

NM1 - 10

INSPECTIONS & DATA



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

September 26, 1997

CERTIFIED MAIL

RETURN RECEIPT NO. P-326-936-337

Mr. Phillip C. Nobis
Tierra Environmental Company, Inc.
P.O. Drawer 15250
Farmington, NM 87401

RE: Landfarm Inspection (NM-01-0010)
Tierra Environmental Company, Inc.
NW/4 SE/4 (Unit J), Section 2, Township 29 North, Range 12 West,
NMPM, San Juan County, New Mexico

Dear Mr. Nobis:

The New Mexico Oil Conservation Division (OCD), inspected Tierra Environmental Company, Inc. (Tierra) landfarm located in the NW/4 SE/4 (Unit J), Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico on June 10, 1997 and September 8 and 11, 1997.

The OCD inspection and current file review of Tierra indicates some permit deficiencies. Attachment 1 lists the permit deficiencies found at Tierra during the inspection and the new Rule 711 requirements that are not on file. Attachment 2 contains photographs taken during the inspection. Tierra shall provide OCD with a detailed description of how the corrections will be made and a time table of when each of the corrections will be completed. A response is required by Tierra to these deficiencies by November 26, 1997.

Pursuant to Order R-10411-B the OCD General Rule 711 has been revised. The OCD is currently in the process of re-permitting all surface waste management facilities under the new Rule 711. Tierra landfarm is included under the new Rule 711. A copy of Order R-10411-B along with the new bond forms were given to you (Phillip Nobis) during the OCD inspection on June 10, 1997. An additional set of these forms and the Order is included with this report. A permit application, Form C-137 (attachment 3), shall be filed with the OCD according to the instructions in Attachment 1, Section 16.

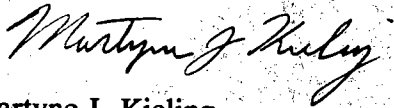
Please be advised that the bonding requirements have changed under the new Rule 711. Tierra's current cash bond for \$25,000 will need to be replaced. The bonded amount will be based upon the estimated closure costs that the State of New Mexico would incur if a third

Mr. Phillip C. Nobis
September 26, 1997
Page 2

party contractor were to remediate the facility (see Rule 711.B.1.i and 711.B.3). Tierra must have a new bond in place for the approved estimated closure amount prior to receiving a new waste management facility permit.

If you have any questions please do not hesitate to contact me at (505) 827-7153.

Sincerely,



Martyne J. Kieling
Environmental Geologist

Attachments

xc: Aztec OCD Office

**ATTACHMENT 1
INSPECTION REPORT**

June 10, 1997

September 8 and 11, 1997

TIERRA ENVIRONMENTAL COMPANY, INC.

(NW/4 SE/4 (Unit J), Section 2, Township 29 North, Range 12 West, NMPM,)
SAN JUAN COUNTY, NEW MEXICO

1. **Fencing and Signs:** The facility will be fenced and have a sign at the entrance. The sign shall be maintained in good condition and shall be legible from at least fifty (50) feet and contain the following information: a) name of facility, b) location by section, township and range, and c) emergency phone number.

Facility is secured with fence and locking gate and has a sign at the entrance.

2. **Berming :** An adequate berm will be constructed and maintained to prevent runoff and runoff for that portion of the facility containing contaminated soils.

Cell berms are in good shape and well maintained. The berm at northwest corner of the facility was adequately holding water from all of the heavy rain fall (see picture 2). Additional berms should be added to limit the commingling of cell material and to keep run off away from other cells (see pictures 1, 2, 3, 4, 5, 6 and 7).

3. **Setbacks:** All new landfarm facilities or modifications to existing landfarm facilities must have a setbacks along the facility boundary and along any pipelines crossing the landfarm. No contaminated soils will be placed within one-hundred (100) feet of the boundary of the facility. No contaminated soil will be placed within fifty (50) feet of any pipelines crossing the landfarm. In addition, no equipment will be operated within ten (10) feet of a pipeline. All pipelines crossing the facility will have surface markers identifying the location of the pipelines.

All future cells constructed must follow the setback requirements. The pipelines crossing the facility should have surface markers.

