification of a Solid Waste Facility Permit for the Lea Land, Inc., Non-Hazardous Industrial Solid Waste Landfill.

Dear Mr. Anderson:

Enclosed please find the Notice of Public Hearing regarding the subject application to modify the Solid Waste Facility Permit for the Lea Land Inc., Non-Hazardous Industrial Solid Waste Landfill to:

- 1.) change the permitted design to allow for the installation of a 20 foot berm which will increase the final elevation of the landfill by 20 feet and;
- 2.) remove condition 8, which prohibits the disposal of wastes regulated by the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department, from the permit.

Sincerely,

Tamella Lakes
Hearing Clerk
New Mexico Environment Department

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT



IN THE MATTER OF THE APPLICATION OF
LEA LAND, INC. FOR THE MODIFICATION OF
THE SOLID WASTE LANDFILL FACILITY PERMIT
FOR THE LEA LAND NON-HAZARDOUS
INDUSTRIAL SOLID WASTE LANDFILL

NO. SW 00-08 (M)

AMENDED NOTICE OF HEARING

A public hearing on the above captioned matter will be held on September 12, 2000, by the New Mexico Environment Department to consider an application submitted by the Lea Land, Inc. to modify the Solid Waste Facility Permit. The landfill is located on U.S. Highway 62/180, approximately 32 miles southwest of Hobbs, New Mexico and 30 miles northeast of Carlsbad, New Mexico in Section 32, Township 20 South, Range 32 East. The mailing address for the facility is P.O. Box 3247, Carlsbad, New Mexico 88221. The hearing will begin at 10:00 A.M., September 12, 2000 in the Conference Room, District Attorney's Office, 101 South Canal, Carlsbad, New Mexico.

The applicant requests the following modifications to the Solid Waste Facility Permit issued February 27, 1996:

1. The applicant requests the permitted design to be modified to add a twenty foot high berm around the disposal area and to increase the final elevation of the landfill by twenty feet. The facility is underlain by a dense caliche bed which prevented the permitted excavation depth from being achieved, resulting in the loss of waste disposal volume. The installation of the requested berm and resulting increase in final elevation will recover the lost volume.

2. Removal of condition eight of the existing permit which states "No petroleum wastes or other substance regulated by the New Mexico Oil Conservation Division shall be disposed of in the proposed landfill".

The application has been reviewed for compliance with the New Mexico Solid Waste Act and Solid Waste Management Regulations (20 NMAC 9.1). Public comment received during the public hearing will be considered by the Secretary of Environment in making a final decision on the application to modify the existing Solid Waste Facility Permit. The permit application may be reviewed between the hours of 9:00 A.M. and 5:00 P.M., Monday through Friday at the following locations:

New Mexico Environment Department, Solid Waste Bureau,
1190 St. Francis Drive, Suite S2050,
Santa Fe, New Mexico 87502 (Contact Don Beardsley, (505) 827-0580)

New Mexico Environment Department
726 East Michigan, Suite 165
Hobbs, New Mexico 88240 (Contact Annabelle Hernandez, (505) 393-4302)

New Mexico Environment Department
406 North Guadalupe
Carlsbad, New Mexico 88220 (Contact James Smith, (505) 885-9023)

For additional information, please contact Don Beardsley at (505) 827-0580 or by writing:

NMED-Solid Waste Bureau
1190 St. Francis Drive
Santa Fe, New Mexico 87502

The hearing will be conducted in accordance with 20 NMAC 1.4, Permit Procedures, Environment Department, which may be obtained from the Hearing Clerk, Tamella Lakes at P.O. Box 26110, Santa Fe, New Mexico 87502, or by calling (505) 827-2425.

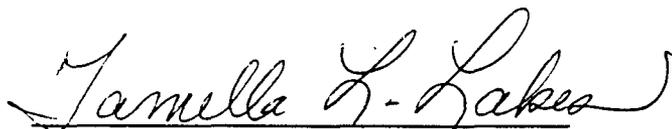
Any person who wishes to be a party shall file, and serve upon all parties of record, an entry of appearance, on or before August 28, 2000. A timely statement of intent to present technical evidence shall be considered an entry of appearance.

Any person who intends to provide a technical written statement or technical oral testimony concerning the application for modification shall file a statement of intent to present technical testimony on or before August 28, 2000. The statement of intent to present technical testimony shall:

1. identify the person filing the statement,
2. state whether the person filing the statement supports or opposes the application for modification,
3. identify each witness, including name, address, affiliations, and educational and work background,
4. estimate the length of the direct testimony of each witness,
5. identify all exhibits which are part of the record proper and, for exhibits not part of the record proper, attach a copy,
6. list or make available all technical materials relied upon by each witness in making a statement of technical fact or opinion contained in his or her direct testimony, and
7. attach a summary of the testimony of each witness, stating any opinions to be offered by such witness, and an explanation of the basis for such opinions.

Any person may provide a general written statement concerning the application for modification at or before the hearing by filing the statement with the Hearing Clerk. Any person may provide a general oral statement or non-technical testimony concerning the application for modification at the hearing.

If you are an individual with a disability and you require assistance or an auxiliary aid, e.g., sign language interpreter to participate in any aspect of this process, please contact Cliff Hawley by September 1, 2000. Mr. Hawley's telephone number is (505) 827-2844. He is Chief of the Program Support Bureau, New Mexico Environment Department, P.O. Box 26110, 1190 St. Francis Drive, Santa Fe, New Mexico, 87502. (TDD or TDY users please access his number via the New Mexico Relay Network. Albuquerque TDD users, (505) 275-7533. Outside of Albuquerque, 1-800-659-1779).



Tamella Lakes
Hearing Clerk
New Mexico Environment Department

Williams, Chris

From: Wrotenbery, Lori
Sent: Tuesday, July 20, 1999 5:53 PM
To: Anderson, Roger; Stogner, Michael
Cc: Williams, Chris; Salisbury, Jennifer; 'William F. Carr'; Carroll, Rand; Davidson, Florene
Subject: RE: Lee Land Disposal Facility

Thanks, Mike. I have an appointment Monday morning to discuss this matter with Bill Carr, who is representing Ken Marsh.

From: Stogner, Michael
Sent: Tuesday, July 20, 1999 2:42 PM
To: Wrotenbery, Lori; Anderson, Roger
Cc: Williams, Chris; Salisbury, Jennifer; 'William F. Carr'; Carroll, Rand; Davidson, Florene
Subject: Lee Land Disposal Facility

Today at 2:00 p.m. Mr. Ken Marsh in Hobbs at (505) 393-1079 called to report on alleged illegal dumping (by Texaco) of oilfield waste (not specified) into a facility that is not authorized to take such waste (Lee Land). I understand from our conversation that he has submitted correspondence concerning this matter to Mr. Anderson, Ms. Wrotenbery, and Ms. Salisbury, therefore I am assuming each of you are familiar with Mr. Marsh's concerns.

He also voiced his opinion and concern about the lack of action by the State's Environmental Department in this matter. He also informed me that he had been trying to get through to someone in this office for 55 minutes today before being transferred to me (Acting Director), however he was not specific when I asked him to give me more details about the numbers called and the voice mail messages left.

I assured him that the Division was aware of his concerns and is taking appropriate action. I assured him that Ms. Wrotenbery would return his call upon her return from an environmental conference.



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502-6110

OFFICE OF GENERAL COUNSEL

Telephone 505-827-2855
Facsimile 505-827-1628



PETER MAGGIORE
SECRETARY

Direct line 505-827-1603
Email tannis_fox@nmenv.state.nm.us

May 22, 2000

By certified return receipt requested mail

Robert G. Hall
Lea Land Inc.
1300 West Main Street
Oklahoma City, Oklahoma 73106

Re: SW Permit 95-08 (P)

Dear Mr. Hall:

Lea Land Inc. ("Lea Land") operates a landfill near Carlsbad, New Mexico pursuant to SW Permit 95-08(P) ("Permit") issued by the Solid Waste Bureau of the New Mexico Environment Department ("NMED"). Condition 8 in the Permit provides that: "No petroleum waste or other substance regulated by the New Mexico Oil Conservation Division shall be disposed of in the proposed landfill." As you are aware, a concern has been raised regarding the interpretation of this condition.

NMED hereby rescinds its July 1, 1997 letter of clarification of the Permit to Lea Land and instructs Lea Land not to accept for disposal any substance regulated by the Oil Conservation Division ("OCD"). OCD is authorized:

(21) to regulate the disposition of nondomestic wastes resulting from the exploration, development, production or storage of crude oil or natural gas to protect public health and the environment; and

(22) to regulate the disposition of nondomestic wastes resulting from the oil field service industry, the transportation of crude oil or natural gas, the treatment of natural gas or the refinement of crude oil to protect public health and the environment, including administering the Water Quality Act as provided in Subsection E of Section 74-6-4 NMSA 1978.

Robert G. Hall
May 22, 2000
Page 2

NMSA 1978, § 70-2-12(B). This restriction on disposal includes waste generated in-state and out-of-state.

If you have any questions regarding this matter, please feel free to call me. Your anticipated cooperation with NMED is appreciated.

Sincerely,

Tannis L. Fox

Tannis L. Fox
Assistant General Counsel

cc: Peter Maggiore, Secretary, NMED
Jim Najima, Director, Division of Environmental Protection, NMED
Butch Tongate, Chief, Solid Waste Bureau, NMED
Lorrie Wrotenberry, Director, OCD
Michael Feldewert, Campbell, Carr, Berge & Sheridan, P.C.

RECEIVED
MAY - 8 2000
CONSERVATION DIVISION

CRI
CONTROLLED RECOVERY INC.

P.O. BOX 388, HOBBS, NM 88241 (505) 393-1079

May 3, 2000

Director of the Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

RE: Lea Land, Inc. application for rule 711 Facility, Section 32, Township
20 South, Range 32 East, Lea County, New Mexico

The Lea Land application must be rejected for the following reasons:

- 1) Application does not comply with Rule 711.
- 2) State statutes prohibit the usage of NMED solid waste facilities for oilfield waste - see attached memo to Attorney General, Patsy Madrid.
- 3) Lea Land states that " the nearest water well to the land fill is located over 25 miles away. This statement is not correct.
- 4) Lea Land has been instructed by the NMED not to accept any substance regulated by the Oil Conservation Division (OCD).

The application fails in many aspects to qualify under "OCD Rule 711" and would be in violation of existing laws of the State of New Mexico.

CRI requests a hearing on the application should it be accepted as complete.

Please advise CRI as to the status of this application.

Sincerely,


Ken Marsh

Enc

KM/kh

MEMORANDUM

TO: The Hon. Patsy Madrid,
Attorney General,
State of New Mexico

FROM: Mark Turnbough, PhD,
Environmental Consultant

SUBJECT: Oil Conservation Division (OCD) Proposal to Dispose of Oilfield Waste Streams in Subtitle D Facilities Regulated by NMED

DATE: May 3, 2000

The purpose of this memo is to address questions raised by the proposed OCD plan to allow the disposal of oilfield wastes in Subtitle D Facilities permitted by NMED under the Solid Waste Act and 20 NMAC 9.1.

Statutory and Regulatory Framework

Solid waste is defined in [74-9-3 (N.) NMSA 1978] and 20 NMAC 9.1 Section 105 (BV.) as ... "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility and other discarded material including solid, liquid, semi-solid or contained gaseous material resulting from industrial, commercial, mining and agricultural operations and from community activities, **but does not include:**

1. Drilling fluids, produced waters and other **non-domestic wastes associated with the exploration, development or production, transportation, storage, treatment or refinement of crude oil, natural gas, carbon dioxide gas, or geothermal energy;**"

A **solid waste facility** is defined in [74-9-3 (P.) NMSA 1978] as... "any public or private system, facility, location, improvements on the land, structures or other appurtenances or methods used for processing, transformation, recycling or disposal of **solid waste**, including landfill disposal facilities, transfer stations, resource recovery facilities, incinerators and other similar facilities not specified, but does not include equipment specifically approved by order of the director to render medical waste noninfectious or a facility which is permitted pursuant to the provisions of the Hazardous Waste Act and

does not apply to a facility fueled by a densified-refuse-derived fuel that accepts no other solid waste;"

The definition of a "solid waste facility" in 20 NMAC 9.1 Section 105 (BX.) is consistent with the statutory definition.

Comment

The statutory and regulatory framework is very specific about what "solid waste" is and is not. Certain materials are categorically excluded from "solid waste" by virtue of the processes that generate them. The fact that some wastes generated in the oil and gas business (as defined in the statute) may also be generated in other activities is not relevant. If a waste is generated in any phase of the oil and gas process it is not solid waste. **This exclusion also applies to oil and gas waste generated outside the state of New Mexico. There is no distinction made in the Solid Waste Act or 20 NMAC 9.1** The only exception is so-called "domestic waste", e.g. sandwich wrappers and Vienna sausage cans.

It is equally clear in the Solid Waste Act and 20 NMAC 9.1 that the purpose of a "solid waste facility" is to accept "solid waste" (by definition).

Consequently, until the statutory definition of "solid waste" is changed to include the materials generated by the processes described in [74-9-3 (N.)(1.)] those materials cannot be disposed of in a facility permitted by NMED.

In order to make a related point about the difficulty of co-mingling the waste streams referenced in this memo, it is worth reiterating the fact that the language in the statutory definition of "solid waste" is unequivocally **exclusionary**; "Solid waste does not include:..."[74-9-3 (N.)(1.)]. The implications for permitting a facility with overlapping jurisdictions (OCD and NMED) are significant. Because of the "solid waste" exclusion described above it would not be possible to place OCD regulated waste and NMED regulated solid waste in a common disposal cell. The NMED solid waste permit would have to exclude everything not defined as "solid waste" by the Solid Waste Act, irrespective of the OCD permit for the same cell. The waste streams are mutually exclusive by virtue of their statutory treatment.

It is worth noting here that oil and gas wastes were excluded from the definition of solid waste in the drafting of the Solid Waste Act because representatives of the oil and gas interests insisted on the separation by virtue of the processes that generate waste materials in their industry.

Consequently if an existing "solid waste disposal facility" permitted under 20 NMAC 9.1 applies for an OCD permit, it will have to construct a separate disposal cell (monitored separately) with a separate facility boundary that is outside the facility boundary permitted by NMED. That is true, again, simply because OCD regulated wastes are not solid waste.

This fact was highlighted in 1994 when the Solid Waste Bureau (NMED) issued a Notice of Violation (N.O.V.) to the Carlsbad Landfill for allowing oil and gas wastes to be placed in the facility. In order to avoid a compliance order and further action, the material in question was removed from the landfill and disposed of at an OCD permitted facility. (David Duran was the NMED Solid Waste Bureau Program Manager who wrote the N.O.V. and I was the compliance consultant for the landfill).

Ultimately, until these definitional issues are addressed in the Solid Waste Act I think that the OCD proposal to dispose of oil and gas wastes in NMED regulated facilities is pre-mature.

If you have any questions about the basis of our interpretation please call me at 505 867-6990 or page me at 800 914-4380.

**CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS**

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
MICHAEL H. FELDEWERT
ANTHONY F. MEDEIROS

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043
E-MAIL: law@westofperco.com

JACK M. CAMPBELL
1916-1999

TELECOPIER COVER SHEET

May 3, 2000

**TO: Ms. Martyne Kieling
New Mexico Oil Conservation Division**

FROM: Michael H. Feldewert

TELECOPIER NO. 827-8177

TOTAL PAGES (including this cover sheet): 2

DOCUMENT: Correspondence dated May 3, 2000

OPERATOR: Ruth Sougstad, Legal Assistant to Michael H. Feldewert

CLIENT/MATTER #: 619

PLEASE CALL:

TO CONFIRM RECEIPT

AFTER REVIEW

MESSAGE:

**IF THERE ARE ANY PROBLEMS WITH OUR TRANSMISSION,
PLEASE CALL OPERATOR AT (505) 988-4421**

**THIS DOCUMENT IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHOM IT IS
ADDRESSED, AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED AND CONFIDENTIAL, OR THAT
CONSTITUTES WORK PRODUCT AND IS EXEMPT FROM DISCLOSURES UNDER APPLICABLE LAW.**

**IF YOU ARE NOT THE INTENDED RECIPIENT OR THE EMPLOYEE OR AGENT OF THE INTENDED RECIPIENT,
YOU ARE HEREBY NOTIFIED THAT ANY USE, DISSEMINATION, DISTRIBUTION OR COPYING OF THE
COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR,
PLEASE NOTIFY US BY TELEPHONE AND DESTROY THE DOCUMENT.**

CAMPBELL, CARR, BERGE

8 SHERIDAN, P.A.
LAWYERS

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WILLIAM F. CARR
BRADFORD G. BERGE
MARK F. SHERIDAN
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SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
FACSIMILE: (505) 983-6043
E-MAIL: law@westofpacos.com

May 3, 2000

Via Facsimile

Ms. Martyne Kieling
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87504

Re: Lea Land, Inc. application for Rule 711 Facility, Section 32, Township 20 South,
Range 32 East, Lea County, New Mexico

Dear Martyne:

As we discussed, our office was not informed that Lea Land's application for a Rule 711 permit had been published. However, you stated that the application was now on hold and that in light of my March 3rd letter the Division would accept comments and a request for public hearing from Controlled Recovery Inc. Those comments will be forthcoming shortly.

Thank you for your cooperation and please inform me if the Division intends to act on Lea Land's application.

Sincerely,



Michael H. Feldewert

MHF/ras

cc. Ken Marsh, Controlled Recovery, Inc.

**CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS**

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WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
MICHAEL H. FELDEWERT
ANTHONY F. MEDEIROS**

**JACK M. CAMPBELL
1916-1999**

**JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
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SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
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CLIENT/MATTER #: 619

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8 SHERIDAN, P.A.
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MARK F. SHERIDAN
MICHAEL H. FELDEWERT
PAUL R. OWEN
ANTHONY F. MEDeiros

JACK M. CAMPBELL
1918-1998

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E-MAIL: law@westlopecos.com

May 3, 2000

Via Facsimile

Ms. Martyne Kieling
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87504

Re: Lea Land, Inc. application for Rule 711 Facility, Section 32, Township 20 South,
Range 32 East, Lea County, New Mexico

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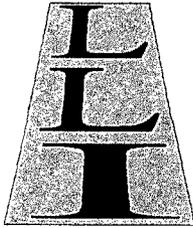
Thank you for your cooperation and please inform me if the Division intends to act on Lea Land's application.

Sincerely,


Michael H. Feldewert

MHF/ras

cc. Ken Marsh, Controlled Recovery, Inc.



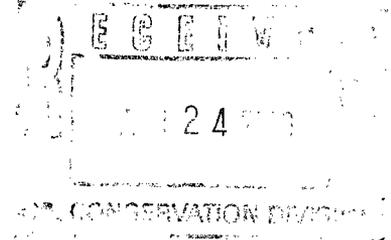
Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

☎ Phone: (505) 887-4048 ☎ Fax: (505) 885-7640

April 19, 2000



Martyne J. Kieling
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, NM 87505

Dear Martyne:

Enclosed is an Affidavit of Publication of the Public Notice of our intent to apply for 711 surface waste management facility at our landfill in Lea County. This notice was published in The Lovington Daily Leader on March 31, 2000.

If you need any additional information, please contact me.

Very truly yours,

Robert G. Hall
President

O F F I C E S

6750 W. Loop South, #500
Bellaire (Houston), TX 77401-4199
Phone: (713) 662-8521
Fax: (713) 662-8546

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

Affidavit of Publication

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

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising Director of **THE LOVINGTON DAILY LEADER**, a daily newspaper or 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

was published in a regular and entire issue of **THE LOVINGTON DAILY LEADER** and not in any supplement thereof, for one (1) day, beginning with the issue of March 31, 2000 and ending with the issue of March 31, 2000.

And that the cost of publishing said notice is the sum of \$ 52.76 which sum has been (Paid) as Court Costs.

Joyce Clemens

Subscribed and sworn to before me this 31st day of March 2000.

Debbie Schilling

Debbie Schilling
Notary Public, Lea County, New Mexico
My Commission Expires June 22, 2002

LEGAL NOTICE

NOTICE OF PUBLICATION

Notice is hereby given that pursuant to the New Mexico Oil Conservation Division Regulations, the following application has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505. Telephone (505) 827-7131:

Lea Land, Inc., Robert G. Hall, Owner, 1300 West Main St., Oklahoma City, Oklahoma, 73106, has submitted for approval an application to operate a Rule 711 commercial surface waste management facility at the Lea Land, Inc. non-hazardous industrial solid waste landfill (New Mexico

Environment Department Permit SWM-131401) located in Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico. Non-hazardous, solid waste associated with oil and gas industry operations will be disposed of by burial in a lined landfill. Hydrocarbon contaminated soils associated with oil and gas industry operations will be remediated by spreading them on a lined cell in 6 inch lifts or less and periodically disk-ing them to enhance biodegradation of contaminants. Ground water most likely to be affected by any accidental discharges at the surface is at a depth of approximately 195-200 feet with chloride concentration of approximately 100 to 250 parts per million. The facility is underlain by Quaternary alluvium which rests unconformably upon the Triassic Santa Rosa sandstone. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be incorporated at the proposed site. 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. The application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed application, 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 and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the application based on the information available. If a public hearing is held, the Director will approve the application based on the information presented at the hearing.

Published in the Lovington Daily Leader March 31, 2000.



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

March 21, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z- 559-573-285

Mr. Robert G. Hall
Lea Land, Inc.
1300 West Main St.
Oklahoma City, OK 73106

**RE: Public Notice for Lea Land, Inc. 711 Surface Waste Management Facility
Section 32, Township 20 South, Range 32 East, NMPM,
Lea County, New Mexico**

Dear Mr. Hall:

The New Mexico Oil Conservation Division (OCD), has received the Lea Land, Inc. (Lea Land) application for a 711 surface waste management facility dated December 29, 1999. The application proposes to operate an OCD Rule 711 facility at the Lea Land, Inc. non-hazardous industrial solid waste landfill (New Mexico Environment Department Permit SWM-131401). The facility is to be located in the Section 32, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico.

Based on the information provided with the application Form C-137, the OCD has prepared a public notice statement that Lea Land must published in the Lovington Daily Leader. Lea Land must send the original certified affidavit of publication from the Lovington Daily Leader to the OCD Santa Fe office and a copy to the appropriate District office.

If you have any questions please do not hesitate to contact me at (505) 827-7153.

Sincerely,

Martyne J. Kieling
Environmental Geologist

Attachments

xc: Hobbs OCD Office
Don Beardsly, NMED, SWB

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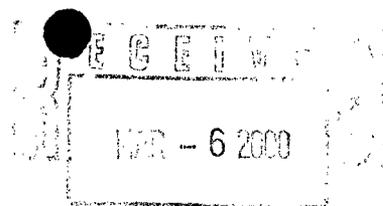
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CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
MICHAEL H. FELDEWERT
PAUL R. OWEN
ANTHONY F. MEDEIROS

JACK M. CAMPBELL
1916-1999



NEW MEXICO OIL CONSERVATION DIVISION
SUITE 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
FACSIMILE: (505) 983-6043
E-MAIL: law@westofpecos.com

March 3, 2000

Ms. Martyne Kieling
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87504

Re: Rule 711 applications

Dear Ms. Kieling,

I understand from our recent telephone conversation that the notice of Lea Land's application for a Rule 711 permit and the notice of Equilon Enterprises to operate four Rule 711 landfarms posted with the March 2, 2000, docket sheet did not trigger the 30-day comment period. I also understand that you will contact this office when notices are issued for these applications which trigger the 30-day comment period.

If I have misunderstood our recent conversation, please let me know immediately. Thank you for your time and effort.

Sincerely,

Michael H. Feldewert

MHF/ras

cc. Ken Marsh, Controlled Recovery, Inc.

Kieling, Martyne

From: Kieling, Martyne
Sent: Monday, February 07, 2000 11:12 AM
To: Martinez, Sally
Cc: Davidson, Florene
Subject: Notices

Sally:

This is for your next Docket Mail-out. I gave Florene two hard copy 711 Notices. One is for Lea Land Inc. the other is for Equilon Enterprises L.L.C. I am attaching the notices here for your other mail outs (E-Mail).



Lealand.wpd



Equilon.wpd

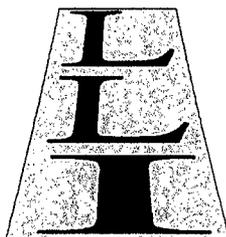
Thanks
Martyne

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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. The application may be viewed at the above address or at or at the Hobbs district office at 1625 N. French Drive, Hobbs, New Mexico between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed application, 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 and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

RECEIVED

JAN 05 2000

Environmental Bureau
Oil Conservation Division

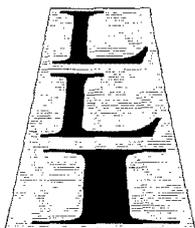
State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division

Permit Application

*Application for Commercial Surface
Waste Management Facility*

January 2000



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East

Carlsbad, New Mexico 88220

Phone: (505) 887-4048 Fax: (505) 885-7640

August 9, 2000

AUG 21 2000

Ms. Martyne Kieling
OCD - Environmental Bureau
2040 South Pacheco St.
Santa Fe, NM 87505

Dear Martyne:

Please make a note that effective August 29, 2000 the Houston office of Lea Land, Inc. will be moving to a new location at:

5100 Westheimer, Suite 200
Houston, Texas 77056

Phone: 713-968-6511
Fax: 713-968-6513
Cell: 832-444-3557

Email: lealand@prodigy.net

You should not expect any delays in service due to this change. I look forward to working with you in the future.

Very truly yours,

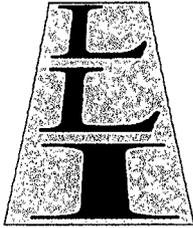
Saralyn Hall, P. E.
Marketing Manager

O F F I C E S

5100 Westheimer, # 200
Houston, TX 77056
Phone: (713) 968-6511
Fax: (713) 968-6513

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

☎ Phone: (505) 887-4048 ☎ Fax: (505) 885-7640

December 29, 1999

RECEIVED

JAN 05 2000

Environmental Bureau
Oil Conservation Division

Ms. Martyne Kieling
State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Dear Ms. Kieling:

Lea Land, Inc. is submitting a permit application for a commercial surface waste management facility to be used to dispose of oil field wastes classified as exempt and non-exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations. Lea Land wishes to obtain an operations permit from the OCD for the current permitted area of 160 acres, as delineated on the attached topographic map. We are seeking to obtain this permit upon request from oil and gas operators that wish to dispose of oil field wastes in a lined facility.

The Lea Land, Inc. landfill is an existing non-hazardous solid industrial waste only facility, which began operations in April 1997 and is currently permitted through the New Mexico Environment Department. Present permit conditions require that all waste be tested or that process knowledge be applied. Lea Land plans to continue this practice with all RCRA-exempt oil field waste.

If you have any questions or need additional information, please contact Ms. Saralyn Hall at 713-662-8521 or I can be reached at 405-236-4257.

Very truly yours,

Robert G. Hall
President

RGH/SH/SD

O F F I C E S

6750 W. Loop South, #500
Bellaire (Houston), TX 77401-4199
Phone: (713) 662-8521
Fax: (713) 662-8546

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

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NEW MEXICO OIL CONSERVATION DIVISION
COMMERCIAL SURFACE WASTE MANAGEMENT FACILITY
FORM C-137

This permit application includes the following information, including exhibits (drawings) and appendices:

OCD Rules and Guidelines:

Rule 711 (Solid Waste Management Facilities)
Rule 116 (Release Notification and Corrective Action)
Guidelines for Permit Application, Design and Construction of Surface Waste Management Facilities

FORM C-137

Executive Summary

Attachments 1 through 4:

Found on Form C-137
Topographic Map

Attachment 5 (Names and Addresses of Facility Landowner and Landowners Within One Mile)

Attachment 6 (Description of Facility):

List of Anticipated Waste Streams
Land Treatment Area
Fences, Signs and Netting (Pictures of Lea Land signs)
Figure J (Site Plan)

Attachment 7 (Facility Design and Construction)

QA/QC Data and Liner Specifications
Figure U (Liner and Leachate Collection System Plan)

Attachment 8 (Contingency Plan)

Figure S-1 (Emergency Exit Route)
Figure S-2 (Emergency Response Contacts)

Page 2 of Contents of Commercial Surface Waste Management Facility Permit Application

Attachment 9 (Routine Inspection and Maintenance Plan)

Waste Acceptance Guidelines
Plan to Accept Loads to Detect and Prevent the Disposal of Regulated Hazardous Waste and Unauthorized Waste
Site Inspections and Maintenance
Frequency of Sampling Guidelines
Inspection Record
Waste Profile Form
Manifest

Attachment 10 (Closure Plan)

Closure Plan, Post Closure Care and Monitoring Plan
Lea Land's Trust Agreement
Figure CC (Landfill Plan View After 10-Year Period)
Figure L (Final Grading Plan)

Attachment 11 (Geological/Hydrological Information)

Ground Water Monitoring
Hydrologic Testing
Description of Site Geology and Hydrology
Laboratory Analysis of Ground Water (Exhibit N)
Soil Boring Data (Exhibit N)
Figure J (Site Plan)

Attachment 12 (Proof of Notice Requirements of OCD Rule 711)

Return Receipts of Letters to Landowners and County Commissioners

Attachment 13 (H₂S Contingency Plan)

Not Applicable (No Liquids Accepted)

APPENDIX A (Storm Water Discharge Pollution Prevention Plan)

Figures 1 and 2

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-137
Revised March 17, 1999

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Commercial Centralized

1. Type: Evaporation Injection Other
 Solids/Landfarm Treating Plant

2. Operator: Lea Land, Inc.

Address: 1300 West Main St., Oklahoma City, Oklahoma 73106

Contact Person: Robert G. Hall Phone: 405-236-4257

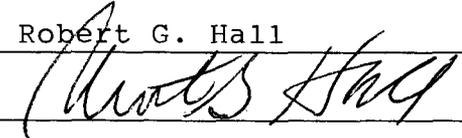
3. Location: --- /4 --- /4 Section 32 Township 20 South Range 32 East
Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? Yes No Current permit is w/NMED
5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.
6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.
7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.
8. Attach a contingency plan for reporting and clean-up for spills or releases.
9. Attach a routine inspection and maintenance plan to ensure permit compliance.
10. Attach a closure plan.
11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.
12. Attach proof that the notice requirements of OCD Rule 711 have been met.
13. Attach a contingency plan in the event of a release of H₂S. (NOT APPLICABLE)
14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Robert G. Hall Title: President/Owner

Signature:  Date: 12-20-99

EXECUTIVE SUMMARY

LEA LAND, INC.

COMMERCIAL SURFACE WASTE MANAGEMENT FACILITY

Lea Land, Inc. is submitting a permit application for a commercial surface waste management facility to be used to dispose of oil field wastes classified as exempt and non-exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations. The following permit application was developed in accordance with the New Mexico Oil Conservation Division (OCD) Rule 711 and the "Guidelines for Permit Application, Design, and Construction of Surface Waste Management Facilities" (Revision 7-97).

The proposed site, located in Lea County, was previously permitted by the state of New Mexico as a non-hazardous solid industrial waste only facility. The permit application was developed in accordance with the New Mexico Solid Waste Management Regulations EIB/SWMMR-4 and was submitted on July 18, 1994. Lea Land received final permit approval on February 27, 1996 (Permit SWM #131401). The landfill occupies an area of approximately 160 acres within a 640 acre tract of land located in Section 32, Township 20 South, Range 32 East, and the land is owned by Lea Land, Inc.

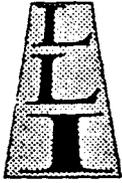
Lea Land is designed to accept all approved solid non-hazardous industrial waste. Municipal, hazardous, asbestos, infectious, regulated PCB and NORM wastes are not accepted. The estimated capacity of the 160-acre landfill is 13,000,000 cubic yards and estimated life of the landfill is 50 to 60 years.

Only scheduled loads are accepted and a certified manifest must accompany each load. The manifest must attest to the physical and chemical characteristics of the waste certifying the waste as non-hazardous. Upon arrival at the facility, the waste will be inspected to ensure that it coincides with the information supplied on the manifest.

The waste cell was designed with a liner and leachate collection system. Retention ditches are constructed around the active portion of the cell to prevent the run-on of storm water onto the waste. Storm water is collected and pumped to the storm water retention pond.

The nearest water well to the landfill is located over 25 miles away. The supply of water to the site is provided via a pipeline from water field wells that are also greater than 25 miles away.

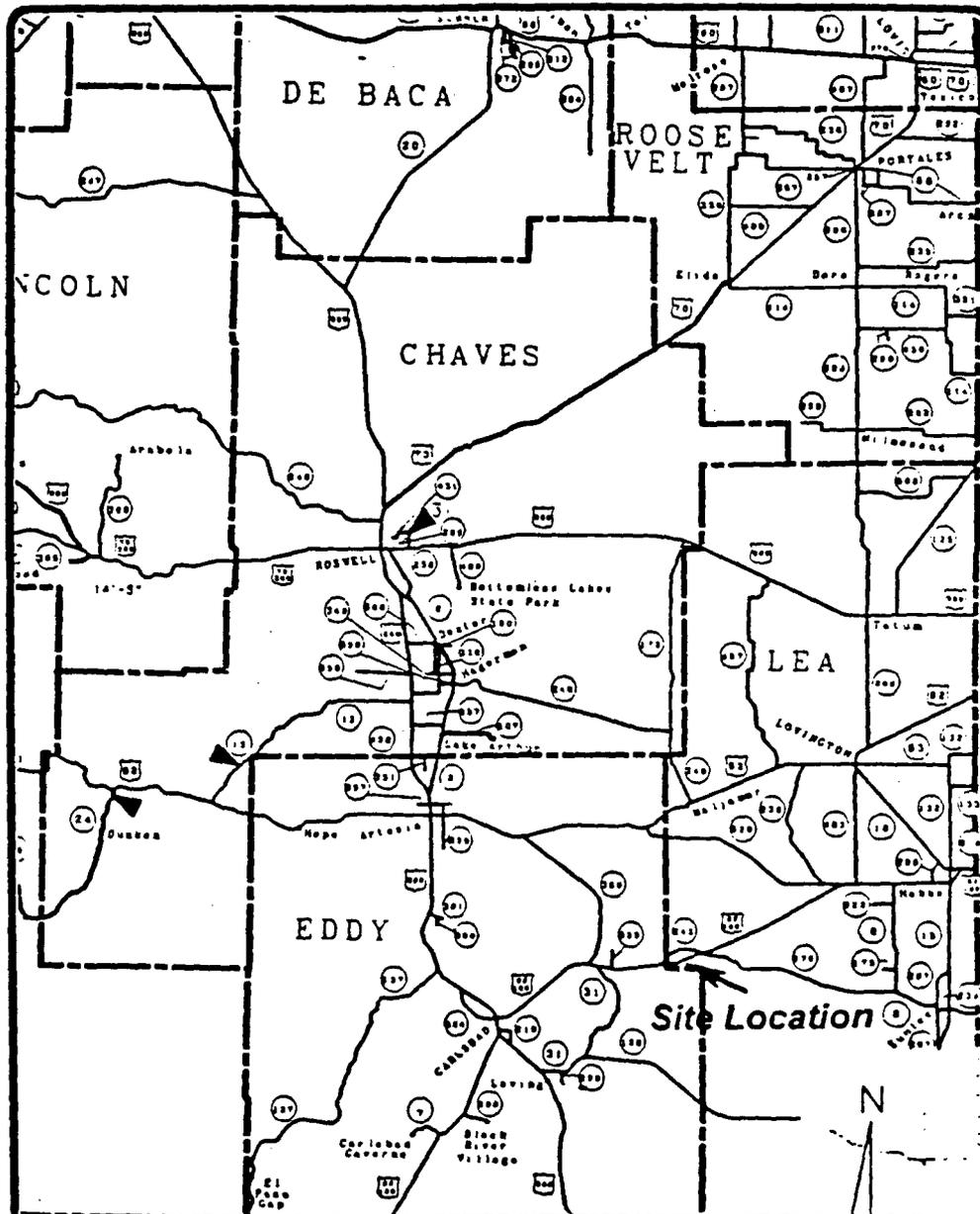
As required by the state of New Mexico, four groundwater monitor wells were drilled down to a depth of 220 feet in the Triassic Santa Rosa sandstone. These wells are used to monitor zones of moisture at the site. Subsequent hydraulic tests conducted on the #3 and #4 monitor wells indicated the maximum groundwater movement in the zone is only 6 meters per 1000 years, and it is not a groundwater source but is a perched water lense (see Attachment 11).



