

Dockets Nos. 31-92 and 32-92 are tentatively set for September 17, 1992 and October 1, 1992. Applications for hearing must be filed at least 23 days in advance of hearing date.

DOCKET: EXAMINER HEARING - TUESDAY - SEPTEMBER 1, 1992

8:15 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING,
SANTA FE, NEW MEXICO

The following cases will be heard before Michael E. Stogner, Examiner or David R. Catanach, Alternate Examiner:

CASE 10507: (Continued from August 6, 1992, Examiner Hearing.)

Application of C & C Landfarm Inc. for a commercial surface waste disposal facility, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authorization to construct and operate a commercial landfarm facility for remediation of non-hazardous hydrocarbon-contaminated soils using an enhanced biodegradation process. Said area is to be located in the SW/4 NE/4 (Unit G) of Section 3, Township 20 South, Range 37 East, which is approximately 2 miles southeast of Monument, New Mexico. This application has been administratively determined to be approvable, and this hearing is scheduled to allow parties the opportunity to present technical evidence why the application should not be approved pursuant to the rules of the Division. In the absence of objection, this application will be taken under advisement.

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 2, 1992

8:15 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING,
SANTA FE, NEW MEXICO

The following cases will be heard before Michael E. Stogner, Examiner or David R. Catanach, Alternate Examiner:

CASE 10539: **Application of Tierra Environmental Company, Inc. for a commercial surface waste disposal facility, San Juan County, New Mexico.** Applicant, in the above-styled cause, seeks authorization to construct and operate a commercial landfarm facility for remediation of non-hazardous hydrocarbon-contaminated soils using an enhanced biodegradation process. Said area is to be located in the NW/4 SE/4 (Unit J) of Section 2, Township 29 North, Range 12 West, which is approximately 6 miles east of Farmington, New Mexico. This application has been administratively determined to be approvable, and this hearing is scheduled to allow parties the opportunity to present technical evidence why the application should not be approved pursuant to the rules of the Division. In the absence of objection, this application will be taken under advisement.

Teira #1
CASE (10539)

the top of the Wolfcamp formation to the base of the Morrow formation which are spaced on 320-acre spacing, Lots 1 through 4 and the S/2 N/2 (N/2 equivalent) of said Section 2 are to be dedicated to said well forming a standard 321.08-acre gas spacing and proration unit. Further, the applicant seeks an exception to Division General Rule 104.C(2) to allow the N/2 equivalent of said Section 2 to be simultaneously dedicated in the Penasco Draw-Permo Pennsylvanian Gas Pool to the proposed well and to the existing Irish Hills "KW" State Well No. 2 located at a standard gas well location 1980 feet from the North and East lines (Unit G) of said Section 2. Said unit is located approximately 11.5 miles west by south at Seven Rivers, New Mexico.

CASE 10544: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location 660 feet from the North and West lines (Unit D) of Section 23, Township 22 South, Range 23 East, to test all formations and/or pools from the top of the Wolfcamp formation to the base of the Morrow formation which are spaced on 320-acre spacing (this presently excludes the Undesignated Indian Basin-Upper Pennsylvanian Gas Pool which is spaced on 640-acre units), the N/2 of said Section 23 to be dedicated to said well forming a standard 320-acre gas spacing and proration unit. Said unit is located approximately 6 miles south of the Marathon Oil Company's Indian Basin Gas Plant.

CASE 10529: (Continued from August 20, 1992)

Application of Pogo Producing Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location 660 feet from the North line and 1650 feet from the East line (Unit B) of Section 34, Township 22 South, Range 32 East, to test the Morrow formation, the N/2 of said Section 34 to be dedicated to said well forming a standard 320-acre gas spacing and proration unit. The proposed well site is located approximately 8.75 miles north-northeast of New Mexico State Highway No. 128 at the Lea/Eddy County Line.

CASE 10530: (Continued from August 20, 1992, Examiner Hearing)

Application of Charles B. Gillespie, Jr. for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Strawn formation comprising the W/2 SE/4 of Section 33, Township 15 South, Range 35 East, the assignment of a discovery allowable, and the promulgation of special rules therefor including provisions for 80-acre spacing units and designated well location requirements. Said area is located approximately 3.5 miles northwest of Lovington, New Mexico.

CASE 10545: Application of Phillips Petroleum Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location to be drilled within a fifty-foot radius of a point 2300 feet from the North line and 330 feet from the West line (Unit E) of Section 1, Township 12 South, Range 34 East, South Four Lakes Unit, Four Lakes-Devonian Gas Pool. Lots 3 and 4 and the S/2 NW/4 (NW/4 equivalent) of said Section 1 is to be dedicated to said well forming a standard 160-06-acre gas spacing and proration unit. Said unit is located approximately 10 miles west-northwest of Tatum, New Mexico.

CASE 10546: Application of Phillips Petroleum Company for an unorthodox gas well location and for simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location to be drilled within a fifty-foot radius of a point 2450 feet from the North line and 960 feet from the East line (Unit H) of Section 2, Township 12 South, Range 34 East, South Four Lakes Unit, Four Lakes-Devonian Gas Pool. Further, the applicant seeks an exception to Division General Rule 104.C(2) to allow the existing 160.14-acre gas spacing and proration unit comprising Lots 1 and 2 and the S/2 NE/4 (NE/4 equivalent) of said Section 2 to be simultaneously dedicated in the Four Lakes-Devonian Gas Pool to the proposed well and to the South Four Lakes Unit Well No. 8 located at a standard gas well location 660 feet from the North line and 990 feet from the East line (Unit A) of said Section 2. Said unit is located approximately 10 miles west-northwest of Tatum, New Mexico.

CASE 10512: (Readvertised)

Application of Phillips Petroleum Company for directional drilling and three unorthodox oil well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to RULE 4 of the Special Rules and Regulations for the Four Lakes-Pennsylvanian Pool, as promulgated by Division Order No. R-2326, for three unorthodox oil well locations (one which will be directionally drilled to an unorthodox bottomhole location) all within its South Four Lakes Unit which is located approximately 10 miles west-northwest of Tatum, New Mexico:

- . 1250' FSL & 2450' FWL (Unit N) of Section 35, Township 11 South, Range 34 East, the 80 acres comprising the E/2 SW/4 is to be dedicated to said well;
- . 2200' FNL & 2150' FWL (Unit F) of Section 2, Township 12 South, Range 34 East, the 80.11 acres comprising Lot 2 and the SE/4 NW/4 is to be dedicated to said well; and,

CASE 10490: (Continued from August 6, 1992, Examiner Hearing.)

Application of Noranda Minerals Inc. requesting the Division to rescind or deny an application to drill a certain well in the oil/potash area, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order denying or rescinding the approval of an "Application for Permit to Drill" which would authorize Yates Petroleum Corporation to drill its Snyder "AKY" Well No. 1 at a standard oil well location in the NW/4 SW/4 (Unit L) of Section 1, Township 20 South, Range 32 East, (approximately 3 miles north of the junction of U.S. Highway 62/180 and State Highway 176). Said location is within the designated oil/potash area as described in and governed under the provisions of Division Order No. R-111-P.

Docket No. 30-92

DOCKET: COMMISSION HEARING - WEDNESDAY - SEPTEMBER 9, 1992

9:00 A.M. - MORGAN HALL, STATE LAND OFFICE BUILDING,
SANTA FE, NEW MEXICO

CASE 10466: **Application of Yates Petroleum Corporation for authorization to drill, Eddy County, New Mexico.** Applicant, in the above-styled cause, seeks approval to drill within the "Potash Area" pursuant to all applicable rules and procedures governing said area, as promulgated by Division Order No. R-111-P. The proposed well is to be located 660 feet from the North line and 1650 feet from the East line (Unit B) of Section 2, Township 22 South, Range 31 East, to test the Delaware formation at an approximate depth of 8500 feet for oil. Lot 2 of said Section 2 is to be dedicated to said well forming a 39.81-acre oil spacing and proration unit for the Undesignated Lost Tank-Delaware Pool. Said unit is located approximately 11 miles east of IMC Inc.'s Potash Mining and Refining Facilities. Upon application of Yates Petroleum Corporation this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 10447: (De Novo) (Readvertised)

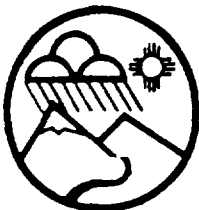
Application of Yates Petroleum Corporation for authorization to drill, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval to drill within the "Potash Area" pursuant to all applicable rules and procedures governing said area, as promulgated by Division Order No. R-111-P. The proposed well is to be located 1980 feet from the North line and 1650 feet from the East line (Unit G) of Section 2, Township 22 South, Range 31 East, to test the Delaware formation at an approximate depth of 8500 feet for oil. The SW/4 NE/4 of said Section 2 is to be dedicated to said well forming a standard 40-acre oil spacing and proration unit for the Undesignated Lost Tank-Delaware Pool. Said unit is located approximately 11 miles east of IMC Inc.'s Potash Mining and Refining Facilities. Upon application of Yates Petroleum Corporation this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 10448: (De Novo) (Readvertised)

Application of Yates Petroleum Corporation for authorization to drill, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval to drill within the "Potash Area" pursuant to all applicable rules and procedures governing said area, as promulgated by Division Order No. R-111-P. The proposed well is to be located 660 feet from the South line and 2310 feet from the West line (Unit N), Township 22 South, Range 31 East, to test the Delaware formation at an approximate depth of 8500 feet for oil. The SE/4 SW/4 of said Section 2 is to be dedicated to said well forming a standard 40-acre oil spacing and proration unit for either the Undesignated Lost Tank-Delaware Pool or the Undesignated Livingston Ridge-Delaware Pool. Said unit is located approximately 11 miles east of IMC Inc.'s Potash Mining and Refining Facilities. Upon application of New Mexico Potash Corporation this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 10449: (De Novo) (Readvertised)

Application of Yates Petroleum Corporation for authorization to drill, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval to drill within the "Potash Area" pursuant to all applicable rules and procedures governing said area, as promulgated by Division Order No. R-111-P. The proposed well is to be located 1980 feet from the South line and 2310 feet from the West line (Unit K) of Section 2, Township 22 South, Range 31 East, to test the Delaware formation at an approximate depth of 8500 feet for oil. The NE/4 SW/4 of said Section 2 is to be dedicated to said well forming a standard 40-acre oil spacing and proration unit for the Undesignated Lost Tank-Delaware Pool or the Undesignated Livingston Ridge-Delaware Pool. Said unit is located approximately 11 miles east of IMC Inc.'s Potash Mining and Refining Facilities. Upon application of New Mexico Potash Corporation this case will be heard De Novo pursuant to the provisions of Rule 1220.



BRUCE KING
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

AIR QUALITY BUREAU

Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-0070

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

MEMORANDUM

DATE: August 28, 1992

TO: Roger C. Anderson, Environmental Bureau Chief
Oil Conservation Division

FROM: Bobby Myers, Environmental Engineer, Air Quality Bureau
Environment Department *[Signature]*

SUBJECT: Tierra Environmental, Inc., Landfarm Application
Applicable Air Quality Permits and Regulations

The Bureau has received your request for a regulatory determination as to whether an air quality permit would be required for the proposed Tierra Environmental hydrocarbon-contaminated soil landfarm near Farmington, New Mexico. Listed below is a summary of my understanding of the proposed project:

- Tierra proposes to accept solids, semi-solids and sludges in soil from oil and gas operations to be landfarmed in order to reduce hydrocarbon contamination in the soil.
- The landfarm is intended to utilize a bio-remediation process to reduce the concentration of heavy-end hydrocarbons to OCD accepted levels. In the initial phase, a one-acre plot will be used to demonstrate the effectiveness of the project, and then will be expanded to include the 21.9 acre land site for bio-remediation.
- The land farm WILL NOT be used for volatilization of light-end hydrocarbons to the atmosphere to reduce contaminated soil concentrations.
- Water is to be added to the contaminated soils in order to enhance the bio-remediation process, but will also aid in suppressing wind-blown dust from the area.

Since the project will not be releasing hydrocarbons to the atmosphere, and dust suppression is to be used, then an air quality permit is not required for this facility. If, however, the scope of work changes at some time in the future to include volatilizing hydrocarbons to reduce soil contaminant levels, then the facility may require a permit both for hydrocarbon emissions to the atmosphere and for particulate emissions, since water treatment would likely be discontinued to enhance volatilization.

XC: Cecilia Williams, Bureau Chief, Air Quality Bureau
David Vackar, Director, Environmental Protection Division





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



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

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

MEMORANDUM

TO: BOBBY MYERS, Environmental Engineer II
Air Quality Bureau

FROM: ROGER C. ANDERSON, Environmental Bureau Chief *RCA*
Oil Conservation Division

SUBJECT: TIERRA ENVIRONMENTAL, INC., LANDFARM APPLICATION
CLARIFICATION OF APPLICATION

DATE: AUGUST 27, 1992

This memo is in response to your verbal request made on August 24, 1992 requiring additional information on the primary purpose of the landfarm and the methods utilized to accomplish this. The primary purpose of all OCD permitted landfarms is to bioremediate non-hazardous, hydrocarbon-contaminated soils. A landfarm allows the contaminated soils to be remediated rather than disposed of or left in place.

The principle of the landfarm operation is to add moisture and nutrients to the soils and then to disc or turnover the soils to enhance biodegradation. This type of operation relies on the biochemical and physical breakdown of the contaminants as opposed to volatilization of the hydrocarbons. The addition of moisture will also control any problem of blowing dust.

If you have any additional questions I may be contacted at (505) 827-5812. Thank you for your time and consideration into this matter.



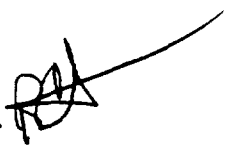
BRUCE KING
GOVERNOR

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

POST OFFICE BOX 2086
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

MEMORANDUM

TO: BOBBY MYERS, Environmental Engineer II
Air Quality Bureau

FROM: ROGER C. ANDERSON, Environmental Bureau Chief 
Oil Conservation Division

SUBJECT: TIERRA ENVIRONMENTAL, INC., LANDFARM APPLICATION
APPLICABLE AIR QUALITY PERMITS AND REGULATIONS

DATE: AUGUST 19, 1992

The attached landfarm application from Tierra Environmental, Inc. has been submitted to the Oil Conservation Division (OCD) to review for approval of a permit in accordance with OCD Rule 711. The application proposes to construct and operate a commercial landfarm facility for remediation of hydrocarbon contaminated soils. The OCD requests a regulatory determination from the New Mexico Air Quality Bureau as to whether an air quality permit is required. If a permit is not required please comment as to whether the Air Quality Bureau would require any other type of monitoring for dust and/or hydrocarbon emissions for this type of facility. The OCD appreciates any help you can provide to ensure our permitted oil and gas disposal facilities are environmentally safe.