4. **Soil Spreading, Disking and Lift Thickness:** All contaminated soils received at the facility will be spread and disked within 72 hours of receipt. Soils will be spread on the surface in six inch lifts or less. Soils will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.

At the time of inspection, several soil piles had not been spread and disked accordingly (see pictures 5 and 6). Further inspections on September 8 and 11, 1997

identified contaminated soil piles that had not been spread in the required 72 hours and/or were spread thicker than 6 inches.

5. Treatment Zone Monitoring: Treatment Zone Monitoring according to Order R-9772, Finding 14.c.1, 2, 4, and 5 and Exhibit "B" Treatment Zone Monitoring, Section 3. Tierra's treatment zone monitoring will be quarterly. The soil samples will be analyzed for total petroleum hydrocarbons (TPH) using an OCD-approved field method. If TPH is detected, then a laboratory analysis will be conducted for Volatile Aromatic Organics (BTEX) using approved EPA methods. Annually samples obtained from the treatment zones will be collected and a laboratory analysis conducted using approved EPA methods. The samples will be analyzed for TPH, BTEX, general chemistry, and heavy metals.

Review of the treatment zone monitoring analytical results on file in the OCD Santa Fe office show that Tierra has supplied only annual reports for TPH and BTEX for 1996, TPH for 1995, TPH and BTEX for 1994, and TPH and BTEX for 1993. All future treatment zone monitoring will be quarterly beginning with the analysis of TPH, BTEX, general chemistry, and heavy metals. Please see the attached copy of Order R-9772 and Exhibits A and B.

6. Reporting of Analytical Results : Reporting according to Order R-9772, Finding 14.e.1 and Exhibit "B" Reporting. Analytical results from the treatment zone monitoring will be submitted to the OCD in Santa Fe within thirty (30) days in written form from the facility with appropriate laboratory analysis included as may be required. Reports will be made for both field and laboratory analysis.

Review of the analytical reports on file in the OCD Santa Fe office show that Tierra has supplied only annual reports for 1993 to 1996. All future treatment zone monitoring reports will be quarterly and will cover both field and laboratory analysis. Please see the attached copy of Order R-9772 and Exhibits A and B.

- 7.. Trash and Potentially Hazardous Materials: All trash and potentially hazardous materials should be properly disposed of.

Little to no plastic trash was observed within the cells. Some fiberglass, plastic and wood were observed in one cell (see picture 4). Trash within this cell will be removed and properly disposed of.

8. Free Liquids : No free liquids or soils with free liquids will be accepted at the facility except those materials authorized for acceptance and solidification. A material that fails the SW-846 Paint Filter Liquids Test Method 9095 by definition contains free liquids.

NA There were no free liquids or soils with free liquids at the facility during the June

10, 1997 inspection. However, during the September 8 and 11, 1997 facility inspections free liquids were observed with sludge in the stabilization pad.

9. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm so that leaks can be identified.

The sludge holding tanks and horizontal green tank located at this facility are lacking the proper containment. Berms to contain the appropriate volume need to be constructed around all above ground tanks that contain fluids other than fresh water (see picture 7).

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

Empty drums and/or drums and buckets containing fluids located at the facility east of the horizontal green tank were not stored on an impermeable pad with curb containment. If possible empty drums should be recycled or returned to the supplier.

All drums and chemical containers should be clearly labeled to identify their contents and other emergency information necessary if they were to rupture, spill or ignite.

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

The saddle tanks do not have the required impermeable pad and curb containment (see picture 7).

12. Tank Labeling: All tanks, drums and containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill or ignite.

The above ground tanks, saddle tanks and containers are not appropriately labeled as to their contents or the hazards of the contents.

13. Housekeeping: All systems designed for spill collection/prevention should be inspected frequently to ensure proper operation and to prevent overtopping or system failure.

At the time of inspection on September 8, 1997 the concrete stabilization pad contained sludge material and liquids. Material within the stabilization pad should be solidified and removed frequently to facilitate the inspection of the containment structure. The stabilization pad permit modification dated February 8, 1996, requires that the containment be inspected both inside and outside weekly.