Lea Land Inc. Landfill

B. LOCATION:

Lea Land is located on U.S. Highway 180(62), at mile marker 64, 32 miles west of Hobbs, New Mexico and 30 miles east of Carlsbad, New Mexico. The site is easily accessible from the four-lane divided highway directly into the landfill. Operating hours are Monday through Friday from 8:00am to 5:00pm and Saturday from 8:00am to 12:00pm. Lea Land mailing address is: P.O. Box 3247, Carlsbad, NM, 88221-3247.



REF: NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPT., MAINTENANCE SUPPORT BUREAU, CARTOGRAPHY SECTION, BRIDGE WEIGHT LIMIT MAP - 1993

PROJ. # 404	DRAWN BY: BJB
SCALE:	CHECKED BY: MG
FILE:	
DATE MAY 20, 1995	

MAP OF NEW MEXICO
BRIDGE WEIGHT LIMIT MAP
LEA COUNTY
NEW MEXICO

EXHIBIT
1



**ATTACHMENTS 1 THROUGH 4
ARE INCLUDED ON FORM C-137**

**ATTACHMENT 5
OF
FORM C-137**

**NAMES AND ADDRESSES OF FACILITY
LANDOWNER AND
LANDOWNERS WITHIN ONE MILE
OF SITE**

**Names and Addresses of Facility Landowner
and Landowners
Within One Mile of Site**

The landowner of the facility site is as follows:

Lea Land, Inc.
1300 West Main Street
Oklahoma City, Oklahoma 73106

The Bureau of Land Management is the only owner of land of record which has been identified within one mile of the proposed facility. Their address is as follows:

Ms. Leslie Theiss
Field Manager
Carlsbad Field Office
Department of Interior
Bureau of Land Management
P. O. Box 1778
Carlsbad, NM 88220

(505) 887-6544

Receipt of the notice of application by means of certified mail receipts for Lea County and Eddy County authorities may be found in Attachment 12.

**ATTACHMENT 6
OF
FORM C-137**

DESCRIPTION OF FACILITY

DESCRIPTION OF FACILITY

General

Attached is the Site Plan (Figure J) for the Lea Land, Inc. Landfill. A complete description of the structures and equipment, including stormwater run-on and run-off from these areas, is found in Sections 2.2 through 2.5 of the Storm Water Discharge Pollution Prevention Plan (see Appendix A).

The main entrance to the landfill is located directly off of Highway 62/180 and is the only entrance that is open during operating hours of the landfill. The Landfill Manager lives at the landfill in a large trailer, which further ensures that no unauthorized loads will be delivered.

Anticipated Waste Streams

Attached are the anticipated waste streams that may be disposed at the Lea Land landfill. Information on Lea Land's waste acceptance guidelines can be found in Attachment 9 of this document.

Land Treatment Area

Lea Land also operates an on-site land treatment area located within the permitted area. Petroleum contaminated soils are remediated until they meet certain criteria and can then be placed in the landfill cell. The contaminated soils are spread to a thickness not to exceed 6 inches. The treatment area is lined with a 12-mil HDPE synthetic liner with a berm and has a grid system. The liner material is covered with adequate protection to allow for the driving of vehicles to spread and till the soils. The petroleum contaminated soils treated on-site are turned or disced a minimum of once every two weeks until remediation is complete. No microbes or chemicals are used to enhance remediation.

Contaminated soils may be acceptable for disposal or daily cover if the TPH concentration is less than 1,000 mg/kg and the sum of total benzene, toluene, ethylbenzene, and xylene isomer concentrations is less than 500 mg/kg, with benzene individually less than 10 mg/kg. It should be noted that uncontaminated or remediated soils will not be mixed with contaminated soils that exceed the levels mentioned above.

Fences, Signs and Netting

A fence is constructed around the Lea Land property, as shown in Figure J, and is maintained as described in Attachment 9 of this document. No part of the fence is constructed on a levee.

DESCRIPTION OF FACILITY (CONT.)

A sign is posted at the entrance of the landfill, which includes the company name, type of landfill (non-hazardous industrial waste), permit number, emergency phone number, hours of operation and the location by section, township, and range. Attached are pictures of the Lea Land signs.

All tanks at the landfill are covered. The Storm Water Retention and the Leachate Evaporation Ponds are not covered, but if any accumulations occur, the fluids will evaporate very quickly due to the arid conditions in the area.

**Anticipated Non-hazardous Industrial Waste Streams
Lea Land, Inc. Industrial Solid Waste Landfill**

Description

The following list identifies but is not limited to the non-hazardous industrial wastes that may be received at the proposed landfill on a regular basis. The wastes will be non-hazardous wastes generated by manufacturing processes from industrial facilities. Prior approval will be required on the waste shipments. A MSDS sheet for the waste will be required for Lea Land analysis prior to accepting waste. The generator will be required to notify Lea Land prior to any changes in the waste stream. Wastes will only be accepted on a certified waste manifest basis. The generator will certify that the waste is a pre-approved non-hazardous waste.

Waste

Absorbent Contaminated Materials

- (1) Petroleum products

Ash

Ash that results from the incineration or transformation of solid waste and includes both fly ash and bottom ash, and ash from the incineration of densified-refuse-derived fuel and refuse-derived fuel, but does not include fly ash waste, bottom ash waste, slag waste and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels and waste produced in conjunction with the combustion of fossil fuels that are necessarily associated with the production of energy and that traditionally have been and actually are mixed with and are disposed of or treated at the same time as fly ash, bottom ash, boiler slag or flue gas emission control wastes from coal combustion.

Asphalt Waste

- (1) Waste asphalt

Carbon Black/Toners

- (1) Carbon black
- (2) Toner

Contaminated Soils

- (1) Gasoline
 - leaded
 - unleaded
- (2) Diesel/distillates
- (3) Waste Oil
- (4) Non-specific hydrocarbons

**Anticipated Industrial Non-hazardous Waste Streams
Lea Land, Inc. Industrial Solid Waste Landfill**

- (5) Other contaminated soils
- crude oil
 - laundry detergent
 - hydraulic oil
 - mineral oil
 - paint
 - trash

Empty Containers

- (1) Drums, cylinders, cans (plastic or metal)
(2) Boxes (wooden)

Foundry Wastes

Full Containers

- (1) Fertilizer
(2) Sodium phosphate
(3) Surfactant

Metal/Metal Related Wastes

- (1) Scrap metal
(2) Metal sweepings/dust

Other Wastes

- (1) Brake linings (non-asbestos)
(2) Cooling tower wash residue
(3) Spent catalyst
(4) Oxidation residue
(5) Plastisol
(6) Synthetic latex resin
(7) Tar exhaust scrubber

**Anticipated Industrial Non-hazardous Waste Streams
Lea Land, Inc. Industrial Solid Waste Landfill**

Rubber Wastes

- (1) Carbon black and mixed pigments
- (2) Rubber tailings
- (3) Rubber grinder dust
- (4) Scrap/shredded tires
- (5) Wastewater pretreatment sludge

Sand, Filter Cake, Granular Wastes

- (1) Filter cake
- (2) Spent blasting material
- (3) Spent diatomaceous earth
- (4) Spent filter clay w/ oil
- (5) Spent sand

Sludges

- (1) Aluminum sulfate sludge
- (2) Amodized aluminum kiln sludge
- (3) Dirt, concrete and aqueous sludge (diatomaceous earth filter)
- (4) Ditch skimmer sludge
- (5) Dried cooling tower basin sludge
- (6) Grinder sludge
- (7) Lignite processing sludge
- (8) Lime sludge
- (9) Oil sludge
- (10) Phosphate sludge
- (11) Separator sludge
- (12) Stabilized /solidified sludge
- (13) Sump sludge
- (14) Laundry sludge
- (15) Paint booth filters/stripping and paint waste residue and sludge
- (16) Rinsing operation residues and sludge
- (17) Sewage related wastes
- (18) Wastewater screenings and grip

OTHER WASTES

Spent solid filters

Non-hazardous concrete/const. debris

Solid resins

Industrial Waste - PPE, wood, insulation (non-asbestos)

PCB material (< 50 ppm)

**ATTACHMENT 7
OF
FORM C-137**

FACILITY DESIGN AND CONSTRUCTION

LANDFILL DESIGN

1. LINERS:

Lea Land was designed with a composite liner system beneath the waste consisting of two components: The upper component is a 60 mil high density polyethylene (HDPE) geomembrane liner. The lower component is a self-healing geosynthetic clay liner which sits on top of six inches of in-situ soil compacted to a 90% Standard Proctor Density. The liner system was constructed with the required two percent slope to promote positive drainage and facilitate leachate collection. The Liner and Leachate Collection System Plan may be found in Figure U.

The liners were designed to be able to withstand the projected loading stresses and disturbances from overlying waste, waste cover materials, and equipment operation. Liners on the sidewall slopes of the cell are textured to prevent sliding. In accordance with the applicable ASTM standards, each liner and soil sample were tested in accordance with the parameters and frequencies specified in the Quality Control Plan before each liner section or lift was installed in the landfill. A certified professional engineer in liner installation and soils engineering was present for all quality control testing during construction. The Cell Construction Report is attached.

Liner seam samples were collected and destructive testing performed once per every 500 feet of seam length, with a portion of each sample tested in the field and another in the laboratory. Seam samples were tested for peel adhesion and bonded seam strength. Non-destructive testing was also completed on all seams.

Attached are the test methods and synthetic material specifications for the liner materials.

2. LEACHATE COLLECTION SYSTEM:

The leachate collection system was constructed to ensure the hydraulic leachate head on the liner never exceeds one foot. EPA "HELP" (Hydrologic Evaluation of Landfill Performance) model simulations, utilizing worst case climatological data, materials characteristics, and the leachate collection system design, indicated that the potential to generate leachate at the site is MINIMAL.

Two feet of soil is located on top of the liner as a protective cover. The soil cover facilitates the collection of leachate in the leachate collection system.

Retention ditches or diversion ditches are constructed around the active portions of the cells to prevent the run-on of stormwater onto the waste and the active portions. If any stormwater is collected during cell development, it is pumped to the stormwater retention ponds located on site.

2. LEACHATE COLLECTION SYSTEM (CONT.):

The perforated pipe used for leachate collection is four inches in diameter with a pipe wall thickness of Schedule-80 as specified by ASTM. The leachate collection pipes are sloped to drain to a 12-inch diameter riser pipe. Leachate is transported by pipe line to the approved leachate evaporation pond located on-site.



April 1, 1997

Mr Don Beardsley
Permits and Compliance
Solid Waste Bureau
New Mexico Environment Department
1190 St. Francis Drive
PO Box 26110
Santa Fe, New Mexico, 87502

**RE: Lea Land Inc. Industrial Solid Waste Landfill
Lea County, New Mexico**

As part of the permit for the Lea Land Industrial Solid Waste Landfill Facility ("Facility"), the Construction Quality Assurance (CQA) Plan requires a Cell Construction Report. This letter and the attached documents will serve as this report for Cell 2 East-South. Mr. Victor Thomas and I provided the CQA services associated with this phase of construction.

This Cell Construction Report report was prepared to document that the construction of Cell 2 East-South complies with the CQA Plan for the Facility. Cardinal Environmental was responsible for CQA during the construction of Cell 2 East-South. The CQA Plan and subsequent amendments were implemented to ensure that the construction of the cell at the Facility were performed with the highest standards and complied with NMED and EPA regulations. The CQA Plan addressed the responsibilities of the project personnel, the inspection activities required during construction of the Facility, and the procedures that would be employed for the acceptance of design changes that would be needed throughout the construction of the Facility.

Minor changes were made to the project during the project's construction. These changes did not decrease the environmental protection of the unit and were needed to implement construction.

All proposed design, engineering, or construction changes were reviewed by the Construction Manager, Mr. Kin Slaughter. If Mr. Slaughter approved the change he notified Mr. Steve Mason or Mr. Victor Thomas of Cardinal Environmental, of the change. The NMED was also notified of the proposed change prior to implementation.

The inspection activities that occurred during construction of the Facility were performed, documented, and maintained as per CQA

Plan by John Wallis Surveying, Pettigrew & Associates, Standard Testing and Cardinal Environmental. John Wallis Surveying, Pettigrew & Associates, and Cardinal Environmental have been responsible for Construction Quality Control (CQC). The CQC records have been maintained at the Facility and the offices of Cardinal Environmental by the CQC Officer and the Construction Manager and have been available for prompt review by the CQA Officer and regulatory officials. The records contain the CQC daily reports and all test data. The following documents have been maintained at the Facility and copies of the data have been available for review by NMED at their request:

- 1) Daily Construction Reports
- 2) Soil Test Results
- 3) Synthetic Liner Installation and Test Documents

Frequent inspections were performed at the site by the CQA Officer to review the progress of the construction, examine compliance with the CQA specifications, inspect the CQC reports, and review the test results. The CQA Officer would review and approve the daily construction reports and supporting documentation.

The Cell Construction Report consists of three reports:

- Soils Report
- Geosynthetic Clay Liner (GCL) Report
- Synthetic Liner Report

The Soils Report is a compilation of all soils construction documentation including the Daily Construction Reports and soil test data. The Daily Construction Reports were prepared to document all phases of construction from excavation to liner subgrade preparation. The soils testing was performed to document that the soil components (subgrade, backfill, and drainage layer materials) meet or exceed the specifications of the CQA Plan.

The GCL Report is a compilation of all GCL manufacturing, installation and laboratory test data. The GCL Report was prepared to document that the geosynthetic clay liner system was manufactured and installed according to the CQA Plan including testing by the manufacturer and independent laboratories. These documents certify that the GCL liner system meets or exceeds all requirements of the CQA Plan and all applicable NMED and EPA regulations and is therefore in compliance with our permit.

The Synthetic Liner Report is a compilation of the daily records detailing all construction, inspection, and testing performed on all synthetic liner material at the Lea Land landfill facility. These documents certify that the synthetic liner system meets or

Lea Land Industrial Solid Waste Landfill
Cell Construction Report
Page 3
April 1, 1997

exceeds all requirements of the CQA Plan and all applicable UDEQ and EPA regulations and is therefore in compliance with our permit.

If you have questions regarding any of the information in this report, please contact me.

Based on the implementation of the CQA Plan, the construction of Cell 2 East-South at the Facility complies with the specifications noted in the August 1996, CQA Plan subsequent amendments.

Sincerely,


Steve Mason, P.E.
President

Enclosures

**TEST METHODS AND SYNTHETIC MATERIAL SPECIFICATIONS
LEA LAND, INC. INDUSTRIAL SOLID WASTE LANDFILL**

Property	60 mil	60 mil textured	Geosynthetic Clay	ASTM Test Method
Material	HDPE	HDPE	---	
Thickness (%)	+/- 10	+/- 10	---	
Carbon Black (%)	2 - 3	2 - 3	---	D1603
Melt Index (g/10 min)	0.3 Max	0.3 Max	---	D1238E
Density (g/cc)	0.94	0.94	---	D1505
Tensile Strength Yield (ppi)	130	126	---	D638 Type IV Dumbell @ 2 ipm
Tensile Strength Break (ppi)	230	35	---	D638 Type IV Dumbell @ 2 ipm
Elong. Yield (%)	13	13	---	D638 Type IV Dumbell @ 2 ipm
Elong. Break (%)	600	100	---	D638 Type IV Dumbell @ 2 ipm
Dimensional Stability (%; 212°F; 1 hour)	+/- 2	+/- 2	---	D1204
Mass/Area	---	---	1 psf @ a 12% adj. moisture content	D-5211
Free Swell	---	---	0.4 in.	D-4354
Hyd. Cond.	---	---	1E-9 cm/sec	D-4354
Direct Shear	---	---	Manufacturer's Specifications	Manufacturer's Specifications
Peel Test (needled Liners only)	---	---	Manufacturer's Specifications	Manufacturer's Specifications

GEOMEMBRANE CERTIFICATE OF ANALYSIS

Customer: The Snow Company

Number of Rolls Shipped: 6

Project Name: Carlsbad, NM

Nominal Thickness: 60 mil

Project Number: 3F12-100

Bill of Lading: 11882

We hereby certify that the polyethylene geomembrane for the above identified shipment meets or exceeds National Seal Company's specifications, below. Testing was performed at the frequency indicated.

The raw polymeric material is first quality polyethylene resin containing no more than two percent clean re-worked plastic by weight. Thickness was measured according to ASTM D 5199. Tensile properties were determined in accordance with ASTM D 638, NSF modified, using Type IV dumbbell specimens, a strain rate of two inches per minute, and grip movement for strain determinations. Carbon black dispersion slides were prepared according to ASTM D 5596 and rated according to the ASTM D 5596 dispersion classification chart under 100X magnification. Where appropriate, carbon black content was determined according to ASTM D 4218. Dimensional stability was determined according to ASTM D 1204 at 100°C for one hour.

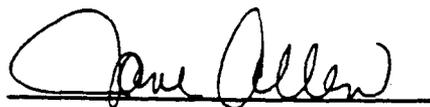
A database listing of all test values follows.

GEOMEMBRANE SPECIFICATIONS

Thickness	60 mil Minimum	at least every 50,000 ft ²
Stress at Yield	2200 psi Minimum	at least every 50,000 ft ²
Stress at Break	3800 psi Minimum	at least every 50,000 ft ²
Strain at Yield	13% Minimum	at least every 50,000 ft ²
Strain at Break	700% Minimum	at least every 50,000 ft ²
Carbon Black Dispersion	Category 1 *	at least every 50,000 ft ²
Carbon Black Content	2% to 3%	at least every 50,000 ft ²
Dimensional Stability	+/- 2%	at least once per shift

* Category 1 is the equivalent of "A1" in ASTM D 2663

NATIONAL SEAL COMPANY



Jane Allen
Quality Control Manager

1-24-97
Date

97-5953/60 MIL TRUCK #1

01/24/97



POLYETHYLENE CERTIFICATE OF ANALYSIS

Customer: The Snow Company

Resin Type: Solvay

Project Name: Carlsbad, NM

Project Number: 3F12-100

Bill of Lading: 11882

We hereby certify that the polyethylene resin for the above identified shipment, meets or exceeds National Seal Company's specifications, below. Testing was performed on each resin blend.

Melt flow index was determined according to ASTM D 1238. Density was determined according to ASTM D 1505. Where appropriate, carbon black content was determined according to ASTM D 1603. The average test results are listed in the table below.

RESIN SPECIFICATIONS

Density (with carbon black)

0.94 grams/cm³ Minimum

Carbon Black Content

2% to 3% Range

BLEND NUMBER	MELT FLOW INDEX	DENSITY	CARBON BLACK CONTENT
025C	0.28	0.946	2.21
111A	0.27	0.946	2.32

Jane Allen

Jane Allen
Quality Control Manager

1-24-97
Date:

Note: When no carbon black content value is listed, the resin contained no carbon black.

97-5953/60 MIL TRUCK #1

**LEA LAND FILL
CELL 2 EAST, LEA COUNTY**

ROLL #	PANEL	ROLL QC (CERT DATE)	DEPLOYED ROLL	SEAM INSP	ND-WEDGE	CAP INV	VT- EXTRUDE	DEST SAMPLE	APPROVED BY CQA (DWG CHKD)
7A1700090	1	1/24/97	1/30/97	N/A	N/A	2/2/97	N/A		GSM
7A1700090	2	1/24/97	1/30/97	1/2	1/30/97	2/2/97	2/2/97	DT1	GSM
				2/4	1/31/97		2/2/97	DT2	GSM
6L1100090	3	1/24/97	1/30/97	1/3	1/30/97	2/2/97	2/2/97		GSM
				2/3	1/30/97				GSM
6L1100090	4	1/24/97	1/31/97	3/4	1/31/97	2/2/97	2/2/97		GSM
6L1100090	5	1/24/97	2/1/97	4/5	2/1/97	2/2/97	2/2/97	DT3	GSM
7A2800130	6		2/1/97	4/6	2/1/97	2/2/97	2/2/97		GSM
				5/6	2/1/97				GSM
7A1700130	7	1/24/97	2/1/97	6/7	2/1/97	2/2/97	N/A		GSM
				5/7	2/1/97		2/2/97	DT4	GSM
7A1700130	8	1/24/97	2/1/97	7/8	2/1/97	2/2/97	2/2/97		GSM
7A1700180	9	1/24/97	2/1/97	8/9	2/1/97	2/2/97	2/2/97		GSM
				7/9	2/1/97		2/2/97	DT5	GSM
7A1700180	10	1/24/97	2/1/97	9/10	2/1/97	2/5/97	2/2/97		GSM
				8/10	2/1/97				GSM
7A1700180	11	1/24/97	2/2/97	10/11	2/2/97	2/5/97	2/2/97	DT6	GSM
7A1700170	12	1/24/97	2/2/97	11/12	2/2/97	2/5/97	2/2/97		GSM
				10/12	2/2/97				GSM
7A1700170	13	1/24/97	2/2/97	12/13	2/2/97	2/5/97	2/5/97	DT7	GSM
7A1700170	14	1/24/97	2/2/97	13/14	2/2/97	2/5/97	2/2/97		GSM
7A1700140	15	1/24/97	2/2/97	14/15	2/2/97	2/5/97	2/5/97	DT8	GSM
				13/15	2/2/97				GSM
7A1700140	16	1/24/97	2/2/97	15/16	2/2/97	2/5/97	2/5/97	DT9	GSM
				14/16	2/2/97				GSM

D:PN402\96LINR\96CQ

LEA LAND LANDFILL
CELL 2 EAST, LEA COUNTY

7A1700140	17	1/24/97	2/4/97	16/17	2/4/97	2/5/97	2/5/97		GSM
7A1700160	18	1/24/97	2/4/97	16/18	2/4/97	2/5/97			GSM
				17/18	2/4/97		2/5/97	DT10	GSM
7A1700160	19	1/24/97	2/4/97	18/19	2/4/97	2/5/97	2/5/97	DT11	GSM
				17/19	2/4/97				GSM
7A1700160	20	1/24/97	2/4/97	19/20	2/4/97	2/5/97	2/5/97		GSM
7A1700100	21	3/25/97	2/4/97	20/21	2/4/97	2/5/97	2/5/97		GSM
				19/21	2/4/97		2/5/97	DT12	GSM
7A1700100	22	3/25/97	2/4/97	21/22	2/4/97	2/5/97	2/5/97	DT13	GSM
7A1700060	23	1/24/97	2/4/97	22/23	2/4/97	2/5/97	2/5/97	DT15	GSM
4K2507AA3	24	3/24/95	2/4/97	23/24	2/5/97	2/5/97	2/5/97		GSM
4K2507AA3	25	3/24/95	2/4/97	24/25	2/4/97	2/5/97	2/5/97		GSM
				23/25	2/5/97				GSM
4K2507AA3	26	3/24/95	2/4/97	25/26	2/4/97	2/5/97	2/5/97		GSM
				23/26	2/5/97				GSM
4K2507AA3	27	3/24/95	2/4/97	26/27	2/4/97	2/5/97	2/5/97	DT14	GSM
				23/27	2/5/97				GSM
4K2507AA3	28	3/24/95	2/4/97	27/28	2/4/97	2/5/97	2/5/97		GSM
				23/28	2/5/97				GSM
4K2507AA3	29	3/24/95	2/4/97	28/29	2/4/97	2/5/97	2/5/97		GSM
				23/29	2/5/97				GSM
4K2507AA3	30	3/24/95	2/4/97	29/30	2/4/97	2/5/97	2/5/97		GSM
				23/30	2/5/97				GSM
4K2507AA3	31	3/24/95	2/4/97	30/31	2/4/97	2/5/97	2/5/97		GSM
				23/31	2/5/97				GSM
4K2507AA3	32	3/24/95	2/4/97	31/32	2/4/97	2/5/97	2/5/97		GSM
				23/32	2/5/97				GSM
4K2505AA3	33	3/25/97	2/5/97	32/33	2/5/97	2/5/97	2/5/97	DT16	GSM

LEA LAND LANDFILL
CELL 2 EAST, LEA COUNTY

4K2505AA3	34	3/25/97	2/5/97	23/33	2/6/97	2/5/97	2/5/97	GSM
				33/34	2/5/97	2/5/97	2/5/97	GSM
4K2505AA3	35	3/25/97	2/5/97	23/34	2/5/97	2/5/97	2/5/97	GSM
				34/35	2/5/97	2/5/97	2/5/97	GSM
4K2505AA3	36	3/25/97	2/5/97	23/35	2/5/97	2/5/97	2/5/97	GSM
				35/36	2/5/97	2/5/97	2/5/97	GSM
4K2505AA3	37	3/25/97	2/5/97	23/36	2/5/97	2/5/97	2/5/97	GSM
				36/37	2/5/97	2/5/97	2/5/97	GSM
4K2505AA3	38	3/25/97	2/5/97	23/37	2/5/97	2/5/97	2/5/97	GSM
				37/38	2/5/97	2/5/97	2/5/97	GSM
4K2505AA3	39	3/25/97	2/5/97	23/38	2/5/97	2/5/97	2/5/97	GSM
				38/39	2/5/97	2/5/97	2/5/97	GSM
4K2505AA3	40	3/25/97	2/5/97	23/39	2/5/97	2/5/97	2/5/97	GSM
				39/40	2/5/97	2/5/97	2/5/97	GSM
4K2505AA3	41	3/25/97	2/5/97	23/40	2/5/97	2/5/97	2/5/97	GSM
				40/41	2/5/97	2/5/97	2/5/97	GSM
4K2508AA3	42	3/25/97	2/6/97	23/41	2/6/97	2/6/97	2/6/97	GSM
				41/42	2/6/97	2/6/97	2/6/97	GSM
4K2508AA3	43	3/25/97	2/6/97	23/42	2/6/97	2/6/97	2/6/97	GSM
				42/43	2/6/97	2/6/97	2/6/97	GSM
4K2508AA3	44	3/25/97	2/6/97	23/43	2/6/97	2/6/97	2/6/97	GSM
				43/44	2/6/97	2/6/97	2/6/97	GSM
4K2508AA3	45	3/25/97	2/6/97	23/44	2/6/97	2/6/97	2/6/97	GSM
				44/45	2/6/97	2/6/97	2/6/97	GSM
4K2508AA3	46	3/25/97	2/6/97	23/45	2/6/97	2/6/97	2/6/97	GSM
				45/46	2/6/97	2/6/97	2/6/97	GSM
4K2508AA3	47	3/25/97	2/6/97	23/46	2/6/97	2/6/97	2/6/97	GSM
				46/47	2/6/97	2/6/97	2/6/97	GSM

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LEA LAND FILL
CELL 2 EAST, LEA COUNTY

4K2508AA3	48	3/25/97	2/6/97	23/47	2/7/97	3/2/97			GSM
				47/48	2/6/97				GSM
4K2508AA3	49	3/25/97	2/6/97	23/48	2/7/97				GSM
				48/49	2/6/97	3/2/97			GSM
4K2508AA3	50	3/25/97	2/6/97	23/49	2/7/97				GSM
				49/50	2/6/97	3/2/97			GSM
7A1700060	51	3/25/97	2/6/97	23/50	2/7/97				GSM
				50/51	2/6/97	11/24/96			GSM
				23/51	2/7/97				GSM
6K2600140	S1	1/28/97	3/1/97	N/A	N/A				GSM
6K2600140	S2	1/28/97	3/1/97	S1/S2	3/1/97	3/2/97		DT1	GSM
6K2600140	S3	1/28/97	3/1/97	S2/S3	3/1/97	3/2/97			GSM
6K2600140	S4	1/28/97	3/1/97	S3/S4	3/1/97	3/2/97		DT2	GSM
6K2600140	S5	1/28/97	3/1/97	S4/S5	3/1/97	3/2/97			GSM
6K2600180	S6	1/28/97	3/1/97	S5/S6	3/1/97	3/2/97		DT3	GSM
				S4/S6	3/1/97				GSM
6K2600180	S7	1/28/97	3/1/97	S6/S7	3/1/97	3/2/97			GSM
				S5/S7	3/1/97				GSM
6K2600180	S8	1/28/97	3/1/97	S7/S8	3/1/97	3/2/97			GSM
6K2600180	S9	1/28/97	3/1/97	S8/S9	3/1/97	3/2/97			GSM
				S7/S9	3/1/97				GSM
6K2600180	S10	1/28/97	3/1/97	S9/S10	3/1/97	3/2/97			GSM
				S8/S10	3/1/97			DT4	GSM
7A1700060	L1	3/25/97	3/1/97						GSM
7A1700060	L2	3/25/97	3/1/97	L1/L2	3/1/97				GSM

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Geosynthetic Clay Liner
QC Form

Roll #	Cert Date	Approved by		Roll #	Cert Date	Approved by
18443	1/28/97	SM		20201	1/28/97	SM
18457	1/28/97	SM		20202	1/28/97	SM
18662	1/29/97	SM		20203	1/28/97	SM
18663	1/29/97	SM		20240	1/30/97	SM
18664	1/29/97	SM		20241	1/30/97	SM
18665	1/29/97	SM		20242	1/30/97	SM
18666	1/29/97	SM		20243	1/30/97	SM
18667	1/29/97	SM		20244	1/30/97	SM
18668	1/29/97	SM		20245	1/30/97	SM
18669	1/29/97	SM		20246	1/30/97	SM
18738	1/29/97	SM		20247	1/30/97	SM
18739	1/29/97	SM		20248	1/30/97	SM
18740	1/29/97	SM		20249	1/30/97	SM
18741	1/29/97	SM		20250	1/30/97	SM
18742	1/29/97	SM		20251	1/30/97	SM
18743	1/29/97	SM		20252	1/30/97	SM
18744	1/29/97	SM		20254	1/30/97	SM
18745	1/29/97	SM		20277	2/3/97	SM
18746	1/29/97	SM		20278	2/3/97	SM
19223	1/28/97	SM		20335	2/3/97	SM
19224	1/28/97	SM		20336	2/3/97	SM
19225	1/28/97	SM		20337	2/3/97	SM
19226	1/28/97	SM		20338	2/3/97	SM
19234	1/28/97	SM		20339	2/3/97	SM
19252	1/28/97	SM		20340	2/3/97	SM
19253	1/28/97	SM		20341	2/3/97	SM
19254	1/28/97	SM		20351	2/3/97	SM
19246	1/24/97	SM		20353	2/3/97	SM
19247	1/24/97	SM		20354	2/3/97	SM
19248	1/24/97	SM		20355	2/3/97	SM
19249	1/24/97	SM		20356	2/3/97	SM
19250	1/24/97	SM		20357	2/3/97	SM
19251	1/24/97	SM		20358	2/3/97	SM
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19330	1/24/97	SM		20370	2/4/97	SM
19331	1/24/97	SM		20371	2/4/97	SM
19332	1/24/97	SM		20372	2/4/97	SM
19338	1/24/97	SM		20393	2/4/97	SM
19352	1/28/97	SM		20394	2/4/97	SM
19502	1/24/97	SM		20395	2/4/97	SM
20113	1/24/97	SM		20397	2/4/97	SM
20114	1/24/97	SM		20398	2/4/97	SM
20115	1/24/97	SM		20399	2/4/97	SM
20197	1/28/97	SM		20400	2/4/97	SM
20199	1/28/97	SM		20401	2/4/97	SM
20200	1/28/97	SM		2310	3/25/97	SM
20201	1/28/97	SM				
20202	1/28/97	SM				

**ATTACHMENT 8
OF
FORM C-137**

CONTINGENCY PLAN

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 - III. SITE OPERATIONS**
 - A. Dust Control
 - B. Litter Control
 - C. Noise Control
 - D. Fire Prevention and Control
 - E. Unusual Traffic Conditions
 - F. Equipment Breakdown
 - G. Alternative Waste Disposal
 - IV. EMERGENCY EQUIPMENT**
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I. INTRODUCTION

Lea Land, Inc. Non-Hazardous Solid Industrial Waste Landfill is located in Lea County, New Mexico, within a 640 acre tract of land, also owned by Lea Land. An area of 160 acres is currently permitted by the New Mexico Environment Department (NMED) for non-hazardous industrial solid waste disposal.

The Contingency Plan for Lea Land addresses the containment, clean-up and reporting of major and minor spills, and other emergencies that may occur during operation of the landfill. Since Lea Land accepts only solid wastes that pass the paint filter test and does not accept liquids, spills should be minor. The plan was prepared to meet the requirements of the New Mexico Oil Conservation (OCD) Rules 711 and 116 and other related requirements regarding the management of emergencies.

The purpose of this Contingency Plan is to present organized, coordinated, and technically/financially feasible courses of action to be taken in response to contingencies during the operation of the Lea Land, Inc. landfill. This Plan will be implemented in the unlikely event that emergency situations develop which could endanger public health, welfare or the environment. The Plan will be amended whenever: the facility permit is revised or modified; the plan fails in an emergency; there are changes in the design, construction, operation, maintenance or other circumstances in a way that increase the potential for fires or explosions, and subsequently changes the response necessary in an emergency; the list of Emergency Coordinators changes; or the list of emergency equipment changes.

Appendix A contains the Storm Water Discharge Pollution Prevention Plan (SWPPP) for the Lea Land Landfill and will be referred to in this document. This Plan was included to provide information on the drainage patterns and preventive measures taken to ensure that there will be minimal impact to the environment during emergency situations.

II. PERSONNEL AND USER SAFETY

An emergency response program has been established for the Lea Land, Inc. landfill to ensure that safety of site personnel and users in the event of emergency situations at the landfill. The program includes:

- Identification of Emergency Coordinator(s)
- Identification of Duties and Responsibilities of Emergency Coordinator(s)
- Identification of Communication Systems
- Development of an Evacuation Plan
- Summary of Available Emergency Services

b. Identification

Whenever there is a fire, explosion, or other incident presenting a potential threat to the public health, welfare or the environment, the Emergency Coordinator must immediately identify the character, exact source, and extent of the situation.

c. Assessment

In case of an emergency situation, an assessment of the possible hazard must be made. The assessment will consider both the direct and indirect hazard of any release, fire, explosion, or other incident that present a possible hazard to public health, welfare or the environment, he must then initiate the Contingency Plan. This will include contact with local authorities in order to inform them of the situation, particularly when an evacuation of the surrounding area is necessary. The OCD will also be advised of all the pertinent facts regarding the incident prior to the commencement of clean-up activities.

d. Control Procedures

In the event of any emergency situation, the Emergency Coordinator must take all reasonable measures to prevent the occurrence, recurrence, or spread of a fire or explosion to other portions of the facility or the surrounding environs. These measures include, when applicable and necessary, ceasing facility operations, and containing and collecting materials released. In the event that the facility ceases operations in response to fire, or explosion, the Emergency Coordinator will monitor for leaks, pressure build up, gas generation or rupture in valves, pipes, or the equipment, wherever this may be appropriate.

In the event of spills, an attempt to safely control the spill will be made, such as using sorbent materials. If the spill is solid materials, the waste pile will be covered with plastic until it can be picked up and properly disposed.

e. Emergency Response Personnel

If an emergency occurs, fully trained response personnel will be contacted as soon as possible. Request for assistance will include the following information:

- Name, address, telephone number of facility
- Type and time of incident occurrence
- Extent of any injuries
- Possible hazard to public health, welfare, or the environment surrounding the facility
- Type and quantities of materials involved, if known

Immediate action by on-site personnel will concentrate on preventing the spread of any fire/explosive, or spill/leak situation that occurs, and immediate emergency

medical attention will be provided to injured personnel. Any possible sources of ignition will be removed from the incident area, if this can be done without risk, and vehicular traffic will be suspended and work ceased until the fire or spill can be safely contained and controlled.

f. Storage and Treatment of Released Materials

Immediately after an emergency situation, the Emergency Coordinator must make arrangements for the treatment, storage, or disposal of any recovered wastes, or other material resulting from a release, fire, or explosion at the facility. The Emergency Coordinator will ensure that waste which may be incompatible is not treated, stored, or disposed of until cleanup procedures are complete. The Emergency Coordinator may do this by observation or review of facility records or manifests, and if necessary, by chemical analysis.

g. Post-Emergency Equipment Maintenance

Following an emergency incident, all emergency response equipment used must be cleaned and made fit for re-use, or replaced if necessary, so that the equipment will be available when facility operations resume. An inspection of all equipment must take place before operations resume to ensure that each item is in proper working condition. Remedial activities, as a result of this inspection, may include recharging of fire extinguishers, replacement of personal protective gear, restocking of disposable items, etc.