OIL CONSERVATION DIVISION
RECEIVED

GLENN E. AND STORME S. VAVRA
P.O. BOX 3656
FARMINGTON, NM 87499-3656
#367 County Road 3100
Aztec, New Mexico 87410

92 AUG 14 PM 10 26

William J. LeMay - Director
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico 87504

Dear Sir,

We are writing to you because of our concern for the health of our family. My husband, I and our four little girls; Tansey 7, Tawney 5, Talissa 3 and our new little baby girl Tylee 5 months.

We purchased our land in 1989, we have resided here since February 1991.

We recently were informed of a "land farm" to be built near our land. The proposed land farm as described to us has no provisions to protect my family from the evaporating hydrocarbons particularly toulene, xylene and benzene. All of which we are led to believe are toxic substances, which cause nervous disorders, headaches, shortness of breath and nausea.

We are also advised in addition to the other effects. Benzene is a known cancer causing agent!

This is a real threat to my precious children. There are already so many dangers in our world that could touch thier lives without them being put at our doorstep.

I see no provisions for the containing of blowing dust and dirt off the "farm". My family lives 400' E. and downwind of this "farm".

We also have a garden every year and we are planning on drilling a water well at the beginning of next year. According to the small piece in the paper on this "land farm" the water will also be contaminated.

I respectfully request and demand a public hearing to demonstrate that in fact. These toxic and cancer causing contaminants will not stay within the bounds of the "land farm".

I further believe that there is not a citizen of New Mexico, let alone a State Government that would put my children in such certain jeopardy!

Sincerely,

Storme S. Vavra
Glenn E. Vavra

P.S. I am also sending copies of this letter to the following people:

Thomas Udall-Attorney General
Dr. Ray Powell-Office of the Governor
Michael Burkhardt-Director Department of Health
Darla Wells-Representative State Legislature



MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal

Time 3:00 P.M.

Date

8/19/92

8/19/92

Originating PartyOther Parties

K. Brown

Glenn + Storme Vavra

Subject

Objection to Tierra Landfarm Application

Discussion

Tried to find phone number for Glenn + Storme Vavra to inform them of the hearing and let them know that they would need to submit a prehearing statement if they plan to present anything at the hearing. Phone number is not listed. Will mail them a copy of the OGD August 10, 1992 letter.

Conclusions or Agreements

Mailed above documents on
Aug. 19, 1992 return receipt P-670-683-663

Signature

Signed

STATE OF
NEW MEXICO

OIL
CONSERVATION
DIVISION



MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal

Time ^{No answer}
4:30 PM 9:45 AM

Date No answer
8/10/92 8/11/92

Originating Party

Other Parties

K.M. Brown - OCD

Mr. Arthur Bichan

313-851-4364

Place

Tierra Hearing Date of September 2, 1992-

Discussion

Told him of the hearing date and wanted to give him prior notice.

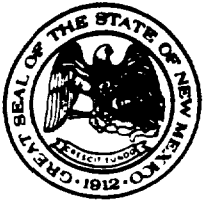
He then went on and on about the whole thing accusing everyone of everything. Very suspecting of everyone.

Conclusions or Agreements

Signature

Signed

Kathy Brown



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



BRUCE KING
GOVERNOR

August 10, 1992

ANITA LOCKWOOD
CABINET SECRETARY

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

CERTIFIED MAIL
RETURN RECEIPT NO. P-670-683-659

Mr. Richard P. Cheney, President
Tierra Environmental Company Inc.
909 West Apache
Farmington, New Mexico 87401

**RE: Tierra Environmental Commercial Landfarm Application
Suspension of OCD Rule 711 Permit Approval**

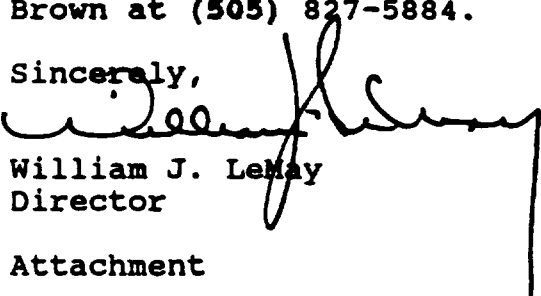
Dear Mr. Cheney:

The Oil Conservation Division (OCD) has determined that there is significant public interest to hold a public hearing for the Tierra Environmental Company Inc., permit application for a commercial landfarm located in the NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. The permit was approved with an effective date of August 11, 1992, under the condition that Arthur and Inez Bichan did not file a protest and request for public hearing on or before August 10, 1992. The OCD received a request for public hearing from Arthur Bichan on August 10, 1992. The OCD Rule 711 permit for Tierra Environmental Company, Inc. is hereby suspended pending a public hearing set for September 2, 1992 in Santa Fe, New Mexico.

The OCD requires all parties wishing to present technical testimony at the hearing to submit a prehearing statement by August 28, 1992. Attached is a form for submitting prehearing statements.

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

Sincerely,


William J. LeMay
Director

Attachment

xc: Arthur H. Bichan - with attachments
Denny Foust, OCD Aztec Office

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

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO.

APPLICATION OF

PRE-HEARING STATEMENT

This prehearing statement is submitted by _____ as
required by the Oil Conservation Division.

APPEARANCES OF PARTIES

APPLICANT

name, address, phone and
contact person

ATTORNEY

OPPOSITION OR OTHER PARTY

name, address, phone and
contact person

ATTORNEY

STATEMENT OF CASE

APPLICANT

(Please make a concise statement of what is being sought with this application and the reasons therefore.)

OPPOSITION OR OTHER PARTY

(Please make a concise statement of the basis for opposing this application or otherwise state the position of the party filing this statement.)

PROPOSED EVIDENCE

APPLICANT

WITNESSES
(Name and expertise)

EST. TIME

EXHIBITS

OPPOSITION

WITNESSES
(Name and expertise)

EST. TIME

EXHIBITS

PROCEDURAL MATTERS

**(Please identify any procedural matters which
need to be resolved prior to the hearing)**

Signature

RECEIVED

AUG 10 1992

OIL CONSERVATION DIV.
SANTA FE

6750 Colby Lane
Bloomfield Hills, MI 48301

August 7, 1992

William J. LeMay, Director
Oil Conservation Division
State Land Office Building
Sante Fe, N.M. 87504

Re: Application of Tierra Environmental for Landfarm - San Juan County, N.M.

Sir:

I am in receipt of your letter dated July 21 and wish to take exception to statements in the second paragraph i.e. "you were advised of the application of Tierra at the time of your purchase and took with knowledge of same".

We arrived in San Juan County from the State of Michigan in early May. I was not advised of an "application" for a landfarm until after I purchased the property from a Tierra owner. I was not aware or advised of the intended landfarm to evaporate hydrocarbons until after our purchase. To my knowledge, no person has ever claimed that I was advised of the "application" prior to purchase. Last week, Geoff McMahon, a Tierra owner and the seller of the land to us, re-stated that he had told me there was going to be an operation for reclaiming drill site contaminated soil wherein the soil would be wetted down with water and the hydrocarbons removed by bacteria (or microbes). He stated that this was what he understood the operation to be at that time.

Clearly, we had no knowledge of the "application" or the evaporator field at the time of purchase.

Further, Glenn and Storme Vavra, a very young couple with four young children-ages 5 months to 7 years-are buying a piece of property and have lived on said property for more than two years. This fact is well known to at least one of the owners of Tierra and obvious to anyone inspecting the area. The Vavra property lies along the extended north line of the proposed landfarm and only 400 feet east and directly downwind.

The proposed landfarm, designed to evaporate off toxic toluene, xylene and benzene (also a known carcinogen), only 400 feet to the west and up-wind clearly makes both our property and the Vavra property unfit for reasonably enjoyment and habitation being subject to the toxic evaporated product 24 hours a day and without surcease.

Further, the operating requirements make no provision for assurance that the introduced solids, i.e. crude oil saturated dirt and dust will be contained on the proposed landfarm particularly when subject to the 50 M.P.H. (and higher) winds that often sweep the top of that mesa. The proposed operating requirements laid down by your Department further exacerbate this certain problem by

demanding that the deposits be fluffed up by discing every two weeks.

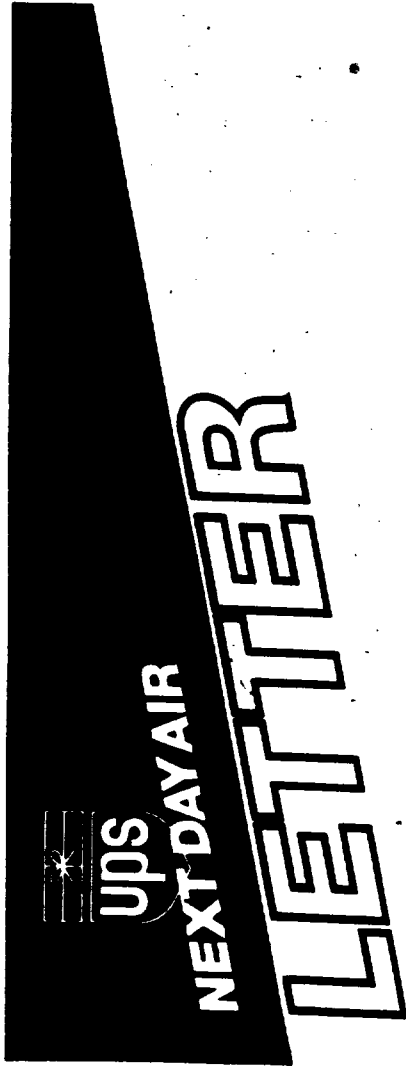
We again request a public hearing before issuance of the proposed permit.

Respectfully,

A handwritten signature in cursive script, appearing to read "Arthur H. Bichan".

Arthur H. Bichan

C.C.: Terra Environmental Company, Inc.



Place parcel register tape or stamp UPS shipper number below.

PLACE THE UPS TRACKING LABEL HERE

REFERENCE NUMBER	34334323	TELEPHONE	
NAME	ARTHUR BIGHAN		
COMPANY	MAIL BOXES E		
STREET ADDRESS	6032 TELEGRAPH		
CITY	STATE	ZIP CODE	
BLOOMFIELD HILLS	MI	48301	
NAME	William J. LeMay, Dir.		
COMPANY	OIL CONSERVATION Div.		
STREET ADDRESS	STATE LAND OFFICE BLDG		
CITY	STATE	ZIP CODE	
SANTA FE	N.M.		

PLACE YOUR ADDRESS LABEL BELOW

LTR	UPS SHIPPER NUMBER	N450-X24
TRACKING NO.	0083 8834 641	
<div> <div>ups</div> <div>NEXT DAY AIR</div> </div>	<div> <div>ups</div> <div>NEXT DAY AIR</div> </div>	<div> <div>ups</div> <div>NEXT DAY AIR</div> </div>

The NEXT DAY AIR LETTER is to be used for document shipments only. Please separate your NEXT DAY AIR LETTERS, PAKS, and packages from any other UPS shipments.



IMPORTANT MESSAGE

FOR John Art Ken May Send me
DATE 7/24/92 TIME 1:50 AM.
M. Author Bickard P.M.
OF 6750 Colby Lane, Bloomfield
Hill MI
PHONE 313-851-4360 4830
AREA CODE NUMBER EXTENSION

TELEPHONED	<input checked="" type="checkbox"/>	RETURNED CALL	<input checked="" type="checkbox"/>
CAME TO SEE YOU	<input checked="" type="checkbox"/>	CALL ANSWERED	<input checked="" type="checkbox"/>
WANTS TO SEE YOU	<input checked="" type="checkbox"/>	NAME	
RETURNED YOUR CALL	<input checked="" type="checkbox"/>	SPECIAL ATTENTION	<input checked="" type="checkbox"/>

MESSAGE Hydrocarbon
evaporator - "T" in no
fuel"
711 - Sent 7/24/92

SIGNED _____
LITHO IN U.S.A.



TOPS FORM 30028

ILLEGIBLE

HYNES, HALE, & THROWER

A T T O R N E Y S A T O I L C O N S E R V A T I O N D I V I S I O N

THOMAS J. HYNES • J. KEVIN HALE • LARRY T. THROWER

1000 West Apache
Farmington, New Mexico 87401
OFF.: 505/325-8813
FAX: 505/326-6177

'92 JUL 30 8 50

July 30, 1992

COPY

Arthur H. and Inez Bichan
6750 Colby Lane
Bloomfield Hills, MI 48301

Re: Application of Tierra Environmental Company, Inc.
for Land Farm in San Juan County, New Mexico

Dear Mr. and Mrs. Bichan:

This office represents Tierra Environmental Company, Inc. reference their permit for a land farm, which I understand is in proximity to real property which you have purchased in San Juan County, New Mexico. I have reviewed the various items of correspondence written by you and the reply letters from the Oil Conservation Division. I note in your letter of July 17, 1992, your comments that you have attempted to avoid the law and lawyers since your retirement, and I certainly echo that sentiment. This letter is written in an effort to address your concerns and to, hopefully, persuade you to withdraw your protest and give my clients an opportunity to demonstrate the safety and feasibility of their project. I attach a letter which I have requested my clients to draft describing the project and the method of operation. My additional comments are as follows:

1. The purpose and intent of the farm is environmental remediation. It is designed to reduce pollutants and restore soil to a safe and usable medium. The technology has been successful in the past and my clients feel it will minimize harm to the environment rather than increase that harm.

2. The project from start to finish is required by State law to be monitored, supervised, and in essence operated per the guidelines and directives of the Oil Conservation Division of the State of New Mexico. As the attached letter indicates, the amount of contaminated soil and the method of remediation are monitored in an ongoing fashion and regulated so as to minimize the airborne and soil related pollutants. As with all contaminated or polluted material, they must be handled and dealt with somewhere.