In addition, at the time of the February 8 and 11 inspections, there was evidence of small slop over spills in the soils surrounding the stabilization containment structure.

14. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116 to the appropriate OCD District Office.

N/A There were no spills/releases at the time of the inspections.

15. Naturally Occurring Radioactive Material (NORM): All generators submitting waste to a New Mexico Oil Conservation Division Permitted Commercial or Centralized 711 Waste Management Facility must include a Naturally Occurring Radioactive Material status declaration. The generator must declare that the waste was tested for Naturally Occurring Radioactive Material (NORM) and does not contain NORM at regulated levels pursuant to 20 NMAC 3.1 Subpart 1403.C and D.

Under the new 711 Waste Management Facility Permit all waste must be accompanied with a signed NORM declaration from the waste generator.

16. Application Requirements for Permit Under the New Rule 711: An application, Form C-137, for a permit renewal shall be filed in DUPLICATE with the Santa Fe Office of the Division and ONE COPY with the Hobbs OCD district office. The application shall comply with Division guidelines and shall include:

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

Please submit with C-137 application.

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

This is already on file with the OCD.

- (c) The names and addresses of the surface owners of the real property on which the

management facility is sited and surface owners of the real property of record within one mile of the site;

This is already on file with the OCD.

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

Please submit an updated facility map that shows all current and discontinued status landfarm cells, tanks, stabilization pad, roads and buildings.

- (e) A plan for management of approved wastes;

Please submit an updated waste management plan that includes all sludge and tank bottoms to be stabilized and contaminated soils both dry and moist/sticky. In addition, include procedures and chemicals used to neutralize odors.

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

Please submit with C-137 application.

- (g) A routine inspection and maintenance plan to ensure permit compliance;

Please submit an updated inspection maintenance plan to include the above ground tanks and stabilization pad as well as the landfarm cells, berms, dikes and fences.

- (h) A Hydrogen Sulfide (H₂S) Prevention and Contingency Plan to protect public health;

Please submit with C-137 application.

- (i) A closure Plan including a cost estimate sufficient to close the facility to protect public health and the environment; said estimate to be based upon the use of equipment normally available to a third party contractor;

Please submit with C-137 application.

- (j) Geological/hydrological evidence, including depth to and quality of groundwater beneath the site, demonstrating that disposal of oil field wastes will not adversely

impact fresh water;

This is already on file with the OCD.

- (l) Certification by an authorized representative of the applicant that information submitted in the application is true, accurate and complete to the best of the applicant's knowledge.

Please submit with C-137 application.

TIERRA ENVIRONMENTAL 711 FACILITY INSPECTION (PHOTOS BY OCD)



PHOTO NO. 1 DATE:06/10/97



PHOTO NO. 2 DATE:06/10/97

TIERRA ENVIRONMENTAL 711 FACILITY INSPECTION (PHOTOS BY OCD)



PHOTO NO. 3 DATE: 06/10/97



PHOTO NO. 4 DATE:06/10/97

TIERRA ENVIRONMENTAL 711 FACILITY INSPECTION (PHOTOS BY OCD)



PHOTO NO. 5 DATE:06/10/97



PHOTO NO. 6 DATE:06/10/97

TIERRA ENVIRONMENTAL 711 FACILITY INSPECTION (PHOTOS BY OCD)