3. Internal Communication/Warning System

An internal communication system containing telephones and two-way radios is available at the Lea Land site for notifying facility personnel in the event of an emergency episode. Units are located in readily accessible areas on site. This system provides facility personnel with immediate emergency notification capabilities, and the opportunity to receive necessary instructions in the event of any incident.

4. External Communication/Warning System

The Emergency Response Contact list is displayed prominently at the landfill for easy employee accessibility in the event of an emergency. Personnel training includes familiarizing employees and regular site visitors with the posted lists and other contingency plan elements. 24-hour security is used on site and Lea Land's landfill manager lives on site. An emergency answering service is also available and is posted at the main entrance gate.

5. Evacuation Plan for Facility Personnel

In an emergency situation, the Emergency Coordinator is the individual responsible for determining when evacuation of the facility is required. The Evacuation Map is found in Figure S-1. Imminent or actual dangers that constitute a situation requiring evacuation include:

- A generalized fire or threat of generalized fire that cannot be avoided
- An explosion or the threat of explosion that cannot be averted
- A major spill or leak that cannot be contained or constitutes a potential threat to human health

When evacuation is required, the following procedures will be followed:

- Alert all personnel using the facility telephone/two-way radio system
- Shut down all landfill equipment
- All personnel will proceed to the designated meeting point. Once assembled, this will permit a determination and identification of any missing persons
- Once assembled, standby to afford assistance if and as needed or evacuate through the main entrance

When time does not permit, proceed to the evacuation route:

- Personnel will exercise judgment and common sense in finding the best evacuation route in this instance.

In the event evacuation through the main entrance is not possible due to fire, an alternate evacuation will be utilized. The alternate evacuation route will be to the northwest corner of the property.

6. Emergency Equipment

Various emergency equipment is available at the Lea Land facility as described below. Personnel are thoroughly trained in the use of emergency equipment.

a. Warning System

The Facility's telephone and two-way radio system will be utilized to provide notification and instruction to on-site personnel, as well as to contact local, State, or Federal agencies in order to obtain emergency assistance.

Telephone and two-way radios are located in areas of the facility that are readily accessible to site personnel. Mobile phones are carried in landfill vehicles and equipment as well.

b. Fire Fighting Equipment

The Lea Land Landfill facility maintains several types of equipment on site that may be used in fire fighting efforts. Earthmoving equipment that is utilized on a regular basis for landfill operations can be used to move and apply cover material to smother fires. Cover material is readily available on site for fire control purposes. A tank truck filled with water and hoses attached is kept on site, and is available for use in controlling fires.

The facility will also maintain a supply of fire extinguishers that may be used in the event of an emergency incident. These extinguishers are located at strategic points in the facility for easy accessibility. Extinguishers are maintained in conformance with state and local fire codes and regulations.

c. First-Aid/Safety Equipment

First-aid and safety equipment are located in strategic locations on site, and some items are kept in landfill vehicles and on landfill equipment. First-aid kits are readily accessible and contain a full range of items necessary to care for minor injuries needing prompt attention.

7. Medical Emergencies/First-Aid

In cases of medical emergency, trained medical response personnel will be contacted immediately. First-aid administered by on-site facility personnel will continue until professional assistance arrives. Personnel training will include first-aid measures and emergency response contact.

First-aid is the immediate care of a person who has been injured or taken ill. It is intended to prevent further illness and injury, and to relieve pain until additional, professional medical aid can be obtained. The objectives of first-aid are:

1. To control conditions that might endanger life.
2. To prevent further injury.
3. To relieve pain, prevent contamination, and treat for shock.
4. To make the patient as comfortable as possible.

The initial responsibility for first-aid rests with the first person at the scene who will react quickly, but in a calm and reassuring manner. The person assuming responsibility will immediately summon medical assistance, being as explicit as possible in reporting suspected types of injury or illness. The injured person will not be moved, except when necessary to prevent further injury.

III. SITE OPERATIONS

Conditions may be encountered at the site during normal landfilling activities that will require response actions that are not included as part of typical daily site operations.

A. Dust Control

During dry periods, fugitive dust may be a nuisance resulting from the landfill operation. The water truck kept at the site is used to control dust whenever a potential problem exists. In the event of unusually dusty conditions, Lea Land will lease another water truck to assist in dust control.

B. Litter Control

Every practicable measure is taken to contain litter as close to the working area as possible. Employees manually pick up any litter on a daily basis.

Restriction of the active working area to as small an area as possible will greatly assist in the control of litter. Cover material or approved tarp is spread on the waste during the on-going operation when wind presents a problem. The active portion of the fill will generally progress in a direction perpendicular with respect to the prevailing wind direction.

C. Noise Control

Since the landfill operations are concentrated in an area a significant distance (25 miles) from local residences, the noise generated from landfill operations will not represent an off-site impact. All landfill equipment has muffler systems to diminish any potential nuisance from noise.

D. Fire Prevention and Control

The possibility of a fire, whether in the landfilled waste or within a piece of equipment, is a potential hazard associated with the daily operation at landfills. Fire prevention includes cleaning combustible materials from on-site equipment, particularly heat sources (e.g. radiators).

The use of cover material to cut off the oxygen supply is an effective and practical means of fire control. Water can be used to supplement the use of cover soil or serve as an alternative means of controlling fires. The Lea Land water truck is available for use during emergency situations. For larger or more serious outbreaks the local fire department will be contacted. Additionally, portable fire extinguishers are kept as a precautionary measure.

E. Unusual Traffic Conditions

Traffic will not pose problems at the Site for the following reasons:

- The local traffic and regional roadways are more than adequate to manage landfill related traffic.
- Landfill personnel are available to direct incoming and outgoing traffic as needed.
- Roadways are designed to manage the type of traffic that will use the landfill at maximum daily volumes and during inclement weather.

F. Equipment Breakdown

The routine preventive maintenance program minimizes equipment down-time. When a piece of equipment is unavailable, other suitable pieces of equipment are used to perform the required task. In the event of multiple breakdowns, or for major earth-moving efforts, additional equipment can be leased from local contractors or suppliers.

G. Alternative Waste Disposal

Lea Land landfill accepts scheduled waste only. Therefore, in the event the facility is not in operation, waste will not be scheduled for acceptance.

IV. EMERGENCY EQUIPMENT

As part of an effort to prevent emergencies, prevent personal injury, and efficiently respond to an emergency, the following equipment is utilized and available for utilization at the Lea Land Industrial Landfill.

A. Personal Protective Equipment

Personnel are required to utilize the following equipment during daily operations:

Gloves - Gloves are worn by personnel working with waste.

Steel-toed boots - Steel toed boots are worn by personnel while working around heavy equipment.

Goggles - Goggles are worn while working with air tools, welding equipment, or any other time when the potential for eye injury exists.

Long pants and shirts - Personnel are required to wear long pants and shirts.

Reflective vests - Reflective vests are worn while directing traffic.

B. Emergency Response Equipment

The following emergency response equipment is available to personnel to be used in the event of an emergency. Personnel are familiarized with the location of the equipment upon employment at the site.

Fire Extinguishers - Approved fire extinguishers are available at strategic locations on site. All extinguishers are tested and recharged at least once per year.

Soil - Soil can be used to extinguish fires occurring at the working face of the landfill by smothering.

First-Aid Kits -First-aid kits are stored in the office and some vehicles located on site. The kits are inspected periodically to ensure contents are complete.

Tanker Truck - The site tanker truck is available and hoses are attached to control fires if necessary.

Telephone System & Mobile Phone - A telephone system located in the office on site and a mobile phone are available for contacting the fire department, police department, and/or rescue personnel.

Two-Way Radios - Two-way radios are available for notifying facility personnel in the event of an emergency episode. Units are located in readily accessible areas on site.

Telephone List - A list of emergency telephone numbers is located near each telephone.

Flares - Flares are available for redirecting traffic during an emergency.

V. EVACUATION PLAN

All emergencies require prompt and deliberate action. In the event of a major emergency, it will be necessary to follow an established set of procedures. Such established procedures are followed as closely as possible; however, in specific emergency situations, the Emergency Coordinator may deviate from procedures to provide a more effective plan for bringing the situation under control. The Emergency Coordinator is responsible for determining which emergency situations require facility evacuation. Imminent or actual dangers that constitute a situation requiring evacuation include the following:

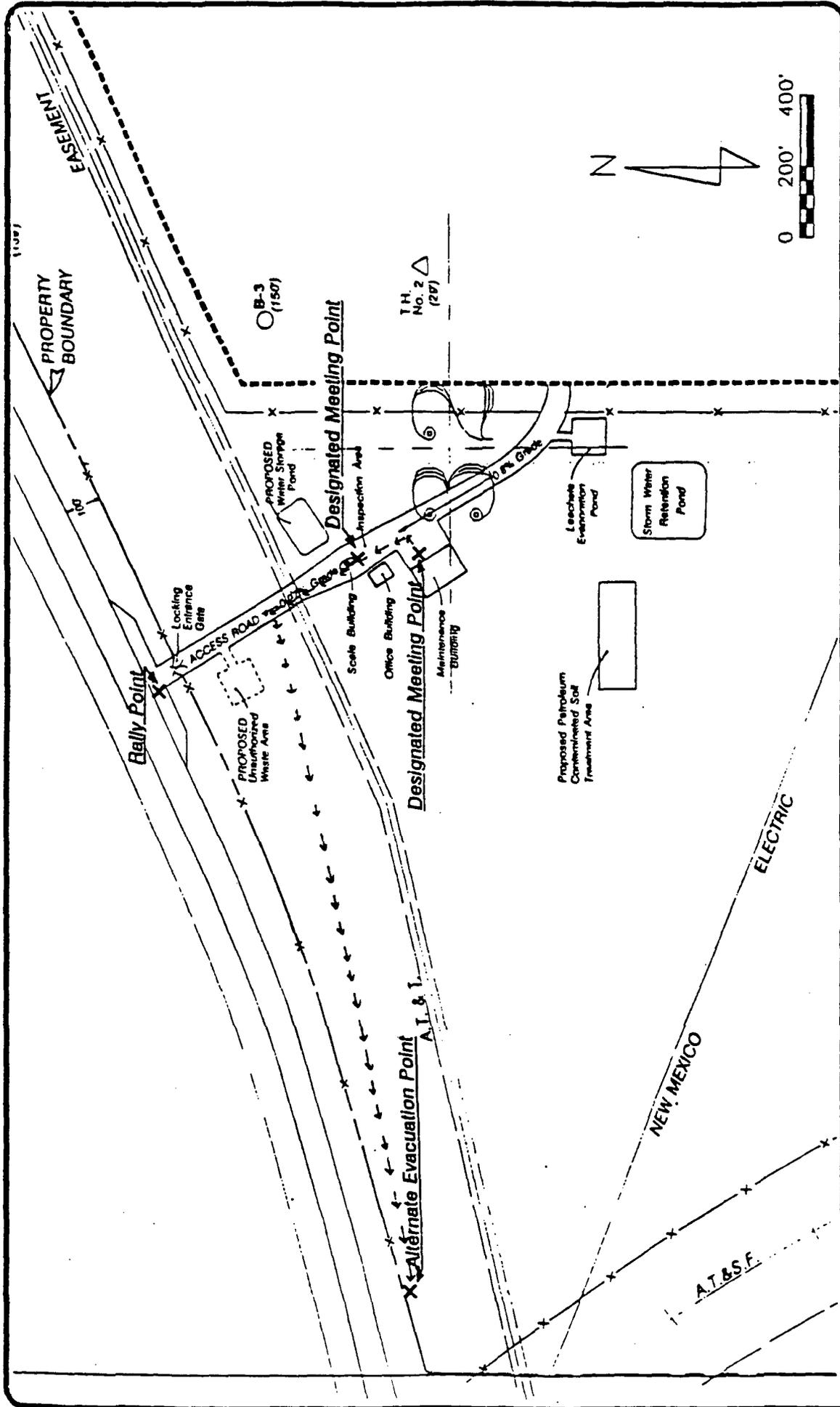
- A generalized fire or threat of a generalized fire that cannot be avoided
- An explosion or the threat of an explosion that cannot be averted
- A major spill or leak that cannot be contained or constitutes a potential threat to human health

Lea Land, Inc. has a telephone/two-way radio and mobile phone system to alert all personnel. The systems are used to announce "evacuate the facility". The telephone and mobile phones are used for internal and external communication in an emergency situation. In the event site evacuation is required by the Emergency Coordinator, the following actions will be taken:

1. The call for site evacuation will given over the telephone/two-way radio system
2. Shut down all landfill equipment.
3. No further entry of visitors, contractors, or trucks will be permitted. All vehicular traffic within the site will cease to allow safe exit of personnel and movement of emergency equipment.
4. All personnel will proceed to the designed meeting point.
5. Once all personnel, visitors, and contractors are assembled, standby to afford assistance if and as needed or evacuate through the main entrance gate.
6. No persons shall remain or re-enter the facility unless specifically authorized by the person or persons calling for the evacuation. In allowing this, the person in charge assumes responsibility for those persons within the perimeter. Those inside the facility boundary will normally only include fire containment personnel or emergency teams.
7. All persons will be accounted for by their immediate supervisors. Supervisors will designate the safest exits for his employees and will choose an alternate exit if the first choice is inaccessible. To assist in this endeavor, the Emergency Coordinator will use the telephone/two-way radio system to inform the supervisor of the nature of the emergency.
8. During exit, the supervisor should try to keep his employees together. The rally point for the site will be outside the main gate as shown in Figure S-1. Immediately upon exit through the main gate, the supervisor or Emergency Coordinator will prepare a list of all personnel at the gate for final accounting.

9. Upon completion of the employee list, the supervisor in charge will hand carry the list to the Emergency Coordinator. All other personnel will remain at the rally point.
10. Contract personnel should also be listed with the name of their company. Contract foremen should report at the main gate.
11. The names of the Fire Department personnel and/or emergency team members involved in emergency response will be reported, in writing to the main gate by designated response team personnel.
12. A final tally of persons will be made by the Emergency Coordinator.
13. No attempt to find persons not accounted for will involve endangering lives of others by re-entry into the emergency area.
14. A site supervisor at the gate will maintain an updated list of all personnel to aid in the accountability procedure.
15. Re-entry into the fenced area will be made only after clearance is given by the Emergency Coordinator.
16. In all questions of accountability, immediate supervisors will be held responsible for those persons reporting to them. Visitors will be the responsibility of the employees they are visiting. Contractors are the responsibility of the persons administering the individual contracts. Truck drivers are the responsibility of the supervisor. Employees will aid in accounting for visitors, contractors and truckers by reference to the sign-in sheets.
17. Emergency drills are held semi-annually to practice all of these procedures and will be treated with the same seriousness as an actual emergency.

In the event evacuation through the main entrance is not possible due to fire, an alternate evacuation will be utilized. The alternate evacuation route is to the northwest corner of the property. The alternate evacuation route is also indicated in Figure S-1.



EMERGENCY EXIT ROUTE

PROJ # 404	DRAWN BY: BJF
SCALE: 1" = 400'	CHECKED BY: MG
FN:	DATE: SEPTEMBER 23, 1994

FIGURE
S-1

Cardinal
ENVIRONMENTAL, INC.

LEA LAND INC.
LEA COUNTY, NEW MEXICO

FIGURE S-2

Lea Land, Inc.

EMERGENCY RESPONSE CONTACTS

Hobbs and Carlsbad have 911 emergency services available.

Agency/Organization

Telephone Number

Fire

City of Carlsbad Fire Dept	(505) 885-2111 or 911
City of Hobbs Fire Dept	(505) 397-9308 "

Police

City of Carlsbad Police Dept	(505) 885-2111 or 911
City of Hobbs Police Dept	(505) 397-9265 "

Sheriff's Dept - Carlsbad	(505) 887-7553
Sheriff's Dept - Hobbs	(505) 393-2515

New Mexico State Police - Carlsbad	(505) 885-3137
New Mexico State Police - Hobbs	(505) 392-5588

Medical

Guadalupe Hospital - Carlsbad	(505) 887-4100
Ambulance Service	911
WIPP Site Health Services	(505) 234-8493

Poison Information Center	(800) 432-6866
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State Emergency Response Contacts

New Mexico Environmental Dept	
Santa Fe	(505) 827-0020
Hobbs	(505) 393-4302

Spill Emergencies	(505) 827-4300
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Federal Emergency Response Contacts

Environmental Protection Agency (EPA)	(214) 655-6644
Region VI Emergency Response Hotline	(214) 665-2222

**ATTACHMENT 9
OF
FORM C-137**

**ROUTINE INSPECTION AND MAINTENANCE
PLAN TO ENSURE
PERMIT COMPLIANCE**

ROUTINE INSPECTION AND MAINTENANCE PLAN TO ENSURE PERMIT COMPLIANCE

Lea Land's routine inspection and maintenance plan consists of three parts:

- Waste Acceptance Guidelines
- Plan to Inspect Loads to Detect and Prevent the Disposal of Regulated Hazardous Waste and Unauthorized Waste
- Site Inspections and Maintenance

The waste acceptance guidelines include Lea Land's procedures for waste profiling and manifesting of the waste streams. Attached is the Waste Profile Form, which contains a certification from the generator that the waste profile is accurate and that the materials tested are representative of the waste that is profiled.

This section also contains procedures for manifesting of the waste loads (see attached manifest) and procedures that will be followed when waste loads arrive at the landfill and are inspected and eventually unloaded. Also included are procedures for inspection of the landfill site and surrounding roads.

Waste Acceptance Guidelines

Lea Land will accept pre-approved non-hazardous solid industrial waste only. Municipal waste, asbestos, infectious waste, regulated PCB waste (>50 ppm), and NORM waste will **not** be accepted at the site. A list of waste streams that may be received for disposal is found in Attachment 6. Lea Land plans to mix RCRA exempt and non-exempt oil field wastes. **Therefore, all RCRA exempt oil and gas wastes will also be tested prior to disposal.**

Data requirements for waste materials to be disposed in the Lea Land landfill will be determined on a case-by-case basis, unless the process that generates the waste stream does not change. The Waste Approval personnel will determine, based on historical activities at the site, what testing needs to be conducted or if process knowledge can be used.

The number of samples will be determined based on Lea Land's Frequency of Sampling Guidelines (see attached). The amount of analytical data and/or process knowledge must be adequate to characterize the waste as not being characteristically hazardous nor being a listed hazardous waste (40 CFR Part 261).

When using process knowledge rather than testing, the generator must show comprehensive knowledge of the waste and how it was generated. Any documents such as MSDS sheets are helpful in supporting the generator's knowledge of process.

Once it is determined that the waste is approved for disposal in the Lea Land landfill, the attached Waste Profile Form (Rev. 05-08-97) is completed and submitted to the Waste Approval personnel along with the associated analytical data and other supporting information.

A certified manifest will accompany each load of waste scheduled to be brought to the facility. The manifest must attest to the physical and chemical characteristics of the waste certifying the waste as non-hazardous. Upon arrival at the facility, the waste will be inspected to ensure that it coincides with the information supplied on the manifest.

2. Manifest Requirements

The manifest will include the following information:

- a. Name, address and phone number of the generator of the waste.
- b. Name, address and phone number of any and all commercial haulers in the order each will be transporting the waste.
- c. Name, site address, phone number, and identification number of the Lea Land facility.
- d. Type and proper name of waste being shipped.
- e. Total weight or volume of waste prior to shipment from generator.
- f. Total weight or volume of waste received at Lea Land, Inc.
- g. Type and number of containers in shipment.
- h. Any special handling instructions.
- i. Date and location the waste was delivered.
- j. Date and receipt from the generator and total weight or volume of the waste shall be provided by the transporter; and
- k. If more than one commercial hauler is used, each commercial hauler shall provide the date of receipt and total weight or volume of said waste from the previous commercial hauler.

The manifest will accurately reflect the information and be signed by the generator and each commercial hauler of the waste, and by Lea Land, Inc. The signature will acknowledge delivery, quantity, and receipt of the waste. The signatories will be duly authorized agents of their organizations.

Upon discovery of any significant discrepancy including but not limited to factual misrepresentation on the manifest, irregularities in transportation, discharges, or any unauthorized action in regard to shipment, delivery, or disposal of the solid waste, the person discovering the discrepancy will notify the New Mexico Waste Management Department, the generator, transporter, and Lea Land within 24 hours.

Upon receipt of a waste shipment at the landfill, Lea Land will send a signed copy of the manifest back to the generator.

A copy of the manifest will be retained by the transporter and Lea Land for their permanent records. The generator will retain both the original copy and returned copy signed by Lea Land for the generator's permanent records.

Copies of the manifest will be retained by Lea Land throughout the post closure period and any extended time period deemed necessary by the state of New Mexico.

3. Petroleum Contaminated Soils

All petroleum contaminated soils to be disposed of at the facility will be tested for Total Petroleum Hydrocarbons (TPH) and other tests. Copies of the results of the laboratory analyses will be placed in the Lea Land daily operating record.

Petroleum contaminated soils containing free liquids will be not accepted. However, petroleum contaminated soils may be accepted for treatment on site and subsequent disposal with prior approval.

Petroleum contaminated soils may be accepted for disposal or cover material if the TPH concentration is less than 1000 mg/Kg and the sum of benzene, toluene, ethylbenzene, and xylene isomer concentration is less than 500 mg/Kg, with benzene individually less than 10 mg/Kg.

Uncontaminated or remediated soils will not be mixed with contaminated soils.

4. Ash

The only ash accepted at the facility will be ash that results from the incineration or transformation of solid waste and includes both fly ash and bottom ash, and ash from the incineration of densified-refuse-derived fuel and refuse-derived fuel, but does not include fly ash waste, bottom ash waste, slag waste and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels and waste produced in conjunction with the combustion of fossil fuels that are necessarily associated with the production of energy and that traditionally have been and actually are mixed with and are disposed of or treated at the same time as fly ash, bottom ash, boiler slag or flue gas emission control wastes from coal combustion. The transporters of ash shall not accept or transport ash unless it has been treated or is securely covered to prevent release of fugitive dust. Transporters of ash shall cover vehicles to prevent fugitive dust loss during transport, and line or seal vehicles in a manner to prevent any leakage of liquids or fugitive dust during transport.

5. Waste Hauling and Vehicles Entering the Site

Containers accepted at the site include Roll Off's, Dump Trailers, Tandems, and Drums.

Vehicles transporting the waste from the generators to the facility will comply with all state and local laws and regulations. Vehicles will not be allowed to litter the area or local road ways. This will be accomplished by all vehicles loads being covered or the waste completely contained until waste reaches the working face. Vehicles will comply with all posted speed limits.

The landfill entrance may accommodate up to 10 vehicles at one time.

6. Access and Weighing of Vehicles

Vehicles disposing of waste at the facility will enter and exit the facility through the main access gate located in the northwestern portion of the site. The main access gate is the only entrance to the facility and is located just south directly off of U.S. Highway 62/180. Upon entering the main access gate the vehicles will proceed to the Scales and the gross vehicle weight will be measured and recorded. The site can accept up to 1000 tons per day of material, (40,000 lbs per truck per day from 50 trucks).

7. Unloading of Waste from Vehicles

After the vehicle weight has been measured and recorded, the vehicles will advance to the working face where the vehicle will be directed to the appropriate unloading point near the vicinity of the working face. The waste hauling vehicles will be positioned at the lift so that the waste may be spread, compacted, and covered.

8. Operation at the Working Face

Initial and first lift operations include the unloading of waste at the top of the active ramp. The waste is then spread toward the base and compacted to proper compaction and to its smallest practical volume. Lea Land personnel will monitor and control cell width, height and slope at the working face. The working face will be limited to an approximate area of 5000 square feet.

The remaining lifts include the deposit of arriving waste and bulky wastes which have been recently accepted. A daily cover of six (6) inches of soil will be applied each day on areas that will be exposed for less than 24 hours. Twelve (12) inches of intermediate cover will be applied in the event that waste will not be received for more than one month.

LEA LAND, INC.

FREQUENCY OF SAMPLING GUIDELINES ⁽¹⁾

SAMPLE MEDIA

FREQUENCY

Excavations / Waste Piles

Petroleum contaminated soils/sludges

Every 100 CY (4 grab samples combined to obtain 1 composite sample)

Soils/sludges contaminated w/metals

Every 20 CY (4 grab samples combined to obtain 1 composite sample)

Drums

Soils/sludges contaminated with organics or metals

Every 10 drums (1 composite sample)

⁽¹⁾ These frequencies are based on the assumption that the waste material is uniform. Frequency of sampling for non-uniform waste will be determined on a case-by-case basis.

Plan to Inspect Loads to Detect and Prevent the Disposal of Regulated Hazardous Waste and Unauthorized Waste

Lea Land has established strict acceptance standards for non-hazardous waste streams. Only waste which has been certified by the generator as being non-hazardous will be scheduled for disposal. The facility employees will supervise the unloading of waste into the cell or unloading area. Industrial solid waste classified as non-hazardous solid waste will be accepted only if the following conditions are fulfilled:

- a. The generator shall be notified as to which waste streams are acceptable for disposal at the facility.
- b. The generator shall collect a representative sample from the waste stream and arrange for testing by a laboratory prior to shipment of the waste. The sample shall be appropriately tested using the accepted EPA test methods to determine that a waste is non-hazardous.
- c. If the generator's knowledge of the waste stream is determined to be adequate, the generator may submit a chemical and/or physical description of the waste and a signed certification that the waste stream is not hazardous prior to shipment of the waste instead of testing as discussed in item (b) above.
- d. Lea Land personnel shall examine the Generator's manifest to determine if the waste stream is acceptable for management and disposal at the facility. The test results of item (b) above must satisfy the acceptance criteria identified in the EPA test methods.
- e. Lea Land personnel will visually inspect a minimum of ten percent (10%) of the waste stream for physical conformance with the manifest.
- f. Any load which does not comply with these conditions shall be rejected and returned to the generator or stored in the unauthorized waste area until the non-conformance is resolved.

Inspection Record

Lea Land personnel will inspect every load upon arrival. The following information will be recorded on the attached Inspection Record and retained by Lea Land, Inc.

- a. Inspector name
- b. Date
- c. Time
- d. Name of transportation company
- e. Truck license number and state
- f. Truck description
- g. Source of the waste
- h. Does waste coincide with the scheduled waste listed on manifest?
- i. Any pertinent observations made during the inspection?
- j. Inspector signature
- k. Driver signature

Manifest No. _____

LEA LAND INC. LANDFILL
INSPECTION RECORD

Inspector: _____

Date: _____ Time: _____

Name of Transportation Company: _____

Driver's Name: _____

Truck License No.: _____ State: _____

Truck Description: _____

Source of Waste: _____

Does waste coincide with the scheduled waste listed on the manifest? _____

Any pertinent observations made during the inspection: _____

Inspector: _____

(signature)

Driver: _____

(signature)

Site Maintenance and Inspections

1. Daily

Daily inspections will be performed for the following items to ensure materials and equipment are in good working order.

- a. Inspect liner quality to verify tears or deformities do not exist
- b. Inspect cell and perimeter for any erosional features that need to be corrected
- c. Verify the cover material is in good condition
- d. Check to ensure adequate and uniform compaction is being achieved
- e. Inspections of all site equipment for any necessary maintenance
- f. Verify all gates are securely locked
- g. Check water level in water storage tank and for freezing in cold weather
- h. A water truck will be used to control dust if needed
- i. Remove any litter on site roads and surrounding area

2. Weekly

Weekly inspections include:

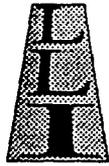
- a. Check for adequate fuel storage
- b. Verify no leaks in tanks and check for visible wet spots in area
- c. Inspect condition of site roads for any necessary repairs

3. Monthly

All fencing and site perimeter will be inspected monthly for any necessary repairs.

4. Annually

Calibration of site scales will be performed annually as recommended by the manufacturer.



LEA LAND, INC.

 NEW AMENDMENT

PAGE 1 OF 5

Material Profile No: _____

A. GENERATOR INFORMATION

Generator Name _____
Facility Address _____

City/County _____
State _____ Zip Code _____
State ID# _____

Technical Contact _____
Telephone () _____ Ext. _____ Fax () _____
Billing Name _____
Billing Address _____

City _____ State _____ Zip Code _____
Attention _____
Telephone () _____ Ext. _____

B. RCRA RCRA Non Hazardous/Exempt? Yes No
General Description of Process: _____

C. ANNUAL REPORT CODES (see attached lists)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

C. ANNUAL REPORT CODES CONT. (see attached lists)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

NAME OF WASTE STREAM: _____

SIC Code: _____
Source Code: _____
Form Code: _____

Origin Code: _____
System Type: M 1 3 2 (Landfill)

11. Does this waste contain scrap metal pieces greater than 2 inches in size or any protruding re-bar (from concrete pieces)? Yes No
 Please describe _____

F. METALS

NONE TCLP (mg/L)

	<u>Reg. Limit</u>	<u>Below</u>	<u>Above</u>
Arsenic	5 mg/L	_____	_____
Barium	100 mg/L	_____	_____
Cadmium	1 mg/L	_____	_____
Chromium	5 mg/L	_____	_____
Lead	5 mg/L	_____	_____
Mercury	0.2 mg/L	_____	_____
Selenium	1 mg/L	_____	_____
Silver	5 mg/L	_____	_____
Others:	_____		

G. PHYSICAL/CHEMICAL CONSTITUENTS

Attach all MSDS, Sample Analysis and Additional Information

H. ANTICIPATED VOLUME

<u>Quantity</u>	<u>Container</u>	<u>Quantity</u>	<u>Container</u>
_____	5-gal pail	_____	Cubic Yard Box
_____	15-gal carboy	_____	Super Sack
_____	30-gal drum	_____	Rolloff/Dump Trailer
_____	55-gal drum	_____	Tanker
_____	85-gal drum	_____	Other _____

Per Time Week Month Year Other _____

LEA LAND, INC.

WASTE PROFILE - PAGE 5 OF 5

If empty containers which formerly contained hazardous waste are to be disposed:

Do they contain no more than 1 inch of residue on the bottom of the container?

Yes No

Have they been rendered non-reusable (i.e., crushed, punctured, etc.)?

Yes No

Generator's Certification:

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all material described by this profile.

Generator's Authorized Signature: _____ Date _____

SOURCE CODES

CODE SYSTEM TYPE

CLEANING AND DEGREASING

- A01 Stripping
- A02 Acid cleaning
- A03 Caustic (alkali) cleaning
- A04 Flush rinsing
- A05 Metals recovery - type unknown
- A07 Vapor degreasing
- A08 Physical scraping and removal
- A09 Clean out process equipment
- A19 Other cleaning and degreasing

SURFACE PREPARATION AND FINISHING

- A21 Painting
- A22 Electroplating
- A23 Electroless plating
- A24 Phosphating
- A25 Heat treating
- A26 Pickling
- A27 Etching
- A29 Other surface coating/preparation
(specify in Comments)

PROCESSES OTHER THAN SURFACE PREPARATION

- A31 Product rinsing
- A32 Product filtering
- A33 Product distillation
- A34 Product solvent extraction
- A35 By-product processing
- A37 Spent process liquids removal
- A38 Tank sludge removal
- A39 Slag removal
- A40 Metal forming
- A41 Plastics forming
- A49 Other processes other than surface
preparation
(specify in Comments)

PRODUCTION OR SERVICE DERIVED ONE- TIME AND INTERMITTENT PROCESSES

- A51 Leak collection
- A53 Cleanup of spill residues
- A54 Oil changes
- A55 Filter/battery replacement
- A56 Discontinue use of process equipment
- A57 Discarding off-spec material
- A58 Discarding out-of-date products
or chemicals
- A59 Other production-derived one-time &
intermittent processes
- Sludge removal

CODE SYSTEM TYPE

REMEDIAION DERIVED WASTE

- A61 Superfund Remedial Action
- A62 Superfund Emergency Response
- A63 RCRA Corrective Action at solid waste
management unit
- A64 RCRA closure of hazardous waste
management unit
- A65 Underground storage tank cleanup
- A69 Other remediation

POLLUTION CONTROL OR WASTE TREATMENT PROCESSES

- A71 Filtering/screening
- A72 Metals recovery
- A73 Solvents recovery
- A74 Incineration/thermal treatment
- A75 Wastewater treatment
- A76 Sludge dewatering
- A77 Stabilization
- A78 Air pollution control devices
- A79 Leachate collection
- A89 Other pollution control or waste
treatment

OTHER PROCESSES

- A91 Clothing and personal protective
equipment
- A92 Routine cleanup wastes
(e.g., floor sweepings)
- A93 Closure of management unit(s) or
equipment other than by remediation
specified in codes A61-A69
- A94 Laboratory wastes
- A99 Other

FORM CODES

Code Waste Description

SOLIDS

INORGANIC SOLIDS - Waste that is primarily inorganic and solid, with low organic content and low-to-moderate water content; not pumpable

301	Soil contaminated with organics
302	Soil contaminated with inorganics only
303	Ash, slag, or other residue from incineration of wastes
304	Other "dry" ash, slag, or thermal residue
305	"Dry" lime or metal hydroxide solids chemically "fixed"
306	"Dry" lime or metal hydroxide solids not "fixed"
307	Metal scale, filings, or scrap
308	Empty or crushed metal drums or containers
309	Batteries or battery parts, casings, cores
310	Spent solid filters or adsorbents
311	Asbestos solids and debris
312	Metal-cyanide salts/chemicals
313	Reactive cyanide salts/chemicals
314	Reactive sulfide salts/chemicals
315	Other reactive salts/chemicals
316	Other metal salts/chemicals
319	Other waste inorganic solids (Specify in Comments)
388	Empty or crushed glass containers
389	Nonhazardous sandblasting waste
390	Nonhazardous concrete/cement/construction debris
391	Nonhazardous dewatered wastewater treatment sludge
392	Nonhazardous dewatered air pollution control device sludge
393	Catalyst waste
394	Nonhazardous solids containing less than 50 ppm PCB's
396	Nonhazardous electrical equipment/devices containing less than 50 ppm PCB's
398	Nonhazardous soils containing less than 50 ppm PCB's

ORGANIC SOLIDS - Waste that is primarily organic and solid, with low-to-moderate inorganic content and water content; not pumpable

401	Halogenated pesticide solid
402	Non-halogenated pesticide solid
403	Solids, resins, or polymerized organics
404	Spent carbon
405	Reactive organic solid
406	Empty fiber or plastic containers
407	Other halogenated organic solids (Specify in Comments)
409	Other non-halogenated organic solids (Specify in Comments)
488	Wood debris
489	Petroleum contaminated solids

FORM CODES

Page 2

ORGANIC SOLIDS - (continued)

Code	Waste Description
490	Sandblasting waste
491	Dewatered biological treatment sludge
492	Dewatered sewage or other untreated biological sludge
493	Catalyst waste
494	Solids containing less than 50 ppm PCB's.
496	Electrical equipment/devices containing less than 50 ppm PCB's.
498	Soil containing less than 50 ppm PCB's.

INORGANIC SLUDGES - Waste that is primarily inorganic, with moderate-to-high water content and low organic content, and pumpable

501	Lime sludge without metals
502	Lime sludge with metals/metal hydroxide sludge
503	Wastewater treatment sludge with toxic organics
504	Other wastewater treatment sludge
505	Untreated plating sludge without cyanides
506	Untreated plating sludge with cyanides
507	Other sludge with cyanides
508	Sludge with reactive sulfides
509	Sludge with other reactives
510	Degreasing sludge with metal scale or filings
511	Air pollution control device sludge (e.g., fly ash, wet scrubber sludge)
512	Sediment or lagoon dragout contaminated with organics only
513	Sediment or lagoon dragout contaminated with inorganics only
514	Drilling mud
516	Chloride or other brine sludge
519	Other inorganic sludges (specify in Comments)
597	Catalyst waste
598	Nonhazardous sludges containing less than 50 ppm PCB's.

ORGANIC SLUDGES - Waste that is primarily organic with low-to-moderate inorganic solids content and water content, and pumpable

601	Still bottoms of halogenated (e.g., chlorinated) solvents or other organic liquids
602	Still bottoms of non-halogenated solvents or other organic liquids
603	Oily sludge
604	Organic paint or ink sludge
605	Reactive or polymerizable organics
606	Resins, tars, or tarry sludge
607	Biological treatment sludge
608	Sewage or other untreated biological sludge

ORGANIC SLUDGES - (continued)

Code	Waste Description
609	Other organic sludges (Specify in Comments)
695	Petroleum contaminated sludges other than still bottoms and oily sludges
696	Grease
697	Catalyst waste
698	Nonhazardous sludges containing less than 50 ppm PCB's

OTHER

OTHER - Waste streams not included in the above descriptions

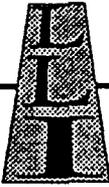
902	Supplemental plant production refuse
999	Plant trash

ORIGIN CODES

Please review the origin codes below and select the code that best indicates the process or type of activity that generated this waste stream.