Arthur H. and Inez Bichan
July 30, 1992

3. The principals in this corporation are long time Farmington residents and have a reputation as honest businessmen and concerned citizens. This is not a scheme to pollute a vast area and walk away. It is designed as a long-term, ongoing method of remediating soil. My clients desire to be good neighbors, both to you, the surrounding residents and the community as a whole.

4. While your protests will certainly impose upon my clients a good deal of delay, costs and expense, I do not believe the ultimate outcome will be different. The permit process requires compliance with State law and, from my review of the application and issuance of the permit, it complies in all respects. Many of your concerns are matters which are not addressed in the permit process and are not relative to issuance or non-issuance of the permit. We believe the protest will only result in a good deal of costs and headaches to everyone involved, resulting in the ultimate issuance of the permit at some later date.

It is hoped that my comments and the attached letter from Tierra will address and alleviate your concerns. Being an attorney, I am certain that you are aware that the mere issuance of the permit and operation of the farm itself in no way infringes or impairs your legal rights to seek damages or injunctive relief should you feel at a later date that the farm is not being operated in a safe and reasonable manner, or has unreasonably affected the value of your property or the ability to utilize it in the fashion you desire.

Would you please consider the matters contained herein and advise if you feel they have merit. If we can reach an acceptable resolution, please contact me at your convenience.

Sincerely yours,

HYNES, HALE & THROWER

J. Kevin Hale

JKH:nn

cc: Client
Oil Conservation Division
Rep. Darla Welles

**TIERRA Environmental Company, Inc.
909 West Apache
Farmington, New Mexico 87413
(505) 325-0924**

July 27, 1992

Mr. Arthur Bichan
6750 Colby Lane
Bloomfield Hills, Mi 48301

RE: TIERRA LAND FARM OPERATION:

Dear Mr. Bichan:

I am in receipt of your letter to OCD of July 17, 1992. By now you should have been notified by OCD as to what action they are taking with respect to the Land Farm Operation.

In your letter you outlined what Geoff McMahon has told you about the operation. He has told you the truth. Tierra owns approximately eighty acres of land adjacent to your parcel on Crouch Mesa. Twenty-one acres, more or less is being permitted for a soils remediation land farm. Within the twenty-one acre facility is a bio-remediation cell. It is the part of the property that is closest to your land. It will be moistened and bio-technology applied thereto. You have been misinformed as to soils being stacked one layer upon the other. It is permissible for the land farm to do that, however, state regulations require, that the soils have to be remediated to less than 100 parts per million ppm total petroleum hydrocarbons (TPH), less than 50 ppm Benzene, Toluene, Ethanes and Xylenes (BTEX) and further that Benzenes cannot exceed 10 ppm. Soils at that level are considered by the State and EPA to be clean. Those regulations and standards must be met and verified to the State by an independent EPA approved laboratory analysis, before another layer of soils can be placed on top. Soils can only be placed in six inch lifts, one at a time until they are remediated to the required levels. OCD must be notified and those standards met before another six inch lift is placed on top of the soils that are in place. Our plans do not include stacking of soils in most instances. It is economically not feasible. We plan to remove most soils following successful remediation for transportation back to the oil and gas fields to use as backfill in the excavations made removing contaminated soils. It will be a cyclic process. The land farm facility will not be permitted to accept UST waste ie: gasoline contaminated soils. Each case wherein soils contaminated with produced gasoline would be taken to the land farm facility, the OCD must give individual approval.

Mr. Arthur Bichan
July 27, 1992
Page two

Regarding the issue of blowing dust, we have offered and it will be OCD's decision whether we can moisten the other areas of the facility. We don't want blowing dust any more than you do. The existing pipe yard located to the north west of both your property and ours and the county road that divides our properties can create enough dust. OCD's concern about moisture however is that it could enhance leaching of contaminants to the underlying soils. That is why in our application, Tierra only asked for one bio-remediation cell. We must prove our technology is effective and safe. I am sure when we can successfully demonstrate that no leaching will occur, OCD will approve the addition of moisture in limited quantity to the other areas of the facility.

I have enclosed a copy of the conditions imposed by OCD regarding our land farm. Tierra had agreed to them prior to your objections. They will explain further just what the land farm can and cannot do.


Regarding the issue of air quality, emissions from the landfarm will be no greater than oil and gas facilities in the basin including the existing gas production wells adjacent to both our properties. It is clear from your most recent letter to the Director of OCD that you were operating under some serious misconceptions based on what information you received second hand.

Just for the record, Tierra is owned by Brewer Associates, Engineers and Surveyors (Mr.Cheney's firm), Geoff McMahon, myself (the former Bloomfield City Manager) and Bill Rippetoe.

Brewer Associates has been a reputable engineering firm in the San Juan Basin since 1962. Richard Cheney is an engineer and has considerable experience with the oil and gas industry. Bill Rippetoe has a Masters Degree in Chemistry and Education and has been in the oil and gas industry since the late 1960s'. Geoff as you know has many diverse interests. I had been in government service for several years, in several states, public safety and management. My contribution to the organization is handling the regulatory matters.

I hope this information is helpful and will clear the air. We would like to be good neighbors.

Sincerely,


Phillip C. Nobis
Vice President
Risk Management

(enclosures)

1. Tierra OCD Rules

ATTACHMENT TO OCD 711 PERMIT APPROVAL
TIERRA ENVIRONMENTAL INC.
COMMERCIAL LANDFARM
(August 11, 1992)

LANDFARM OPERATION

1. All contaminated soils received at the facility will be spread and disked within 72 hours of receipt.
2. Soils will be spread on the surface in six inch lifts or less.
3. Soils will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
4. Successive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
5. Only solids which are non-hazardous by RCRA Subtitle C exemption or by characteristic testing will be accepted at the facility: Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt or are non-hazardous by characteristic testing will only be accepted on a case-by-case basis and with prior OCD approval.
6. Comprehensive records of all material disposed of at the facility will be maintained at the facility. The records for each load will include: 1) the origin, 2) analysis for hazardous constituents if required, 3) transporter, and 4) exact cell location and method of remediation.
7. Bio-remediation through the application of microbes will only be permitted in the designated 1-acre area. The microbes will be mixed with water and applied to the contaminated soils. There will be no ponding, pooling or run-off of water allowed during the application phase or afterwards. Any change in the composition (ie. chemical additives), process or location of the bio-remediation program must receive prior OCD approval.
8. No free liquids or soils with free liquids will be accepted at the facility.

TREATMENT ZONE MONITORING

1. A treatment zone not to exceed two (2) feet beneath the land farm will be monitored. A minimum of one random soil sample will be taken from each individual cell six (6) months after the first contaminated soils are received in the cell and then annually thereafter. The sample will be taken at two to three (2-3) feet below the native ground surface.
2. The soil samples will be analyzed for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) using approved EPA methods.
3. After obtaining the soil samples the boreholes will be filled with an impermeable material such as bentonite cement.
4. Any cells that have moisture added to them will be analyzed on a quarterly basis following the requirements above.

REPORTING

1. Analytical results from the treatment zone monitoring will be submitted to the OCD Santa Fe Office within thirty (30) days of receipt from the laboratory.
2. The OCD will be notified of any break, spill, blow out, or fire or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

BOND

Pursuant to OCD Rule 711 a surety or cash bond in the amount of \$25,000, in a form approved by the Division, is required prior to commencing construction of the commercial surface disposal facility.

CLOSURE

When the facility is to be closed no new material will be accepted. Existing soils will be remediated until they meet the OCD standards in effect at the time of closure. The area will then be reseeded with natural grasses and allowed to return to its natural state. Closure will be pursuant to all OCD requirements in effect at the time of closure.

OIL CONSERVATION DIVISION
RECEIVED

6750 Colby Lane
Bloomfield Hills, MI 48301

'92 JUL 22 AM 8 49

July 17, 1992

Director
Oil Conservation Division
State Land Office Bldg.
P.O. Box 2088
Santa Fe, NM 87504-2088

RE: Application of Tierra Environmental Company, Inc. to operate a landfarm for redemption of soils contaminated with hydrocarbons on County Road 3500 on the top of Crouch Mesa just east of Farmington in San Juan County.

Sir or Madam:

Subsequent to my letter of June 10 to your office on the above captioned matter I received a copy of a letter addressed to a geologist at the "Energy Minerals and Natural Resources Department" - a copy is attached.

I take this opportunity to correct some serious implications that could be construed from that letter.

During my negotiations and prior to purchase, I found a new road running west from the 3100 road that appeared to be on the Morningstar holdings. I followed this road and found two newly leveled adjacent areas surrounded by embankments. There were two big machines present and some big tanks.

I contacted Geoff McMahon of Morningstar and asked him what was the intended use. He explained to me that it was to be a composting operation using manure from the race track. We discussed the fact that it was about a half a mile south and down the hill and three quarters of a mile southwest from the property in which I was interested. In that the prevailing wind is west, I was satisfied that the operation would not bother our enjoyment of the proposed property.

I then asked Mr. McMahon, point blank, did he then have any plans for any of the other property in the quarter section.

In reply to this direct question he did state that he and another man (he named him) that had been City Manager for, I think, Bloomfield were going to put in "a little soil reclamation project". He then explained contaminated soil from drill sights would be spread out and wetted down with water and bacteria would be introduced to devour the hydrocarbons. He asked if I was aware of the process and I told him that I had read of bacteria being used to clean up oil spills quite successfully. We discussed the facts that bacteria was highly successful in cleaning up hydrocarbons and that wetting the soil would avoid dust and blowing sand and seal the oil in and I was completely satisfied that such an operation would not unreasonably interfere with our quiet enjoyment of the nearby land.

I had every confidence then, as I have today, that Geoff McMahon told me the exact truth, at least as he had been told.

On June 8 we closed on the property. June 9 Glenn Vavra, owner of the property immediately east of my piece, stopped by our trailer at the

campground and showed me a paper that had been tacked to a post at his entry. The paper was a copy of public notice of the land-farm and some irate comments on truck traffic, dust, etc.- it was not signed.

I told Mr. Vavra not to worry about it that the dirt would be wetted down and then sold off and moved away after it had been cleaned by the bacteria.

He then said that he had just come from the "O.C.D." office in Aztec and they had said absolutely nothing about watering down the soil or using bacteria. He said he was told that contaminated soil would be spread out and then layered up, one layer on top of the other.

At this time, after I had purchased the property, was when I first discovered that Tierra really intended to construct a huge hydrocarbon evaporator field and just let the sand and dust blow.

I closed my law office in 1968 and have assiduously avoided the law and lawyers ever since.

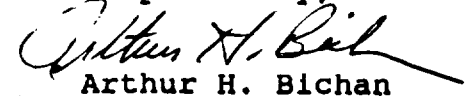
The "... at least one book on environmental issues, concerning hydrocarbon emissions from automobiles" was, in fact, a twenty-eight page booklet entitled "The Emissions Control Bypass Manual" - How To Bypass the Emission Controls On Every '73 and '74 U.S. Automobile Engine. This hardly qualifies me as an "ecology nut".

In that the Tierra letter is nothing but a fallacious personal attack upon me, my methods and motives and totally ignores the basic questions i.e. (1) How is blowing dust and sand to be limited? (2) How much hydrocarbon will be given off? Does that exceed Federal and/or State limits? How are limits to be assured? - it would seem that they intend to operate in any fashion they wish and want no limits or records made.

That scares me and should certainly alert your office; The State Environmental Department; the State Health Department and the Federal Environmental Protection Agency.

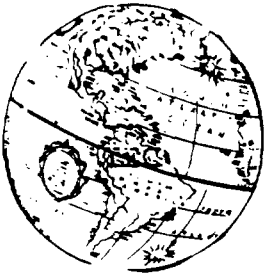
Minimally, the application demands a public hearing.

Respectfully,


Arthur H. Bichan

Copy To:

Tierra Environmental Company, Inc.
State Senator Donistorpe
State Representative Wells
U.S. Senators
U.S. Representatives
Director Burkhardt-Department of Health
Director Esponosa-Environmental Department
Environmental Protection Agency-U.S.



COPY
TIERRA Environmental Company, Inc.
909 West Apache
Farmington, New Mexico 87401

June 22, 1992

Ms. Kathy Brown, Geologist
Energy Minerals and Natural Resources Department
P.O. Box 2088
Santa Fe, New Mexico 87504

RE: Request for Public Hearing on Tierra Environmental Company, Inc., Landfarm Permit Application, by Mr. Arthur H. Bichan:

Dear Ms. Brown:

We appreciate your quick response, furnishing Tierra a copy of Mr. Bichans' letter, requesting a public hearing. According to the deed copy enclosed with the letter, Mr. Bichan purchased the property on or about June 8, 1992. Morningstar Corporation was the owner of record, when Tierra sent out the required notices, pursuant to OCD Rule 711, on April 15, 1992.

After reviewing the letter, I contacted the owner of Morningstar Corporation, Mr. Geoff McMahon. Mr. McMahon told me he did sell the land to Bichan on or about June 8, 1992. He further said that he had told Mr. Bichan all about the proposed landfarm, showed him its location in relationship to the land Mr. Bichan was interested in purchasing, prior to the sale. Enclosed is a letter from Mr. McMahon. Mr. McMahon is also one of the principal partners in Tierra.

Also enclosed is a letter from Ms. Claudine Riddle. She is the local Realtor who closed the transaction between Morningstar and Mr. Bichan. She says Mr. Bichan was aware of the landfarm before he made the purchase of the adjacent ten (10) acres. Ms. Riddle has no business interest in Tierra.

Mr. Robert Stanard, owner of San Juan Engineering, in Farmington, New Mexico and a Registered Professional Engineer himself, discussed the landfarm with Mr. Bichan, the day after Mr. Bichan bought the property. Enclosed please find Mr. Stanards letter. Mr. Stanard has no business interest in Tierra, nor is he associated with Richard Cheney also a Registered Professional Engineer and President of Tierra.

The above information appears to conflict with Mr. Bichans letter of protest.

I have personally obtained some additional information concerning Mr. Bichan. He is an attorney in the State of Michigan and claims to be an author, who has written at least one book on environmental issues, concerning hydrocarbon emissions from automobiles.

Ms Kathy Brown
June 22, 1992
Page two

It appears to Tierra, that Mr. Bichan, purchased the property with full knowledge as to the landfarm and its method of operation. It is also quite clear that Mr. Bichan possessed sufficient knowledge regarding environmental issues to be able to make an intelligent decision as to whether or not he wanted to purchase land adjacent to our proposed facility.

Tierra respects the right of anyone to protest and ask for a public hearing, according to the laws of our state. We are however, suspicious of an out of state attorney and environmental author, who after having full knowledge of what plans Tierra had for the adjacent property, in advance, purchases the land and then files a protest.

I can only compare his actions to a person who after being told by an automobile dealer the vehicle he wants to buy is used and has a bad transmission, purchases the vehicle as is and then attempts to file a court action against the automobile dealer under the "Lemon Law".

As a point of information for the record, my wife Dorothy and I are currently dealing with Morningstar Corporation. We intend to purchase about five (5) acres between the Tierra landfarm and Mr. Bichans property, move a double wide onto the property and live there with our family. Dorothy is a former newspaper editor and currently a medical professional. I am a former City Manager, Public Safety Official and currently a principal partner in Tierra, an environmental company. We are well aware of what the proposed landfarm will be doing and feel perfectly safe living next to it.

Tierra hopes OCD will deny the request. We are anxious to proceed with permitting process and if successful be able to provide a much needed, environmentally sound service to our clients in the oil and natural gas industry.

However Mr. Bichans major complaint seems to be blowing dust and hydrocarbon emissions. If required by OCD, Tierra would commit to taking appropriate measures to limit dust and would further be willing to conduct some degree of limited air monitoring.

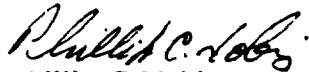
The only logical method to limit dust is the addition of moisture, which would require further OCD approval. Air monitoring is expensive, however an on-site program, requiring personnel to wear exposure badges and use a "sniffer" periodically, on a scheduled basis might serve the purpose.

Ms Kathy Brown
June 22, 1992
Page three

Regarding Mr. Bichans statements about our Company President, Richard Cheney and his alleged powerful political clout, I can only say that, Tierra has followed the rules to the best of our ability, just like anyone else would have to do. This is America, even a politician has a God given right to earn a living. It might interest Mr. Bichan to know that Richard Cheney is a "Lame Duck". He did not seek re-election this year.

Thank you for your consideration and we hope this information is helpful.

Sincerely,



Phillip C. Nobis
Vice President

cc: Mr. D. Fost, Aztec OCD Office
Mr. Richard Cheney, Tierra President
Mr. Bill Rippetoe, V.P. Tech Ops Tierra
Mr. Geoff McMahon, Mornigstar / Tierra
Mr. Les Dow, Attorney for Tierra
Mr. Arthur H. Bichan (Protestant)



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

BRUCE KING
GOVERNOR

July 21, 1992

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

Mr. Richard P. Cheney, President
Tierra Environmental Company, Inc.
909 West Apache
Farmington, NM 87401

RE: *Tierra Environmental Commercial Landfarm Application*
San Juan County, NM

Dear Mr. Cheney:

Enclosed is approval of *Tierra Environmental Company, Inc.*'s application for a commercial landfarm under Division Rule 711. Please notice that the approval letter is dated August 11, 1992, and it is not effective until that date.

As you know Arthur and Inez Bichan have filed a protest and request for hearing on your application. Enclosed is a copy of the letter to them advising them of the approval and of their right to file a petition for hearing to rescind the approval. If they do so, the burden will be on them to show why the application should not be approved.

If they do not file their petition before August 10, 1992, your approval will become effective, and you may begin operation. If they do file their petition, your approval will be suspended.

Sincerely,

Roger Anderson,
Environmental Bureau Chief



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



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

August 11, 1992

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

CERTIFIED MAIL
RETURN RECEIPT NO. P-670-683-652

Mr. Richard P. Cheney, President
Tierra Environmental Company Inc.
909 West Apache
Farmington, New Mexico 87401

**RE: Tierra Environmental Commercial Landfarm Application
OCD Rule 711 Permit Approval**

Dear Mr. Cheney:

The permit application for the Tierra Environmental Commercial Landfarm located in the NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, is hereby approved in accordance with OCD Rule 711 under the conditions contained in the enclosed attachment. The application consists of the original application dated April 13, 1992, and the materials dated June 3, 1992 and June 22, 1992, submitted as supplements to the application.

The operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications ~~and~~ alternatives to the approved landfarming methods must receive prior OCD approval. **You are** required to notify the Director of any facility expansion or process modification ~~and to~~ file the appropriate materials with the Division.

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

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered nonhazardous to migratory birds.

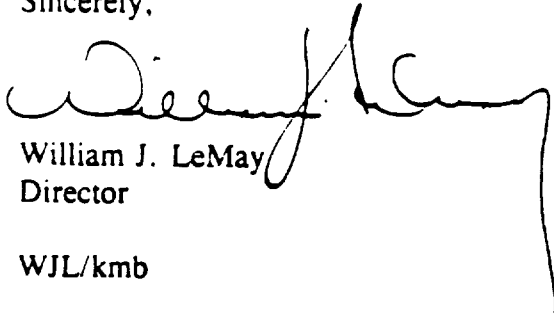
Mr. Richard P. Cheney

August 11, 1992

Page 2

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

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

William J. LeMay
Director

WJL/kmb

Attachment

xc: Denny Foust, OCD Aztec Office

**ATTACHMENT TO OCD 711 PERMIT APPROVAL
TIERRA ENVIRONMENTAL INC.
COMMERCIAL LANDFARM
(August 11, 1992)**

LANDFARM OPERATION

1. All contaminated soils received at the facility will be spread and disked within 72 hours of receipt.
2. Soils will be spread on the surface in six inch lifts or less.
3. Soils will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
4. Successive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
5. Only solids which are non-hazardous by RCRA Subtitle C exemption or by characteristic testing will be accepted at the facility. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt or are non-hazardous by characteristic testing will only be accepted on a case-by-case basis and with prior OCD approval.
6. Comprehensive records of all material disposed of at the facility will be maintained at the facility. The records for each load will include: 1) the origin, 2) analysis for hazardous constituents if required, 3) transporter, and 4) exact cell location and method of remediation.
7. Bio-remediation through the application of microbes will only be permitted in the designated 1-acre area. The microbes will be mixed with water and applied to the contaminated soils. There will be no ponding, pooling or run-off of water allowed during the application phase or afterwards. Any change in the composition (ie. chemical additives), process or location of the bio-remediation program must receive prior OCD approval.
8. No free liquids or soils with free liquids will be accepted at the facility.

TREATMENT ZONE MONITORING

1. A treatment zone not to exceed two (2) feet beneath the land farm will be monitored. A minimum of one random soil sample will be taken from each individual cell six (6) months after the first contaminated soils are received in the cell and then annually thereafter. The sample will be taken at two to three (2-3) feet below the native ground surface.
2. The soil samples will be analyzed for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) using approved EPA methods.
3. After obtaining the soil samples the boreholes will be filled with an impermeable material such as bentonite cement.
4. Any cells that have moisture added to them will be analyzed on a quarterly basis following the requirements above.

REPORTING

1. Analytical results from the treatment zone monitoring will be submitted to the OCD Santa Fe Office within thirty (30) days of receipt from the laboratory.
2. The OCD will be notified of any break, spill, blow out, or fire or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

BOND

Pursuant to OCD Rule 711 a surety or cash bond in the amount of \$25,000, in a form approved by the Division, is required prior to commencing construction of the commercial surface disposal facility.

CLOSURE

When the facility is to be closed no new material will be accepted. Existing soils will be remediated until they meet the OCD standards in effect at the time of closure. The area will then be reseeded with natural grasses and allowed to return to its natural state. Closure will be pursuant to all OCD requirements in effect at the time of closure.



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

July 21, 1992

BRUCE KING
GOVERNOR

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

CERTIFIED MAIL # P 670683656 - RETURN RECEIPT REQUESTED

Arthur H. and Inez Bichan
6750 Colby Lane
Bloomfield Hills, MI 48301

RE: Application of Tierra Environmental for Landfarm
San Juan County, NM

Dear Mr. and Mrs. Bichan:

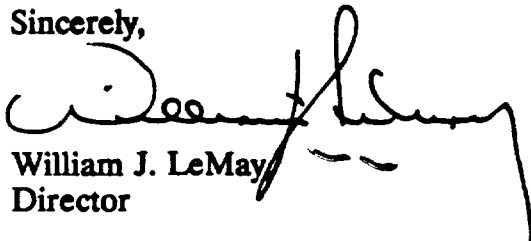
We have received your letter of June 10, 1992, in opposition to the above application, and your request.

The application of *Tierra Environmental Company, Inc.*, was filed with the Oil Conservation Division on April 14, 1992. *Tierra* complied with the notice requirements at the time of their application. You acquired your property on June 8, 1992, from Morningstar Corporation, through a deed signed by Geoff McMahon, who is also a principal in *Tierra*. You were advised of the application of *Tierra* at the time of your purchase and took with knowledge of the same.

The Division has reviewed the application and finds that it is approvable with certain operating requirements, a copy of which is attached. The approval is suspended for twenty days from this date. You may within that twenty day period file a petition for hearing to request rescission of the approval within that time. If you so file, the hearing will be docketed at the next available hearing date, usually within four weeks. At such hearing it will be your burden to prove that the application should not be approved under the rules and regulations of the Division. Land use considerations are not a matter which the Division can consider.

If we do not receive your application for hearing on or before close of business on August 10, 1992, the approval of the permit will become effective.

Sincerely,



William J. LeMay
Director

cc: *Tierra Environmental*

**ATTACHMENT TO OCD 711 PERMIT APPROVAL
TIERRA ENVIRONMENTAL INC.
COMMERCIAL LANDFARM
(August 11, 1992)**

LANDFARM OPERATION

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3. Soils will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
4. Successive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
5. Only solids which are non-hazardous by RCRA Subtitle C exemption or by characteristic testing will be accepted at the facility. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt or are non-hazardous by characteristic testing will only be accepted on a case-by-case basis and with prior OCD approval.
6. Comprehensive records of all material disposed of at the facility will be maintained at the facility. The records for each load will include: 1) the origin, 2) analysis for hazardous constituents if required, 3) transporter, and 4) exact cell location and method of remediation.
7. Bio-remediation through the application of microbes will only be permitted in the designated 1-acre area. The microbes will be mixed with water and applied to the contaminated soils. There will be no ponding, pooling or run-off of water allowed during the application phase or afterwards. Any change in the composition (ie. chemical additives), process or location of the bio-remediation program must receive prior OCD approval.
8. No free liquids or soils with free liquids will be accepted at the facility.

TREATMENT ZONE MONITORING

1. A treatment zone not to exceed two (2) feet beneath the land farm will be monitored. A minimum of one random soil sample will be taken from each individual cell six (6) months after the first contaminated soils are received in the cell and then annually thereafter. The sample will be taken at two to three (2-3) feet below the native ground surface.
2. The soil samples will be analyzed for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) using approved EPA methods.
3. After obtaining the soil samples the boreholes will be filled with an impermeable material such as bentonite cement.
4. Any cells that have moisture added to them will be analyzed on a quarterly basis following the requirements above.

REPORTING

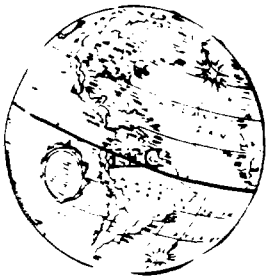
1. Analytical results from the treatment zone monitoring will be submitted to the OCD Santa Fe Office within thirty (30) days of receipt from the laboratory.
2. The OCD will be notified of any break, spill, blow out, or fire or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

BOND

Pursuant to OCD Rule 711 a surety or cash bond in the amount of \$25,000, in a form approved by the Division, is required prior to commencing construction of the commercial surface disposal facility.

CLOSURE

When the facility is to be closed no new material will be accepted. Existing soils will be remediated until they meet the OCD standards in effect at the time of closure. The area will then be reseeded with natural grasses and allowed to return to its natural state. Closure will be pursuant to all OCD requirements in effect at the time of closure.



OIL CONSERVATION DIVISION
TIERRA Environmental Company, Inc. REG. 100
909 West Apache
Farmington, New Mexico 87401
JUN 24 AM 8 39

June 22, 1992

Ms. Kathy Brown, Geologist
Energy Minerals and Natural Resources Department
P.O. Box 2088
Santa Fe, New Mexico 87504

RE: Request for Public Hearing on Tierra Environmental Company, Inc., Landfarm Permit Application, by Mr. Arthur H. Bichan:

Dear Ms. Brown:

We appreciate your quick response, furnishing Tierra a copy of Mr. Bichans' letter, requesting a public hearing. According to the deed copy enclosed with the letter, Mr. Bichan purchased the property on or about June 8, 1992. Morningstar Corporation was the owner of record, when Tierra sent out the required notices, pursuant to OCD Rule 711, on April 15, 1992.

After reviewing the letter, I contacted the owner of Morningstar Corporation, Mr. Geoff McMahon. Mr. McMahon told me he did sell the land to Bichan on or about June 8, 1992. He further said that he had told Mr. Bichan all about the proposed landfarm, showed him its location in relationship to the land Mr. Bichan was interested in purchasing, prior to the sale. Enclosed is a letter from Mr. McMahon. Mr. McMahon is also one of the principal partners in Tierra.

Also enclosed is a letter from Ms. Claudine Riddle. She is the local Realtor who closed the transaction between Morningstar and Mr. Bichan. She says Mr. Bichan was aware of the landfarm before he made the purchase of the adjacent ten (10) acres. Ms. Riddle has no business interest in Tierra.

Mr. Robert Stanard, owner of San Juan Engineering, in Farmington, New Mexico and a Registered Professional Engineer himself, discussed the landfarm with Mr. Bichan, the day after Mr. Bichan bought the property. Enclosed please find Mr. Stanards letter. Mr. Stanard has no business interest in Tierra, nor is he associated with Richard Cheney also a Registered Professional Engineer and President of Tierra.

The above information appears to conflict with Mr. Bichans letter of protest.

I have personally obtained some additional information concerning Mr. Bichan. He is an attorney in the State of Michigan and claims to be an author, who has written at least one book on environmental issues, concerning hydrocarbon emissions from automobiles.

Ms Kathy Brown
June 22, 1992
Page two

It appears to Tierra, that Mr. Bichan, purchased the property with full knowledge as to the landfarm and its method of operation. It is also quite clear that Mr. Bichan possessed sufficient knowledge regarding environmental issues to be able to make an intelligent decision as to whether or not he wanted to purchase land adjacent to our proposed facility.