.....
CODE #
.....

- 1 Generated on-site from a product process or service activity.
- 2 Spill clean-up, equipment decommissioning, or emergency removal by company.
- 3 Derived from the on-site management of a nonhazardous waste.
- 4 Waste received from off-site and not recycled or treated on-site.
- 5 Residual from on-site treatment, disposal or recycling of hazardous waste.
- 6 State, federal or locally funded cleanup.
- 7 Corrective action or closure.
- 8 Reserved.



LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **22479**

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE	
	PHONE NO.	CITY	STATE	ZIP	6. TNRC I.D. NO.	
N E R A T O R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No.	9. TOTAL QUANTITY
	a.				Type	10. UNIT Wt/Vol.
	b.					11. TEXAS WASTE ID #
	c.					
R A T O R	d.					
	12. COMMENTS OR SPECIAL INSTRUCTIONS:					
T R A N S P O R T E R	13. IN CASE OF EMERGENCY OR SPILL, CONTACT					
	NAME	PHONE NO.	24-HOUR EMERGENCY NO.			
O R T E R	14. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.					
	PRINTED/TYPED NAME	SIGNATURE			DATE	
T R A N S P O R T E R	15. TRANSPORTER (1)			16. TRANSPORTER (2)		
	NAME:			NAME:		
	TEXAS I.D. NO.			TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT:			IN CASE OF EMERGENCY CONTACT:		
S P O R T E R	EMERGENCY PHONE:			EMERGENCY PHONE:		
	17. TRANSPORTER (1): Acknowledgment of receipt of material			18. TRANSPORTER (2): Acknowledgment of receipt of material		
	PRINTED/TYPED NAME _____			PRINTED/TYPED NAME _____		
	SIGNATURE _____ DATE _____			SIGNATURE _____ DATE _____		
D I S P O S I T O R	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE E 505-887-4048	
	PERMIT NO. SWM #131401 - New Mexico		19. COMMENTS			
A U T H O R I Z E D	20. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
	AUTHORIZED SIGNATURE		CELL NO.	DATE	TIME	

**ATTACHMENT 10
OF
FORM C-137**

CLOSURE PLAN

Closure Plan, Post Closure Care and Monitoring Plan

Trust Agreement

**Lea Land, Inc. Industrial Solid Waste Landfill
Closure Plan, Post Closure Care and Monitoring Plan**

The following closure plan and post closure care and monitoring plan has been developed to comply with the requirements of the New Mexico Solid Waste Management Regulations.

I. CLOSURE PLAN

Components of Final Cover

The final cover will consist of the following:

- (1) 6-inches of vegetative cover
- (2) 18-inches of 1 x 10 -5 cm/sec material
- (3) 12-inches of intermediate cover soil

Estimate of Largest Area Requiring Final Cover

The following is an estimate of the largest area of the landfill, requiring a final cover any time during the first ten year period of the active life:

The landfill will be developed in a series of five phases. The five phases and corresponding areas requiring closure are listed as follows:

Phase	Area Requiring Closure
I	325,338 square feet
II	395,100 square feet
III	354,000 square feet
IV	448,600 square feet
V	579,100 square feet

The largest area requiring closure during the active life of the first ten years is Phase V covering an area of approximately 13.29 acres. The other phases will cover less area than Phase V. Phase V is utilized to determine closure costs.

Estimate of the Maximum Inventory of Waste

The following is an estimate of the maximum inventory of waste ever on-site during the active life for the first ten years of the landfill facility.

As previously mentioned the landfill will be developed in phases. Upon completion of all five phases during the initial ten year period, the landfill has an estimated waste capacity of 2,020,062 cubic yards.

Schedule for Completing Closure Activities

The following is a tentative schedule for completing all activities necessary to satisfy the closure criteria:

2 months -	Install intermediate cover.
6 months to 2 years -	Settlement of intermediate cover with periodic settlement monitoring.
1 month -	Install additional intermediate cover due to settlement.
4 months -	Install low permeability soil.
1 month -	Install vegetative cover.
2 months -	Installation certification.

Plan Drawing of Final Contours

A plan drawing showing the final contours and vegetation in relationship to the surrounding land, and a plan and a description of the vegetation proposed for permanent soil stabilization is shown in Figure L. The vegetation proposed for the permanent soil stabilization consists of one or more of the following grasses: Side Oats Grama Grass, Sand Drop Seed Grass, and Little or Big Blue Stem.

A plan drawing is shown in Figure CC which shows the anticipated landfill after the initial permit period of ten (10) years.

Closure Notification

Prior to the beginning of closure Lea Land, Inc. will notify the Secretary that a notice of intent to close the unit has been placed in the operating record. Lea Land, Inc. will notify the Secretary of the intent to close at least 90 days before closure occurs.

Closure Schedule

The landfill closure requirements will begin within 30 days after Lea Land, Inc. Landfill receives the known final receipt of waste. The landfill closure will be completed within 180 days following the beginning of closure, unless an extension has been granted by the Secretary. Upon closure, Lea Land, Inc. will notify the Secretary that closure has been completed in accordance with the closure plan. Additionally, at the completion of closure a detailed description and plat of the use of the landfill site will be filed with the appropriate county land recording authority. The description and plat will be filed so that it may be found during a title search. Proof of this filing will be submitted to the Secretary.

Closure Costs

A portion of the materials used for final cover will be transported to the needed cell area from borrow areas located on the facility property. The material will be hauled and placed by scrapers and other on-site equipment. Due to the fact that the material will be transported from on-site, the cost of material is insignificant. The cost to haul, compact, and shape the material will be approximately \$1.50 per cubic yard. The hauling and grading of the final cover material will be performed by landfill personnel. The closure costs required to close the largest area of the landfill (13.29 acres), during the initial ten year life of the landfill are shown in Table CC-1.

**Table CC-1
CLOSURE COSTS FOR 13.29 ACRES**

Media	Amount of Media	Unit Cost	Cost
Top Soil (6")	10,724 cubic yards	\$1.50/cubic yard	\$16,086
(18") Clay Cap	32,172 cubic yards	\$1.50/cubic yard	\$48,258
(12") Intermediate Cover	21,448 cubic yards	\$1.50/cubic yard	\$32,172
Vegetation material/labor/equipment	579,100 square feet	\$12.16/thousand square feet	\$7,042
		sub-total	\$103,558
Administration of Financial Assurance Instruments	1% of initial post-closure costs		\$1,356
		sub-total	\$104,914
Contingency		10%	\$10,491
		Total cost	\$115,405

II. POST CLOSURE CARE AND MONITORING REQUIREMENTS

Post closure monitoring and maintenance will continue for a period of thirty years upon placing the closure notice in the operating record and notifying the Secretary. The following activities will be performed during the post closure care period:

1. Complying with all applicable technical requirements;
2. Contracting for technical consultative services;
3. Inspect site routinely (twice per year);
4. Properly collecting, treating, and disposing of leachate. A submersible pump will be placed in the minimum twelve inch diameter pipe which will pump any accumulated leachate out into a tanker truck. The tanker truck will haul the leachate to a leachate evaporation pond or fiberglass tanks. The leachate will be managed in one of the following methods: (1) disposed of off-site at a facility designed and permitted to accept such wastes; or (2) allowed to evaporate in leachate evaporation ponds located on-site.;
5. Repairing and maintaining all on-site permanent improvements and equipment;
6. Maintaining vegetation and other erosion controls in permitted areas;
7. Repairing and maintaining surface drainage features;
8. Reworking or replacing any defective required groundwater monitoring wells and other defective monitoring equipment and installing new wells and equipment as required;
9. Collecting and analyzing water and air samples as required.
10. Repairing erosion and final cover;
11. Maintaining site security and access control
12. Providing administrative overhead for oversight and record keeping;
13. Preparing annual maintenance and monitoring post-closure reports;
14. Preparing post-closure certification; and
15. Performing any other tasks necessary to accomplish adequate post-closure care.

Maintenance of Cover Integrity

The cover material of the landfill will be inspected twice per year throughout the thirty year post-closure period. In the event that the routine inspections reveal that the integrity of the cover has diminished appropriate action will be taken to repair or remedy the situation.

Maintenance and Operation of the Leachate Collection System

The leachate collection system will be operated and maintenance will continue for the period of the thirty year post-closure period.

Operation of the Methane Monitoring System NOT APPLICABLE

The methane monitoring system will continue to be operated as specified during the operation of the landfill for the period of the thirty year post-closure period. The landfill will not accept municipal waste. As a result a landfill gas control system or gas recovery system is not proposed at the facility. The presence of methane gas will be monitored inside the office and main buildings and at the sampling points around the perimeter of the landfill are shown on Exhibit V. A combustible gas meter will be used to measure gas concentrations. Results of monitoring survey will be sent to the Department. Quarterly gas monitoring will occur at the perimeter of the landfill and at facility structures throughout the post closure period.

Operation of the Ground Water Monitoring System

All existing groundwater monitoring wells, including any supplemental groundwater monitoring wells that may be installed in the future, will be sampled and samples analyzed according to the procedures and schedules as specified in the groundwater sampling and analysis plan located in Attach. 11. Groundwater sampling shall be in accordance with the RCRA Groundwater Monitoring: Draft Technical Guidance. The ground water monitoring system will continue in operation throughout the closure and the thirty year post-closure period.

Post-Closure Cost Estimates

The cost estimates on the following page are based on an area of 13.29 acres (the largest area requiring closure for the first ten year period) for a post-closure care and monitoring period of thirty years.

**POST-CLOSURE CARE AND MONITORING COST ESTIMATES
LEA LAND INC. LANDFILL, LEA COUNTY, NEW MEXICO**

ITEMS	UNIT	UNITS REQUIRED	UNIT COST	TOTAL
SEMI-ANNUAL ROUTINE INSPECTION	1/2 YEAR	60	\$250.00	\$15,000.00
MAINTENANCE OF ON-SITE IMPROVEMENTS	YEAR	30	\$500.00	\$15,000.00
FINAL PLUGGING OF GW MONITORING WELLS	WELL	4	\$1,000.00	\$4,000.00
MAINTAINING VEGETATION (13.29 AC)	YEAR	30	\$3,322.50	\$99,675.00
REPAIRING FINAL COVER (13.29 AC)	YEAR	30	\$79.74	\$2,392.20
MAINTAINING 300 FT. OF SURFACE DRAINAGE STRUCTURES	FOOT	300	\$3.50	\$1,050.00
REPLACING DEFECTIVE GW MONITORING WELLS	WELL	2	\$3,966.00	\$7,932.00
PLUGGING DEFECTIVE GW MONITORING WELLS	WELL	2	\$1,000.00	\$2,000.00
QUARTERLY GAS SAMPLING	1/4 YEAR	120	\$140.00	\$16,800.00
GW MONITORING WELL (\$645/WELL) SAMPLING AND ANALYSIS	YEAR	30	\$2,580.00	\$77,400.00
INITIAL POST CLOSURE CARE COSTS				\$241,249.20
ADMINISTRATIVE (1% OF INITIAL POST-CLOSURE COST)				\$2,412.49
FINAL POST CLOSURE CARE COST				\$243,661.69
CONTINGENCY (10% OF FINAL POST CLOSURE COST)				\$24,366.17
TOTAL				\$268,027.86

The reports of the monitoring performance and the data collected will be submitted to the Secretary within 45 days from the end of each calendar year. The post-closure care period for the landfill will be thirty (30) years.

III. PHASE I ASSESSMENT

The cost estimate for performing the Phase I Assessment is listed in the following table:

**Table CC-2
PHASE I ASSESSMENT**

Item	Quantity	Unit	Unit Cost \$	Cost \$
Initial Sampling (three wells)	3	each	100.00	300.00
Initial Analysis (three wells, one sample per well)	3	each	3,000.00	9,000.00
Add Additional Monitoring Wells	3	each	4,000.00	12,000.00
Sample Analyze New Wells	3	each	3,000.00	9,000.00
Prepare Analysis of Assessment Results	1	each	10,000.00	10,000.00
			Sub-total	40,300.00
Administration of Financial Assurance Instruments			1% of initial costs	430.00
			Sub-total	40,730.00
Contingency			10%	4,073.00
			Total Cost	\$44,803.00

IV. PHASE II ASSESSMENT

The cost estimate for performing the Phase II Assessment is listed in the following table:

**Table CC-3
PHASE II ASSESSMENT**

Item	Quantity	Unit	Unit Cost \$	Cost \$
Initiate Assessment of Corrective Measurement	1	each	30,000.00	30,000.00
Continue Analysis (Four Wells/two samples per well)	8	each	3,000.00	24,000.00
Analyze Corrective Measures	1	each	10,000.00	10,000.00
Select Corrective Remedy	1	each	25,000.00	25,000.00
			Sub-total	89,000.00
Administration of Financial Assurance Instruments			1% of initial costs	890.00
			Sub-total	\$89,890.00
Contingency			10%	\$8,989.00
			Total Cost	\$98,879.00

TRUST AGREEMENT
(NMED as Beneficiary)

Trust Agreement, the "Agreement", entered into as of this 27th day of August, 19 96, by and between Lea Land, Inc., a New Mexico corporation, the "Grantor", and The Carlsbad National Bank of New Mexico, a national bank, the "Trustee".

WHEREAS, the New Mexico Environmental Improvement Board ("EIB") has established certain regulations applicable to the Grantor, requiring that an owner or operator of a solid waste management facility shall provide assurance that funds will be available when needed for certain activities as required in a permit issued pursuant to the Solid Waste Management Regulations.

WHEREAS, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

WHEREAS, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

NOW, THEREFORE, the Grantor and the Trustee agree as follows:

Section 1. Definitions.

As used in this Agreement:

- (a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.
- (b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities and Cost Estimates.

This Agreement pertains to the facilities and cost estimates identified on attached Schedule A.

Section 3. Establishment of Fund.

The Grantor and the Trustee hereby establish a trust fund (the "Fund") for the benefit of the State of New Mexico, c/o Secretary, New Mexico Environment Department (NMED). The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trust, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by NMED.

Section 4. Payments Pursuant to the Solid Waste Management Regulations.

The Trustee shall make payments from the Fund as the NMED Secretary shall direct, in writing, to provide for the payment of the costs pursuant to Solid Waste Management Regulations of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the NMED Secretary from the Fund for the costs in such amounts as the NMED Secretary shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the NMED Secretary specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund.

Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee as described in Schedule B attached hereto.

Section 6. Trustee Management.

The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

- (a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government.
- (b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government, and
- (c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment.

The Trustee is expressly authorized in its discretion:

- (a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which

the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee.

Without, in any way, limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see the application of the purchase money or to inquire into the validity or expediency of any such sale or disposition;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses.

All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust,

including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation.

The Trustee shall annually, at least 30 days prior to the anniversary date of the establishment of the Fund, furnish to the Grantor and to the NMED Secretary a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the NMED Secretary shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel.

The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation.

The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee.

The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor trustee accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and property then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the NMED Secretary, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee.

All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests,

and instructions. All orders, requests, and instructions by the NMED Secretary to the Trustee shall be in writing, signed by the NMED Secretary, or designee, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or NMED hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or NMED, except as provided for herein.

Section 15. Notice of Nonpayment.

The Trustee shall notify the Grantor and the NMED Secretary by certified mail within 10 days following the expiration of the 30-day period after the anniversary date of the Trust if no payment is received from the Grantor during that period according to Schedule B attached hereto. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement.

This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the NMED Secretary, or by the Trustee and the NMED Secretary if the Grantor ceases to exist.

Section 17. Irrevocability and Termination.

Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the NMED Secretary, or by the Trustee and the NMED Secretary, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification.

The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the NMED Secretary issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law.

This Agreement shall be administered, construed, and enforced according to the laws of the State of New Mexico.

Section 20. Interpretation.

As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in the Solid Waste Management Regulations as such regulations were constituted on the date first above written.

"GRANTOR"
LEA LAND, INC.

By: Robert G. Hall
Robert G. Hall, President

(SEAL)

"TRUSTEE"
The Carlsbad National Bank

By: Carl J. Mangano
Title: SR. V.P. & TRUST OFFICER

(SEAL)

STATE OF OKLAHOMA

COUNTY OF OKLAHOMA

On this 27th day of AUGUST, 1996, before me personally came Robert G. Hall, to me known, who, being by me duly sworn, did depose and say that he resides in Oklahoma City, Oklahoma: that he is President of Lea Land, Inc., the Corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

Sandra Roy
Notary Public

My commission expires: 2-26-97

(SEAL)

STATE OF NEW MEXICO

:

: ss

COUNTY OF EDDY

:

The foregoing instrument was acknowledged before me this 28th of August, 1996, by **Carl J. Manganaro**, Senior Vice President and Trust Officer of The Carlsbad National Bank, for and on behalf of The Carlsbad National Bank.


Notary Public

My commission expires:

04/08/97

LEA LAND INC. LANDFILL PAYMENTS

LEA LAND, INC. LANDFILL

Calculation of Annual Trust Fund Payments for
Closure and Post-Closure Costs

by Steve Mason, Cardinal Environmental
10/12/95

Schedule A	
Phase I Assessment	\$44,803.00
Phase II Assessment	\$98,879.00
Closure Costs	\$115,405.00
Post-Closure Costs	<u>\$268,027.86</u>
Total	\$527,114.86

Pay-in period 10 years

Schedule B			
Year Remaining in Pay-In Period	Current Cost Estimate (CE) (\$)	Current Value of Trust Fund (CV) (\$)	Next Payment (\$)
10	\$527,114.86	.00	\$52,711.49
9	\$527,114.86	\$52,711.49	\$52,711.49
8	\$527,114.86	\$105,422.97	\$52,711.49
7	\$527,114.86	\$158,134.46	\$52,711.49
6	\$527,114.86	\$210,845.94	\$52,711.49
5	\$527,114.86	\$263,557.43	\$52,711.49
4	\$527,114.86	\$316,268.92	\$52,711.49
3	\$527,114.86	\$368,980.40	\$52,711.49
2	\$527,114.86	\$421,691.89	\$52,711.49
1	\$527,114.86	\$474,403.37	\$52,711.49
0	\$527,114.86	\$527,114.86	\$0.00

**ATTACHMENT 11
OF
FORM C-137**

GEOLOGICAL/HYDROLOGICAL INFORMATION

Ground Water Monitoring

Hydrologic Testing

Description of Site Geology and Hydrology

Laboratory Analysis of Ground Water

Soil Boring Data

Ground Water Monitoring

The ground water monitoring system at Lea Land consists of one upgradient well located north of the landfill and three downgradient monitoring wells located south of the landfill. The wells were constructed in a manner that the integrity of the bore-hole and well is maintained and is in accordance with ASTM method 5092.

The ground water monitoring program includes consistent sampling and analysis procedures and are conducted in accordance with the RCRA Ground-Water Monitoring: Draft Technical Guidance. The ground water program includes procedures and techniques for:

- a. Sample collection
- b. Sample preservation and shipment
- c. Analytical procedures
- d. Chain of custody control; and
- e. Quality assurance and quality control
- f. Statistical methods
- g. Reporting requirements

The ground water monitoring program at Lea Land includes consistent sampling and analysis procedures that are designed to ensure monitoring results which will provide an accurate representation of ground water quality at the upgradient and downgradient wells. Lea Land notifies the New Mexico Waste Management Secretary that the sampling and analysis program has been placed in the operating record.

1. Sampling Frequency

Samples are collected and background levels and concentrations established for each parameter or constituent for each individual well from four independent samples during the first six months (once per six weeks) and at least one from the second six months.

Samples will be collected semi-annually after the first year of operation unless the New Mexico Secretary approves annual sampling. Sampling will continue for the life of the facility and the post-closure period.

Groundwater samples will be analyzed for the parameters listed in Appendix A (attached) and must meet the corresponding groundwater standards.

2. Hydrologic testing of monitor wells

See attached report.

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APPENDIX A

GROUND WATER PARAMETERS

The standards are from the New Mexico Water Quality Control Commission Regulations or the federal Safe Drinking Water Act as they exist on the effective date of these regulations. Check with the Department to confirm the standards are still applicable.

Table I

Parameter	Standard ² mg/l	PQL ³ mg/l	Parameter	Standard mg/l	PQL mg/l
Arsenic ¹	0.05	0.01	Barium ¹	1.0	0.02
Benzene ¹	0.005	0.001	Benzo[a]pyrene ¹	0.0002	0.0001
Cadmium ¹	0.005	0.002	Boron	0.75(i)	0.5
Carbon tetrachloride ¹	0.005	0.002	Chloride	250(a)	5.0
Chloroform ¹	0.1	0.005	Chromium ¹	0.05	0.01
Cobalt	0.05(i)	0.03	Copper	1.0(a)	0.06
Cyanide ¹	0.2	0.1	1,2-Dichloroethane (EDC) ¹	0.005	0.001
1,1-Dichloroethane ¹	0.025	0.005	1,1-Dichloroethylene (1,1-DCE) ¹	0.005	0.001
Ethylbenzene ¹	0.7	0.005	Ethylene dibromide (EDB) ¹	0.00005	0.000025
Fluoride ¹	1.6	0.4	Iron	0.3(a)	0.1
Lead ¹	0.05	0.01	Magnesium		
Manganese	0.05(a)	0.03	Mercury ¹	0.002	0.001
Methylene chloride ¹	0.005	0.001	Molybdenum	1.0(i)	0.75
Nickel ¹	0.1	0.05	Nitrate ¹	10	1.0
PAHs: Total					
Naphthalene plus monomethylnaphthalenes ¹	0.03	0.01	Phenols	0.005(a)	0.003
Polychlorinated biphenyls (PCB's) ¹	0.001	0.0005	Potassium		
Radioactivity: Combined					
Radium-226 and Radium 228 ¹	5.0pCi/l	2.5pCi/l	Selenium ¹	0.01	0.005
Silver ¹	0.05	0.01	Sodium		
Sulfate	250(a)	5.0	Toluene ¹	0.75	0.005
Total Dissolved Solids	500(a)	5.0	Total Xylenes ¹	0.62	0.005
1,1,2,2-Tetrachloroethane ¹	0.01	0.005	Tetrachloroethylene ¹	0.005	0.0005
1,1,1-Trichloroethane ¹	0.06	0.005	Aluminum	5.0(i)	3.0
1,1,2-Trichloroethane ¹	0.005	0.002	Trichloroethylene ¹	0.005	0.001
Uranium ¹	5.0	2.5	Vinyl Chloride ¹	0.001	0.0004
Zinc	5.0(a)	0.05	pH (Units)	6.5-8.5(a)	0.1

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Parameter	Standard ² mg/l	PQL ³ mg/l	Parameter	Standard mg/l	PQL mg/l
Ammonia			Total Nitrogen ¹	10	1.0
Specific Conductance			Total Organic Carbon		
Temperature			Water Elevation		
Antimony ¹	0.006	0.003	Beryllium ¹	0.004	0.002
Thallium ¹	0.002	0.001	Vanadium ¹		0.08
Acetone ¹		0.1	Acrylonitrile ¹		0.2
Bromochloromethane ¹		0.002	Bromodichloromethane ¹		0.005
Bromoform ¹		0.015	Carbon disulfide ¹		0.1
Chlorobenzene ¹	0.1	0.005	Chloroethane ¹		0.01
Dibromochloromethane ¹		0.005	1,2-Dibromo-3-chloropropane ¹	0.0002	0.0001
1,2-Dichloropropane ¹	0.005	0.0005	cis-1,3-Dichloropropene ¹		0.02
2-Hexanone ¹		0.05	Methyl bromide ¹		0.02
Methyl chloride ¹		0.001	Methylene bromide ¹		0.02
Methyl ethyl ketone ¹		0.01	Methyl iodide ¹		0.04
4-Methyl-2-pentanone ¹		0.015	Styrene ¹	0.1	0.01
1,1,1,2-Tetrachloroethane ¹		0.005	Trichlorofluoromethane ¹		0.01
1,2,3-Trichloropropane ¹		0.01	Vinyl acetate ¹		0.05
o-Dichlorobenzene ¹	0.06	0.01	p-Dichlorobenzene ¹	0.075	0.015
trans-1,4-Dichloro-2-butene ¹		0.1	HCO ₃		
CO ₂			Total Kjeldahl Nitrogen		
Calcium			trans-1,3-Dichloropropene ¹		0.01

¹ Constituent is considered to be hazardous.

² Ground Water Protection Standard subject to change under the New Mexico Water Quality Control Commission Regulations or the federal Safe Drinking Water Act (see Section 806.H.1)

³ Practical Quantitation Limits (PQL) are the lowest concentration of analytes in ground waters that can be reliably determined within specified limits of precision and accuracy under routine laboratory operating conditions.

All standards are health based except for those followed by (a) aesthetic standard or (i) irrigation standard. For those parameters without a specific standard, background standards shall be established.

HYDROLOGIC TESTING ON WELL MW#4

Prepared for:

Lea Land Inc.
P.O. Box 3247
Carlsbad, New Mexico 88221

Prepared by:



1012A West Pierce St.
Carlsbad, New Mexico 88220

6850 Austin Center Blvd. Suite 300
Austin, Texas 78731

February 27, 1997

1.0 SUMMARY

A series of hydraulic tests were performed on two monitor wells (MW #3 and MW #4) at the Lea Land, Inc. non-hazardous industrial waste landfill as part of the permitting process. The landfill is located approximately thirty miles east of Carlsbad, New Mexico on state highway 62/180. Each of the monitor wells tested was completed within the Triassic Santa Rosa Sandstone, a silty shale and siltstone, with a 30 foot screened interval in the water bearing unit (saturated thickness). The hydrologic testing between February 17 and February 20, 1997 was carried out in order to provide aquifer parameter estimates of both transmissivity (T) and of specific storage (Ss) of the water bearing unit.

Evaluation of preliminary data from slug tests that were performed on MW #3 and MW #4 suggested that the permeability of the water bearing unit at these location was very similar and so low that a constant-rate pumping test would not be feasible. The reason for this was that the formation would not be able to sustain an appreciable flow rate. Therefore, it was decided that a slug test of longer duration (~15 hours) would be performed on MW #4 to define the hydraulic parameters. The results of analysis of this slug test are as follows:

$$T = 3.53e-7 \text{ m}^2/\text{s}$$
$$Ss = 3.71e-9 \text{ 1/m}$$

In addition, the analysis suggests that under a 16 psig head difference, the fluid flow into the formation attained a maximum value of only ~0.04 gallons per minute (gpm). It would not have been possible to maintain a flow rate this small with the equipment available.

It should be noted that water levels were monitored in three additional wells indicated in Figure 1.1 (MW #1, MW #2, and MW #3) during the slug test recovery. Though the four wells appear to be completed in the same hydrostratigraphic horizon, there was no detectable response in the three monitoring wells during the MW #4 slug test. The lack of response is consistent with the low permeability calculated from the MW#4 slug test. The coordinates and elevations of the four monitoring wells are indicated in Figure 1.2.

The maximum hydraulic gradient based on pretest water-level measurements and survey data from wells MW#1, MW#2, MW#3, and MW#4 is $5.11e-3$ meters/meter. Based on the hydraulic conductivity value calculated from the slug test data in MW#4 of $3.86e-8$ m/s, the average velocity is $6.21e-3$ m/year (6 m/1000 years) in a south-southeast direction.

Note: The use of brand names in this report is for identification purposes only and does not imply any endorsement of specific products by INTERA Inc.

Cardinal

ENVIRONMENTAL, INC.

March 14, 1997

Mr. Bob Hall
Lea Land Inc.
1300 W. Main St.
Oklahoma City, OK 73106

Dear Mr. Hall:

We have completed an evaluation of the hydrogeologic setting of the Lea Land facility to determine the potential for ground water contamination. The information used in this analysis was derived from the four monitor wells and 10 soil borings completed at this site.

The facility is underlain by the low permeability Santa Rosa formation (silty shale and siltstone) to a depth of greater than 200 feet. The first subsurface water encountered under the disposal cells is a thin saturated layer at a depth of 195-200 feet. Hydraulic testing of this wet zone demonstrates that it is not a viable aquifer because its water production capacity is very low (estimated at less than 0.04 gpm). The calculated rate of horizontal flow in this wet zone is only approximately 20 feet in 1000 years.

The potential for contamination of the wet zone by water seeping from the surface is very low. This facility is located in a semi-arid area with unsaturated soil and rock between the surface and the water table. Even if a source of water was available, (such as a perforation of the composite liner system), the time required for water to "wet" the unsaturated materials and allow migration to the water table is calculated to be greater than the life of the landfill or the subsequent 30 year post closure monitoring period.

Based on the above discussion, it is our professional opinion that the Lea Land facility is located an ideal geologic environment. Operation of this landfill will have no negative impact on ground water occurring under this site.

Sincerely,



Duane L. Winegardner, P.E.
Senior Hydrogeologist

F:\pn404.1\opinion

DESCRIPTION OF SITE GEOLOGY AND HYDROLOGY

Lea Land, Inc.
Lea County, New Mexico
June 14, 1995

Page 31

The general information pertaining to the geologic regime was obtained from the following published reports: USGS Groundwater Report 6 (Nicholson, A. and Clebsch, A., 1961); and New Mexico Geological Society, Special Publication No. 10, Environmental Geology and Hydrology of New Mexico, 1981. The proposed landfill facility is located in the Pecos Valley section of the Great Plains physiographic province. The Pecos Valley section is a very irregular erosional surface which slopes towards the west and south, towards the Pecos River. The major structural feature of the area is the Delaware Basin. There has been virtually no tectonic movement in the basin since the close of Permian time 245 million years ago.

A regional geologic map obtained from the U.S. Geological Survey (~~EXHIBIT M,~~ (Figures 1 and 1a) shows the surface geology of the Site to consist of Alluvium deposits of Recent and Pleistocene age. The Quaternary, Recent, and Pleistocene age deposits are channel and lake deposits of alternating thickbedded calcareous silt, fine sand, and clay. The alluvium was deposited in topographically low areas where the (Miocene, Pliocene, and Pleistocene) Ogallala formation had been stripped away. The U.S. Geological Survey map also shows that the southwest corner of the Section consists of the Upper Triassic, Santa Rosa sandstone which is a red to white, poorly sorted, coarse-grained, crossbedded sandstone.

The literature indicates that the Triassic rocks of the area have a regional dip of less than 1 degree to the southeast. At the proposed location, the dips are reversed and are in the northerly direction, towards the Laguna Toston and Laguna Plata. Collapse structures are not identified in the literature or by visual inspection at the proposed location.

The literature also indicated that the ground water in the Ogallala formation and the Quaternary sediments of southern Lea County is unconfined where the underlying red beds are relatively impermeable. The beds may form a lower confining layer, which prevents further downward movement and it is possible that the Ogallala formation and the Quaternary sediments of southern Lea County may contain perched aquifers. Since the Ogallala is absent in the area of the proposed landfill perched aquifers may occur in the Quaternary deposits. However, no such wells are known to be completed in such a zone as indicated by the literature.

Piezometric maps of the Triassic formation were obtained from literature published by the U.S.G.S. in the ground water report 6 by Clebsch and Nicholson (~~Exhibit M~~, (Figures 2 and 2a). The piezometric map indicates that the Triassic aquifer is approximately 200 to 300 feet below the surface of the ground. The recharge area of the Triassic rocks is in the western part of southern Lea County and the eastern

part of Eddy County. Some recharge probably is derived from precipitation on the sand dunes, by precipitation and runoff directly on the outcrop, and probably from ground water from the overlying Ogallala formation and Quaternary alluvium where they overlie permeable beds of Triassic age in the subsurface. The contours of the previously discussed map indicate that water discharges from the Triassic rocks (Santa Rosa sandstone) in the vicinity of the Lagunas which are located north of the proposed facility. The water does not discharge to the lakes because the aquifer is located approximately 200 feet below the lake surfaces.

Three initial test holes were air drilled at the Site to test for groundwater, identify water bearing zones, and to gain geologic information. The holes were drilled to depths of 139 feet, 29 feet, and 39 feet, respectively. Test hole #1 is located north of the proposed landfill area, test hole #2 is located in the proposed landfill area, and test hole #3 is located south of the proposed landfill area. (See Figure J). Ground water was not encountered in any of the initial test holes. Test hole #1 was drilled in the north central portion of Section 32. Test hole #2 was drilled south of hole #1 in the east central portion of Section 32. Test hole #3 was drilled in the approximate SE/4 SE/4 SW/4 of Section 32. The test holes revealed that the geology of the area consisted of surficial deposits of fine grained gypsiferous sand, silt, and clay with occasional caliche stringers from 1 inch to 4 inches thick. Hole

#1 contained approximately 44 feet of surficial deposits, hole #2 contained approximately 29 feet of surficial deposits, and hole #3 contained 9 feet of surficial deposits. The Gatuna Formation (Quaternary Age) was then encountered containing dark reddish to orange, very fine grained sand and siltstone with occasional clay. Hole #1 contained 20 feet, hole #2 was not drilled deep enough to encounter the formation, and hole #3 had 3.5 feet. The Santa Rosa sandstone (Triassic age) was encountered next. The Santa Rosa sandstone consisted of hard, tight, gray to light brown, medium grained sandstone with occasional dark brown conglomerate shales. Hole #1 contained 50 feet of the Santa Rosa and hole #3 did not contain any Santa Rosa. The Dewey Lake Redbed was encountered last. The formation consisted of light red to reddish orange shale with thin stringers of siltstone and sandstone. Hole #1 drilled 20 feet of this zone and hole #3 drilled 26.5 feet. Drilling in both holes ceased in this formation. The test holes were plugged in accordance with the State Engineer's requirements. As previously mentioned, the test holes did not encounter any ground water and revealed that the beds were dipping to the north. The laboratory analyses of the soil sample obtained from these borings may found in Exhibit N.

A subsurface investigation plan was submitted to the department on September 3, 1993 to further define the subsurface geologic regime at the proposed facility. The plan provided for the drilling of ten (10) boreholes on the proposed landfill Site in order to obtain geologic information and characterize the aquifer below. The plan was approved by the Department. The drilling of the borings was initiated on October 5, 1993 with drilling completed on October 10, 1993. Pool Environmental Drilling drilled the borings from the surface to total depth utilizing air rotary drilling

rig. The ten boring were spaced evenly throughout the proposed landfill site. The depths of borings were as follows: B-1 (125'), B-2 (155'), B-3 (150'), B-4(148'), B-5 (200'), B-6 (151'), B-7 (154'), B-8 (166'), B-9 (160'), an B-10 (178'). The locations of the borings may be found in Figure J. Samples were collected at intervals of every (5) five feet. The lithology of each boring was logged by a qualified geologist and was described according to the Unified Soil Classification System, ASTM D2487-66T. Graphical logs of these boring are provided in Exhibit N.

The subsurface materials encountered at the Site were comprised of surfical deposits consisting of light tan to buff gypsiferous sand and clay with caliche stringers to depths of twenty (20) to fifty (50) feet below the surface of the ground. This zone graded into a light reddish brown to orange shale, siltstone, and fine grained sandstone with some caliche stringers to depths of approximately one

hundred (100) to one hundred and twenty five (125) feet. This zone contained some hard streaks of light brown and dark reddish orange clay, silt, and sandstone. Dark reddish brown to orange shales with siltstone stringers were encountered to the total depths drilled ranging from one hundred and twenty five (125) feet to two hundred (200) feet. Gray shales and siltstone stringers were observed in this zone at depths ranging from one hundred (100) feet to two hundred (200) feet.

Only two of the ten borings encountered ground water. Boring B-1 encountered ground water at a depth of one hundred and twenty five (125) feet. Boring B-5 encountered ground water at a depth of one hundred and ninety nine (199) feet. One sample was obtained from each of the borings and laboratory analyses were performed on each sample for the major anions, major cations, alkalinity, total hardness, resistivity, specific gravity, and pH. The U.S.G.S. Ground-water report 6 (Nicholson and Clebsch 1961) identifies the distinctive character of water from the Triassic rocks as having a sulfate (SO₄) to chloride (Cl) ratio (equivalents per million) greater than 2. The ground water samples from Tertiary and Quaternary deposits have sulfate-chloride ratios generally less than 2 but greater than 0.1. The laboratory analysis of the groundwater sample obtained from boring B-1 had a sulfate-chloride ratio of 1.44 (equivalents per million) which is indicative of Tertiary and Quaternary deposits. The laboratory analysis of the groundwater sample

obtained from boring B-5 had a sulfate-chloride ratio of 3.6 (equivalents per million) indicative of Triassic deposits. The laboratory analysis of the ground water, the U.S.G.S. report 6 sulfate-chloride ratio determination (Nicholson and Clebsch 1961), the dip of the beds to the north, and ground water not being encountered at shallower depths south of boring B-1, indicate groundwater from the Tertiary and Quaternary deposits to be restricted to the extreme northeast portion of the proposed landfill. The laboratory analysis of the groundwater samples obtained from B-1 and B-5 are located in Exhibit N.