Tierra respects the right of anyone to protest and ask for a public hearing, according to the laws of our state. We are however, suspicious of an out of state attorney and environmental author, who after having full knowledge of what plans Tierra had for the adjacent property, in advance, purchases the land and then files a protest.

I can only compare his actions to a person who after being told by an automobile dealer the vehicle he wants to buy is used and has a bad transmission, purchases the vehicle as is and then attempts to file a court action against the automobile dealer under the "Lemon Law".

As a point of information for the record, my wife Dorothy and I are currently dealing with Morningstar Corporation. We intend to purchase about five (5) acres between the Tierra landfarm and Mr. Bichans property, move a double wide onto the property and live there with our family. Dorothy is a former newspaper editor and currently a medical professional. I am a former City Manager, Public Safety Official and currently a principal partner in Tierra, an environmental company. We are well aware of what the proposed landfarm will be doing and feel perfectly safe living next to it.

Tierra hopes OCD will deny the request. We are anxious to proceed with permitting process and if successful be able to provide a much needed, environmentally sound service to our clients in the oil and natural gas industry.

However Mr. Bichans major complaint seems to be blowing dust and hydrocarbon emissions. If required by OCD, Tierra would commit to taking appropriate measures to limit dust and would further be willing to conduct some degree of limited air monitoring.

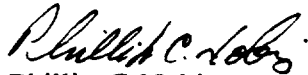
The only logical method to limit dust is the addition of moisture, which would require further OCD approval. Air monitoring is expensive, however an on-site program, requiring personnel to wear exposure badges and use a "sniffer" periodically, on a scheduled basis might serve the purpose.

Ms Kathy Brown
June 22, 1992
Page three

Regarding Mr. Bichans statements about our Company President, Richard Cheney and his alleged powerful political clout, I can only say that, Tierra has followed the rules to the best of our ability, just like anyone else would have to do. This is America, even a politician has a God given right to earn a living. It might interest Mr. Bichan to know that Richard Cheney is a "Lame Duck". He did not seek re-election this year.

Thank you for your consideration and we hope this information is helpful.

Sincerely,



Phillip C. Nobis
Vice President

cc: Mr. D. Fost, Aztec OCD Office
Mr. Richard Cheney, Tierra President
Mr. Bill Rippetoe, V.P. Tech Ops Tierra
Mr. Geoff McMahon, Mornigstar / Tierra
Mr. Les Dow, Attorney for Tierra
Mr. Arthur H. Bichan (Protestant)

June 14, 1992

To whom it may concern:

Arthur Dickan and his wife Jethen Love-
With and purchased 10 Acres of land from
Geoff McMahon on Crowna Mesa.

Arthur was a very ~~Methodical~~ ^{Methodical} Purchaser.
He checked everything out ~~himself~~ ^{himself} - was
on the land talking to many people like
inspector - Contractors etc. They, he and his
wife, both knew this was their dream place
when we found it (they were here 30 days).

Arthur was very impressed with Geoff
and his honesty - He told me about everything
Geoff had told him including the "Field".
As we talked I ask him if that was a
problem - He said "No." He spent ~~2~~ ³ ~~days~~ ^{days} checking
I did believe he checked everything out!!
After all he is very knowledgeable and is
a professional person - Richard Langer and
has sold Real Estate. I would trust
him to be very complete with his inspections.
~~Arthur Dickan, Broker, etc.~~

Morningstar Corporation

Land Development

PHONE
(505) 325-2435

P.O. DRAWER 9
FARMINGTON, NEW MEXICO 87499

N. GEOFF McMAHON
President

June 18, 1992

Tierra Environmental, Inc.
909 West Apache
Farmington, NM 87401

ATTENTION: Mr. Richard Cheney
President

Dear Sir;

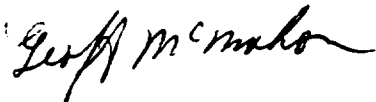
On Monday the 8th of June, Mr. Arthur Bichan purchased 10 acres from us in the SE $\frac{1}{4}$ of S2T29NR12W.

Before he purchased the property, I discussed with him the proposal that a soil remedial land farm was to be installed west of his property and on the other side of the road.

I also told him that there was a composting facility on the SW corner of SE $\frac{1}{4}$ S2T29NR12W.

I was very careful to explain to him about these facilities before he purchased the property.

Yours Faithfully,



Geoff McMahon

SAN JUAN ENGINEERS

2101 SAN JUAN BOULEVARD

FARMINGTON, NEW MEXICO 87401

TELEPHONE: 505-325-7535

June 19, 1992

Morningstar Corporation
P. O. Drawer 9
Farmington, NM 87499

23868

ATTN: Geoff McMahon

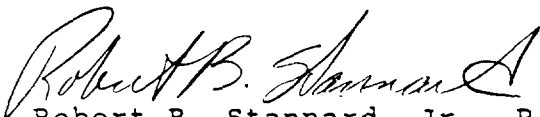
Dear Mr. McMahon:

On June 9, 1992, I met with Mr. Bichan regarding several issues including the Vavra land trade and the effects of the potential land farm adjacent to the Bichan property on County Road 3100. Mr. Bichan inquired whether he would be affected by odors. I suggested he contact Mr. Cheney, the developer of the farm. I have since talked with other engineers more knowledgeable of land farming and am told these operations normally produce very little in the way of petroleum odor.

Please communicate this to Mr. Bichan or have him call me directly.

Very truly yours,

SAN JUAN ENGINEERS



Robert B. Stannard, Jr., P.E., P.S.
Vice President

RBS/ig

OIL CONSERVATION DIVISION
RECEIVED

6750 Colby Lane
Bloomfield Hills, MI 48301

'92 JUN 11 AM 8 53

June 10, 1992

Director
Oil Conservation Division
State Land Office Bldg.
P.O. Box 2088
Santa Fe, NM 87504-2088

RE: Application of Tierra Environmental Company, Inc. to operate a landfarm for redemption of soils contaminated with hydrocarbons on County Road 3500 on the top of Crouch Mesa just east of Farmington in San Juan County.

Sir or Madam;

My wife and I have just been made aware of the above application and it particularly concerns us as we own 10 acres of land in the same ¼ section of Sec. 2, T29N, R12W, NMPM, San Juan County. In fact, our property is 300 yards east, downwind from the subject property, a copy of our deed is enclosed. We have just started to build a \$150,000 house.

The subject 40 acre plot is, nearly, the very highest point in the entire area and is therefore exposed to the most wind possible. The land slopes downward toward the west so the prevailing westerly wind does not blow across it as on level land, but blows against its tilted face for maximum scrubbing action. Further, the land is so tilted to the west as to give it maximum exposure to the direct vertical rays of the hot afternoon sun.

It would appear that this site is perfect to guarantee the greatest possible evaporation of hydrocarbon into the atmosphere.

If minimum evaporation of hydrocarbon into the atmosphere was of even the slightest consideration, surely one would pick a site tipped toward the east so the hot afternoon sun would only strike it obliquely and well down out of, and shielded from, the wind.

It would also appear certain that the artificial introduction of sand will cause an excessive and unnatural amount of dust and blowing sand onto our downwind property.

During the past 20 years governmental regulations have caused the public to spend hundreds of millions, maybe billions, of dollars on devices to prevent hydrocarbons from cars. U.S. Congress is presently trying to decide whether every car should have an on-board capture system to capture evaporated hydrocarbon when you take the cap off and fill your gas tank. Apparently, escaping evaporated hydrocarbon is a health risk of major national concern. We would like to enjoy our property free from unnatural and excessive blowing sand and dust and particularly free from evaporated hydrocarbon.

I should also like you to consider that immediately east of our proposed house and also downwind of the subject landfarm, there lives Glenn Vavra, his young wife and their very young 4 children. Every effort should be made to protect these young children from the deleterious effects of evaporated hydrocarbon.

Because of the certainty of, or at least probability, of evaporated hydrocarbon from this site, the general public has a great deal at stake. Certainly a public hearing is called for with researched opinions of the State Environmental, Health and Human Services Department presented.


I am further advised that Mr. Dick Cheney, president of the applying company, is a powerful and long standing politician in this state and has served many years in the

Director
Oil Conservation Division
State Land Office Bldg.
P.O. Box 2088
Santa Fe, NM 87504-2088
Page 2

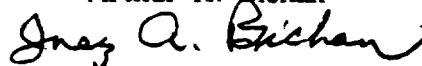
legislature. This fact alone should compel a public hearing.

We hereby request a public hearing and sufficient advanced personal notice as we are living in Michigan until our new house is built.

Respectfully,



Arthur H. Bichan



Inez A. Bichan

AHB/tmm

Enclosure

P.S. We are sending copies to the State Senator and State Representative for this area; the Fed. E.P.A. and the three State Departments mentioned as soon as we learn their addresses.

WARRANTY DEED

Morningstar Corporation, for consideration paid, grant
 to Arthur H. Bichan AND INEZ A. BICHAN, HUSBAND AND WIFE
 whose address is 6750 COLBY LANE BLOOMFIELD HILLS, MI. 48301

the following described real estate in San Juan County, New Mexico:

SURFACE RIGHTS ONLY, IN AND TO:

A 10.00 acre tract of land located within the Southeast 1/4 of Section 2, Township 29 North, Range 12 West of the N.M.P.M., San Juan County, New Mexico, more particularly described as follows:

Beginning at a B.L.M. brass capped monument dated 1974 as set at the east 1/4 corner of said Section 2; thence along the north line of said Southeast 1/4, North 89°28'09" West, 914.16 Feet to a point on the Southeasterly right-of-way of county road 3100, said road having a prescriptive right-of-way width of 60.00 feet; thence parallel with the East line of said Southeast 1/4 south of 01°10'10" west 476.53 feet; thence parallel to the North line of said Southeast 1/4 South 89°28'09" East, 914.16 feet to a point on the East line of said Southeast 1/4; thence along said East line North 01°10'10" East, 476.53 feet to the point of beginning.

SELLER IS reserving a 30' access and utility easement on the East property line.

SUBJECT TO: easements, reservations, and restrictions of record or in place.

with warranty covenants.

WITNESS my hand and seal this 8th day of June, 1992

Morningstar Corporation (Seal) (Seal)

by: Geoff McMahon (Seal) (Seal)

ACKNOWLEDGMENT FOR NATURAL PERSONS

STATE OF NEW MEXICO

COUNTY OF SAGUARO

The foregoing instrument was acknowledged before me this day of 1992

by (Name or Names of Person or Persons Acknowledging)

My commission expires: (Seal)

Notary Public

ACKNOWLEDGMENT FOR CORPORATION

STATE OF NEW MEXICO

COUNTY OF San Juan

The foregoing instrument was acknowledged before me this 8th day of June, 1992

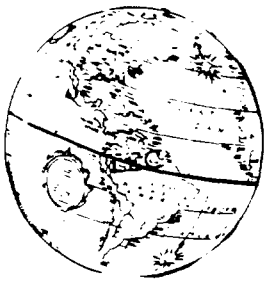
by Geoff McMahon (Name of Officer)
 President of Morningstar Corporation (Name of Corporation Acknowledging)

for the purpose of the foregoing instrument, on behalf of said corporation.

OFFICIAL SEAL
 (Seal) Notary Public

NOTARY PUBLIC - STATE OF NEW MEXICO

FOR RECORDER'S USE ONLY



TIERRA Environmental Company, Inc.
909 West Apache
Farmington, New Mexico 87401

(A)
OIL CONSERVATION
R
JUN 11 1992

June 3, 1992

Ms. Kathy M. Brown, Geologist
Energy Minerals and Natural Resources Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

RE: Additional Information, TIERRA Environmental Company, Inc.
Commercial Landfarm Request:

Dear Ms. Brown:

Pursuant to your request for additional information from Tierra, regarding it's Commercial Landfarm Application, the following is submitted for your review.

1. Tierra commits to the following conditions.

- a. All contaminated soils received at the facility will be spread within 72 hours of receipt.
- b. Tierra will disk the soils in active cells a minimum of one time every two weeks bi-weekly to enhance biodegradation of contaminants
- c. Successive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm). and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and Benzene is less than 10 ppm. Comprehensive records of laboratory analysis will be maintained at the facility. Authorization from OCD will be obtained prior to application of successive lifts.
- d. Tierra will accept solids that are non hazardous by RCRA Subtitle C exemption or by characteristic testing. Solids from operations currently exempt under RCRA Subtitle C or mixed exempt/non exempt will be tested for appropriate hazardous constituents. Test results will be submitted to the OCD along with a request to receive the non exempt solids, and a written OCD approval (case specific) will be obtained prior to disposal. Any non oilfield wastes which are RCRA Subtitle C exempt will only be accepted on a case by case basis following OCD approval.

Ms. Kathy M. Brown

June 3, 1992

Page two

- e. Tierra proposes to dedicate a specific area to the treatment and remediation of tank bottoms, waxes and similar material requiring bio-technology in order to accelerate decomposition. OCD approval will be obtained prior to the addition of any substances to enhance biodegradation of the soils landfarmed.
 - f. No free liquid or soils containing free liquids will be accepted at the facility.
- 2. Enclosed as exhibit A, please find a map showing all private residences within one mile of the proposed facility, including a list of names and land status of resident.
 - 3. Enclosed as exhibit B, please find the appropriate legal documents clarifying landownership of the proposed site.
 - 4. In addition, to notifying OCD within two working days of any spill or release, Tierra will also completely comply with OCD Rule 116, and will notify OCD of any break, spill blow out or fire and or any other circumstance that could constitute a hazard or contamination.
 - 5. a., b., see attached explanation exhibit C, by Brewer Associates, Inc. Engineers.
 - c. The dirt roads in question will be discontinued. Cells will be identified by numbered stakes, in a grid pattern.
 - d. See attached explanation exhibit C, by Brewer, Associates.
 - e. The pipeline area will not be used for bio-remediation. Pipelines are 8" and 6" steel and contain natural gas. See exhibit C by Brewer Associates for additional information requested. Notification letter and return receipt attached.
 - f. Tierra does plan to place an office trailer on site. See exhibit B by Brewer Associates for placement. Tierra does not plan to store chemicals on site that could cause contamination. Tierra does plan to install one four-hundred (400) barrel tank on the site, above ground that will contain fresh water. See exhibit C by Brewer Associates indicating placement and containment.
 - 6. Tierras proposed Landfarm is designed to remediate contaminated soils and not transfer contaminants into the underlying native soil and / or ground water. Tierra will monitor a treatment zone not to exceed two (2) feet beneath the land farm. Tierra will commit to the following conditions;


Ms. Kathy M. Brown
June 3, 1992
Page three

- a. A minimum of one random soil sample will be taken from each individual cell six (6) months after the first contaminated soils are received in the cell and then annually thereafter. The sample will be taken at two to three (2-3) feet below the native ground surface.
- b. The soil samples will be analyzed for total petroleum hydrocarbons (THP) and volatile aromatic organics (BTEX) using approved EPA methods. The results will be submitted to OCD Santa Fe Office within thirty (30) days of receipt from the laboratory.
- c. After obtaining the soil samples the boreholes will be filled with an impermeable material such as bentonite cement.
- d. Any cells that have moisture added to them will be analyzed on a quarterly basis following the requirements above.

Pursuant to OCD Rule 711, Tierra Environmental Company, Inc. will provide to OCD proof of surety or cash bond in the amount of \$ 25,000.00, in a form approved by the Division, prior to commencing construction, following approval of the permit.

I hope this information is helpful and fulfills the requirements. If you have any additional questions please contact me at (505) 325-0924.

Sincerely,



Phillip C. Nobis
Vice President

cc: Denny Foust, OCD Aztec Office

BIO-REMEDIATION INFORMATION

Tierra intends to dedicate about one (1) acre of land for a bio-remediation cell. (See Plat by Brewer Associates)

The method we intend to implement is the use of manufactured (cultured) microbes. Dichlor Chemical Company Inc., 907 West Apache, Farmington, New Mexico will be our supplier. Dichlor is also owned by Richard Cheney. They have an exclusive agreement with South West Microbes, Kiseki Southwest, 305 Broadway, Tyler, Texas, who are the manufacturer. Dichlor is currently treating several wells in the area for paraffin control with similar microbe products.

It is difficult to outline specifically the program Tierra will use in the bio-remediation process. The quantity, degree of contamination and constituents of the material will dictate the exact amount of microbes used for remediation.

In general the program will involve adding a pre-determined quantity of the microbes to the contaminated material. A laboratory analysis will be necessary in order to determine the extent of contamination and nature of the material. That analysis will dictate the quantity of microbes added and the frequency. Water will be a necessary ingredient. Only enough water will be added to the cell, to keep the material moist. A process similar to watering flowers in a garden. Continuous irrigation will not be employed. We anticipate no run off from this process. The material will be disked or turned a minimum of once a week, again depending on the nature and extent of contamination.

Once remediation is complete, based on a lab analysis, we will notify OCD and probably ask for permission to remove the remediated soil from the cell for placement elsewhere as the cell is so small.

It is Tierras' intention to be very selective regarding the material we will accept, not only for bio-remediation but through out the facility. Once we are satisfied and OCD is satisfied that our operation is a good one and is effective, Tierra will file for an expansion permit. We will own a total of eighty acres at the Crouch Mesa Site. We also have access to an additional eighty (80) acres if it becomes necessary to expand even further.

PCN

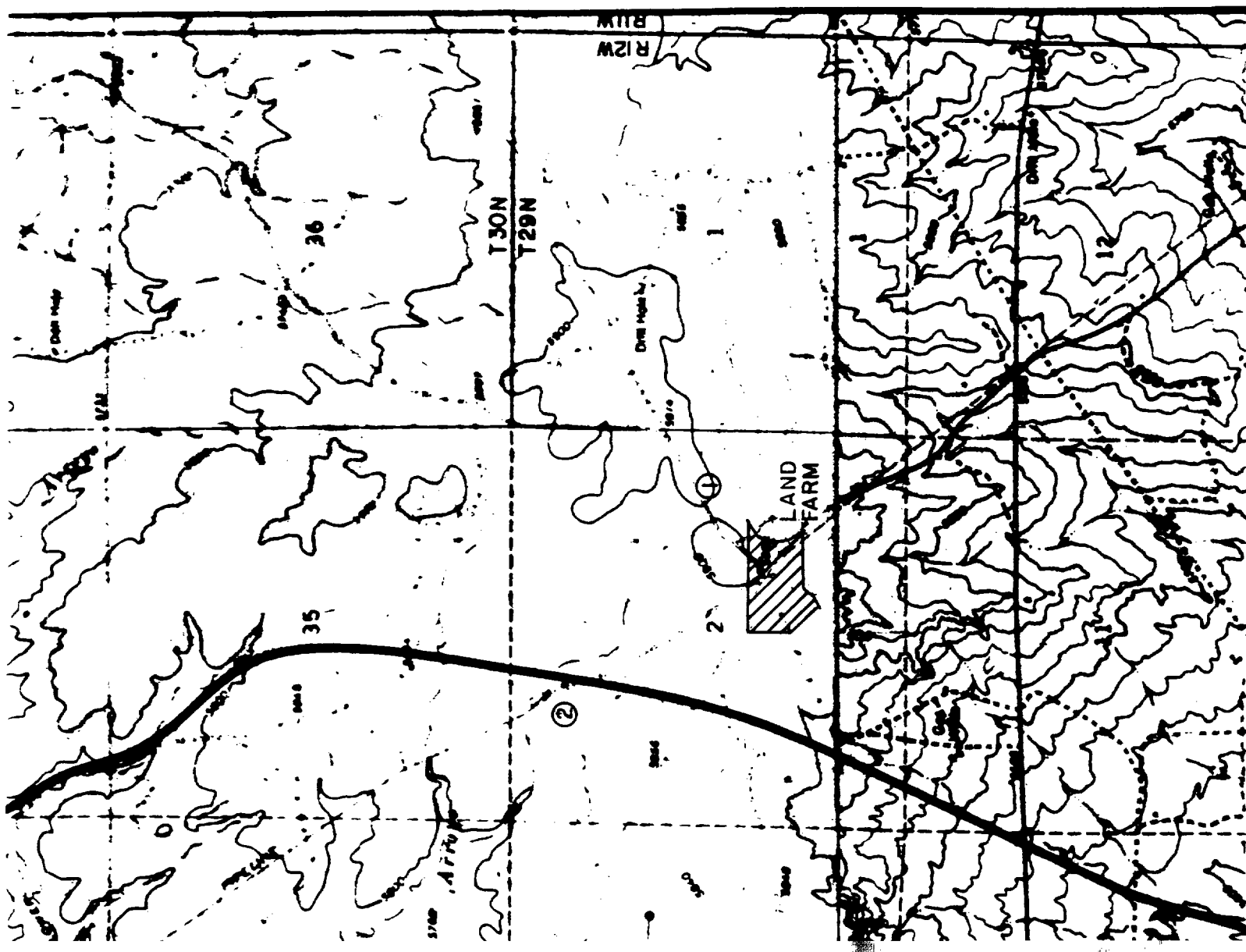


Exhibit A

TIERRA ENVIRONMENTAL
LAND FARM LOCATION
& RESIDENCES WITHIN
ONE MILE
SE 1/4-SEC2-T29N-R12W

① GLEN VAVERA
STATUS: PURCHASING LAND
ON CONTRACT FROM
L. WOODARD

② GEORGE COLEMAN
SUNCO INC.
STATUS: MANAGERS QUARTERS



REAL ESTATE CONTRACT (Short Form)

This Contract, Made this 10th day of April, 1992, between undersigned seller and undersigned purchaser,

MORNINGSTAR CORPORATION
P.O. BOX 9
FARMINGTON, NEW MEXICO

TIERRA ENVIRONMENTAL, INC.
909 W. APACHE, FARMINGTON, NEW MEXICO
Witnesseth:

Seller agrees to sell and convey to purchaser and purchaser agrees to buy upon the terms and conditions hereinafter set

out, the following described real estate in SAN JUAN County, New Mexico, to-wit:

SEE ATTACHED LEGAL DESCRIPTION

80 ACRES

The agreed purchase price is the sum of \$ 200,000.00, to be paid as follows:

(1) \$ 1,000.00 cash, including \$ 1,000.00 Earnest Money, the receipt of which Earnest Money is hereby acknowledged by seller to bind this Contract of Sale.

(2) \$ 199,000.00 balance as follows:

Cash or equivalent on closing. Seller is aware that buyer is proposing a land farm on the property and stipulates that no work is done until title is taken by buyer. This contract is subject to approval of the Oil Conservation Division for buyers application for a land farm.

Seller shall furnish a title guaranty policy, to be paid for by the buyer, in the usual form and containing the usual terms and conditions, showing a good and merchantable title in seller. Should there be any valid and meritorious objections to the title, seller shall have reasonable time within which to cure same. If seller is unable to cure said objection within a reasonable time, this contract may at the option of purchaser be terminated and seller shall return the earnest money to purchaser. Should purchaser fail or refuse to comply with the terms of this contract, seller may retain the earnest money as liquidated damages or pursue any other remedy afforded him at law, or equity, but the retention of the earnest money shall not prevent the pursuing of any other remedy.

Upon performance by purchaser of the obligations on him herein imposed, seller shall make and deliver to purchaser a good and sufficient warranty deed in accordance with the terms of this contract.

Deed shall be made subject to the usual restrictions and reservations shown of record to _____

Purchaser declares that he is buying said property upon his own examination and judgment and not through any representation made to purchaser by the seller, or agent for seller, as to its location, value, future value, income therefrom, or as to its production.

In Witness Whereof, both parties have hereunto set their hands the day and year hereinafter written.

TIERRA ENVIRONMENTAL, INC.

MORNINGSTAR CORPORATION

Phil Nobis

Phil Nobis

(Termed purchaser whether one or more)

Geoff McMahon

Geoff McMahon

(Termed seller whether one or more)

LAND DESCRIPTION

A tract of land lying in the Southeast Quarter (SE1/4) of Section 2, T29N R12W, N.M.P.M., San Juan County, New Mexico, more particularly described as follows:

COMMENCING at the Southeast Corner of said Section 2;

THENCE: N89°52'00"W and along the south line of Section 2 for a distance of 477.17 feet to a point of intersection with the centerline of County Road 5290 and the point of beginning;

THENCE: CONTINUING along said section line and N89°51'57"W for a distance of 1508.39 feet to the southeast corner of the SW1/4 SW1/4 SE1/4;

THENCE: N01°23'59"E and along the east line of said SW1/4 SW1/4 SE1/4 for a distance of 660.55 feet to the northeast corner of said SW1/4 SW1/4 SE1/4;

THENCE: N89°45'55"W and along the north line of said SW1/4 SW1/4 SE1/4 for a distance of 660.95 feet to the northwest corner of said SW1/4 SW1/4 SE1/4 and a point on the north-south midsection line;

THENCE: N01°28'33"E and along said north-south midsection line for a distance of 1985.22 feet to a point on the east-west midsection line;

THENCE: S89°27'15"E and along said east-west midsection line for a distance of 1657.01 feet to a point of intersection with the centerline of the above said County Road 5290;

THENCE: ALONG the centerline of said County Road 5290 the following bearings and distances, S61°30'11"W for a distance of 230.05 feet;

THENCE: S56°49'15"W for a distance of 172.58 feet;

THENCE: ALONG a curve to the left for a distance of 470.82 feet whose radius is 300.00 feet and has a chord of S11°51'39"W for a distance of 423.97 feet;

THENCE: S33°05'57"E for a distance of 244.31 feet;

THENCE: S26°16'38"E for a distance of 118.69 feet;

THENCE: ALONG a curve to the right for a distance of 208.23 feet whose radius is 436.08 feet and has a chord of S12°35'52"E for a distance of 206.26 feet;

THENCE: S01°04'56"W for a distance of 132.79 feet;

THENCE: ALONG a curve to the left for a distance of 285.69 feet whose radius is 486.36 feet and has a chord of S15°44'45"E for a distance of 281.60 feet;

THENCE: S32°34'25"E for a distance of 345.56 feet;

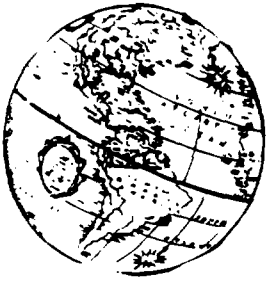
THENCE: S29°20'45"E for a distance of 214.19 feet;

THENCE: S25°43'26"E for a distance of 204.25 feet;

THENCE: S22°24'39"E for a distance of 283.62 feet;

THENCE: S25°22'20"E for a distance of 119.14 feet;

THENCE: S27°15'40"E for a distance of 76.83 feet to a point of intersection with the south line of said Section 2 and back to the point of beginning. Said tract of land contains 86.71 acres, more or less.



TIERRA Environmental Company, Inc
909 West Apache
Farmington, New Mexico 87401

June 8, 1992

Mr. James Sull
Gas Company of New Mexico
P.O. Box 11899
Bloomfield, New Mexico 8413

RE: LAND FARM PERMIT APPLICATION FOR TIERRA ENVIRONMENTAL:

Dear Jim:

I appreciate the speedy response in having two of your men identify the lines on Crouch Mesa on Tuesday. Steve and his partner were very helpful.

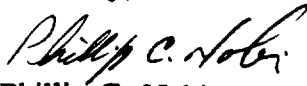
Enclosed, please find Tierra Environmental Company Inc. Land Farm Permit Application to the New Mexico OCD. They require that the pipeline owner receive a copy of the application for review and comment if any.

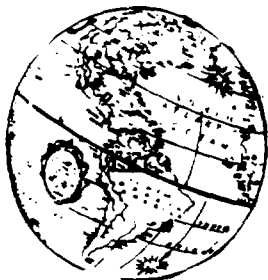
If you or the Gas Company of New Mexico have any comments, direct them to The New Mexico Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504.

Tierra as you will see in the application, intends to accept soils contaminated with non hazardous oil field waste and to spread the soils on the land farm for remediation. There will be no excavation on or near the pipelines, nor will any heavy equipment be used. No structures will be constructed on or near rights of way.

If you have any questions from Tierra, please call me at (505) 325-0924.