Materials testing was performed on soil samples obtained from the drilling of the borings. The materials testing included the following: description, sieve analysis, atterberg limits, percentage carbonates, and USCS soil classification. The materials testing results are provided in Exhibit N.

The boreholes were abandoned by backfilling each from total depth to grade with bentonite chips activated with water (refer to Exhibit N for certification for borehole closure).

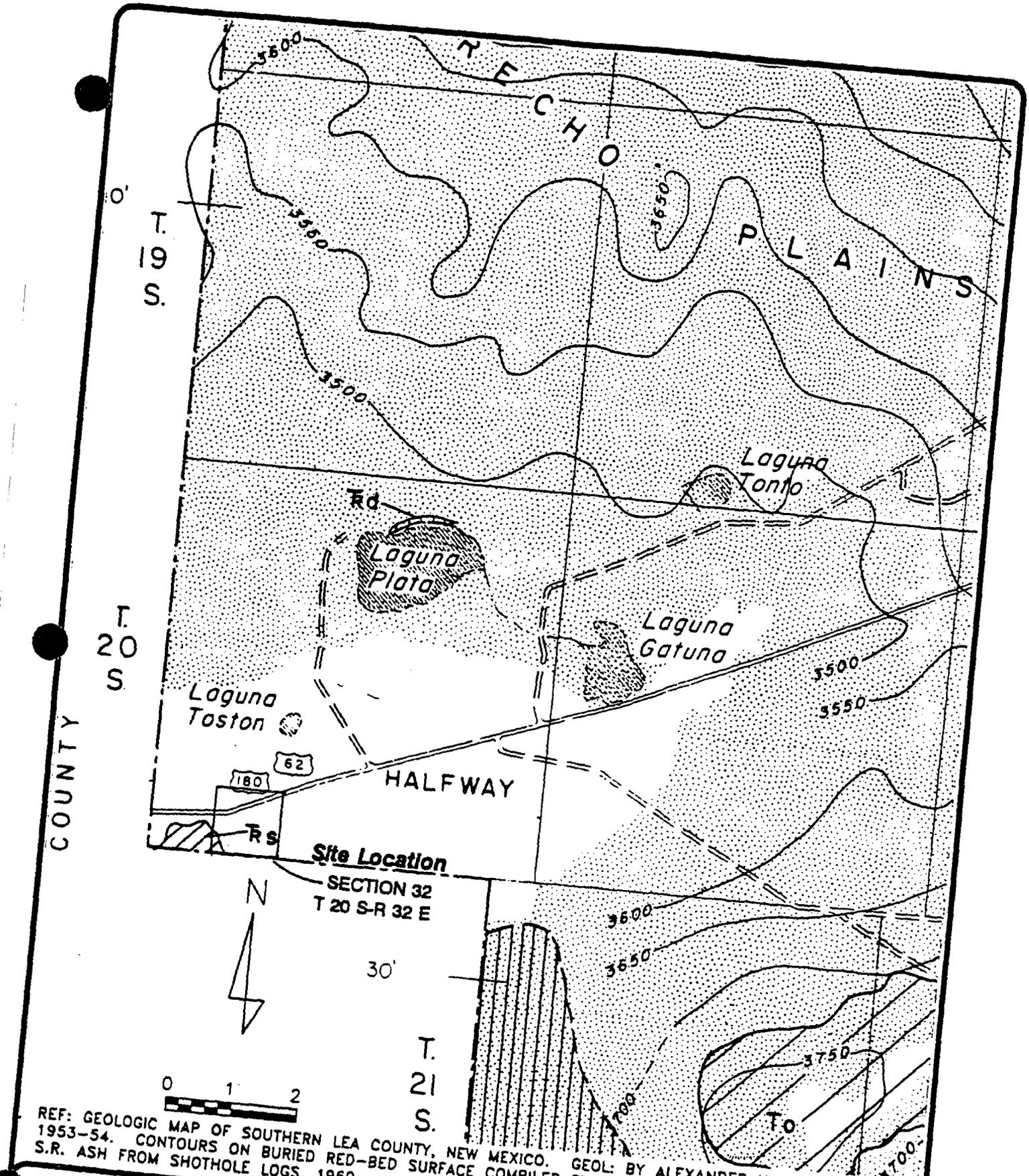
The construction of the ground water monitoring wells to be installed at the site will comply with ASTM method 5092 or the requirements as outlined in Section 802.C.

8. A demonstration that surface water from the landfill will not discharge contaminants in violation of the New Mexico Water Quality Act, Commission regulations or standards, or the Federal Clean Water Act, including an analysis of surface water flow and diversion, collection, conveyance, erosion, and sedimentation control, treatment, storage and discharge facilities to be used;

There are no surface drainage features on site which will convey any produced landfill contaminants.

During the working life of the landfill, diversion ditches will be constructed around the up-gradient portion and sides of the active portion of the proposed landfill to divert any off-site surface run-on away from the active portion of the cells. The location of the diversion ditches are illustrated in Exhibit CC.

Stormwater coming into contact with the active portion of the proposed landfill will be contained in each cell as the cell is being developed. This stormwater will be collected in the cells and will be transferred to a lined stormwater retention pond which will be constructed, as required to store the on-site stormwater. As the active portion of the proposed landfill extends above surface grade, the lined area and retention ditches will be utilized to capture and contain the stormwater run-off. The



REF: GEOLOGIC MAP OF SOUTHERN LEA COUNTY, NEW MEXICO, 1953-54. CONTOURS ON BURIED RED-BED SURFACE COMPILED BY ALEXANDER NICHOLSON, JR., AND S.R. ASH FROM SHOTHOLE LOGS, 1960.

PROJ. # 404	DRAWN BY: BJF
SCALE: 1" = 2 MILES	CHECKED BY: MG
FN:	
DATE: AUGUST 20, 1993	

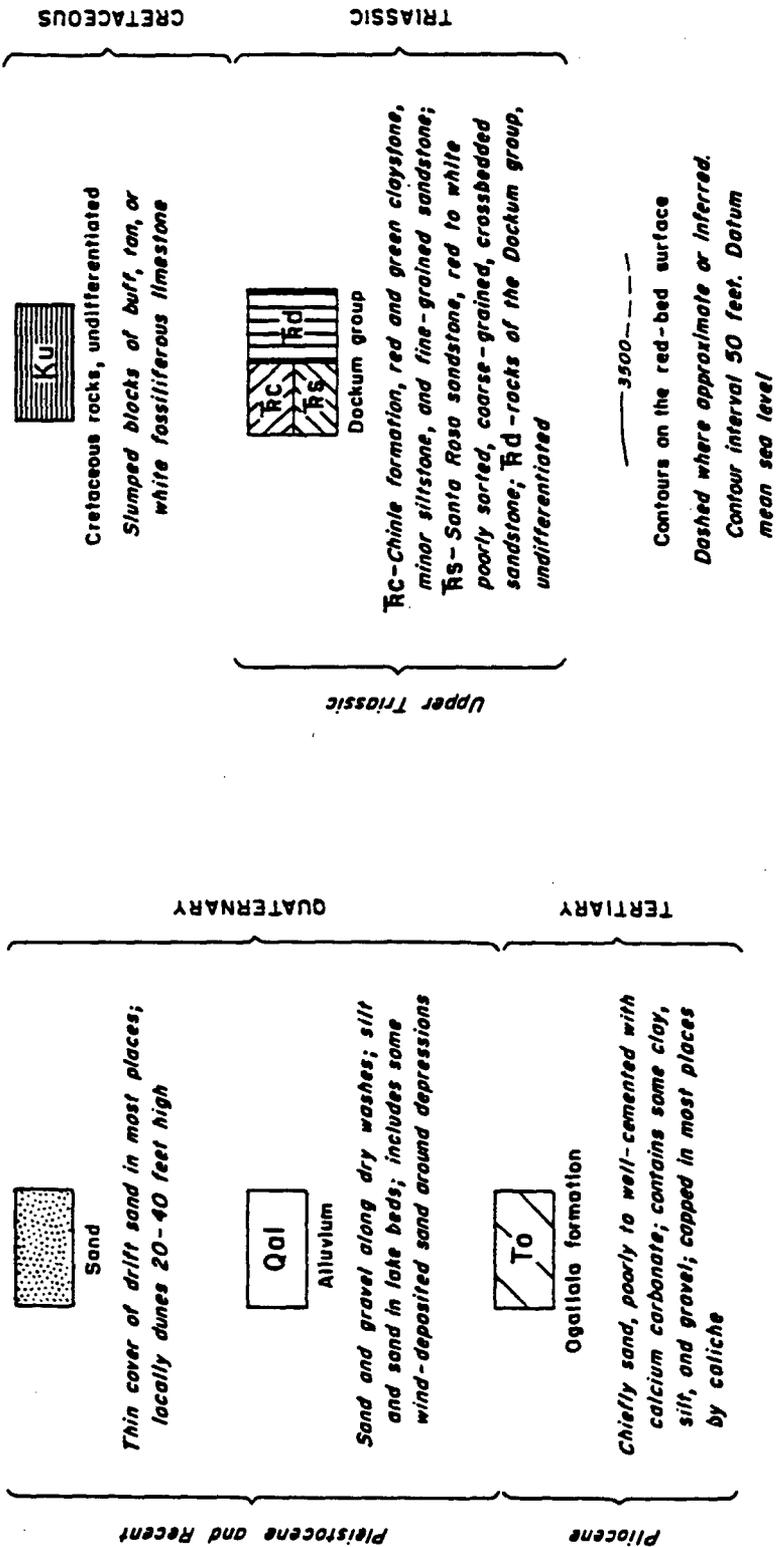
GEOLOGIC MAP

LEA LAND, INC.
OKLAHOMA CITY, OKLAHOMA

FIGURE
1



EXPLANATION



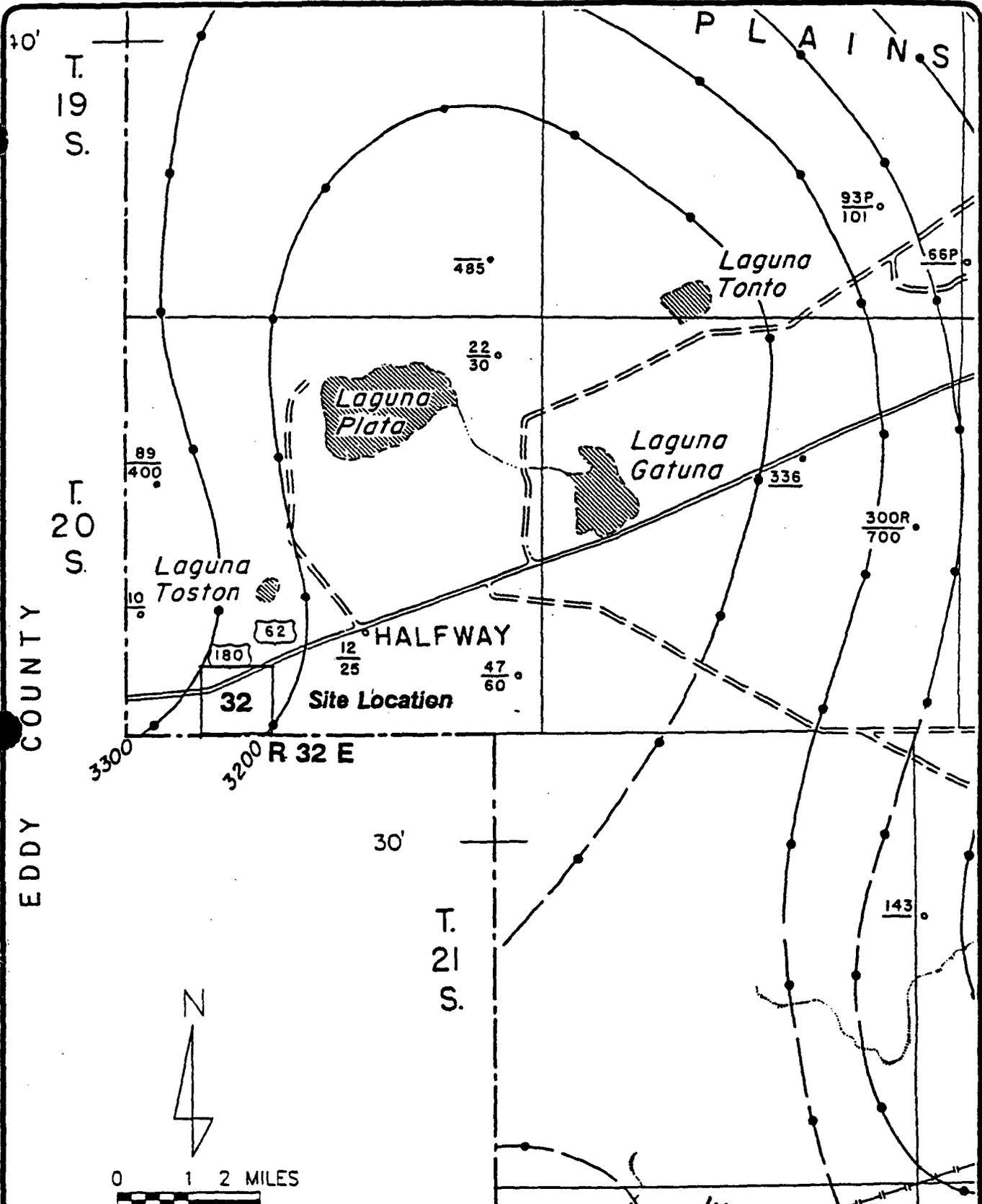
EXPLANATION OF GEOLOGIC MAP SYMBOLS

PROJ# 404	DRAWN BY: BJF
SCALE:	CHECKED BY: MG
FN:	
DATE: AUGUST 20, 1993	

FIGURE
1a



LEA LAND, INC.
 OKLAHOMA CITY, OKLAHOMA



REF: COMPILED BY ALFRED CLEBSCH, JR., 1960, USING DATA COLLECTED MAINLY BY ALEXANDER NICHOLSON, JR., IN 1953 AND 1954.

PROJ.# 404.1
 DRAWN BY: BJF
 SCALE: 1" = 2 MILES
 CHECKED BY: MG
 FN:
 DATE: AUGUST 30, 1994

GEOLOGIC MAP

LEA LAND, INC
 OKLAHOMA CITY, OKLAHOMA

FIGURE 2

Cardinal
 ENVIRONMENTAL, INC.

EXPLANATION

150
252

Water well

Upper figure is depth to water; lower figure is depth of well. Open circles are wells finished in Tertiary or Quaternary rocks; solid circles are wells finished in Triassic rocks

- F = Flowing
 - R = Reported
 - P = Water level measured while pumping
 - D = Dry
 - ? = Uncertainty as to aquifer
 - > = More than
 - < = Less than
- (See tables 6 and 7 for detailed well data.)

— 3925 — — — —

Water-table contour in Tertiary or Quaternary rocks

*Dashed where inferred or uncertain.
Contour interval 25 feet. Datum mean sea level*

— 3500 — — — —

Water-table or piezometric contour on water body in Triassic aquifers

*Dashed where inferred or uncertain.
Contour interval 100 feet. Datum mean sea level*

— — — — —

Approximate position of boundary between Tertiary rocks and saturated Tertiary and Quaternary rocks

FIGURE

2a

EXPLANATION OF GEOLOGIC MAP SYMBOLS

PROJ: 404.1	DRAWN BY: BJF
SCALE:	CHECKED BY: MG
FN:	
DATE: AUGUST 30, 1994	

LEA LAND, INC.
OKLAHOMA CITY, OKLAHOMA



Lea Land, Inc. Industrial Solid Waste Landfill

LABORATORY ANALYSIS

EXHIBIT N

POOL

POOL ENVIRONMENTAL DRILLING, INC.

712 E. College
P.O. Box
Roswell, NM 88201
(505) 622-4859

January 24, 1994

Mr. Bob Hall
Lea Land, Inc.
22 Northeast 46th Street
Oklahoma City, OK 73165

RE: Abandonment and Sealing of Test Holes Drilled on Sec.32, T20S, R32E,
Lea County, New Mexico

Dear Mr. Hall:

Pool Environmental Drilling, Inc. does hereby certify that each test hole drilled by us at the above referenced site was abandoned in a manner to meet the requirements of the Rules and Regulations of the State of New Mexico, Office of the State Engineer.

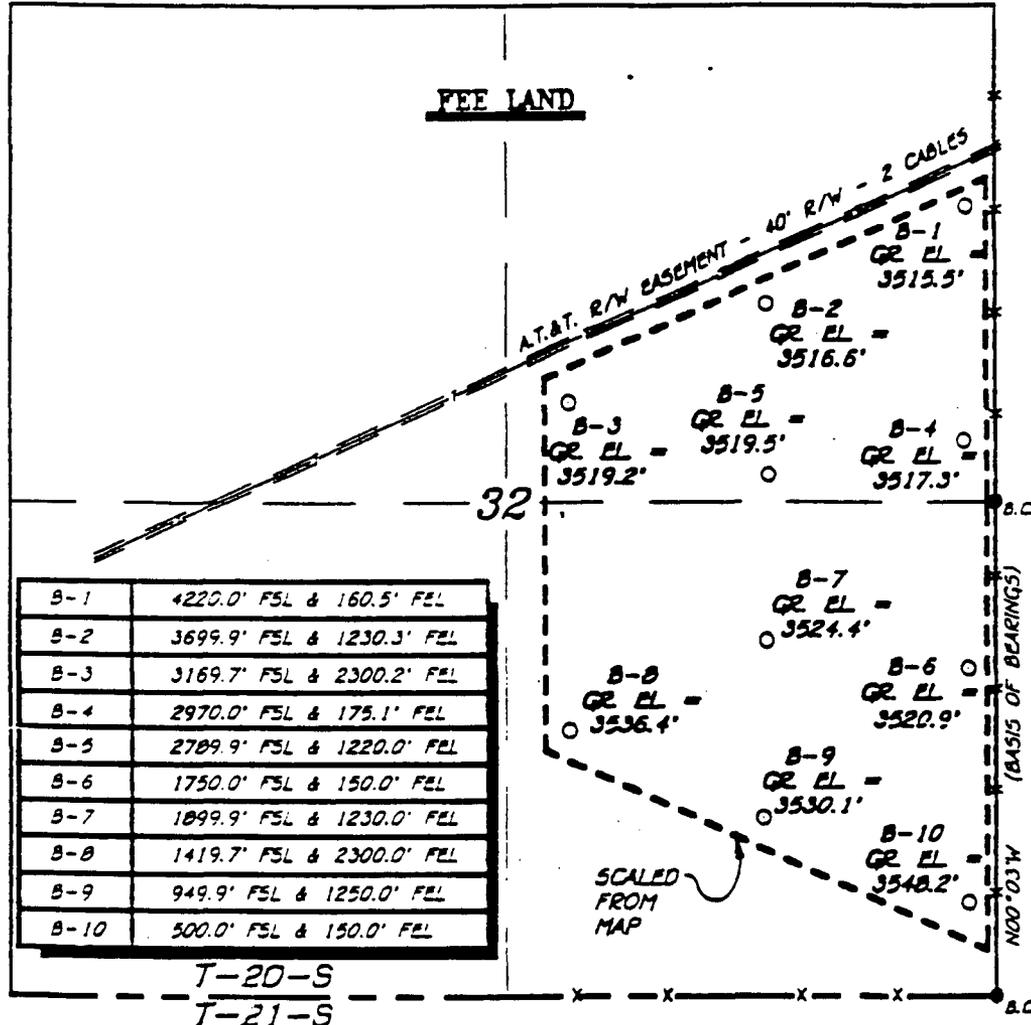
Sincerely,

POOL ENVIRONMENTAL DRILLING, INC.



Fred F. Pool, III WD-1266

SECTION 32, TOWNSHIP 20 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



1000 0 1000 2000 FEET

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

John W. West
JOHN W. WEST
RONALD J. EIDSON
GARY L. JONES

N.M. P.S.
TEXAS P.L.S.
N.M. P.S.
TEXAS P.L.S.
N.M. P.S.

GARY L. JONES
NEW MEXICO
7977
No. 677
No. 1138
No. 3239
No. 1883
No. 7977

LEA LAND, INC.

TEN BORE HOLE LOCATIONS LOCATED IN SECTION 32, TOWNSHIP 20 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

JOHN W. WEST ENGINEERING COMPANY
CONSULTING ENGINEERS & SURVEYORS - HOBBS, NEW MEXICO

Survey Date: 10-02-93	Sheet 1 of 1 Sheets
W.O. Number: 93-11-1929	Drawn By: S.C. NICHOLS
Date: 10-29-93	Scale: 1" = 1000'

Certification of groundwater monitoring system plan:

I hereby certify that, to the best of my professional judgement, the information provided in the groundwater monitoring system plan for the Lea Land, Inc. Non-Hazardous Industrial Landfill located in Lea County, New Mexico will be accurate and complete and the system will consist of a sufficient number of wells, at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that will represent the quality of background groundwater that has not been affected by leakage from the landfill and will represent the quality of groundwater passing the relevant point of compliance. The groundwater monitoring system plan for the Lea Land, Inc. Non-Hazardous Industrial Landfill will be based on information known at the present time and information obtained in the future.

5/11/95

Date

Mark C. Gray

Signature of qualified* groundwater scientist

MARK C. GRAY

Printed Name

* Resume attached which demonstrates conformity with Section 105.GG



**Petroleum Laboratory
Gas Engineering
and Environmental Services**
401 N.E. 46th, Oklahoma City, OK 73105-3338
(405) 528-8255

LABORATORY REPORT NO. 79024
LOG #3206

WATER ANALYSIS.

LEALAND INC

MW1 (190')

LEA CO/NM

SAMPLED BY: R HALL
DATE SAMPLED: 05-01-96
DATE RUN 05-06-96
COLOR BEFORE FILTRATION: COLORLESS
COLOR AFTER FILTRATION: COLORLESS

***** CHEMICAL CHARACTERISTICS *****

	mg/l
CALCIUM (Ca)	420
MAGNESIUM (Mg)	55
SODIUM (Na)	710
POTASSIUM (K)	2
BARIUM (Ba)	<1
IRON (Fe)	0.7
SILICA (SiO2)	15
*BICARBONATE (HCO3)	67
CARBONATE (CO3)	0
HYDROXIDE (OH)	0
SULFATE (SO4)	2,500
CHLORIDE (Cl)	110

	mg/l
P ALKALINITY (AS CaCO3)	0
M ALKALINITY (AS CaCO3)	55
TOTAL HARDNESS (AS CaCO3)	1,280
TOTAL DISSOLVED SOLIDS	3,865

RESISTIVITY @ 77 DEG. F.	1.786
SPECIFIC GRAVITY @ 72 DEG. F.	1.004
pH VALUE	7.90

NOTES: *BICARBONATE as CaCO3: 55

CERTIFIED BY: Suresh Joshi
CHEMIST/ANALYST



PETROLEUM LABORATORY
AND GAS ENGINEERING

101 N.E. 46th Oklahoma City, OK 73105-3338
LABORATORY REPORT NO. 6279
(405) 528-8255

WATER ANALYSIS

LELAND INC
HOLE #B-5 (199')

SAMPLED BY: BOB HALL
DATE SAMPLED: 10-00-93
DATE RUN 10-14-93
COLOR BEFORE FILTRATION: COLORLESS
COLOR AFTER FILTRATION: COLORLESS

***** CHEMICAL CHARACTERISTICS *****

	mg/l
CALCIUM (Ca)	96
MAGNESIUM (Mg)	50
SODIUM (Na)	200
POTASSIUM (K)	<1
BARIUM (Ba)	<1
IRON (Fe)	0.1
SILICA (SiO2)	14
*BICARBONATE (HCO3)	256
CARBONATE (CO3)	0
HYDROXIDE (OH)	0
SULFATE (SO4)	500
CHLORIDE (Cl)	100

	mg/l
'P' ALKALINITY (AS CaCO3)	0
'M' ALKALINITY (AS CaCO3)	210
TOTAL HARDNESS (AS CaCO3)	448
TOTAL DISSOLVED SOLIDS	1,200

RESISTIVITY @ 77 DEG. F. 5.260
SPECIFIC GRAVITY @ 74 DEG. F. 1.003
PH VALUE 6.91

NOTES:

DATE RECEIVED: 10-13-93
*BICARBONATE as CaCO3: 210



PETROLEUM LABORATORY
AND GAS ENGINEERING

401 N.E. 46th Oklahoma City, Ok. 73105-3338
(405) 528-8255

LABORATORY REPORT NO. 68479

FRESH WATER ANALYSIS

LELAND INC
HOLE #B-1 (125')

SAMPLED BY: BOB HALL
DATE SAMPLED: 10-00-93
DATE RUN: 10-14-93
COLOR BEFORE FILTRATION: COLORLESS
COLOR AFTER FILTRATION: COLORLESSDS

**** CHEMICAL CHARACTERISTICS ****

	mg/l
CALCIUM (Ca)	120
MAGNESIUM (Mg)	115
SODIUM (Na)	120
POTASSIUM (K)	<1
BARIUM (Ba)	<1
IRON (Fe)	0.1
- SILICA (SiO2)	16
*BICARBONATE (HCO3)	200
CARBONATE (CO3)	0
HYDROXIDE (OH)	0
SULFATE (SO4)	490
CHLORIDE (Cl)	250

	mg/l
'P' ALKALINITY (AS CaCO3)	0
'M' ALKALINITY (AS CaCO3)	165
TOTAL HARDNESS (AS CaCO3)	780
TOTAL DISSOLVED SOLIDS	1,295

RESISTIVITY @ 77 DEG. F.	5.100
SPECIFIC GRAVITY @ 74 DEG. F.	1.003
pH VALUE	7.70

NOTES:

DATE RECEIVED: 10-13-93

*BICARBONATE as CaCO3: 165

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Location New Mexico Quantity 1 Sample
Architect _____ Represented _____
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892

Sample No.: 1a

Boring No.: 1

Sample Depth: 0'-25'

Sample Type: Air Rotary Cuttings

Description: Tan Clayey Sand, Low Plasticity, Approx. 50% Carbonate

Sieve Analysis

Sieve	% Passing
#10	98.0
#40	94.6
#200	35.1

Atterberg Limits

Liquid Limit	29
Plastic Limit	17
Plasticity Index	12

Classification

AASHTO: A-6(0)
USCS: SC

Charge: Lea Land, Inc.
Orig. & 1cc To Same
1cc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Quantity
Location New Mexico Represented 2 Samples
Architect
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892

Sample No.: 1b & 2a

Boring No.: 1 2

Sample Depth: 25'-44' 3'-29'

Sample Type: Air Rotary Cuttings

Description: Tan and Gray Clayey Fine Sand with Limestone Fragments,
Medium Plasticity, Approx. 70% Carbonate

Sieve Analysis

Sieve	% Passing
#10	91.0
#40	85.0
#200	35.1

Atterberg Limits

Liquid Limit	31
Plastic Limit	17
Plasticity Index	14

Classification

AASHTO: A-6(1)
USCS: SC

Charge: Lea Land, Inc.
Orig. & 1cc To Same
1cc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING CO.
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Quantity
Location New Mexico Represented 1 Sample
Architect
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892
Sample No.: 1c
Boring No.: 1
Sample Depth: 44'-54'
Sample Type: Air Rotary Cuttings
Description: Brown Silty Sand, Non-plastic, Approx. 50% Carbonate

Sieve Analysis

Sieve	% Passing
#10	96.6
#40	93.7
#200	26.6

Atterberg Limits

Liquid Limit	-
Plastic Limit	-
Plasticity Index	NP

Classification

AASHTO: A-2-4
USCS: SM

Charge: Lea Land, Inc.
Orig. & 1cc To Same
1cc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Location New Mexico Quantity 1 Sample
Architect _____ Represented _____
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892

Sample No.: 1d
Boring No.: 1
Sample Depth: 54'-69'
Sample Type: Air Rotary Cuttings

Description: Reddish-Brown Silty Clay, Low Plasticity, Approx. 10% Carbonate

Sieve Analysis

Sieve	% Passing
#10	99.7
#40	95.5
#200	59.3

Atterberg Limits

Liquid Limit	26
Plastic Limit	16
Plasticity Index	10

Classification

AASHTO: A-4(3)
USCS: CL

Charge: Lea Land, Inc.
Orig. & 1cc To Same
1cc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING CO.
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Location New Mexico Quantity 1 Sample
Architect _____ Represented _____
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892

Sample No.: 1e

Boring No.: 1

Sample Depth: 69'-84'

Sample Type: Air Rotary Cuttings

Description: Gray Clayey, Silty, Very Fine Sand, Trace of Plasticity,
Approx. 10% Carbonate**Sieve Analysis**

Sieve	% Passing
#10	99.4
#40	87.9
#200	43.4

Atterberg Limits

Liquid Limit	20
Plastic Limit	14
Plasticity Index	6

Classification

AASHTO: A-4(0)
USCS: SC-SM

Charge: Lea Land, Inc.
Orig. & lcc To Same
lcc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Quantity
Location New Mexico Represented 1 Sample
Architect
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892
Sample No.: 1f
Boring No.: 1
Sample Depth: 84'-94'
Sample Type: Air Rotary Cuttings
Description: Maroon Sandy Silt, Non-plastic, Less Than 10% Carbonate

Sieve Analysis

Sieve	% Passing
#10	100.0
#40	98.5
#200	53.2

Atterberg Limits

Liquid Limit	-
Plastic Limit	-
Plasticity Index	NP

Classification

AASHTO: A-4(0)
USCS: ML

Charge: Lea Land, Inc.
Orig. & 1cc To Same
1cc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING CO.
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Location New Mexico Quantity 3 Samples
Architect _____ Represented _____
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892

Sample No.: 1g, 1h, 1i

Boring No.: 1

Sample Depth: 94'-114' 114'-119' 120'-140'

Sample Type: Air Rotary Cuttings

Description: Maroon Very Silty Sand, Non-plastic, Less Than 10% Carbonate

Sieve Analysis

Sieve	% Passing
#10	100.0
#40	96.1
#200	44.3

Atterberg Limits

Liquid Limit	-
Plastic Limit	-
Plasticity Index	NP

Classification

AASHTO: A-4(0)
USCS: SM

Charge: Lea Land, Inc.
Orig. & 1cc To Same
1cc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Quantity
Location New Mexico Represented 1 Sample
Architect
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892

Sample No.: 3a

Boring No.: 3

Sample Depth: 0'-4'

Sample Type: Air Rotary Cuttings

Description: Light Tan Silty Sand, Non-Plastic, Approx. 90% Carbonate

Sieve Analysis

Sieve	% Passing
#10	86.8
#40	69.0
#200	30.8

Atterberg Limits

Liquid Limit	-
Plastic Limit	-
Plasticity Index	NP

Classification

AASHTO: A-2-4
USCS: SM

Charge: Lea Land, Inc.
Orig. & 1cc To Same
1cc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING CO.
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93

Project Lea Land, Inc. Specification ASTM D2487/2488
Quantity 1 Sample

Location New Mexico Represented 1 Sample

Architect _____

Engineer _____ Sampled by Client

Contractor _____ by Order of Bob Hall

Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892

Sample No.: 3b

Boring No.: 3

Sample Depth: 4'-12'

Sample Type: Air Rotary Cuttings

Description: Tan & Gray Silty Sand with Limestone Fragments, Non-plastic, Approx. 70% Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	74.9
#40	68.8
#200	31.1

Liquid Limit	-
Plastic Limit	-
Plasticity Index	NP

Classification

AASHTO: A-2-4
USCS: SM

Charge: Lea Land, Inc.
Orig. & lcc To Same
lcc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING CO.
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Quantity 1 Sample
Location New Mexico Represented 1 Sample
Architect _____
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892
Sample No.: 3c
Boring No.: 3
Sample Depth: 12'-19'
Sample Type: Air Rotary Cuttings
Description: Reddish-Brown Sandy Clay, Medium Plasticity, Approx. 30% Carbonate

Sieve Analysis

Sieve	% Passing
#10	98.9
#40	83.7
#200	54.2

Atterberg Limits

Liquid Limit	33
Plastic Limit	19
Plasticity Index	14

Classification

AASHTO: A-6(5)
USCS: CL

Charge: Lea Land, Inc.
Orig. & 1cc To Same
1cc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING CO.
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 5/5/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Quantity
Location New Mexico Represented 1 Sample
Architect
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 5/5/93 Order No. _____

TEST RESULTS

Project No.: G-892
Sample No.: 3d
Boring No.: 3
Sample Depth: 20'-39'
Sample Type: Air Rotary Cuttings
Description: Brown Silty Sandy Clay, Low Plasticity, Approx. 20% Carbonate

Sieve Analysis

Sieve	% Passing
#10	87.7
#40	69.3
#200	43.2

Atterberg Limits

Liquid Limit	25
Plastic Limit	15
Plasticity Index	10

Classification

AASHTO: A-4(1)
USCS: SC

Charge: Lea Land, Inc.
Orig. & 1cc To Same
1cc To File

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING
(Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample: Composite #1
 Boring No. / Depth: #8 / 105 ft. - 110 ft.; #8 / 120 ft. - 125 ft.
 Sample Type: Air Rotary Cuttings

Description: Brown Sandy Silt
 Non-Plastic

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	99.9
#40	97.8
#200	53.9

Liquid Limit	24
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 5 %

Classification

AASHTO: A-4(0)
 USCS: ML

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted
 STANDARD TESTING AND ENGINEERING CO.
 (Original Signed By)



REGISTERED PROFESSIONAL ENGINEER
 RICHARD W. HADD
 12537
 Oklahoma City, Oklahoma
 Richard W. Hadd, P.E.

REPORT Soil Classification Date 11/8/93
Project Lea Land, Inc. Specification ASTM D2487/2488
Location Lea County, New Mexico Quantity
Represented One Sample
Engineer _____ Sampled by Client
Contractor _____ by Order of Bob Hall
Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample: Composite #2
Boring No. / Depth: #7 / 35 ft. - 40 ft.; #9 / 0 ft. - 5 ft.;
#1 / 75 ft. - 80 ft.; #2 / 65 ft. - 70 ft.;
#8 / 0 ft. - 3 ft.
Sample Type: Air Rotary Cuttings
Description: Tan to Pink Very Sandy Clay,
Low Plasticity

Sieve Analysis

Sieve	% Passing
#10	88.7
#40	85.4
#200	54.4

Atterberg Limits

Liquid Limit	25
Plastic Limit	17
Plasticity Index	8

Calcium or Magnesium Carbonates 4 %

Classification

AASHTO: A-4(2)
USCS: CL

Charge: Lea Land, Inc.
Orig. & lcc to Same
lcc to File No. LE05-9

Respectfully Submitted,
STANDARD TESTING AND ENGINEERING CO.
(Original Signed By)



REGISTERED PROFESSIONAL ENGINEER
RICHARD W. HADD
12537
Richard W. Hadd, P.E.
OKLAHOMA

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity
 Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #3
 Boring No. / Depth: #4 / 140 ft. - 150 ft.; #1 / 90 ft. - 95 ft.
 Sample Type: Air Rotary Cuttings

Description: Dark Brown Sandy Clay,
 Medium Plasticity, Low Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	99.1
#40	78.9
#200	49.2

Liquid Limit	31
Plastic Limit	17
Plasticity Index	14

Calcium or Magnesium Carbonates 19 %

Classification

AASHTO: A-6(4)
 USCS: SC

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

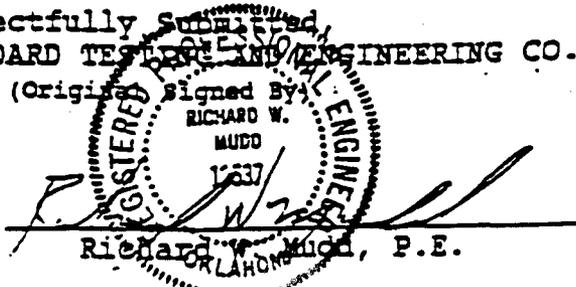
Respectfully Submitted,
 STANDARD TESTING AND ENGINEERING CO.

(Original Signed By)

RICHARD W. MUDD

11/8/93

Richard W. Mudd, P.E.