Sincerely,


Phillip C. Nobis
Vice President



TIERRA Environmental Company, Inc.
909 West Apache
Farmington, New Mexico 87401

June 8, 1992

Director of Right of Way Department
El Paso Natural Gas Company
P.O. Box 1492
El Paso, Texas 79978

Dear Sir:

Tierra Environmental Company, Inc., has applied to the State of New Mexico, Oil Conservation Division, (OCD), for a permit to operate a Land Farm which would receive soils contaminated with non hazardous waste generated as a result of oil and gas exploration, production or processing operations. Those wastes would be spread on top of the ground, according to OCD regulations in no more than six (6) inch lifts.

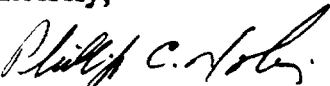
El Paso has two (2) natural gas pipelines on the property. Mr. Tim Jones of El Paso visited the site on June 4, 1992. According to Mr. Jones, the pipelines are about forty-three (43) inches deep. No heavy equipment will be used in the land farm operation. No excavation will be conducted. Nothing will be constructed with in the right of way.

Enclosed please find a copy of the Application as required by OCD.

Please direct any comments to The New Mexico Oil Conservation Division P.O. Box 2088, State Land Office Building, Santa Fe, New Mexico 87504.

If you have any questions of Tierra, please call (505) 325-0924.

Sincerely,


Phillip C. Nobis
Vice President

PA 430 860

THE UNIVERSITY OF CHICAGO

James D. Lee, Geo Co of Tenn.

P.O. Box 11899, Bedford mm

1.21

1.00

[illegible]

11049901 *Uncommon*
in Western and Middle Eastern

Return freight (owing to whom)
Date and Address of Delivery

1.00

3.21

Postmark or Date

6-10-92

PS Form 3800, June 1985

El Paso Natural Gas Co

F. O. Box 1492

2200 TX 79978

100

[illegible]

THE UNIVERSITY OF CHICAGO

Abstract The purpose of this study was to determine the effect of a 12-week, 1000 kcal energy deficit diet on the weight and body fat of obese women. The study was a randomized, controlled trial. The subjects were 20 obese women who were randomly assigned to either a diet or a control group. The diet group was instructed to consume 1000 kcal less than their estimated energy requirements, while the control group was instructed to consume their estimated energy requirements. The subjects were monitored for 12 weeks. The results showed that the diet group lost significantly more weight and body fat than the control group. The diet group lost an average of 10.5 kg (23.1 lb) of weight and 15.5% of body fat, while the control group lost an average of 2.5 kg (5.5 lb) of weight and 2.5% of body fat. The diet group also experienced a significant decrease in blood pressure and cholesterol levels. The results of this study suggest that a 12-week, 1000 kcal energy deficit diet is an effective method for weight loss and reduction of body fat in obese women.

Return Receipt showing to whom
Date, and Address of Delivery

25

Postmark or Date

6-10-92

OIL CONSERVATION DIVISION
RECEIVED

6750 Colby Lane
Bloomfield Hills, MI 48301

'92 JUN 11 AM 8 53

June 10, 1992

Director
Oil Conservation Division
State Land Office Bldg.
P.O. Box 2088
Santa Fe, NM 87504-2088

RE: Application of Tierra Environmental Company, Inc. to operate a landfarm for redemption of soils contaminated with hydrocarbons on County Road 3500 on the top of Crouch Mesa just east of Farmington in San Juan County.

Sir or Madam;

My wife and I have just been made aware of the above application and it particularly concerns us as we own 10 acres of land in the same ¼ section of Sec. 2, T29N, R12W, NMPM, San Juan County. In fact, our property is 300 yards east, downwind from the subject property, a copy of our deed is enclosed. We have just started to build a \$150,000 house.

The subject 40 acre plot is, nearly, the very highest point in the entire area and is therefore exposed to the most wind possible. The land slopes downward toward the west so the prevailing westerly wind does not blow across it as on level land, but blows against its tilted face for maximum scrubbing action. Further, the land is so tilted to the west as to give it maximum exposure to the direct vertical rays of the hot afternoon sun.

It would appear that this site is perfect to guarantee the greatest possible evaporation of hydrocarbon into the atmosphere.

If minimum evaporation of hydrocarbon into the atmosphere was of even the slightest consideration, surely one would pick a site tipped toward the east so the hot afternoon sun would only strike it obliquely and well down out of, and shielded from, the wind.

It would also appear certain that the artificial introduction of sand will cause an excessive and unnatural amount of dust and blowing sand onto our downwind property.

During the past 20 years governmental regulations have caused the public to spend hundreds of millions, maybe billions, of dollars on devices to prevent hydrocarbons from cars. U.S. Congress is presently trying to decide whether every car should have an on-board capture system to capture evaporated hydrocarbon when you take the cap off and fill your gas tank. Apparently, escaping evaporated hydrocarbon is a health risk of major national concern. We would like to enjoy our property free from unnatural and excessive blowing sand and dust and particularly free from evaporated hydrocarbon.

I should also like you to consider that immediately east of our proposed house and also downwind of the subject landfarm, there lives Glenn Vavra, his young wife and their very young 4 children. Every effort should be made to protect these young children from the deleterious effects of evaporated hydrocarbon.

Because of the certainty of, or at least probability, of evaporated hydrocarbon from this site, the general public has a great deal at stake. Certainly a public hearing is called for with researched opinions of the State Environmental, Health and Human Services Department presented.

I am further advised that Mr. Dick Cheney, president of the applying company, is a powerful and long standing politician in this state and has served many years in the

Director
Oil Conservation Division
State Land Office Bldg.
P.O. Box 2088
Santa Fe, NM 87504-2088
Page 2

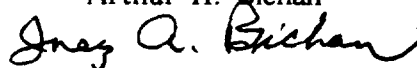
legislature. This fact alone should compel a public hearing.

We hereby request a public hearing and sufficient advanced personal notice as we are living in Michigan until our new house is built.

Respectfully,

A handwritten signature in cursive script, appearing to read "Arthur H. Bichan".

Arthur H. Bichan

A handwritten signature in cursive script, appearing to read "Inez A. Bichan".

Inez A. Bichan

AHB/tmm

Enclosure

P.S. We are sending copies to the State Senator and State Representative for this area; the Fed. E.P.A. and the three State Departments mentioned as soon as we learn their addresses.



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



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

May 28, 1992

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

CERTIFIED MAIL
RETURN RECEIPT NO. P-670-683-645

Mr. Richard P. Cheney, President
Tierra Environmental Company Inc.
909 West Apache
Farmington, New Mexico 87401

RE: **Commercial Landfarm Request**
Tierra Environmental Company Inc.
San Juan County, New Mexico

Dear Mr. Cheney:

The Oil Conservation Division (OCD) has received and is in the process of reviewing the above referenced application for an oil field related solids landfarm located in the NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. The following comments and requests for additional information are based on review of the application, dated April 13, 1992. In order for the review process to continue the OCD requires the following information:

1. The OCD has stringent requirements for the operation of all OCD regulated landfarms. Although Tierra has committed to a large majority of the requirements, a commitment to the following conditions is required prior to OCD approval of commercial landfarms:
 - a. All contaminated soils received at the facility will be spread and disked within 72 hours of receipt.
 - b. Tierra has proposed to disk the soils "periodically based on the degree of contamination". Active cells will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.

Mr. Richard P. Cheney
May 28, 1992
Page 2

- c. Sucessive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm) and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
 - d. Tierra has committed to accepting only solids that are non-hazardous by RCRA Subtitle C exemption or by characteristic testing. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt will only be accepted on a case-by-case basis and with OCD approval.
 - e. Tierra has proposed to dedicate a specific area "to the treatment and remediation of tank bottoms, waxes and similar material requiring bio-technology in order to accelerate decomposition". OCD approval must be obtained prior to the addition of any substances to enhance biodegradation of the soils landfarmed (ie. chemical additives, manure, nutrients, bugs, water ect.).
 - f. No free liquids or soils with free liquids will be accepted at the facility.
- 2. The OCD is concerned about the impact of disposal facilities on private residences. Please submit a map showing all private residences within one mile of the proposed facility. Include the name and land status of the resident.
 - 3. Tierra has indicated that they are the landowner of the proposed land farm facility. Records at the San Juan County Court House indicate that this property is owned by the Morning Star Corporation. Submit the appropriate legal documents to clarify who is the landowner of the property in question.
 - 4. Tierra has committed to notifying the OCD within two (2) working days of any spill or release. Please note that OCD Rule 116 requires that "the Division be notified of any fire, break, spill, or blowout occurring at any injection or disposal facility ... such facility". The OCD requires Tierra to commit to notifying the Division of any fire, break, spill, or blowout in accordance with the provisions set forth in Rule 116.C.
 - 5. The OCD has several questions concerning Tierra's plat of the facility (Exhibit B). Submit the appropriate information in response to the following questions:

Mr. Richard P. Cheney
May 28, 1992
Page 3

- a. Tierra proposes to build a dike on the north and west side of the property to an elevation of 5881'. The facility plat shows the dike extending to an elevation of 5886' on the north and 5884' on the west. Clarify the conflicting data on the elevation and extent of the dike. The runoff calculations which you performed to justify a dike with a top elevation of 5881' do not coincide with either the top of the dike at 5881' or with the limit of the dike as shown on the plat. The calculations you performed to determine the holding capacity of a triangular shaped area in the northwest corner used a triangular height of 320' and a base of 570'. Clarify the runoff calculations and plat showing the exact location the top of the dike will extend to and the boundary of the triangular area used to calculate the holding capacity.
- b. What are the dimensions of the proposed ditch between the perimeter road and the berm? Will the ditch extend the same as, more, or less than the extent of the dike? Is the perimeter road and ditch inside of the fence on the facility property or on the outside of the fence?
- c. The plat shows several dirt roads crossing your property. Are these existing or planned roads? Will these roads be used to delineate the various cells. If not, how will the cells be delineated?
- d. In Section VII. of the application Tierra states that a specific area will be dedicated to biological technology for remediation. The reader is then referred to Exhibit B (facility plat) for design information. The OCD copy of Exhibit B has no design information on the proposed bio-remediation area. Please submit this information if Tierra wishes to receive approval to dedicate a specific cell for biological technology. Please be aware of the requirements above in 1.e. for the addition of any substances to enhance biodegradation.
- e. The plat indicates that a pipeline crosses your property. What is the size, depth, composition, and contents of the pipeline? What measures will Tierra take to guarantee that the pipeline will not be broken or damaged while disking soils? Who owns the pipeline? Tierra must provide the OCD with evidence that the pipeline owner has received a copy of your landfarm application. Please note that if Tierra proposes to add moisture to the soils to enhance biodegradation then the OCD will require a buffer zone on either side of pipeline for moisture addition.
- f. Does Tierra plan to construct any buildings (office, equipment storage, etc.) on the premises and if so where will they be located? Does Tierra plan to store or use any chemicals or materials which may cause contamination if spilled onto the ground surface? If so, what spill prevention/containment measures will be taken? Does Tierra plan to install any pits, ponds, or tanks (either above or below

Mr. Richard P. Cheney

May 28, 1992

Page 4

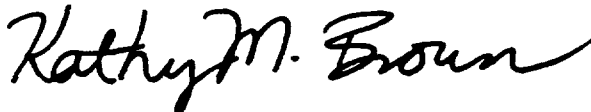
ground) at the facility? If so, describe in detail and indicate what spill prevention/containment methods will be incorporated into the design.

6. Because a land farm is designed to remediate contaminated soils and not transfer contaminants into the underlying native soil and/or groundwater, the OCD requires land farms to monitor a treatment zone not to exceed two (2) feet beneath the land farm. A commitment to the following conditions is required prior to OCD approval of commercial land farms:
 - a. A minimum of one random soil sample will be taken from each individual cell six (6) months after the first contaminated soils are received in the cell and then annually thereafter. The sample will be taken at two to three (2-3) feet below the native ground surface.
 - b. The soil samples will be analyzed for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) using approved EPA methods. The results will be submitted to the OCD Santa Fe Office within thirty (30) days of receipt from the laboratory.
 - c. After obtaining the soil samples the boreholes will be filled with an impermeable material such as bentonite cement.
 - d. Any cells that have moisture added to them will be analyzed on a quarterly basis following the requirements above.

Please note that OCD Rule 711 requires that before commencing construction, all commercial surface waste disposal facilities shall have a surety or cash bond in the amount of \$25,000, in a form approved by the Division.

Submission of the above requested information will allow the review process to continue. If you have any questions please do not hesitate to contact me at (505) 827-5884.

Sincerely,



Kathy M. Brown
Geologist

xc: Denny Foust, OCD Aztec Office

CHECKLIST FOR COMPLIANCE WITH RULE 711

Facility Name and Mailing Address: *POLLUTION CONTROL*

PO BOX 840 HOBBS 89241

Order No.: *R-3725, -3725-A*

Location: *LASUNA GATUNA NE 1/4 SEC 18 + SW 1/4 SEC 17 - 205-325*

Contact Person: *LARRY SQUIRES*

Date of Review:

- ✓ 1. Plat and topo maps showing location in relation to governmental surveys and roads, watercourses, water wells and dwellings within one mile.
- ✓ 2. Names and addresses of facility site landowners and landowners of record within one-half mile.
- Not Comp* ✓ 3. Description of facility with a diagram indicating location of fences and cattleguards, and detailed engineering construction/installation diagrams of pits, liners, dikes, piping, sprayers, and tanks.
- Not Comp* ✓ 4. Plan for disposal of approved waste solids or liquids.
- ✓ 5. Contingency plan for reporting and cleanup of spills or releases.
- ✓ 6. Routine inspection and maintenance plan.
- ✓ 7. Closure plan.
- Not Comp* ✓ 8. Geohydrological evidence that fresh water will not be affected.
- ✓ 9. a. Proof that owners and occupants within 1/4 mile were notified.
b. OCD public notice.
- ✓ 10. Affidavit of verification.
- Need* ✓ 11. Bond (required by 12/30/88 for current facilities).