3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #4
 Boring No. / Depth: #10 / 85 ft. - 90 ft.; #6 / 30 ft. - 35 ft.
 Sample Type: Air Rotary Cuttings

Description: Brown Sandy Clay,
 Low to Medium Plasticity, Moderate Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	99.4
#40	96.5
#200	73.8

Liquid Limit	27
Plastic Limit	16
Plasticity Index	11

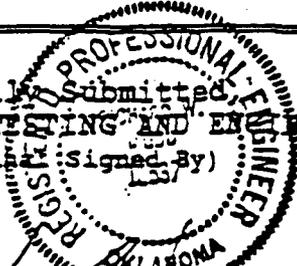
Calcium or Magnesium Carbonates 27 %

Classification

AASETO: A-6(6)
 USCS: CL

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted,
 STANDARD TESTING AND ENGINEERING CO.
 (Original Signed By)



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #5
 Boring No. / Depth: #3 / 15 ft. - 20 ft.; #9 / 35 ft. - 40 ft.
 Sample Type: Air Rotary Cuttings

Description: Light Pink Silty Sand,
 Non-Plastic

Sieve Analysis

Sieve	% Passing
#10	98.1
#40	93.6
#200	30.6

Atterberg Limits

Liquid Limit	28
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 8 %

Classification

AASHTO: A-2-4
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & 1cc to Same
 1cc to File No. LE05-9

Respectfully Submitted,
 STANDARD TESTING AND ENGINEERING CO.

(Original Signed by)
 RICHARD W. MUDD
 11/8/93



Richard W. Mudd, P.E.

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #6
 Boring No. / Depth: #8 / 5 ft. - 10 ft.; #10 / 10 ft. - 15 ft.
 Sample Type: Air Rotary Cuttings

Description: Pink Silty Sand,
 Non-Plastic, High Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	80.9
#40	69.7
#200	33.4

Liquid Limit	29
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 77 %

Classification

AASHTO: A-2-4
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted,
 STANDARD TESTING AND ENGINEERING CO.

(Original Signed By)

RICHARD W.

KUSD

11/8/93



Richard W. KUSD, P.E.

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #7
 Boring No. / Depth: #5 / 35 ft. - 40 ft.; #10 / 65 ft. - 70 ft.
 Sample Type: Air Rotary Cuttings

Description: Pink to Brown Silty Sand,
 Non-Plastic, Low Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	96.4
#40	89.9
#200	35.1

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 18 %

Classification

AASHTO: A-4(0)
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & 1cc to Same
 1cc to File No. LE05-9

Respectfully Submitted,
 STANDARD TESTING AND ENGINEERING CO.
 (Original Signed By)



Richard W. Luce, P.E.

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #8
 Boring No. / Depth: #4 / 60 ft. - 65 ft.; #10 / 60 ft. - 65 ft.
 Sample Type: Air Rotary Cuttings

Description: Dark Brown Silty Sand,
 Non-Plastic, Low Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	99.4
#40	92.3
#200	40.9

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 18 %

Classification

AASHTO: A-4(0)
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted
 STANDARD TESTING AND ENGINEERING CO.
 (Original Signed By)



REGISTERED PROFESSIONAL ENGINEER
 RICHARD W. KUDO
 2537
 RICHARD W. KUDO, P.E.
 OKLAHOMA

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #9
 Boring No. / Depth: #8 / 65 ft. - 70 ft.; #9 / 50 ft. - 55 ft.
 Sample Type: Air Rotary Cuttings

Description: Light Pink Silty Sand,
 Non-Plastic, Low Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	99.0
#40	95.4
#200	30.5

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 18 %

Classification

AASHTO: A-2-4
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted
 STANDARD TESTING AND ENGINEERING CO.
 (Original Signed By)



Richard W. Klammer, P.E.

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity
 Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #10
 Boring No. / Depth: #6 / 55 ft. - 60 ft.; #2 / 10 ft. - 15 ft.
 Sample Type: Air Rotary Cuttings

Description: Light Pink Silty Sand,
 Non-Plastic, Low Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	97.2
#40	90.9
#200	30.4

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 17 %

Classification

AASHTO: A-2-4
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted
 STANDARD TESTING AND ENGINEERING CO.
 (Original signed by)



REGISTERED PROFESSIONAL ENGINEER
 RICHARD W. KUDD
 12537
 Richard W. Kudd P.E.

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #11
 Boring No. / Depth: #1 / 5 ft. - 10 ft.; #9 / 30 ft. - 35 ft.
 Sample Type: Air Rotary Cuttings

Description: Light Pink Silty Sand,
 Non-Plastic, High Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	87.9
#40	71.6
#200	32.4

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 100 %

Classification

AASHTO: A-2-4
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted,
 STANDARD TESTING AND ENGINEERING CO.
 (Original & Copy by)



REGISTERED PROFESSIONAL ENGINEER
 EDWARD W. MUDD
 1400
 11/25/93
 Richard W. Mudd, P.E.
 OKLAHOMA

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #12
 Boring No. / Depth: #7 / 25 ft. - 30 ft.; #8 / 15 ft. - 20 ft.
 Sample Type: Air Rotary Cuttings

Description: Gray to Light Pink Silty Sand,
 Non-Plastic, High Carbonate

Sieve Analysis

Sieve	% Passing
#10	78.8
#40	59.0
#200	19.1

Atterberg Limits

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 77 %

Classification

AASHTO: A-2-4
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted
 STANDARD TESTING AND ENGINEERING CO.

(Original Signed By)



REGISTERED PROFESSIONAL ENGINEER
 RICHARD W. HUDD
 1533
 Richard W. Hudd, P.E.

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #13
 Boring No. / Depth: #1 / 45 ft. - 50 ft.; #7 / 50 ft. - 55 ft.
 Sample Type: Air Rotary Cuttings

Description: Gray to Light Pink Silty Sand,
 Non-Plastic, Low Carbonate

Sieve Analysis

Sieve	% Passing
#10	96.2
#40	82.2
#200	38.6

Atterberg Limits

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 24 %

Classification

AASHTO: A-4(0)
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted
 STANDARD TESTING AND ENGINEERING CO.
 (Original Signed By)



Richard W. Mudd, P.E.
 OKLAHOMA

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #14
 Boring No. / Depth: #2 / 25 ft. - 30 ft.; #6 / 40 ft. - 45 ft.; #10 / 15 ft. - 20 ft.
 Sample Type: Air Rotary Cuttings
 Description: Gray to Pink Silty Sand, Non-Plastic, Moderate Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	91.3
#40	83.3
#200	37.8

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 40 %

Classification

AASHTO: A-4(0)
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted
 STANDARD TESTING AND ENGINEERING CO.

(Original Signed By) RICHARD W. LUBBO



Richard W. Lubbo
 RICHARD W. LUBBO
 1537

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity
 Represented One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #15
 Boring No. / Depth: #4 / 40 ft. - 45 ft.; #6 / 110 ft. - 115 ft.
 Sample Type: Air Rotary Cuttings

Description: Brown Silty Sand,
 Non-Plastic, Low Carbonate

Sieve Analysis

Atterberg Limits

Sieve	% Passing
#10	97.2
#40	90.2
#200	38.0

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 18 %

Classification

AASHTO: A-4(0)
 USCS: SM

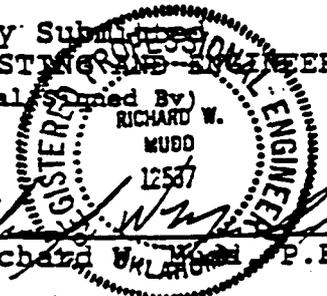
Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted
 STANDARD TESTING AND ENGINEERING CO.

(Original Signed By)

RICHARD W.
 MUDD
 12587

Richard W. Mudd P.E.



3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #16
 Boring No. / Depth: #7 / 70 ft. - 75 ft.; #9 / 65 ft. - 70 ft.
 Sample Type: Air Rotary Cuttings

Description: Pink Silty Sand,
Non-Plastic, Low Carbonate

Sieve Analysis

Sieve	% Passing
#10	96.0
#40	85.9
#200	28.6

Atterberg Limits

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 24 %

Classification

AASHTO: A-2-4
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted,
 STANDARD TESTING AND ENGINEERING CO.
 (Original Submitted)



Richard W. Mudd
 REGISTERED PROFESSIONAL ENGINEER
 RICHARD W. MUDD
 17337
 RICHARD W. MUDD, P.E.
 OKLAHOMA

3LE05

REPORT Soil Classification Date 11/8/93
 Project Lea Land, Inc. Specification ASTM D2487/2488
 Location Lea County, New Mexico Quantity One Sample
 Engineer _____ Sampled by Client
 Contractor _____ by Order of Bob Hall
 Reported To Bob Hall Date 11/8/93 Order No. _____

TEST RESULTS

Laboratory Number G-979

Sample No.: Composite #17
 Boring No. / Depth: #1 / 35 ft. - 45 ft.
 Sample Type: Air Rotary Cuttings

Description: Light Gray Silty Sand,
 Non-Plastic, High Carbonate

Sieve Analysis

Sieve	% Passing
#10	92.2
#40	67.8
#200	23.4

Atterberg Limits

Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Calcium or Magnesium Carbonates 100 %

Classification

AASHTO: A-2-4
 USCS: SM

Charge: Lea Land, Inc.
 Orig. & lcc to Same
 lcc to File No. LE05-9

Respectfully Submitted
 STANDARD TESTING AND ENGINEERING CO.
 (Original Signed By)



RICHARD W. MUDD
 12537
 Richard W. Mudd, P.E.

STANDARD TESTING AND ENGINEERING COMPANY

CORPORATE OFFICE and CENTRAL LABORATORY
3400 N. LINCOLN, OKLAHOMA CITY, OK 73105 (405) 528-0541

Area Offices

9200 KING ARTHUR DRIVE	DALLAS, TX 75356	(214) 631-4372
902 TRAILS WEST LOOP	ENID, OK 73703	(405) 237-3130
660 DISTRIBUTORS ROW, SUITE C	HARAHAN, LA 70123	(504) 734-8378
900 S.E. SECOND	LAWTON, OK 73501	(405) 353-0872

November 9, 1993

Lea Land, Inc.
22 NE 46th St.
Oklahoma City, OK 73105

Attention: Mr. Bob Hall

Re: Laboratory Test Results and Boring Logs
Section 32, Township 20 South, Range 32 East
Lea County, New Mexico

Gentlemen:

Enclosed herewith are the original and one copy of our report for the referenced project. Included are a tabulation of the visual-manual classification of the soil samples into groups of similar grain size, plasticity, and carbonate content; the soil classification test results for seventeen (17) composite samples representing these groups; and boring logs describing the stratigraphy represented by the samples.

Please review the test data and logs and notify us of any additional work or modifications which you find appropriate.

We appreciate the opportunity to assist on this project. Please call on us if we can be of further service.

Sincerely,

STANDARD TESTING AND ENGINEERING COMPANY


Richard W. Mudd, P.E.
Vice President



Project No. G-979
File No. LE05-9
Account No. 3LE05

Boring	Depth	Group	USCS	Description
1	0	5	SM	Silty Sand; Nonplastic
1	5	11	SM	Silty Sand; Nonplastic; High Carbonate
1	10	11	SM	Silty Sand; Nonplastic; High Carbonate
1	15	11	SM	Silty Sand; Nonplastic; High Carbonate
1	20	11	SM	Silty Sand; Nonplastic; High Carbonate
1	25	11	SM	Silty Sand; Nonplastic; High Carbonate
1	30	11	SM	Silty Sand; Nonplastic; High Carbonate
1	35	17	SM	Silty Sand; Nonplastic; High Carbonate
1	40	17	SM	Silty Sand; Nonplastic; High Carbonate
1	45	13	SM	Silty Sand; Nonplastic; Low Carb
1	50	13	SM	Silty Sand; Nonplastic; Low Carb
1	55	13	SM	Silty Sand; Nonplastic; Low Carb
1	60	5	SM	Silty Sand; Nonplastic
1	65	8	SM	Silty Sand; Nonplastic; Low Carbonate
1	70	8	SM	Silty Sand; Nonplastic; Low Carbonate
1	75	2	CL	V Sandy Clay; Low Plasticity
1	80	3	SC	Clayey Sand; Med Plasticity; Low Carb
1	85	3	SC	Clayey Sand; Med Plasticity; Low Carb
1	90	3	SC	Clayey Sand; Med Plasticity; Low Carb
1	95	5	SM	Silty Sand; Nonplastic
1	100	5	SM	Silty Sand; Nonplastic
1	105	9	SM	Silty Sand; Nonplastic; Low Carbonate
1	110	8	SM	Silty Sand; Nonplastic; Low Carbonate
1	115	8	SM	Silty Sand; Nonplastic; Low Carbonate
1	120	9	SM	Silty Sand; Nonplastic; Low Carbonate
2	0	13	SM	Silty Sand; Nonplastic; Low Carb
2	5	10	SM	Silty Sand; Nonplastic; Low Carbonate
2	10	10	SM	Silty Sand; Nonplastic; Low Carbonate
2	15	12	SM	Silty Sand; Nonplastic; High Carb
2	20	13	SM	Silty Sand; Nonplastic; Low Carb
2	25	13	SM	Silty Sand; Nonplastic; Low Carb
2	30	7	SM	Silty Sand; Nonplastic; Low Carb
2	35	5	SM	Silty Sand; Nonplastic
2	40	5	SM	Silty Sand; Nonplastic
2	45	7	SM	Silty Sand; Nonplastic; Low Carb
2	50	7	SM	Silty Sand; Nonplastic; Low Carb
2	55	7	SM	Silty Sand; Nonplastic; Low Carb
2	60	7	SM	Silty Sand; Nonplastic; Low Carb
2	65	2	CL	V Sandy Clay; Low Plasticity
2	70	7	SM	Silty Sand; Nonplastic; Low Carb
2	75	13	SM	Silty Sand; Nonplastic; Low Carb
2	80	13	SM	Silty Sand; Nonplastic; Low Carb
2	85	13	SM	Silty Sand; Nonplastic; Low Carb
2	90	7	SM	Silty Sand; Nonplastic; Low Carb
2	95	2	CL	V Sandy Clay; Low Plasticity
2	100	2	CL	V Sandy Clay; Low Plasticity
2	105	2	CL	V Sandy Clay; Low Plasticity
2	110	7	SM	Silty Sand; Nonplastic; Low Carb
2	115	5	SM	Silty Sand; Nonplastic

2	120	10	SM	Silty Sand; Nonplastic; Low Carbonate
2	125	10	SM	Silty Sand; Nonplastic; Low Carbonate
2	130	13	SM	Silty Sand; Nonplastic; Low Carb
2	135	7	SM	Silty Sand; Nonplastic; Low Carb
2	140	2	CL	V Sandy Clay; Low Plasticity
2	145	3	SC	Clayey Sand; Med Plasticity; Low Carb
2	150	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	0	2	CL	V Sandy Clay; Low Plasticity
3	5	5	SM	Silty Sand; Nonplastic
3	10	5	SM	Silty Sand; Nonplastic
3	15	5	SM	Silty Sand; Nonplastic
3	20	10	SM	Silty Sand; Nonplastic; Low Carbonate
3	25	10	SM	Silty Sand; Nonplastic; Low Carbonate
3	30	13	SM	Silty Sand; Nonplastic; Low Carb
3	35	7	SM	Silty Sand; Nonplastic; Low Carb
3	40	8	SM	Silty Sand; Nonplastic; Low Carbonate
3	45	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	50	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	55	2	CL	V Sandy Clay; Low Plasticity
3	60	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	65	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	70	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	75	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	80	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	85	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
3	90	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	95	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	100	8	SM	Silty Sand; Nonplastic; Low Carbonate
3	105	8	SM	Silty Sand; Nonplastic; Low Carbonate
3	110	8	SM	Silty Sand; Nonplastic; Low Carbonate
3	115	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	120	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	125	2	CL	V Sandy Clay; Low Plasticity
3	130	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	135	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	140	3	SC	Clayey Sand; Med Plasticity; Low Carb
3	145	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
4	0	7	SM	Silty Sand; Nonplastic; Low Carb
4	5	13	SM	Silty Sand; Nonplastic; Low Carb
4	10	11	SM	Silty Sand; Nonplastic; High Carbonate
4	15	10	SM	Silty Sand; Nonplastic; Low Carbonate
4	20	10	SM	Silty Sand; Nonplastic; Low Carbonate
4	25	11	SM	Silty Sand; Nonplastic; High Carbonate
4	30	11	SM	Silty Sand; Nonplastic; High Carbonate
4	35	14	SM	Silty Sand; Nonplastic; Mod Carb
4	40	15	SM	Silty Sand; Nonplastic; Low Carbonate
4	45	3	SC	Clayey Sand; Med Plasticity; Low Carb
4	50	15	SM	Silty Sand; Nonplastic; Low Carbonate
4	55	8	SM	Silty Sand; Nonplastic; Low Carbonate
4	60	8	SM	Silty Sand; Nonplastic; Low Carbonate

4	65	15	SM	Silty Sand; Nonplastic; Low Carbonate
4	70	15	SM	Silty Sand; Nonplastic; Low Carbonate
4	75	13	SM	Silty Sand; Nonplastic; Low Carb
4	80	7	SM	Silty Sand; Nonplastic; Low Carb
4	85	7	SM	Silty Sand; Nonplastic; Low Carb
4	90	7	SM	Silty Sand; Nonplastic; Low Carb
4	95	8	SM	Silty Sand; Nonplastic; Low Carbonate
4	100	3	SC	Clayey Sand; Med Plasticity; Low Carb
4	105	8	SM	Silty Sand; Nonplastic; Low Carbonate
4	110	9	SM	Silty Sand; Nonplastic; Low Carbonate
4	115	9	SM	Silty Sand; Nonplastic; Low Carbonate
4	120	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
4	125	15	SM	Silty Sand; Nonplastic; Low Carbonate
4	130	8	SM	Silty Sand; Nonplastic; Low Carbonate
4	135	7	SM	Silty Sand; Nonplastic; Low Carb
4	140	3	SC	Clayey Sand; Med Plasticity; Low Carb
4	145	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
5	0	5	SM	Silty Sand; Nonplastic
5	5	11	SM	Silty Sand; Nonplastic; High Carbonate
5	10	12	SM	Silty Sand; Nonplastic; High Carb
5	15	10	SM	Silty Sand; Nonplastic; Low Carbonate
5	20	10	SM	Silty Sand; Nonplastic; Low Carbonate
5	25	5	SM	Silty Sand; Nonplastic
5	30	5	SM	Silty Sand; Nonplastic
5	35	7	SM	Silty Sand; Nonplastic; Low Carb
5	40	14	SM	Silty Sand; Nonplastic; Mod Carb
5	45	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
5	50	7	SM	Silty Sand; Nonplastic; Low Carb
5	55	8	SM	Silty Sand; Nonplastic; Low Carbonate
5	60	8	SM	Silty Sand; Nonplastic; Low Carbonate
5	65	16	SM	Silty Sand; Nonplastic; Low Carbonate
5	70	16	SM	Silty Sand; Nonplastic; Low Carbonate
5	75	16	SM	Silty Sand; Nonplastic; Low Carbonate
5	80	16	SM	Silty Sand; Nonplastic; Low Carbonate
5	85	15	SM	Silty Sand; Nonplastic; Low Carbonate
5	90	15	SM	Silty Sand; Nonplastic; Low Carbonate
5	95	16	SM	Silty Sand; Nonplastic; Low Carbonate
5	100	8	SM	Silty Sand; Nonplastic; Low Carbonate
5	105	15	SM	Silty Sand; Nonplastic; Low Carbonate
5	110	15	SM	Silty Sand; Nonplastic; Low Carbonate
5	115	8	SM	Silty Sand; Nonplastic; Low Carbonate
5	120	7	SM	Silty Sand; Nonplastic; Low Carb
5	125	9	SM	Silty Sand; Nonplastic; Low Carbonate
5	130	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
5	135	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
5	140	9	SM	Silty Sand; Nonplastic; Low Carbonate
5	145	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
5	150	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
5	155	9	SM	Silty Sand; Nonplastic; Low Carbonate
5	160	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
5	165	4	CL	Sandy Clay; Low to Med Plast; Mod Carb

5	170	4	CL	Sandy Clay: Low to Med Plast; Mod Carb
5	175	4	CL	Sandy Clay: Low to Med Plast; Mod Carb
5	180	4	CL	Sandy Clay: Low to Med Plast; Mod Carb
5	185	4	CL	Sandy Clay: Low to Med Plast; Mod Carb
5	190	4	CL	Sandy Clay: Low to Med Plast; Mod Carb
5	195	4	CL	Sandy Clay: Low to Med Plast; Mod Carb
6	0	10	SM	Silty Sand: Nonplastic; Low Carbonate
6	5	11	SM	Silty Sand: Nonplastic; High Carbonate
6	10	11	SM	Silty Sand: Nonplastic; High Carbonate
6	15	12	SM	Silty Sand: Nonplastic; High Carb
6	20	12	SM	Silty Sand: Nonplastic; High Carb
6	25	11	SM	Silty Sand: Nonplastic; High Carbonate
6	30	4	CL	Sandy Clay: Low to Med Plast; Mod Carb
6	35	4	CL	Sandy Clay: Low to Med Plast; Mod Carb
6	40	14	SM	Silty Sand: Nonplastic; Mod Carb
6	45	16	SM	Silty Sand: Nonplastic; Low Carbonate
6	50	13	SM	Silty Sand: Nonplastic; Low Carb
6	55	10	SM	Silty Sand: Nonplastic; Low Carbonate
6	60	13	SM	Silty Sand: Nonplastic; Low Carb
6	65	13	SM	Silty Sand: Nonplastic; Low Carb
6	70	13	SM	Silty Sand: Nonplastic; Low Carb
6	75	13	SM	Silty Sand: Nonplastic; Low Carb
6	80	7	SM	Silty Sand: Nonplastic; Low Carb
6	85	8	SM	Silty Sand: Nonplastic; Low Carbonate
6	90	9	SM	Silty Sand: Nonplastic; Low Carbonate
6	95	7	SM	Silty Sand: Nonplastic; Low Carb
6	100	8	SM	Silty Sand: Nonplastic; Low Carbonate
6	105	8	SM	Silty Sand: Nonplastic; Low Carbonate
6	110	15	SM	Silty Sand: Nonplastic; Low Carbonate
6	115	8	SM	Silty Sand: Nonplastic; Low Carbonate
6	120	8	SM	Silty Sand: Nonplastic; Low Carbonate
6	125	9	SM	Silty Sand: Nonplastic; Low Carbonate
6	130	9	SM	Silty Sand: Nonplastic; Low Carbonate
6	135	9	SM	Silty Sand: Nonplastic; Low Carbonate
6	140	9	SM	Silty Sand: Nonplastic; Low Carbonate
6	145	16	SM	Silty Sand: Nonplastic; Low Carbonate
6	150	16	SM	Silty Sand: Nonplastic; Low Carbonate
7	0	5	SM	Silty Sand: Nonplastic
7	5	10	SM	Silty Sand: Nonplastic; Low Carbonate
7	10	10	SM	Silty Sand: Nonplastic; Low Carbonate
7	15	10	SM	Silty Sand: Nonplastic; Low Carbonate
7	20	12	SM	Silty Sand: Nonplastic; High Carb
7	25	12	SM	Silty Sand: Nonplastic; High Carb
7	30	10	SM	Silty Sand: Nonplastic; Low Carbonate
7	35	1	ML	Sandy Silt; Nonplastic
7	40	5	SM	Silty Sand: Nonplastic
7	45	9	SM	Silty Sand: Nonplastic; Low Carbonate
7	50	13	SM	Silty Sand: Nonplastic; Low Carb
7	55	16	SM	Silty Sand: Nonplastic; Low Carbonate
7	60	16	SM	Silty Sand: Nonplastic; Low Carbonate

7	65	16	SM	Silty Sand; Nonplastic; Low Carbonate
7	70	16	SM	Silty Sand; Nonplastic; Low Carbonate
7	75	9	SM	Silty Sand; Nonplastic; Low Carbonate
7	80	9	SM	Silty Sand; Nonplastic; Low Carbonate
7	85	15	SM	Silty Sand; Nonplastic; Low Carbonate
7	90	9	SM	Silty Sand; Nonplastic; Low Carbonate
7	95	9	SM	Silty Sand; Nonplastic; Low Carbonate
7	100	16	SM	Silty Sand; Nonplastic; Low Carbonate
7	105	16	SM	Silty Sand; Nonplastic; Low Carbonate
7	110	9	SM	Silty Sand; Nonplastic; Low Carbonate
7	115	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
7	120	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
7	125	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
7	130	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
7	135	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
7	140	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
7	145	16	SM	Silty Sand; Nonplastic; Low Carbonate
7	150	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
8	0	2	CL	V Sandy Clay; Low Plasticity
8	5	6	SM	Silty Sand; Nonplastic; High Carbonate
8	10	5	SM	Silty Sand; Nonplastic
8	15	12	SM	Silty Sand; Nonplastic; High Carb
8	20	12	SM	Silty Sand; Nonplastic; High Carb
8	25	11	SM	Silty Sand; Nonplastic; High Carbonate
8	30	10	SM	Silty Sand; Nonplastic; Low Carbonate
8	35	13	SM	Silty Sand; Nonplastic; Low Carb
8	40	13	SM	Silty Sand; Nonplastic; Low Carb
8	45	15	SM	Silty Sand; Nonplastic; Low Carbonate
8	50	13	SM	Silty Sand; Nonplastic; Low Carb
8	55	7	SM	Silty Sand; Nonplastic; Low Carb
8	60	7	SM	Silty Sand; Nonplastic; Low Carb
8	65	9	SM	Silty Sand; Nonplastic; Low Carbonate
8	70	9	SM	Silty Sand; Nonplastic; Low Carbonate
8	75	9	SM	Silty Sand; Nonplastic; Low Carbonate
8	80	7	SM	Silty Sand; Nonplastic; Low Carb
8	85	7	SM	Silty Sand; Nonplastic; Low Carb
8	90	9	SM	Silty Sand; Nonplastic; Low Carbonate
8	95	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
8	100	1	ML	Sandy Silt; Nonplastic
8	105	1	ML	Sandy Silt; Nonplastic
8	110	9	SM	Silty Sand; Nonplastic; Low Carbonate
8	115	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
8	120	1	ML	Sandy Silt; Nonplastic
8	125	1	ML	Sandy Silt; Nonplastic
8	130	1	ML	Sandy Silt; Nonplastic
8	135	1	ML	Sandy Silt; Nonplastic
8	140	1	ML	Sandy Silt; Nonplastic
8	145	1	ML	Sandy Silt; Nonplastic
8	150	1	ML	Sandy Silt; Nonplastic
8	155	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
8	160	4	CL	Sandy Clay; Low to Med Plast; Mod Carb

8	165	9	SM	Silty Sand; Nonplastic; Low Carbonate
9	0	1	ML	Sandy Silt; Nonplastic
9	5	11	SM	Silty Sand; Nonplastic; High Carbonate
9	10	11	SM	Silty Sand; Nonplastic; High Carbonate
9	15	14	SM	Silty Sand; Nonplastic; Mod Carb
9	20	10	SM	Silty Sand; Nonplastic; Low Carbonate
9	25	11	SM	Silty Sand; Nonplastic; High Carbonate
9	30	11	SM	Silty Sand; Nonplastic; High Carbonate
9	35	5	SM	Silty Sand; Nonplastic
9	40	9	SM	Silty Sand; Nonplastic; Low Carbonate
9	45	9	SM	Silty Sand; Nonplastic; Low Carbonate
9	50	9	SM	Silty Sand; Nonplastic; Low Carbonate
9	55	9	SM	Silty Sand; Nonplastic; Low Carbonate
9	60	14	SM	Silty Sand; Nonplastic; Mod Carb
9	65	16	SM	Silty Sand; Nonplastic; Low Carbonate
9	70	7	SM	Silty Sand; Nonplastic; Low Carb
9	75	3	SC	Clayey Sand; Med Plasticity; Low Carb
9	80	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
9	85	2	CL	V Sandy Clay; Low Plasticity
9	90	7	SM	Silty Sand; Nonplastic; Low Carb
9	95	7	SM	Silty Sand; Nonplastic; Low Carb
9	100	5	SM	Silty Sand; Nonplastic
9	105	7	SM	Silty Sand; Nonplastic; Low Carb
9	110	7	SM	Silty Sand; Nonplastic; Low Carb
9	115	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
9	120	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
9	125	3	SC	Clayey Sand; Med Plasticity; Low Carb
9	130	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
9	135	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
9	140	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
9	145	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
9	150	9	SM	Silty Sand; Nonplastic; Low Carbonate
9	155	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	0	11	SM	Silty Sand; Nonplastic; High Carbonate
10	5	11	SM	Silty Sand; Nonplastic; High Carbonate
10	10	6	SM	Silty Sand; Nonplastic; High Carbonate
10	15	14	SM	Silty Sand; Nonplastic; Mod Carb
10	20	14	SM	Silty Sand; Nonplastic; Mod Carb
10	25	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	30	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	35	9	SM	Silty Sand; Nonplastic; Low Carbonate
10	40	9	SM	Silty Sand; Nonplastic; Low Carbonate
10	45	9	SM	Silty Sand; Nonplastic; Low Carbonate
10	50	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	55	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	60	8	SM	Silty Sand; Nonplastic; Low Carbonate
10	65	7	SM	Silty Sand; Nonplastic; Low Carb
10	70	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	75	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	80	4	CL	Sandy Clay; Low to Med Plast; Mod Carb

10	85	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	90	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	95	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	100	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	105	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	110	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	115	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	120	9	SM	Silty Sand; Nonplastic; Low Carbonate
10	125	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	130	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	135	9	SM	Silty Sand; Nonplastic; Low Carbonate
10	140	9	SM	Silty Sand; Nonplastic; Low Carbonate
10	145	9	SM	Silty Sand; Nonplastic; Low Carbonate
10	150	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	155	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	160	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	165	9	SM	Silty Sand; Nonplastic; Low Carbonate
10	170	4	CL	Sandy Clay; Low to Med Plast; Mod Carb
10	175	4	CL	Sandy Clay; Low to Med Plast; Mod Carb

SOIL BORING LOG AND TEST RESULTS

BORING B-1

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3515.5 ft.

Boring No.: B-1

Drill method: Air Rotary

Water Depth: 125 ft.

Reported To: Bob Hall; Lea Land, Inc.

Remarks: 4220.0 ft. from S. Line; 160.5 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">3520</div> <div style="margin-bottom: 10px;">0</div> <div style="margin-bottom: 10px;">3510</div> <div style="margin-bottom: 10px;">10</div> <div style="margin-bottom: 10px;">3500</div> <div style="margin-bottom: 10px;">20</div> <div style="margin-bottom: 10px;">3490</div> <div style="margin-bottom: 10px;">30</div> <div style="margin-bottom: 10px;">3480</div> <div style="margin-bottom: 10px;">40</div> <div style="margin-bottom: 10px;">3470</div> <div style="margin-bottom: 10px;">50</div> <div style="margin-bottom: 10px;">3460</div> </div>	<div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div>	<div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div>	<div style="margin-bottom: 10px;">Gray Silty Sand Nonplastic</div> <div style="margin-bottom: 10px;">Light Pink Silty Sand Nonplastic High Carbonate</div> <div style="margin-bottom: 10px;">Lt. Gray Silty Sand Nonplastic High Carbonate</div> <div style="margin-bottom: 10px;">Pink Silty Sand Nonplastic Low Carbonate</div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">NP</div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">71.6</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">82.2</div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">32.4</div> <div style="margin-bottom: 10px;">23.4</div> <div style="margin-bottom: 10px;">38.6</div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">100</div> <div style="margin-bottom: 10px;">100</div> <div style="margin-bottom: 10px;">24</div>

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by client.

PLATE B- 1

SOIL BORING LOG AND TEST RESULTS

BORING B-1

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3515.5 ft.

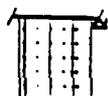
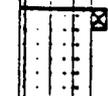
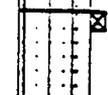
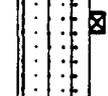
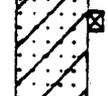
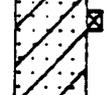
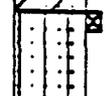
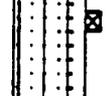
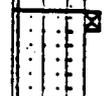
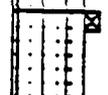
Boring No.: B-1

Drill method: Air Rotary

Water Depth: 125 ft.

Reported To: Bob Hall; Lea Land, Inc.

Remarks: 4220.0 ft. from S. Line; 160.5 ft. from E. Line

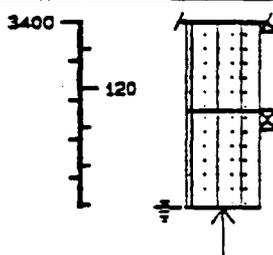
ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO ₃ %
3460								
60		SM	Dark Pink Silty Sand Nonplastic					
3450		SM	Brown Silty Sand Nonplastic Low Carbonate					
70								
3440		CL	Dark Brown V. Sandy Clay Low Plasticity	25	8	85.4	54.4	4
80		SC	Dark Brown Clayey Sand Medium Plasticity Low Carbonate					
3430								
90				31	14	78.9	49.2	19
3420		SM	Dark Pink Silty Sand Nonplastic					
100								
3410		SM	Dark Brown Silty Sand Nonplastic Low Carbonate					
110		SM	Dark Brown Silty Sand Nonplastic Low Carbonate					
3400								

Boring
Continues

SOIL BORING LOG AND TEST RESULTS

BORING B-1

Project: Lea Land, Inc.	Date: 11/8/93
Location: Lea County, New Mexico	Project No.: G-979
Surface Elevation: 3515.5 ft.	Boring No.: B-1
Drill method: Air Rotary	Water Depth: 125 ft.
Reported To: Bob Hall; Lea Land, Inc.	
Remarks: 4220.0 ft. from S. Line; 160.5 ft. from E. Line	

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO3 %
		SM	DK Brown Silty Sand Nonplastic Low Carbonate					

SOIL BORING LOG AND TEST RESULTS

BORING B-2

Project: Lea Land, Inc.
 Location: Lea County, New Mexico
 Surface Elevation: 3516.6 ft.
 Drill method: Air Rotary
 Reported To: Bob Hall: Lea Land, Inc.
 Remarks: 3699.9 ft. from S. Line: 1230.3 ft. from E. Line

Date: 11/8/93
 Project No.: G-979
 Boring No.: B-2
 Water Depth: None

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL	PI	#40	#200	CaCO ₃
				%	%	%	%	%
3520								
0		SM	Lt. Tan Silty Sand Nonplastic Low Carbonate					
3510		SM	Lt. Pink Silty Sand Nonplastic Low Carbonate					
10				NP	NP	90.9	30.4	17
3500		SM	Lt. Pink Silty Sand Nonplastic High Carbonate					
20		SM	Pink Silty Sand Nonplastic Low Carbonate					
3490				NP	NP	82.2	38.6	24
30		SM	Ok Pink Silty Sand Nonplastic Low Carbonate					
3480		SM	Pink Silty Sand Nonplastic					
40								
3470		SM	Ok Pink Silty Sand Nonplastic Low Carbonate					
50								
3460								

Boring
Continues

SOIL BORING LOG AND TEST RESULTS

BORING B-2

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3516.6 ft.

Boring No.: B-2

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall; Lea Land, Inc.

Remarks: 3699.9 ft. from S. Line; 1230.3 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
3460								
60								
3450		CL	Pink V Sandy Clay Low Plasticity	25	8	85.4	54.4	4
70		SM	Pink Silty Sand Nonplastic Low Carbonate					
3440		SM	Lt Pink Silty Sand Nonplastic Low Carbonate					
80								
3430								
90		SM	Dk Pink Silty Sand Nonplastic Low Carbonate					
3420		CL	Dk Pink V Sandy Clay Low Plasticity					
100								
3410								
110		SM	Dk Pink Silty Sand Nonplastic Low Carbonate					
3400		SM	Dk Pink Silty Sand Nonplastic					

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by client.

PLATE B- 5

SOIL BORING LOG AND TEST RESULTS

BORING B-2

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3516.6 ft.

Boring No.: B-2

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 3699.9 ft. from S. Line; 1230.3 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO ₃ %
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>3400</p> <p>120</p> <p>3390</p> <p>130</p> <p>3380</p> <p>140</p> <p>3370</p> <p>150</p> </div> </div>	<p>SM</p> <p>SM</p> <p>SM</p> <p>CL</p> <p>SC</p>	<p>Pink Silty Sand Nonplastic Low Carbonate</p> <p>Pink Silty Sand Nonplastic Low Carbonate</p> <p>Lt Pink Silty Sand Nonplastic Low Carbonate</p> <p>Dk Brown V Sandy Clay Low Plasticity</p> <p>Dark Brown Clayey Sand Medium Plasticity Low Carbonate</p>						

SOIL BORING LOG AND TEST RESULTS

BORING B-3

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3519.2 ft.

Boring No.: B-3

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall; Lea Land, Inc.

Remarks: 3169.7 ft. from S. Line; 2300.2 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">3520</div> <div style="margin-bottom: 10px;">0</div> <div style="margin-bottom: 10px;">3510</div> <div style="margin-bottom: 10px;">10</div> <div style="margin-bottom: 10px;">3500</div> <div style="margin-bottom: 10px;">20</div> <div style="margin-bottom: 10px;">3490</div> <div style="margin-bottom: 10px;">30</div> <div style="margin-bottom: 10px;">3480</div> <div style="margin-bottom: 10px;">40</div> <div style="margin-bottom: 10px;">3470</div> <div style="margin-bottom: 10px;">50</div> <div style="margin-bottom: 10px;">3460</div> </div>		<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">CL</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SC</div> <div style="margin-bottom: 10px;">CL</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">Lt Tan V Sandy Clay Low Plasticity</div> <div style="margin-bottom: 10px;">Lt Pink Silty Sand Nonplastic</div> <div style="margin-bottom: 10px;">Gray Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Lt Pink Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Dk Brown Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Dk Brown Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Dark Brown Clayey Sand Medium Plasticity Low Carbonate</div> <div style="margin-bottom: 10px;">Brown V Sandy Clay Low Plasticity</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">28</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">93.6</div> <div style="margin-bottom: 10px;">30.6</div> <div style="margin-bottom: 10px;">8</div> </div>				

Boring
Continues

SOIL BORING LOG AND TEST RESULTS

BORING B-3

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3519.2 ft.

Boring No.: B-3

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 3169.7 ft. from S. Line: 2300.2 ft. from E. Line

ELEV/DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO ₃ %
Feet								
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">3460</div> <div style="margin-bottom: 10px;">60</div> <div style="margin-bottom: 10px;">3450</div> <div style="margin-bottom: 10px;">70</div> <div style="margin-bottom: 10px;">3440</div> <div style="margin-bottom: 10px;">80</div> <div style="margin-bottom: 10px;">3430</div> <div style="margin-bottom: 10px;">90</div> <div style="margin-bottom: 10px;">3420</div> <div style="margin-bottom: 10px;">100</div> <div style="margin-bottom: 10px;">3410</div> <div style="margin-bottom: 10px;">110</div> <div style="margin-bottom: 10px;">3400</div> </div>		<div style="margin-bottom: 10px;">SC</div> <div style="margin-bottom: 10px;">CL</div> <div style="margin-bottom: 10px;">SC</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SC</div>	<div style="margin-bottom: 10px;">Brown Clayey Sand Medium Plasticity Low Carbonate</div> <div style="margin-bottom: 10px;">Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</div> <div style="margin-bottom: 10px;">Brown Clayey Sand Medium Plasticity Low Carbonate</div> <div style="margin-bottom: 10px;">Lt Brown Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Brown Clayey Sand Medium Plasticity Low Carbonate</div>					
	Boring Continues							

SOIL BORING LOG AND TEST RESULTS

BORING B-3

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3519.2 ft.

Boring No.: B-3

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 3169.7 ft. from S. Line; 2300.2 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">3400</div> <div style="margin-bottom: 10px;">120</div> <div style="margin-bottom: 10px;">3390</div> <div style="margin-bottom: 10px;">130</div> <div style="margin-bottom: 10px;">3380</div> <div style="margin-bottom: 10px;">140</div> <div style="margin-bottom: 10px;">3370</div> <div style="margin-bottom: 10px;">150</div> </div>	<div style="margin-bottom: 10px;">CL</div> <div style="margin-bottom: 10px;">SC</div> <div style="margin-bottom: 10px;">CL</div>	<div style="margin-bottom: 10px;">V Dk Brown Sandy Clay Low Plasticity</div> <div style="margin-bottom: 10px;">Lt Brown Clayey Sand Medium Plasticity Low Carbonate</div> <div style="margin-bottom: 10px;">Gray Sandy Clay Low to Medium Plasticity Moderate Carbonate</div>						

SOIL BORING LOG AND TEST RESULTS

BORING B-4

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3517.3 ft.

Boring No.: B-4

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 2970.0 ft. from S. Line; 175.1 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
3520 0	☒	SM	DK Tan Silty Sand Nonplastic Low Carbonate					
3510 10	☒	SM	Lt Gray Silty Sand Nonplastic Low Carbonate					
3500 20	☒	SM	Gray Silty Sand Nonplastic High Carbonate					
3490 30	☒	SM	Lt Pink Silty Sand Nonplastic Low Carbonate					
3480 40	☒	SM	Pink Silty Sand Nonplastic Low Carbonate					
3470 50	☒	SM	Lt Pink Silty Sand Nonplastic Moderate Carbonate					
3460	☒	SM	Brown Silty Sand Nonplastic Low Carbonate	NP	NP	90.2	38	18
	☒	SC	Brown Clayey Sand Medium Plasticity Low Carbonate					
	☒	SM	Brown Silty Sand Nonplastic Low Carbonate					
	☒	SM	DK Brown Silty Sand Nonplastic Low Carbonate					

Boring
Continues

SOIL BORING LOG AND TEST RESULTS

BORING B-4

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3517.3 ft.

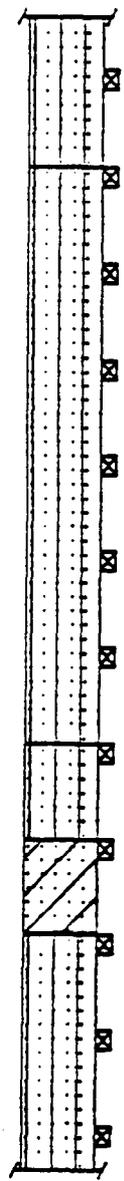
Boring No.: B-4

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall; Lea Land, Inc.

Remarks: 2970.0 ft. from S. Line; 175.1 ft. from E. Line

ELEV/DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">3460</div> <div style="margin-bottom: 10px;">60</div> <div style="margin-bottom: 10px;">3450</div> <div style="margin-bottom: 10px;">70</div> <div style="margin-bottom: 10px;">3440</div> <div style="margin-bottom: 10px;">80</div> <div style="margin-bottom: 10px;">3430</div> <div style="margin-bottom: 10px;">90</div> <div style="margin-bottom: 10px;">3420</div> <div style="margin-bottom: 10px;">100</div> <div style="margin-bottom: 10px;">3410</div> <div style="margin-bottom: 10px;">110</div> <div style="margin-bottom: 10px;">3400</div> </div>  <p style="font-size: small; margin-top: 5px;">Boring Continues</p>	<div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SC</div> <div style="margin-bottom: 10px;">SM</div>	<div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div>	<div style="margin-bottom: 10px;">Brown Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Dk Brown Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Dk Brown Clayey Sand Medium Plasticity Low Carbonate</div> <div style="margin-bottom: 10px;">Brown Silty Sand Nonplastic Low Carbonate</div>	<div style="margin-bottom: 10px;">92.3</div> <div style="margin-bottom: 10px;">40.9</div>	<div style="margin-bottom: 10px;">16</div>			

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by client.

PLATE B- 11

SOIL BORING LOG AND TEST RESULTS

BORING B-4

Project: Lea Land, Inc. Date: 11/8/93
 Location: Lea County, New Mexico Project No.: G-979
 Surface Elevation: 3517.3 ft. Boring No.: B-4
 Drill method: Air Rotary Water Depth: None
 Reported To: Bob Hall: Lea Land, Inc.
 Remarks: 2970.0 ft. from S. Line; 175.1 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO3 %
3400 120 3390 130 3380 140 3370		CL SM SC CL	Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate Lt Brown Silty Sand Nonplastic Low Carbonate Dk Brown Clayey Sand Medium Plasticity Low Carbonate Reddish Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate	31	14	78.9	49.2	19

SOIL BORING LOG AND TEST RESULTS

BORING B-5

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3519.5 ft.

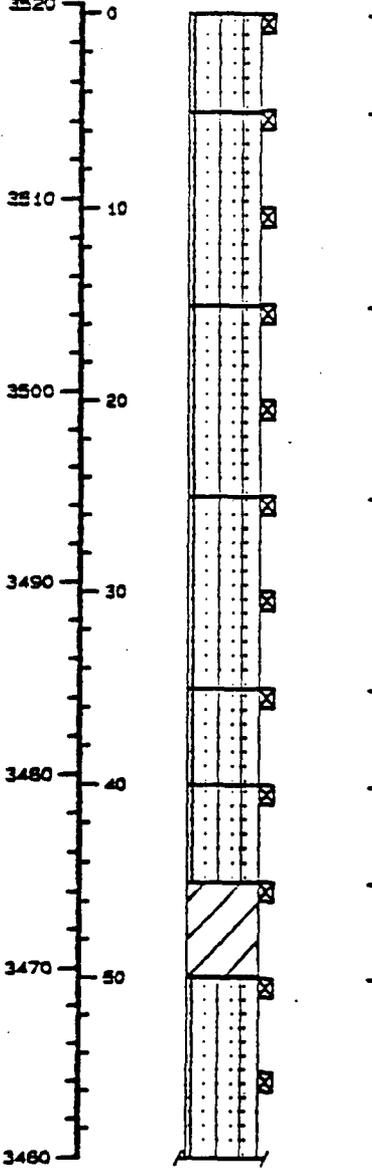
Boring No.: B-5

Drill method: Air Rotary

Water Depth: 199 ft.

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 2789.9 ft. from S. Line; 1220.0 ft. from E. Line

ELEV/DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 5px;">3520</div> <div style="margin-bottom: 5px;">0</div> <div style="margin-bottom: 5px;">3510</div> <div style="margin-bottom: 5px;">10</div> <div style="margin-bottom: 5px;">3500</div> <div style="margin-bottom: 5px;">20</div> <div style="margin-bottom: 5px;">3490</div> <div style="margin-bottom: 5px;">30</div> <div style="margin-bottom: 5px;">3480</div> <div style="margin-bottom: 5px;">40</div> <div style="margin-bottom: 5px;">3470</div> <div style="margin-bottom: 5px;">50</div> <div style="margin-bottom: 5px;">3460</div> </div>  <p style="margin-top: 10px;">Boring Continues</p>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 5px;">SM</div> <div style="margin-bottom: 5px;">CL</div> <div style="margin-bottom: 5px;">SM</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 5px;">DK Tan Silty Sand Nonplastic</div> <div style="margin-bottom: 5px;">V Lt Pink Silty Sand Nonplastic High Carbonate</div> <div style="margin-bottom: 5px;">Pink Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 5px;">Lt Pink Silty Sand Nonplastic</div> <div style="margin-bottom: 5px;">Pink Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 5px;">Brown Silty Sand Nonplastic Moderate Carbonate</div> <div style="margin-bottom: 5px;">Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</div> <div style="margin-bottom: 5px;">Lt Brown Silty Sand Nonplastic Low Carbonate</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 5px;">NP</div> <div style="margin-bottom: 5px;">NP</div> <div style="margin-bottom: 5px;">89.9</div> <div style="margin-bottom: 5px;">35.1</div> <div style="margin-bottom: 5px;">18</div> </div>					

SOIL BORING LOG AND TEST RESULTS

BORING B-5

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3519.5 ft.

Boring No.: B-5

Drill method: Air Rotary

Water Depth: 199 ft.

Reported To: Bob Hall; Lea Land, Inc.

Remarks: 2789.9 ft. from S. Line: 1220.0 ft. from E. Line

ELEV/DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">3460</div> <div style="margin: 0 5px;">60</div> </div> <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; width: 100%; height: 100%; position: relative;"> <div style="position: absolute; left: -10px; top: 0; bottom: 0; writing-mode: vertical-rl; transform: rotate(180deg);">3450</div> <div style="position: absolute; left: -10px; top: 100px; bottom: 0; writing-mode: vertical-rl; transform: rotate(180deg);">3440</div> <div style="position: absolute; left: -10px; top: 200px; bottom: 0; writing-mode: vertical-rl; transform: rotate(180deg);">3430</div> <div style="position: absolute; left: -10px; top: 300px; bottom: 0; writing-mode: vertical-rl; transform: rotate(180deg);">3420</div> <div style="position: absolute; left: -10px; top: 400px; bottom: 0; writing-mode: vertical-rl; transform: rotate(180deg);">3410</div> <div style="position: absolute; left: -10px; top: 500px; bottom: 0; writing-mode: vertical-rl; transform: rotate(180deg);">3400</div> </div> <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">60</div> <div style="margin: 0 5px;">70</div> <div style="margin: 0 5px;">80</div> <div style="margin: 0 5px;">90</div> <div style="margin: 0 5px;">100</div> <div style="margin: 0 5px;">110</div> </div> <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Boring Continues</div> </div> </div>								

SOIL BORING LOG AND TEST RESULTS

BORING B-5

Project: Lea Land, Inc.
 Location: Lea County, New Mexico
 Surface Elevation: 3519.5 ft.
 Drill method: Air Rotary
 Reported To: Bob Hall: Lea Land, Inc.
 Remarks: 2789.9 ft. from S. Line; 1220.0 ft. from E. Line

Date: 11/8/93
 Project No.: G-979
 Boring No.: B-5
 Water Depth: 199 ft.

ELEV./DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
3400 3390 3380 3370 3360 3350		CL SM CL SM CL	Reddish Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate Brown Silty Sand Nonplastic Low Carbonate Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate Lt Brown silty Sand Nonplastic Low Carbonate Dk Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate					

SOIL BORING LOG AND TEST RE

BORING B-5

Project: Lea Land, Inc.	Date: 11
Location: Lea County, New Mexico	Project
Surface Elevation: 3519.5 ft.	Boring N
Drill method: Air Rotary	Water De
Reported To: Bob Hall: Lea Land, Inc.	
Remarks: 2789.9 ft. from S. Line: 1220.0 ft. from E. L	

ELEV/DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>3340 — 180</p> <p>3330 — 190</p> <p>3320 — 200</p> </div> </div>					

SOIL BORING LOG AND TEST RESULTS

BORING B-6

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3520.9 ft.

Boring No.: B-6

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 1750.0 ft. from S. Line; 150.0 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">3530</div> <div style="margin-bottom: 10px;">3520</div> <div style="margin-bottom: 10px;">3510</div> <div style="margin-bottom: 10px;">3500</div> <div style="margin-bottom: 10px;">3490</div> <div style="margin-bottom: 10px;">3480</div> <div style="margin-bottom: 10px;">3470</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">CL</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">CL</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">Dk Tan Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Lt Gray Silty Sand Nonplastic High Carbonate</div> <div style="margin-bottom: 10px;">Lt Pink Silty Sand Nonplastic High Carbonate</div> <div style="margin-bottom: 10px;">Pink Silty Sand Nonplastic High Carbonate</div> <div style="margin-bottom: 10px;">Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</div> <div style="margin-bottom: 10px;">Lt Pink Silty Sand Nonplastic Moderate Carbonate</div> <div style="margin-bottom: 10px;">Lt Pink Silty Sand Nonplastic Low Carbonate</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">27</div> <div style="margin-bottom: 10px;">11</div> <div style="margin-bottom: 10px;">96.5</div> <div style="margin-bottom: 10px;">73.8</div> <div style="margin-bottom: 10px;">27</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">83.3</div> <div style="margin-bottom: 10px;">37.8</div> <div style="margin-bottom: 10px;">40</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">27</div> <div style="margin-bottom: 10px;">40</div> </div>			

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by client.

PLATE B- 17

SOIL BORING LOG AND TEST RESULTS

BORING B-6

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3520.9 ft.

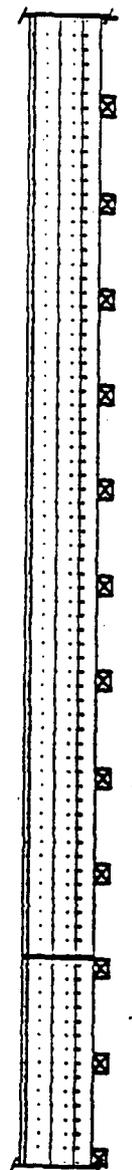
Boring No.: B-6

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall; Lea Land, Inc.

Remarks: 1750.0 ft. from S. Line: 150.0 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO3 %
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>3470</p> <p>3460 60</p> <p>3450 70</p> <p>3440 80</p> <p>3430 90</p> <p>3420 100</p> <p>3410 110</p> </div>  <div style="flex: 1; text-align: center;"> <p>Boring Continues</p> </div> </div>				NP	NP	90.0	30.4	17
		SM	Brown silty sand Nonplastic Low Carbonate					
				NP	NP	90.2	38.0	18

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by Client.

SOIL BORING LOG AND TEST RESULTS

BORING B-6

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3520.9 ft.

Boring No.: B-6

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 1750.0 ft. from S. Line: 150.0 ft. from E. Line

ELEV/DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">3410</div> <div style="margin-bottom: 10px;">120</div> <div style="margin-bottom: 10px;">3400</div> <div style="margin-bottom: 10px;">130</div> <div style="margin-bottom: 10px;">3390</div> <div style="margin-bottom: 10px;">140</div> <div style="margin-bottom: 10px;">3380</div> <div style="margin-bottom: 10px;">150</div> <div style="margin-bottom: 10px;">3370</div> </div>								

SOIL BORING LOG AND TEST RESULTS

BORING B-7

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3524.4 ft.

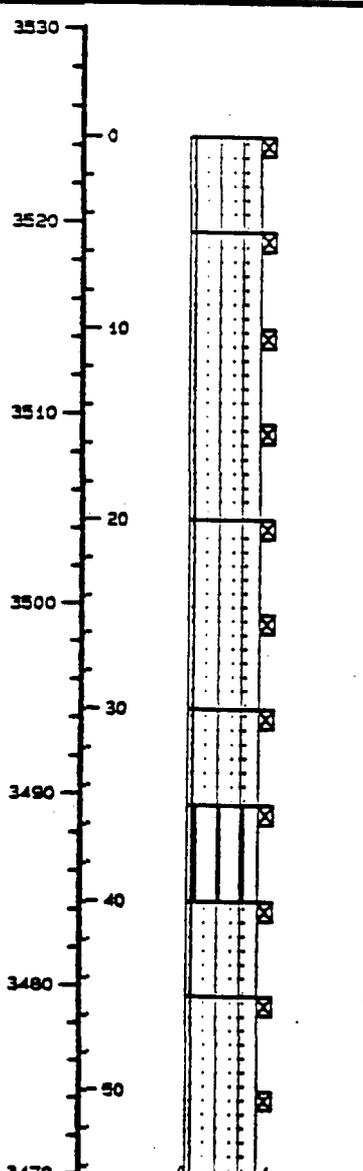
Boring No.: B-7

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 1699.9 ft. from S. Line; 1230.0 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 5px;">3530</div> <div style="margin-bottom: 5px;">0</div> <div style="margin-bottom: 5px;">3520</div> <div style="margin-bottom: 5px;">10</div> <div style="margin-bottom: 5px;">3510</div> <div style="margin-bottom: 5px;">20</div> <div style="margin-bottom: 5px;">3500</div> <div style="margin-bottom: 5px;">30</div> <div style="margin-bottom: 5px;">3490</div> <div style="margin-bottom: 5px;">40</div> <div style="margin-bottom: 5px;">3480</div> <div style="margin-bottom: 5px;">50</div> <div style="margin-bottom: 5px;">3470</div> </div>  <p style="margin-top: 10px;">Boring Continues</p>	<div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">ML</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div>	<div style="margin-bottom: 10px;">DK Tan Silty Sand Nonplastic</div> <div style="margin-bottom: 10px;">Lt Pink Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">White to Pink Silty Sand Nonplastic High Carbonate</div> <div style="margin-bottom: 10px;">Pink Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Brown Sandy Silt Nonplastic</div> <div style="margin-bottom: 10px;">Pink Silty Sand Nonplastic</div> <div style="margin-bottom: 10px;">Lt Pink Silty Sand Nonplastic Low Carbonate</div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">24</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">59.0</div> <div style="margin-bottom: 10px;">97.8</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">19.1</div> <div style="margin-bottom: 10px;">53.9</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div>	<div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;">77</div> <div style="margin-bottom: 10px;">5</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div>	

SOIL BORING LOG AND TEST RESULTS

BORING B-7

Project: Lea Land, Inc.
 Location: Lea County, New Mexico
 Surface Elevation: 3524.4 ft.
 Drill method: Air Rotary
 Reported To: Bob Hall: Lea Land, Inc.
 Remarks: 1899.9 ft. from S. Line; 1230.0 ft. from E. Line

Date: 11/8/93
 Project No.: G-979
 Boring No.: B-7
 Water Depth: None

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO3 %
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>3470</p> <p style="text-align: center;">60</p> <p>3460</p> <p style="text-align: center;">70</p> <p>3450</p> <p style="text-align: center;">80</p> <p>3440</p> <p style="text-align: center;">90</p> <p>3430</p> <p style="text-align: center;">100</p> <p>3420</p> <p style="text-align: center;">110</p> <p>3410</p> </div> <div style="flex: 1; border-left: 1px solid black; border-right: 1px solid black; position: relative;"> <div style="position: absolute; top: 0; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 20px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 40px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 60px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 80px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 100px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 120px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 140px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 160px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 180px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 200px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 220px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 240px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 260px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 280px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 300px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 320px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 340px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 360px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 380px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 400px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 420px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 440px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 460px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 480px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 500px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 520px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 540px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 560px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 580px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 600px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 620px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 640px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 660px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 680px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 700px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 720px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 740px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 760px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 780px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 800px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 820px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 840px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 860px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 880px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> <div style="position: absolute; top: 900px; left: 0; right: 0; border-bottom: 1px solid black; height: 20px;"></div> </div> <div style="margin-left: 10px; font-size: small;"> <p>Boring Continues</p> </div> </div>								
				NP	NP	85.9	28.6	24

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by Client.

SOIL BORING LOG AND TEST RESULTS

BORING B-8

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3536.4 ft.

Boring No.: B-8

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 1419.7 ft. from S. Line; 2300.0 ft. from E. Line

ELEV/DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO ₃ %
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>3480</p> <p>60</p> <p>3470</p> <p>70</p> <p>3460</p> <p>80</p> <p>3450</p> <p>90</p> <p>3440</p> <p>100</p> <p>3430</p> <p>110</p> <p>3420</p> </div> </div>								
				NP	NP	95.4	30.5	18
		CL	Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate					
		ML	Brown Sandy Silt Nonplastic					
				24	NP	97.8	53.9	5
		SM	Brown Silty Sand Nonplastic Low Carbonate					
		CL	DK Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate					

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by Client.

PLATE B-24

SOIL BORING LOG AND TEST RESULTS

BORING B-9

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3530.1 ft.

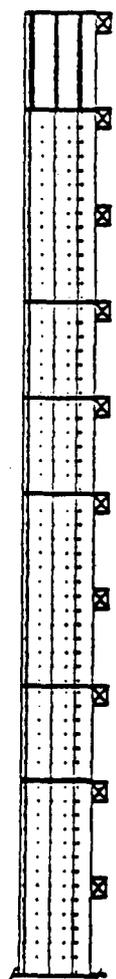
Boring No.: B-9

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall; Lea Land, Inc.

Remarks: 949.9 ft. from S. Line; 1250.0 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO3 %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="text-align: right; margin-bottom: 5px;">3540</div> <div style="text-align: right; margin-bottom: 5px;">3530 0</div> <div style="text-align: right; margin-bottom: 5px;">3520 10</div> <div style="text-align: right; margin-bottom: 5px;">3510 20</div> <div style="text-align: right; margin-bottom: 5px;">3500 30</div> <div style="text-align: right; margin-bottom: 5px;">3490 40</div> <div style="text-align: right;">3480 50</div> </div>  <p style="font-size: small; margin-top: 5px;">Boring Continues</p>								
		ML	Dk Tan Sandy Silt Nonplastic	24	NP	97.8	53.9	5
		SM	Lt Pink Silty Sand Nonplastic High Carbonate					
		SM	Lt Tan Silty Sand Nonplastic Moderate Carbonate					
		SM	Lt Pink Silty Sand Nonplastic Low Carbonate					
		SM	Lt Pink Silty Sand Nonplastic High Carbonate					
				NP	NP	71.6	32.4	100
		SM	Pink Silty Sand Nonplastic.	28	NP	93.6	30.6	8
		SM	Lt Pink Silty Sand Nonplastic Low Carbonate					
				NP	NP	95.4	30.5	18

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by Client.

SOIL BORING LOG AND TEST RESULTS

BORING B-9

Project: Lea Land, Inc.
 Location: Lea County, New Mexico
 Surface Elevation: 3530.1 ft.
 Drill method: Air Rotary
 Reported To: Bob Hall: Lea Land, Inc.
 Remarks: 949.9 ft. from S. Line; 1250.0 ft. from E. Line

Date: 11/8/93
 Project No.: G-979
 Boring No.: B-9
 Water Depth: None

ELEV/DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO3 %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">3480</div> <div style="margin-bottom: 10px;">3470</div> <div style="margin-bottom: 10px;">3460</div> <div style="margin-bottom: 10px;">3450</div> <div style="margin-bottom: 10px;">3440</div> <div style="margin-bottom: 10px;">3430</div> <div style="margin-bottom: 10px;">3420</div> </div> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="width: 100px; border-left: 1px solid black; border-right: 1px solid black; position: relative;"> <div style="position: absolute; top: 0; left: 0; right: 0; height: 100%; border-left: 1px dashed black; border-right: 1px dashed black;"></div> <div style="position: absolute; top: 0; left: 0; right: 0; height: 100%; border-left: 1px dotted black; border-right: 1px dotted black;"></div> <div style="position: absolute; top: 0; left: 0; right: 0; height: 100%; border-left: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 0; left: 0; right: 0; height: 100%; border-left: 1px dashed black; border-right: 1px dashed black;"></div> <div style="position: absolute; top: 0; left: 0; right: 0; height: 100%; border-left: 1px dotted black; border-right: 1px dotted black;"></div> <div style="position: absolute; top: 0; left: 0; right: 0; height: 100%; border-left: 1px solid black; border-right: 1px solid black;"></div> </div> <div style="margin-left: 10px; text-align: center;"> <p>Boring Continues</p> </div> </div>	<div style="margin-bottom: 10px;">60</div> <div style="margin-bottom: 10px;">70</div> <div style="margin-bottom: 10px;">80</div> <div style="margin-bottom: 10px;">90</div> <div style="margin-bottom: 10px;">100</div> <div style="margin-bottom: 10px;">110</div>	<div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SC</div> <div style="margin-bottom: 10px;">CL</div> <div style="margin-bottom: 10px;">SM</div>	<div style="margin-bottom: 10px;">Lt Pink Silty Sand Nonplastic Moderate Carbonate</div> <div style="margin-bottom: 10px;">Lt Pink Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Lt Brown Clayey Sand Medium Plasticity Low Carbonate</div> <div style="margin-bottom: 10px;">Lt Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</div> <div style="margin-bottom: 10px;">Lt Brown Silty Sand Nonplastic Low Carbonate</div>	<div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div>	<div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div>	<div style="margin-bottom: 10px;">85.9</div> <div style="margin-bottom: 10px;">28.6</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div>	<div style="margin-bottom: 10px;">24</div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div> <div style="margin-bottom: 10px;"></div>	

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by Client.

SOIL BORING LOG AND TEST RESULTS

BORING B-10

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3548.2 ft.

Boring No.: B-10

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall: Lea Land, Inc.

Remarks: 500.0 ft. from S. Line: 150.0 ft. from E. Line

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	#40 %	#200 %	CaCO ₃ %
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>3490</p> <p>60</p> <p>3480</p> <p>70</p> <p>3470</p> <p>80</p> <p>3460</p> <p>90</p> <p>3450</p> <p>100</p> <p>3440</p> <p>110</p> <p>3430</p> </div> <div style="flex: 1; border-left: 1px solid black; border-right: 1px solid black; position: relative;"> </div> </div> <p style="text-align: center; margin-top: 5px;">Boring Continues</p>	<p>SM</p> <p>CL</p>	<p>SM</p> <p>CL</p>	<p>Brown Silty Sand Nonplastic Low Carbonate</p> <p>Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</p>	<p>NP</p> <p>27</p>	<p>NP</p> <p>11</p>	<p>92.3</p> <p>96.5</p>	<p>40.9</p> <p>73.8</p>	<p>18</p> <p>27</p>

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by Client.

PLATE B- 30

Standard Testing and Engineering Company

SOIL BORING LOG AND TEST RESULTS

BORING B-10

Project: Lea Land, Inc.

Date: 11/8/93

Location: Lea County, New Mexico

Project No.: G-979

Surface Elevation: 3548.2 ft.

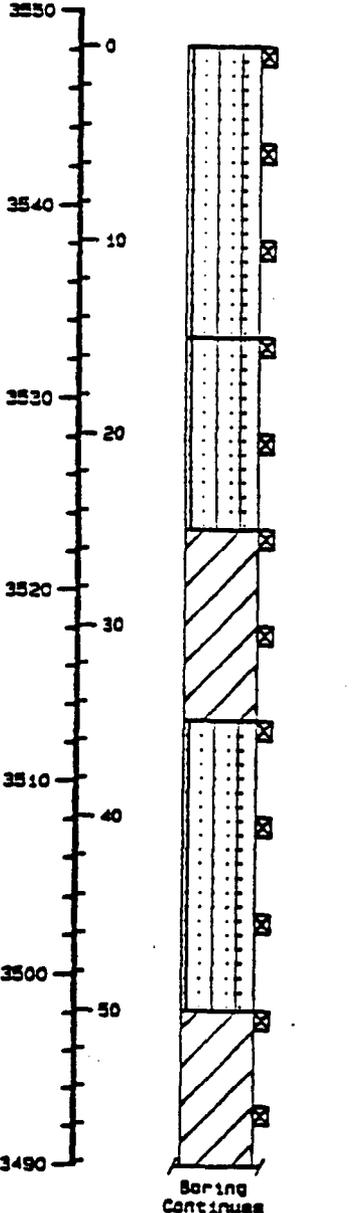
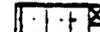
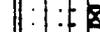
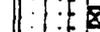
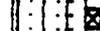
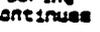
Boring No.: B-10

Drill method: Air Rotary

Water Depth: None

Reported To: Bob Hall; Lea Land, Inc.

Remarks: 500.0 ft. from S. Line; 150.0 ft. from E. Line

ELEV/DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO ₃ %
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 5px;">3550</div> <div style="margin-bottom: 5px;">0</div> <div style="margin-bottom: 5px;">3540</div> <div style="margin-bottom: 5px;">10</div> <div style="margin-bottom: 5px;">3530</div> <div style="margin-bottom: 5px;">20</div> <div style="margin-bottom: 5px;">3520</div> <div style="margin-bottom: 5px;">30</div> <div style="margin-bottom: 5px;">3510</div> <div style="margin-bottom: 5px;">40</div> <div style="margin-bottom: 5px;">3500</div> <div style="margin-bottom: 5px;">50</div> <div style="margin-bottom: 5px;">3490</div> </div>  <p style="font-size: small; margin-top: 5px;">Boring Continues</p>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> <div style="margin-bottom: 10px;">  </div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">CL</div> <div style="margin-bottom: 10px;">SM</div> <div style="margin-bottom: 10px;">CL</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">Lt Gray Silty Sand Nonplastic High Carbonate</div> <div style="margin-bottom: 10px;">DK Pink Silty Sand Nonplastic Moderate Carbonate</div> <div style="margin-bottom: 10px;">Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</div> <div style="margin-bottom: 10px;">Brown Silty Sand Nonplastic Low Carbonate</div> <div style="margin-bottom: 10px;">Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">29</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> <div style="margin-bottom: 10px;">NP</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">69.7</div> <div style="margin-bottom: 10px;">83.3</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">33.4</div> <div style="margin-bottom: 10px;">37.8</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">77</div> <div style="margin-bottom: 10px;">40</div> </div>	

Boring logs are based on laboratory examination of air rotary drill cuttings sampled by Client.

PLATE B- 29

Standard Testing and Engineering Company

SOIL BORING LOG AND TEST RESULTS

BORING B-10

Project: Lea Land, Inc.	Date: 11/8/93
Location: Lea County, New Mexico	Project No.: G-979
Surface Elevation: 3548.2 ft.	Boring No.: B-10
Drill method: Air Rotary	Water Depth: None
Reported To: Bob Hall; Lea Land, Inc.	
Remarks: 500.0 ft. from S. Line; 150.0 ft. from E. Line	

ELEV/DEPTH Feet	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	LL %	PI %	-#40 %	-#200 %	CaCO3 %
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>3430</p> <p>120</p> <p>3420</p> <p>130</p> <p>3410</p> <p>140</p> <p>3400</p> <p>150</p> <p>3390</p> <p>160</p> <p>3380</p> <p>170</p> </div> </div>	<p>SM</p> <p>CL</p> <p>SM</p> <p>CL</p> <p>SM</p> <p>CL</p>	<p>SM</p> <p>CL</p> <p>SM</p> <p>CL</p> <p>SM</p> <p>CL</p>	<p>Brown Silty Sand Nonplastic Low Carbonate</p> <p>DK Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</p> <p>Lt Brown Silty Sand Nonplastic Low Carbonate</p> <p>Lt Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</p> <p>Lt Pink Silty Sand Nonplastic Low Carbonate</p> <p>DK Brown Sandy Clay Low to Medium Plasticity Moderate Carbonate</p>					

Legend:

Symbol: Description:



Silty Sand



Clayey Sand



Bulk sample taken
from air rotary
cuttings



End of boring

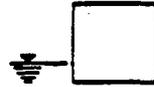
Symbol: Description:



Sandy Clay



Sandy Silt

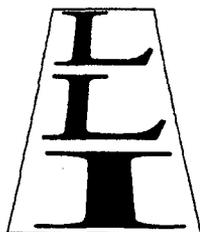


Notes:

- LL = Liquid limit
- PI = Plasticity index
- #40 = percent passing #40 U.S. Standard sieve
- #200 = percent passing #200 U.S. Standard sieve
- CaCO₃ = percent Calcium Carbonate and/or Magnesium Carbonate

**ATTACHMENT 12
OF
FORM C-137**

**NOTICE REQUIREMENTS
OF
OCD RULE 711**



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

☎ Phone: (505) 887-4048 ☎ Fax: (505) 885-7640

Main Office: 1300 West Main, Oklahoma City, OK 73106
Phone: (405) 236-4257 - Fax: (405) 236-4261

December 14, 1999

Ms. Leslie Theiss
Field Manager
Carlsbad Field Office
Department of Interior
Bureau of Land Management
P.O. Box 1778
Carlsbad, NM 88220

****CERTIFIED MAIL****
#P 103 658 016

Dear Ms Theiss:

Lea Land, Inc. plans to submit a permit application through the New Mexico Oil Conservation Division for a commercial surface waste management facility to be used to dispose of oil field wastes classified as exempt and non-exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations.

The Lea Land, Inc. landfill is an existing non-hazardous solid industrial waste only facility that began operations in April 1997 and will be operated in the same manner under this new permit. Specifically, the RCRA-exempt oil field waste will be tested, as have all other wastes that have been disposed in the Lea Land landfill. We are seeking to obtain this permit upon request from oil and gas operators that wish to dispose of oil field wastes in an economical, lined facility.

If you have any questions or comments, please contact me at 405-236-4257.

Yours very truly,

Robert G. Hall
President

RGH/sd

O F F I C E S

6750 W. Loop South, #500
Bellaire (Houston), TX 77401
Phone: (713) 662-8521
Fax: (713) 662-8546

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

PS Form 3800, April 1995

Sent to	Leslie Theiss, BLM
Street & Number	P.O. BOX 1778
Post Office, State, & ZIP Code	Carlsbad, NM 88220
Postage	\$ 0.33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.40
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$ 3.13
Postmark or Date	12/14/99

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

P 103 658 016

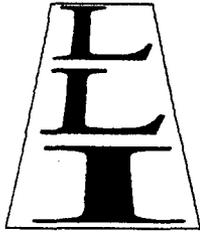
is your RETURN ADDRESS completed on the reverse side?