*use detail on water diversion from farm water
closure details on pits*

ILLEGIBLE

SUNCO APPLICATION

- Well located @ 34-T30N-R12W TD 107', DTW 25'
Elevation 5800' Water elevation 5775'
State either abandoned or mislocated based on
field inspection. Northwesterly gradient

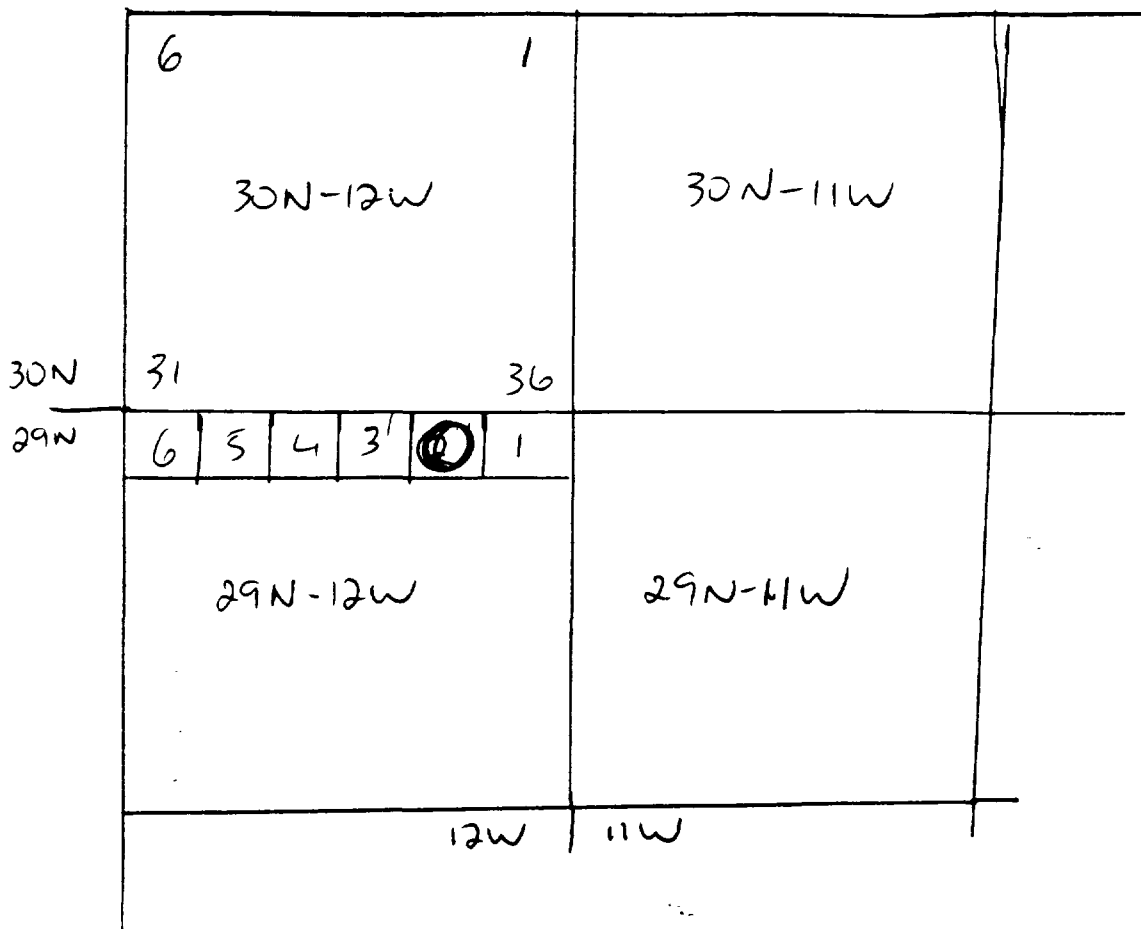
- Monitor Wells for landfill

Well #1

0'-20' Soil
21'-46' Sandstone (SS)
47'-75' Shale
75' TD
70S 7798 ppm
55' Groundwater (3-30-89)
(PVC Casing 0-75'
Screen 50'-75')

Well #2

0'-19' Soil
19'-119' SS+Shale
75' Groundwater ^{TD 6576 ppm}
120'-160' Sandstone ^{TD}
160' TD
(PVC Casing 0-95'
Screen 70'-95'
5% Bentonite Cement 95'-160')



NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to New Mexico Oil Conservation Commission Regulations, the following applications to construct and operate a commercial surface waste disposal facility have been submitted for approval to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

Tierra Environmental Company Inc., Richard Cheney, President, 909 West Apache, Farmington, New Mexico 87401, has submitted an application to construct and operate a commercial landfarm facility for remediation of hydrocarbon contaminated soils. The proposed facility is in the NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. The facility is proposed to consist of a land management area where solids containing "non-hazardous" contaminants will be spread on the ground surface in six inch lifts or less and periodically stirred to enhance biodegradation of contaminants. The ground water most likely to be affected by any accidental discharges is at a depth in excess of 100 feet and has an estimated total dissolved solids content of approximately 800 mg/l.

549 Disposal, Inc., Dale Gandy, P.O. Box 827, Tatum, New Mexico 88267, has submitted an application to construct and operate a commercial surface disposal facility for brine water generated in conjunction with the production of oil and gas. The proposed location of the facility is the W/2 NW/4, Section 9, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico. Produced water will be trucked to the facility and unloaded into skimmer tanks where the hydrocarbon free produced water will pass into storage tanks and then finally into a series of below grade, unlined, evaporation ponds. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be utilized at the facility. The ground water most likely to be affected by any accidental discharges is at a depth of 85 feet with a total dissolved solids content of approximately 750 mg/l.

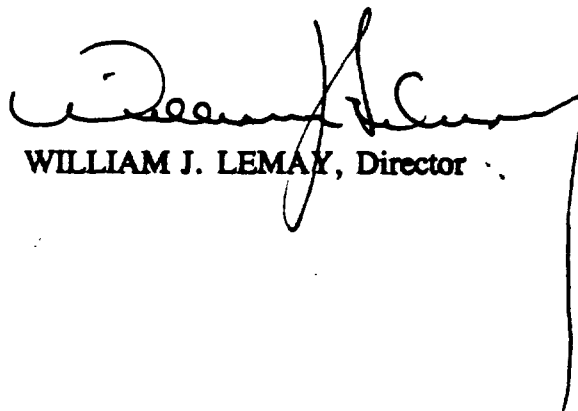
Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30)

days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held., A hearing will be held if the Director determines there is significant public interest.

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of May, 1992.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read "William J. Lemay", is written over the printed name. The signature is fluid and cursive, with a long vertical line extending downwards from the end of the name.

WILLIAM J. LEMAY, Director

S E A L

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

OIL CONSERVATION DIVISION

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

Terra Environmental Company Inc., Richard Chaney, President, 909 West Apache, Farmington, New Mexico 87401, has submitted an application to construct and operate a commercial landfill facility for remediation of hydrocarbon contaminated soils. The proposed facility is in the NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. The facility is proposed to consist of a land management area where solids containing "non-hazardous" contaminants will be spread on the ground surface in six inch lifts or less and periodically stirred to enhance biodegradation of contaminants. The ground water most likely to be affected by any accidental discharges is at a depth in excess of 100 feet and has an estimated total dissolved solids content of approximately 800 mg/L.

540 Disposal, Inc., Dale Gandy, P.O. Box 327, Tatum, New Mexico 88257, has submitted an application to construct and operate a commercial surface disposal facility for brine water generated in conjunction with the production of oil and gas. The proposed location of the facility is the W/2 NW/4, Section 8, Township 13 South, Range 22 East, NMPM, Lea County, New Mexico. Produced water will be trucked to the facility and unloaded into storage tanks where the hydrocarbon free produced water will pass into storage tanks and then finally into a series of basins, unlined, evaporation ponds. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be utilized at the facility. The ground water most likely to be affected by any accidental discharges is at a depth of 85 feet with a total dissolved solids content of approximately 700 mg/L.

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 discharge plan application may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on the 10th day of April, 1992.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
s/William J. LeMay, Director
Journal: May 20, 1992

STATE OF NEW MEXICO
County of Bernalillo

SS

IL CONSER. DIVISION
REC: VED

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

for..... times, the first publication being on the...20...day
of..... May....., 1992, and the subsequent consecutive
publications on....., 1992.

Thomas J. Smithson
Sworn and subscribed to before me, a Notary Public in
and for the County of Bernalillo and State of New
Mexico, this ..20... day of ..May... 1992.

PRICE.....

Statement to come at end of month.

ACCOUNT NUMBER..... C21184.....

CLA-22-A (R-12/92)

ILLEGIBLE

AFFIDAVIT OF PUBLICATION

COPY OF PUBLICATI

No. 29501

STATE OF NEW MEXICO,
County of San Juan:

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

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

First Publication SUNDAY, MAY 17, 1992

Second Publication _____

Third Publication _____

Fourth Publication _____

and the cost of publication was \$ 49.71

Christine Hill
Subscribed and sworn to before me
this 2nd day of
MAY June, 1992.

Connie Andrae
Notary Public, San Juan County,
New Mexico

My Comm expires: JULY 3, 1993

NOTICE OF PUBLICATI
STATE OF NEW MEXIC
ENERGY, MINERALS AND NATURAL RESC
OIL CONSERVATION DIVI

Notice is hereby given that pursuant to New Mexi
Regulations the following applications to construct an
waste disposal facility have been submitted for app
Conservation Division, State Land Office Building, P.O. I
87504-2088, Telephone (505) 827-5800:

Tatun Disposal, Inc., Richard Chen
Apache, Farmington, New Mexico 87401, has subm
construct and operate a commercial landfarm faci
hydrocarbon contaminated soils. The proposed faci
Section 2, Township 29 North, Range 12 West, NMP
New Mexico. The facility is proposed to consist of a
where solids containing "non-hazardous" containin
ground surface in six inch lifts or less and periodic
biodegradation of contaminants. The ground water i
affected by any accidental discharges is at a depth ir
and has an estimated total dissolved solids content
800 mg/l.

549 Disposal, Inc., Dale Gandy, P.O. Box 827, Tatum
has submitted an application to construct and opera
disposal facility for brine water generated in conjunc
of oil and gas. The proposed location of the facility is
Section 9, Township 18 South, Range 32 East, NMP
Mexico. Produced water will be trucked to the facility
skimmer tanks where the hydrocarbon free produce
storage tanks and then finally into a series of below g
evaporation ponds. The permit application address
operations, spill/leak prevention and monitoring proc
utilized at the facility. The ground water most likely to
accidental discharges is at a depth of 85 feet with a b
content of approximately 750 mg/l.

Any interest person may obtain further informati
Division and may submit written comments to the Dir
Division at the address given above. The discharge plan a
above address between 8:00 a.m. and 4:00 p.m., Monday
any proposed discharge plan or its modification, the D
Division shall allow at least thirty (30) days after the d
during which comments may be submitted to him and pub
any interested person. Requests for public hearing sh
hearing should be held. A hearing will be held if the
significant public interest.

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

GIVEN under the Seal of New Mexico Oil Conserv
New Mexico, on this 7th day of May, 1992.

SEAL

Legal No 29501 published in the Farmington Daily T
on Sunday, May 17, 1992.

ILLEGIBLE

Affidavit of Publication

STATE OF NEW MEXICO)

) ss.

COUNTY OF LEA)

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

That the notice which is hereto attached, entitled

Notice Of Publication

and numbered ~~XXXXXX~~

~~County of New Mexico~~, was published in a regular and entire issue of THE LOVINGTON DAILY LEADER and not in any supplement thereof, ~~on the 15th day of May 1992~~

~~XXXXXX~~ for one (1) day

~~XXXXXX~~, beginning with the issue of

May 15, 19 92

and ending with the issue of

May 15, 19 92

And that the cost of publishing said notice is the sum of \$ 35.64

which sum has been (Paid) (Assessed) as Court Costs

Subscribed and sworn to before me this 18th

May, 19 92

day of

Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 19 94

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

Notice is hereby given that pursuant to New Mexico Oil Conservation Commission Regulations, the following applications to construct and operate a commercial surface waste disposal facility have been submitted for approval to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2068, Santa Fe, New Mexico 87504-2068, Telephone (505) 827-5800:

Company Inc., President, 800 West Alameda, Farmington, New Mexico 87401, has submitted an application to construct and operate a commercial surface waste disposal facility for remanufactured solids. The proposed facility is in the NW 1/4, Section 2, Township 12 North, Range 12 West, N.M.P.M. San Juan County, New Mexico. The facility is proposed to consist of a land management area where solids containing "non-hazardous" materials will be spread on the ground surface in six inch layers and periodically stirred to enhance biodegradation of contaminants. The ground water most likely to be affected by any accidental discharges is at a depth in excess of 100 feet and has an estimated total dissolved solids content of approximately 800 mg/l.

548 Disposal, Inc., Dale Gandy, P.O. Box 827, Tatum, New Mexico 86267, has submitted an application to construct and operate a commercial surface disposal facility for brine water generated in conjunction with the production of oil and gas. The proposed facility of the facility is the NW 1/4, Section 2, Township 12 North, Range 12 West, N.M.P.M. Lea County, New Mexico. Produced water will be trucked to the facility and unloaded into storage tanks where the hydrocarbon free produced water will be transferred into a series of storage tanks, unlined, open to the atmosphere. The permit application includes spill/leak prevention, and monitoring procedures to be utilized at the facility. The ground water most likely to be affected by any accidental discharges is at a depth of 80 feet with a total dissolved solids content of approximately 750 mg/l.

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 discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him, and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of May, 1992.

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

SEAL
Published in the Lovington Daily
Leader May 15, 1992

ILLEGIBLE

**RUNOFF CALCULATION FOR
TIERRA ENVIRONMENTAL COMPANY LAND FARM**

Area = 21.9 Acres

6 hr 100 year rainfall from NOAA
Atlas 2 volume IV = 2.1 inches

$21.9 \text{ Ac} (43560 \text{ Sq. Ft./Ac}) (2.1/12) = 166,944 \text{ Cu. Ft.}$

Estimate 50% runoff $166,949 \text{ Cu. Ft.} (0.5) = 83,472 \text{ Cu. Ft.}$

Estimate 83,472 Cu. Ft. of runoff in 6 hour period for 100 year storm

Top of proposed dike as shown on attached topo map = 5,883
Maximum depth = 4.25 Ft.

Holding capacity of triangular shaped area in northwest corner of
property at 5882 elevation = $0.5(220)(440) = 48,400 \text{ Sq. Ft.}$

Holding capacity @ 5882 elevation = 108,900 Cu. Ft.

Runoff estimated = 83,472 Cu. Ft.

Based on the above assumptions, the holding capacity is sufficient for the 6 hour 100 year storm
and the 100 year 1 hour storm.