SENDER: ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Ms. Leslie Theiss, Field Man Dept of Interior Bureau of Land Management P.O. Box 1778 Carlsbad, NM 88220		4a. Article Number P 103 658 016	
5. Received By: (Print Name) <i>Leslie Hill</i>		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
6. Signature: (Addressee or Agent) X <i>Leslie Hill</i>		7. Date of Delivery 12-20-99	
		8. Addressee's Address (Only if requested and fee is paid)	

Thank you for using Return Receipt Service.

PS Form 3811, December 1994

Domestic Return Receipt



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

☎ Phone: (505) 887-4048 ☎ Fax: (505) 885-7640

Main Office: 1300 West Main, Oklahoma City, OK 73106
Phone: (405) 236-4257 - Fax: (405) 236-4261

December 14, 1999

Mr. Dennis Holmberg
County Manager
Lea County Commissioner
Lea County Court House
P.O. Box 4-C
Lovington, NM 88260

****CERTIFIED MAIL****
#P 103 658 017

Dear Mr. Holmberg:

Lea Land, Inc. plans to submit a permit application through the New Mexico Oil Conservation Division for a commercial surface waste management facility to be used to dispose of oil field wastes classified as exempt and non-exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations.

The Lea Land, Inc. landfill is an existing non-hazardous solid industrial waste only facility that began operations in April 1997 and will be operated in the same manner under this new permit. Specifically, the RCRA-exempt oil field waste will be tested, as have all other wastes that have been disposed in the Lea Land landfill. We are seeking to obtain this permit upon request from oil and gas operators that wish to dispose of oil field wastes in an economical, lined facility.

If you have any questions or comments, please contact me at 405-236-4257.

Yours very truly,

Robert G. Hall
President

RGH/sd

O F F I C E S

6750 W. Loop South, #500
Bellaire (Houston), TX 77401
Phone: (713) 662-8521
Fax: (713) 662-8546

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

P 103 658 017

**US Postal Service
Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

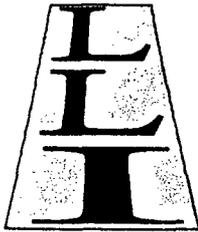
Sent to	Dennis Holmberg, Lea Co.
Street & Number	P.O. Box 4-C
Post Office, State, & ZIP Code	Lovington, NM 88260
Postage	\$ 0.33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.40
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$ 3.13
Postmark or Date	12/14/99

Is your RETURN ADDRESS completed on the reverse side?

<p>SENDER:</p> <ul style="list-style-type: none"> Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b. Print your name and address on the reverse of this form so that we can return this card to you. Attach this form to the front of the mailpiece, or on the back if space does not permit. Write "Return Receipt Requested" on the mailpiece below the article number. The Return Receipt will show to whom the article was delivered and the date delivered. 		<p>I also wish to receive the following services (for an extra fee) <i>999</i></p> <p>1. <input type="checkbox"/> Addressee's Address</p> <p>2. <input type="checkbox"/> Restricted Delivery</p> <p>Consult postmaster for fee.</p>	
<p>3. Article Addressed to:</p> <p>Dennis Holmberg, County Mar Lea County Court House P.O. Box 4-C Lovington, NM 88260</p>		<p>4a. Article Number</p> <p>P 103 658 017</p>	
<p>5. Received By: (Print Name)</p> <p>Andrea Martinez</p>		<p>4b. Service Type</p> <p><input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified</p> <p><input type="checkbox"/> Express Mail <input type="checkbox"/> Insured</p> <p><input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD</p>	
<p>6. Signature: (Addressee or Agent)</p> <p><i>Andrea Martinez</i></p>		<p>7. Date of Delivery</p> <p>12-17-99</p>	
<p>PS Form 3811, December 1994</p>		<p>8. Addressee's Address (Only if requested and fee is paid)</p>	

Thank you for using Return Receipt Service.

Domestic Return Receipt



Lea Land Inc.

Non-Hazardous Industrial
Waste Only Landfill

Mile Marker 64 U.S. Highway 62/180 East
Carlsbad, New Mexico 88220

☎ Phone: (505) 887-4048 ☎ Fax: (505) 885-7640

Main Office: 1300 West Main, Oklahoma City, OK 73106
Phone: (405) 236-4257 - Fax: (405) 236-4261

December 14, 1999

Mr. Steve Massey
County Manager
Eddy County Commissioner
101 W. Greene Street, #225
Carlsbad, NM 88220

****CERTIFIED MAIL****
#P 103 658 018

Dear Mr. Massey:

Lea Land, Inc. plans to submit a permit application through the New Mexico Oil Conservation Division for a commercial surface waste management facility to be used to dispose of oil field wastes classified as exempt and non-exempt from Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations.

The Lea Land, Inc. landfill is an existing non-hazardous solid industrial waste only facility that began operations in April 1997 and will be operated in the same manner under this new permit. Specifically, the RCRA-exempt oil field waste will be tested, as have all other wastes that have been disposed in the Lea Land landfill. We are seeking to obtain this permit upon request from oil and gas operators that wish to dispose of oil field wastes in an economical, lined facility.

If you have any questions or comments, please contact me at 405-236-4257.

Yours very truly,

Robert G. Hall
President

RGH/sd

O F F I C E S

6750 W. Loop South, #500
Bellaire (Houston), TX 77401
Phone: (713) 662-8521
Fax: (713) 662-8546

6070 Gateway East, #500C
El Paso, TX 79905
Phone: (915) 783-0114
Fax: (915) 775-9899

1300 West Main Street
Oklahoma City, OK 73106
Phone: (405) 236-4257
Fax: (405) 236-4261

PS Form 3800, April 1995

P 103 658 018

**US Postal Service
Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	Steve Massey County Mgr
Street & Number	101 W. Greene St., #225
Post Office, State, & ZIP Code	Carlsbad, NM 88220
Postage	\$ 0.33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.40
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$ 3.13
Postmark or Date	12/14/99

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Steve Massey, County Mgr.
Eddy County Commissioner
101 W. Greene St., #225
Carlsbad, NM 88220

4a. Article Number

P 103 658 018

4b. Service Type

- Registered Certified
- Express Mail Insured
- Return Receipt for Merchandise COD

7. Date of Delivery

12-17-99

5. Received By: (Print Name)

Janet Cox

6. Signature: (Addressee or Agent)

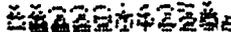
X

8. Addressee's Address (Only if requested and fee is paid)

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

PS Form 3811, December 1994



**ATTACHMENT 13
OF
FORM C-137**

**CONTINGENCY PLAN
IN THE EVENT
OF A
RELEASE OF H₂S**

(NOT APPLICABLE)

APPENDIX A

**STORM WATER DISCHARGE
POLLUTION PREVENTION PLAN**

LEA LAND, INC. LANDFILL

**STORM WATER DISCHARGE
POLLUTION PREVENTION PLAN**

Prepared By:

**Cardinal Environmental, Inc.
6520 North Western Avenue, Suite 206
Oklahoma City, Oklahoma 73116
(405) 842-1066
cardenv@aol.com**

December 23, 1997

Annual Certification

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

Ant S. Hall

Signature - Responsible Official

12-23-97

Date

President

Title - Responsible Official

I. GENERAL INFORMATION

1.1 Introduction

Landfills that discharge storm water runoff from any active or inactive areas without a stabilized final cover and that have received any industrial wastes are considered to meet the definition of "storm water discharge associated with industrial activity" in 40 CFR 122.26(b)(14) and are required to obtain an NPDES permit. Landfills seeking coverage under an NPDES General Multi Sector permit are required to submit a Notice of Intent (NOI) and prepare a Storm Water Pollution Prevention Plan (SWPPP). Lea Land, Inc. has submitted the NOI (see Appendix) with this prepared SWPPP. The SWPPP will be maintained on site.

1.2 Facility Information

Lea Land, Inc. Landfill is a privately owned landfill. The Lea Land, Inc. Landfill operates under a permit obtained from the New Mexico Department of the Environment. Solid waste landfills are regulated by the New Mexico Department of the Environment. The landfill is approved to receive non-hazardous solid waste from commercial and industrial sources. The construction of the first landfill cell (or waste disposal area) was completed on April 2, 1997.

The Lea Land, Inc. Landfill is located in southwest Lea County, New Mexico generally, between Carlsbad, NM and Hobbs, NM. The finding location is the 64 mile marker east of Carlsbad on U.S. Highway 180(62). Figure 1 presents a United States Geological Survey (USGS) topographic map showing the location of the Lea Land, Inc. Landfill. The permitted disposal area occupies 160 acres within a 460 acre tract in Section 32, Township 20 South, Range 32 East, N.M.P.M, Lea County, New Mexico.

1.3 Description of Facility Storm Water Discharge

The general surface drainage pattern of the Lea Land, Inc. Landfill is to the north. According to the USGS Topographic map, there are no bodies of water in the vicinity of the landfill. Due to the relatively arid and flat terrain with highly permeable soils and deep groundwater, erosion is not indicated into or out of the landfill property. There is a shallow bar ditch associated with U.S. Highway 180 (62) which flanks the northern portion of the landfill property. The highway bar ditch essentially receives all runoff from the landfill property which is diverted to the other side of the highway to the open plains via culverts.

A detailed surface water management design is presented in the June 1996 Permit Application for the Lea Land, Inc. Landfill. The principal drainage structures for routing storm water are

diversion channels surrounding the up gradient side of the waste disposal area which diverts run off to the north.

Intracell berms are used to hold runoff from the contiguous hauling roads and equipment fueling, maintenance and parking area. Any storm water which contacts the waste is contained in the flexible membrane lined landfill cell. The storm water is removed via pipeline and transferred to the onsite storm water retention pond. This impoundment has above grade diking, is also lined, and is designed to store and provide the retention time needed to evaporate storm water from the unclosed portions of the waste disposal area from a 24 hour-25 year rain storm event, i.e. greater than a 4 inch rainfall.

The landfill vicinity only receives about 16 inches of annual precipitation, has a highly permeable surface and unshallow groundwater. The rest of the drainage area of the 460 acre landfill property is generally open field that naturally drains toward the highway.

1.4 Pollution Prevention Team

The Pollution Prevention Team (Team) is responsible for developing and revising the SWPPP. The Team will be responsible for developing and administering spill prevention and response (SPR), best management practices (BMP), and employee training. The activities and responsibilities of the team members are listed below and will be revised as needed per changes in the plan. If a Team member's employment status changes, the replacement employee for the position designated in this plan will immediately become a member of the Team as a replacement for the member which departed. Any changes that occur between revisions of the plan will be reflected in the revised document. The following is a list of the Team members and respective responsibilities under this plan:

Team Member Information

Leader: Robert Hall

Title: Owner

Office Phone: (405)236-4255

Responsibilities:

Signatory approval; plan review and oversight.

Team Member: Kin Slaughter

Title: Site (Landfill) Manager
Office Phone: (505)887-4048

Responsibilities:

Coordinate and implement all facets of developing and administering the plan, monitoring and analysis reporting, record keeping, and employee training. Oversight of spill response, clean up activities, and housekeeping. Implement preventive maintenance program.

Team Member: Cardinal Environmental

Office Phone: (405) 842-1066

Responsibilities:

Evaluate and recommend pollution control measures and spill prevention procedures. Review and revise the plan. Recommend and design control measures to reduce or prevent significant pollution sources affecting the storm water runoff. Analyze, design, and implement erosion prevention measures when needed and possible. Review and comment on the impact of proposed construction or process modifications on storm water discharges.

Conduct storm water sampling and visual inspections. Design, coordinate, and complete employee training.

2. ASSESSMENT

2.1 Description of Potential Pollutant Sources

Potential sources of pollutants which may reasonably be expected to add a significant amount of pollutant to storm water discharges shall be identified below. The description of potential pollutant sources will include the following items:

- Site map for identification of potential sources including location of waste disposal, diesel fuel tank, storm water retention pond, leachate evaporation pond, and location of stockpiled cover material;
- Description of structural controls implemented to reduce pollutant levels;
- Prediction of the direction of flow and identification of flows with significant potential for causing erosion;
- Inventory of exposed chemicals handled and stored at the facility;
- List of significant spills and leaks that have occurred in the three years prior to the issuance of this permit;

- Description of all significant potential pollutants;

Potential storm water pollutant sources within the facility are: paved and unpaved hauling roads and parking areas, heavy equipment maintenance, refueling and product storage (lubricants, fuels, etc).

2.2 Site Map

Figure 2 shows U.S. Highway 180(62), surface drainage flow direction, landfill property boundaries, stockpile area, an approximately 21,000 gallon water storage tank, main entrance, unauthorized waste (parking) area, office building, storage shelter, parking area, scale, storm water retention pond, leachate evaporation pond, permitted waste disposal boundaries, the first landfill cell of about 6 acres, equipment parking, fueling and maintenance area that includes the impounded 4,000 gallon diesel fuel tank, paved and unpaved hauling roads, and diversion trenches.

2.3 Description of Structural Controls

The landfill property is located within a drainage area, and without indication of erosion, receives run on water from an open field to the south. Run on and essentially all runoff is directed to the north, draining into a bar ditch between the northern boundary of the landfill property and U.S. Highway 180(62), into culverts beneath the highway and into open field. Other runoff from the waste disposal area is collected and impounded onsite for evaporation.

Diversion trenches and intracell berms prevent storm water from entering the waste disposal area.

Local runoff from the equipment fueling, maintenance and parking area and the up gradient portion of the unpaved hauling road encircling the waste disposal area are all prevented from entering the waste disposal area and are impounded via intracell berms. Storm water which falls on the working face drains to the lowest elevation of lined cell where it collected and transferred via pipeline to the onsite storm water retention pond.

The storm water retention and leachate evaporation ponds have flexible membrane liners and are diked above grade. The storm water retention pond is designed to hold more water that can be collected in the waste disposal area during a 24 hour-25 year rain event. The leachate evaporation pond is also designed to retain leachate during the same probable rain event.

Storm water and leachate from the landfill are collected and transferred separately. The leachate is collected via riser pipe, over the eastern slope of the landfill cell. Any spills that may occur during the loading of leachate or contaminated storm water, or rain fall that comes in contact with the spill residue, will drain back into the lined cell.

The diesel tank is within the equipment fueling, maintenance and parking area. The tank is diked and has a flexible membrane liner on the floor. This area is presently near the entrance ramp into the first landfill cell. Tank refilling and equipment fueling is partially conducted outside of diesel tank impoundment. Runoff from this area drains toward the cell but is prevented from contacting the waste and impounded via intracell berms located on the inside perimeter of the presently below grade cell.

The stockpile presently occupies an approximate area of 700 and 250 square feet and about 40 feet tall. The side slopes of the stockpile are very steep. An onsite and unpaved access road is located between the highway and stockpile, on the stockpile side of the boundary fence. Although near the highway bar ditch, the access road, the surrounding vegetation, highly permeable soils and flat terrain prevents a significant amount of sediment from being discharged into the bar ditch. Therefore, additional structural controls for the stockpile is not necessary at this time. However, if erosion via drainage becomes evident during the routine inspection of the stockpile area, then this SWPPP plan will be changed to prevent and/or sample the discharge.

The facility uses asphalt paving on the main entrance, office area, storage shelter, parking and on the main hauling road outside the permitted disposal area. Since the paved surface prevents percolation and graded to the north, runoff from the pavement drains to the highway via main entrance/exit.

The storage shelter is located on pavement near the office/scale area. A truck bed with a shell shelters all products such as unleaded gasoline, heavy lubricants, oil and portable equipment such as a pump, welding equipment, and air compressor. Used oil is not stored onsite. Therefore, no structural controls are needed for this area.

The unauthorized waste area is an unpaved parking area near the main entrance where loads "in-dispute" (e.g. having incomplete manifests) are parked off the highway. The waste remains inside trailers while parked, therefore, no structural controls are needed.

The landfill facility has a petroleum contaminated soil treatment area and plans to add an ash mono-fill cell and both will be impounded by diking. Equipment maintenance, parking, and product storage will be moved inside the proposed maintenance building once constructed.

2.4 Direction of Flow

The flow pattern noted on Figures 1 and 2 was developed from the surface gradients. The normal flow pattern at the site has been altered because of the landfill construction, but the general drainage pattern remains the same. The highway collects the landfill property run off and diverts storm water from the south bar ditch to open field via culverts beneath the highway. Care will be taken to impound water coming in contact with landfill wastes, preventing landfill contaminates from leaving off site.

2.5 Inventory of Exposed Chemicals and Potential Pollutant Sources

No chemicals are stored outside of this facility without proper packaging to reduce contamination of water or soil from spills, accidental releases, or exposure to storm water. Used oil is not stored onsite. The onsite equipment is maintained by a vendor which transports the used oil to a recycler. Smaller equipment and product other than diesel are stored in a shelled truck bed parked on asphalt, near the office and scale area.

The following list of materials is stored outside or potentially exposed to storm water through loading activities.

Compound	Storage Location	Dispensed Outside?	Storage form	Qty. Used/month	Qty. Stored
Diesel Fuel	Near active landfill cell	yes	4,000 gallon tank	1,000 gallons*	1 - 4,000 gallons

* - estimated since waste disposal activity is still pending.

The diesel storage tank is stored within a diked area. Storm water collected within the impoundment will be transferred via pipeline to the storm water retention pond.

Herbicides and pesticides are not used outdoors at the facility.

All maintenance on vehicles and equipment takes place outdoors (construction of a maintenance building is pending). Waste moving equipment is not driven off-site, nor is it driven beyond the diversion ditches/hauling road encircling the waste disposal area without waste being removed from the equipment with a shovel.

Leachate springs are not present at the landfill property or vicinity. All rain water which contacts the landfill waste is collected and impounded.

The major potential pollutant is runoff from the paved hauling and parking areas which includes the scale area. Thus, total suspended solids (TSS) represents the pollutant parameter of concern at the facility.

2.6 Other Exposed Material

The landfill facility stores equipment outside. The equipment is considered an insignificant pollutant source.

2.7 Significant Leaks and Spills

No significant spills or leaks have occurred at this site. All significant spills and leaks will be recorded by the Spill Prevention and Response Team as noted in Section 4 of this document. The annual revisions of this document will include all records of significant spills and leaks that have occurred at the facility since the last revision.

2.8 Non-Storm Water Discharges Authorized by this Permit

This permit allows for the following items to be discharged from the facility

- Fire fighting activities
- Fire hydrant flushings
- Potable water sources including waterline flushings
- Irrigation drainage
- Lawn watering (water removed from the impoundments and used to support vegetation along the slopes and inactive areas)
- Air conditioning condensate
- Compressor condensate
- Uncontaminated groundwater
- Foundation and footing drains where flows are not contaminated with process waters

Other than the 21,000 gallon water storage tank, there are not any other significant sources of water at the facility. Measures as discussed in Section 3 will be used to minimize erosion and protect water quality.

2.9 Historical Monitoring of Discharges from the Facility

Historical storm water quality information does not exist.

3. BEST MANAGEMENT PRACTICES

3.1 Description of Best Management Practices

Potential sources of pollution at a facility require controls and practices to reduce the pollutants that could be discharged off-site. Storm water management controls can significantly reduce the potential for storm water pollutants if developed and implemented properly in conjunction with facility operation practices. These controls and practices are dynamic; thus, operations will be amended as necessary to provide the maximum control of potential pollutants at this facility. The description of best management practices (BMP) developed for this site include:

- Good housekeeping practices developed to control materials and substances at the facility, especially in areas of material storage, waste disposal areas, and with regard to vehicle tracking of sediment and waste.
- Preventive maintenance methods developed to reduce the number of potential pollutant sources at the facility.
- Spill prevention and response procedures to reduce the potential of spills as a pollutant source.
- Sediment and erosion control measures to reduce the impact of erosion as a pollutant source.
- Visual inspection schedules and methods for early detection of potential pollutant source problems.
- Runoff management measures and controls designed and implemented to reduce pollutant discharges.
- Storm water management practices to reduce the source of potential pollutants.
- Employee training to develop knowledgeable and responsible employees to enhance the control potential pollutants.

3.2 Good Housekeeping Practices

Good housekeeping practices are developed to maintain a clean, efficient, and safe work environment. A clean workplace not only benefits the employees as a safe work environment; it

will also reduce pollutant sources which could pose both environmental and employee hazards. The Lea Land, Inc. Landfill is a safety- and housekeeping-conscious facility. All employees will be trained to regularly inspect for leaks or conditions that could lead to discharges of chemicals to storm water.

Good housekeeping in areas of material storage (active cells, inactive cells, roads, and building area) will include minimizing erosional opportunities for storm water, adhering to daily cover provisions of permit, and maintaining grass/ground cover in areas of run off or potential surface erosion location. Good housekeeping procedures to reduce tracking of sediment and waste are also used. For instance, waste is removed from the waste handling equipment by physical means and does not use water washes.

3.2.1 Operation and Maintenance

Operationally, blowing trash is sometimes a concern for landfills. At Lea Land, Inc. Landfill, the nature of the non-hazardous industrial waste received does not typically contain a significant amount of "blowable" trash which is minimized from migrating off site by mesquite bushes, boundary fencing and from the routine policing of litter.

The storm water retention and leachate evaporation ponds will be periodically regraded to remove any accumulated sediment. The excavated material is used for cover material within the landfill if tested as non-hazardous.

The facility is operated and maintained to the highest quality standards with each employee trained to observe and report (to the Site Manager) any maintenance that may be required. Maintenance personnel provide checks of machines and tanks on an ongoing basis. All maintenance on equipment is completed outside but will be conducted inside once the proposed maintenance building is constructed. This will prevent the potential contact of vehicle fluids to the environment.

Dust control is conducted by the use of an onsite water truck which is filled via onsite storage tank located on top of the stockpiled soils. This storage tank is filled via public water line located between the highway and northern boundary.

3.2.2 Material Inventory Procedures

Only employees trained to handle the heavy equipment are allowed to operate machinery. Loads are weighed in and out of the site to determine total amount of waste delivered to the landfill.

Liquid materials are not accepted. Shipments are randomly searched for unauthorized materials (PCBs, liquids, oils, etc).

3.3 Preventive Maintenance

A preventive maintenance program is established by maintenance personnel who methodically inspect and correct any problems throughout the facility before storm water pollution occurs.

Equipment or areas to be regularly inspected include:

- ▶ Diversion berms and storm water routing channels;
- ▶ Equipment fueling, maintenance and parking area, including diesel fuel tank;
- ▶ Product storage area;
- ▶ Active waste disposal area;
- ▶ Storm water Retention Pond;
- ▶ Leachate Collection Pond;
- ▶ Paved and unpaved hauling roads.

3.4 Spill Prevention and Response

Spill prevention and response (SPR) is coordinated by the Site Manager. A general policy of containing and immediately cleaning up all spills is enforced at the facility.

The drainage areas will be inspected as described in Section 3.6 to determine if remedial action is necessary to minimize the potential for spills.

The Site Manager is responsible for identifying the facility spill response team to respond to spills and ensuring spill response equipment is readily available. The Site Manager is also responsible for notifying the appropriate authorities for assistance.

3.5 Sediment and Erosion Control

The area where erosion may be of the most concern is the stock pile soil area. Wind erosion and not water erosion is of significant concern for the stockpile. The landfill is located within an arid terrain and only receives about 16 inches of annual precipitation. Runoff is relatively low because the surface is highly permeable with no shallow groundwater. The grade of the stockpile will eventually be near the natural grade at landfill closure. If drainage via erosion leading offsite becomes evident, then this SWPPP plan will be modified to address and/or sample this drainage.

The above grade landfill at closure will be have established vegetation. Dust control measures will be implemented to control dispersal of sediment from roads and areas that do not have vegetative cover.

Water from the water storage tank will be used for dust suppression. Erosion in other areas of the landfill property has not been observed. During the site inspections, any erosion which occurs will be noted and addressed appropriately as the Site Manager directs.

3.6 Visual Inspection of Pollutant Sources

A regular visual inspection of areas identified as potential pollutant source areas are performed by facility management personnel. This inspection includes a walk of the facility grounds. These visual inspections are not documented except for the weekly inspections as discussed below.

The contiguous bar ditch, impoundments' diking, onsite diversion ditches and berms, locations where trucks and waste enter/exit the facility, and maintenance and storage areas will be inspected every seven days. These visual inspections will be recorded in the Pollution Prevention Plan and maintained until one year after the permit expires. (See weekly checklist in appendix).

In addition to visually examining the storm water discharge points, the Site Manager will also visually inspect the quality of storm water on a quarterly basis at each outfall throughout the term of the permit. See Section 4.3 for details.

3.7 Runoff Measures and Controls

Further measures are not needed except for the impoundment of additional waste storing areas.

3.8 Storm Water Management Practices

Whenever practicable Lea Land, Inc. Landfill will implement storm water management practices to reduce the source of potential storm water pollutants. The specific storm water management practices for the industrial activities identified in the drainage areas are present in the following text.

Raw materials, tools, and empty containers are presently stored behind the office building. Tools and product is stored in the storage shelter, in vehicles or in the office building. Heavy earth work equipment (dozers, scrapers, graders, and compactors) are well maintained to prevent break

downs and leaks. The Spill Prevention Control and Countermeasures (SPCC) plan will be followed for all impoundments.

The storm water drainage channels have been designed to handle the flow from at least a 24-hour, 25-year storm event. The drainage channels and berms will be inspected regularly and excess sediment or debris will be removed.

Cover material will be applied to the working face at the end of each day to control odors, vectors, and blowing litter.

3.9 Employee Training

Employees shall be trained on the implementation and goals of the SWPPP. Training will address the following components of the SWPPP:

- ▶ Good housekeeping
- ▶ Preventive maintenance
- ▶ Spill prevention and response
- ▶ Purpose and maintenance of storm water management control equipment

Points to be covered in the training include:

- ▶ Locations of housekeeping and spill response equipment
- ▶ Instruction for housekeeping and preventive maintenance inspections
- ▶ Appropriate spill response procedures
- ▶ Recording of all inspections, maintenance, and spill response activities.

Training shall be conducted at least annually, or whenever a change in facility operation requires an update or change in training.

4. EVALUATION

4.1 Comprehensive Site Compliance Evaluation

As required by the multi sector permit conditions an annual site compliance evaluation must be conducted at this facility. The permit dictates the following minimum requirements:

- Inspect storm water drainage areas for evidence of pollutants entering the drainage system.

- Evaluate the effectiveness of measures to reduce pollutant loadings and whether additional measures are needed.
- Observe structural measures, sediment controls, and other storm water BMP's to ensure proper operation.
- Inspect any equipment needed to implement the plan, such as spill response equipment.
- Revise the plan as needed within two weeks of inspection (potential pollutant source description, description of measures and controls, and spills).
- Implement any changes in a timely manner, but at least within 12 weeks of the inspection.
- Prepare a report summarizing inspection results and follow up actions, the date of inspection and personnel who conducted the inspection; identify any incidents of noncompliance or certify that the facility is in compliance with the plan.
- All incidents of noncompliance must be documented in the inspection report. Where there are no incidents of noncompliance, the inspection report must contain a certification that the facility is in compliance with the plan.
- Sign the report in accordance with Section 6 and keep it with the plan.

4.2 Quarterly Visual Examination of Storm Water Quality

Lea Land, Inc. Landfill shall perform and document a visual examination of storm water discharge associated with industrial activity from the entrance drive outfall prior to entering the culvert at the northwest corner landfill property. The exam shall be conducted according to the directions on the worksheet in the appendix.

4.3 Storm water Analysis - Required by Permit

During each quarter of the second year of the permit, the Site Manager will collect a grab sample from the outfall on the southern end of the impoundment during a measurable storm (greater than 0.1 inch more than 72 hours from the last storm). Collected waters shall be tested for Total Suspended Solids (TSS) and Total Recoverable Iron. Records shall indicate when the last storm event occurred and the estimate flow of water discharged.

By ninety days after the close of the second year of the permit, the Landfill will submit a Discharge Monitoring Report (DMR) for each sampling event during the second year. Additionally, the site will compute an average value for the parameters monitored. If values are less than the cut off concentrations noted in the Federal Register and listed below, then no laboratory analyses are required in the fourth year of the permit. For outfalls where the average value exceeds the cut off concentration, quarterly sampling during the fourth year is required with the same reporting deadline as for the second year's sampling.

Parameter	Cut Off Concentration (mg/L)
Total Suspended Solids	100
Total Recoverable Iron	1.0

4.4 Record Keeping and Internal Reporting

Incidents such as spills and other discharges, along with other information describing the quality and quantity of storm water discharges must be included in the records. Inspections and maintenance activities shall be documented and recorded in the Plan. Records must be maintained for three years.

5.0 PLAN REVISIONS

This plan will be revised whenever there is a change in design, operation, or maintenance which may impact the potential for pollutants to be discharged off-site or if the Plan proves to be ineffective to control the discharge of pollutants.

6.0 REQUIRED SIGNATURES

All pollution prevention plans, reports, certifications, or other information submitted to the permitting authority or required to be maintained on-site must be signed by a "principal executive officer or ranking elected official."

Any person signing documents under this permit shall make the following certification:

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

7.0 PLAN LOCATION AND PUBLIC ACCESS

This Plan is required to be signed and maintained on-site at the facility near Carlsbad, New Mexico. The Plan and all required records must be kept until at least one year after coverage under the permit expires. This Plan is available to the public by request through the permitting authority. The annual site compliance checks must be kept for three years after the inspection was completed.

Quarterly Storm water Quality Check:

Outfall: (circle one) South

Complete a Storm water Quality Check at each outfall once a quarter

Date: _____ Quarter (circle one): 1 2 3 4

Nature of the Discharge: (circle one) Storm water Snow melt runoff

Time Grab Sampled Collected: _____ (must be within thirty minutes of the time the storm water starts flowing)

Time the storm started: _____ OR Date/Time of most recent rainfall _____

Total amount of rainfall event: _____ (must be greater than 0.1 inches) (Watch the evening news or use rain gauge)

The storm event for this monitoring must occur more than seventy two hours since the last qualifying (greater than 0.1 inches) storm event. Is this true? (Circle one) Yes No

Person performing assessment must be a member of the Pollution Prevention Team:

Name: _____ Member of Pollution Prevention Team? (Circle one) Yes No

Assess the following parameters in a well lit area.

Observed Quality			
Parameter	Value (circle one)		Notes/Remedies
	Note possible source in "Notes" column and implement remedies as needed.	No action necessary	
Color	Color _____	Colorless	
Odor	Smells like	None	
Floating solids present?	Yes	No	
Suspended solids present?	Yes	No	
Settled solids present?	Yes	No	
Foam present	Yes	No	
Clarity	Cloudy	Clear	
Oil sheen present?	Yes	No	

Reviewed by: _____, Site Manager

Site Manager: Any probable source of contamination needs to be investigated in a timely manner and any improvement measures must be documented. The Site Manager needs to insure with existing tracking methods that necessary work is completed.

Once this checklist is completed and reviewed, it needs to be filed in the appropriate section of the Pollution Prevention Plan.

WATER ANALYSIS DURING THE SECOND YEAR OF THE PERMIT

During the second year a grab sample must be taken each quarter from the outfall. Requirements for the grab sample are as follows:

Circle One: Yes No	Taken from a storm event of greater than 0.1 inches of precipitation and within the first 30 minutes of the storm event.
Circle One: Yes No	Taken from a storm event which occurs more than 72 hours since the previous reportable (greater than 0.1 inches) storm event
Circle One: Yes No	Ideally taken by the same person every time
Circle One: Yes No	Must be taken by a member of the pollution prevention team
precipitation amount (in) _____ Duration (hours) _____	Estimate the total precipitation (inches) and duration (hours) (Needed for the Discharge Monitoring Report)
Estimated volume (gpm) during sampling _____	Estimate the volume of the runoff at each outfall (gallons per minute) (Needed for the Discharge Monitoring Report)
Estimated flow rate (fps) during sampling _____	Estimate the flow rate of the runoff at each outfall (feet per second) (Needed for the Discharge Monitoring Report)
Days between this/most recent storm event and the storm event previous to it _____	Estimate the duration between sampled storm water event and end of the previous measurable storm water event. (Needed for the Discharge Monitoring Report)

The samples must be sent to a laboratory and analyzed for Total Suspended Solids (mg/L) and Total Recoverable Iron (mg/L) Within ninety days of the end of the year, the following items must be completed:

1. Complete a Discharge Monitoring Report (DMR) for each sample event at each outfall (there should be at least four sample event for each of the outfalls). Complete a separate DMR for any other sampling done during the year (i.e. any sampling done for your landfill permit).

Be sure the DMR is signed by General Manager.

Keep copy of all analysis, calculations, and DMRs in the appropriate section of the Pollution Prevention Plan.

Mail the DMRs to: EPA, Region VI, Enforcement and Compliance Assurance Division, (GEN-WC), EPA SW MSGP, First Interstate Bank Tower at Fountain Place, P.O. Box 50625, Dallas, Texas, 75025

2. Compute an arithmetic average for each parameter at each outfall.

3. Compare the average value for Total Suspended Solids and Total Recoverable Iron to the table below on an outfall by outfall basis.

Total Suspended Solids (TSS)	100 mg/L
Total Recoverable Iron (Fe)	1.0 mg/L

4. Complete the following table:

Outfall	Parameter	Calculated average: Equal to/Greater Than or Less Than Cut Off Value (circle one)	
#1	TSS	Equal to/Greater Than	Less Than
#1	Fe	Equal to/Greater Than	Less Than

For any line with "equal to/greater than" circled, monitoring at that outfall for that parameter will be required during each quarter of the fourth year of the permit. Again, DMRs will need to be turned in within ninety days of the end of the year for those locations which are monitored.

Note: Visual monitoring continues during each quarter of every year at each outfall regardless of the results of this testing.

WEEKLY INSPECTION CHECK SHEET

Date: _____

Time: _____

Personnel Conducting Inspection: _____

Visually inspect the following areas and complete the table reflecting current status of the area.

Area	Condition (Circle One)	Notes -- For any line with a "Need Improvement" rating
Intracell Berms (check for integrity)	Satisfactory Needs Improvement	
Diesel Storage Tank Impoundment (check capacity and integrity)	Satisfactory Needs Improvement	
Diversion Trenches (check for debris or sediment)	Satisfactory Needs Improvement	
Storm water Retention Pond (check for capacity and integrity)	Satisfactory Needs Improvement	
Leachate Evaporation Pond (check for capacity and integrity)	Satisfactory Needs Improvement	
Paved Area and Scale (check for contamination)	Satisfactory Needs Improvement	
Unpaved Hauling Roads (check for contamination)	Satisfactory Needs Improvement	
Unauthorized Waste (Parking) Area (check for contamination)	Satisfactory Needs Improvement	
Stockpile (check for drainage/erosion leading offsite)	Satisfactory Needs Improvement	

Reviewed by: _____ Site Manager

Site Manager: Any items with a "Needs Improvement" rating should be incorporated into the maintenance activities of the plant within two weeks. Items requiring significant construction can take up to twelve weeks.

After the Site Manager has reviewed this checklist, please file the document in the appropriate section of the Pollution Prevention Plan.

COMPREHENSIVE SITE COMPLIANCE EVALUATION

Must be conducted at least once per year by a qualified facility personnel

Steps to Follow:

1. Inspect the following areas of the facility
 - Visually inspect areas contributing to storm water discharge associated with industrial activity for evidence of or potential for pollutants entering the drainage system.
 - Evaluate measures to reduce pollutant loadings to determine if adequate and properly implemented or whether additional controls are necessary.
 - Observe structural storm water control measures and other structural pollution prevention measures to ensure they are operating correctly
 - Visually examine any equipment needed to implement the plan
 - Review the training methods for adequacy and the training records to insure all training needed has been completed.
2. Revise the Storm Water Pollution Prevention Plan within two weeks of this evaluation incorporating description of potential pollutant sources and pollution prevention measures. Any changes must be implemented within twelve weeks of the evaluation.
3. Prepare report summarizing scope of the evaluation, personnel conducting the evaluation, date of the evaluation, any major observations relating to the implementation of the storm water pollution prevention plan.
4. The report shall identify any incidents of non compliance or a certification that the facility is in compliance with the storm water pollution prevention plan and the permit. Such a certification would simply be, for instance, "The Plant has been in compliance with the terms of the general storm water permit for the period ____ to _____. No unauthorized discharges to storm water have occurred."
5. This report needs to be signed by the Team member designated with signatory authority. If the signatory authority rests with anyone other than Mr. Hall, an assignment needs to be sent to the Director.
6. The Site Manager must ensure any revisions to the Plan or the storm water program are implemented within twelve weeks of the evaluation.
7. The report must be filed with the Storm Water Pollution Prevention Plan. The report must be maintained with the Storm Water Pollution Prevention Plan for a period of three years from the date of the evaluation.