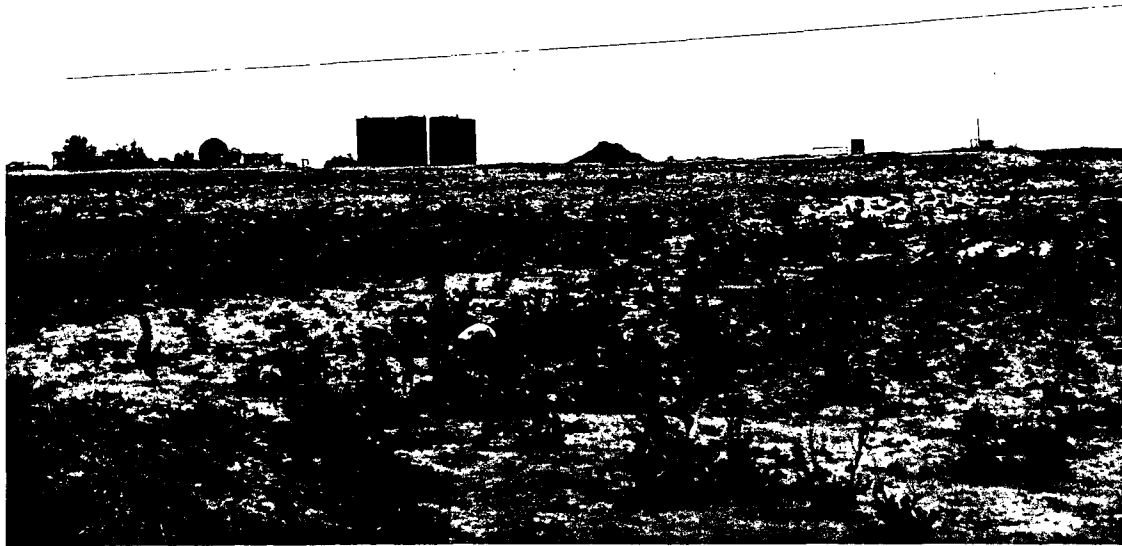


PHOTO NO. 7 DATE:06/10/97

Martyne Kieling

From: Frank Chavez
Sent: Thursday, September 11, 1997 12:09 PM
To: Martyne Kieling
Subject: Tierra Inspection 9/11/97
Importance: High

On the morning of September 11, 1997, I inspected the Tierra land farm to be sure that they were in compliance with the requirements of the NOV they were issued.

I found the following:

1. The liquid material from the stabilization pad had been mixed with soil and spread on the west side of the facility. There were still very strong odors around the stabilization pad from small remaining amounts of the soil. Blain said that he was going to spray the material with permanganate to eliminate the odors. He mentioned that they had added permanganate water to the waste from Conoco to lessen the odors during mixing. The soil had been spread as deep as 1 foot.
2. There were several piles of oily contaminated soil in different areas of the facility. This material had been received as long ago as July and had not been spread. Blain explained that he understood that they were allowed by our office to wait until the rains had ceased and the material had dried before spreading it. He said that when the material is too wet their trackter cannot get enough traction to spread adequately.
3. Several spreads appeared to be considerably deeper than 6 inches.
4. The horizontal green tank marked "Exempt Sludge" was leaking through a connection used as part of a permanganate mixing operation. Blain said that he would fix it right away.
5. There was a small bermed area immediately east of the horizontal green tank. It contained empty drums and buckets, and containers with other materials. Blain said that the materials were ammonia and used motor oil. Two small open top tubs cut from the bottoms of plastic drums had been put in this area in such a manner that the material in them had spilled and rain had overflowed them. I asked Blain to straighten them up to prevent further spillage.
6. Several 5 gallon containers of motor oil were stacked on the ground between the office and a storage shed.
7. There was a general impression that waste and litter are beginning to accumulate on this facility creating an appearance of disorder and confusion as to what material is part of the facility operation and what is not.

Martyne Kieling

From: Denny Foust
Sent: Tuesday, September 09, 1997 8:40 AM
To: Roger Anderson
Cc: Frank Chavez; Martyne Kieling
Subject: Permit Violations At Tirerra's Land Farm

On Monday September 8, 1997 Mr. Frank Chavez and I were responding to complaints of odors from residences east of the land farm. During our investigation of potential sources for odors the following problems were identified at Tierra's Crouch Mesa Land Farm.

1. The stabilization pad was full of wet material which has a highly pervasive odor. Unstabilized material is not permitted to be in the pad more than 24 hours.
2. The stabilization pad appears to be leaking or weeping around the edges due to wet material being left in the pad.
3. The pad has been run over or slopped over during stabilization of material, little or no remedial work has been done on this material.
4. Contaminated soils to the south of the office have not been spread at all or have not been spread sufficiently to meet the conditions of your permit. These soils are dry enough to be worked easily. I specifically discussed OCD's position on spreading soils with you and Tim Nobis on August 26, 1997. I subsequently reminded both Tim Nobis and Blaine Williams of the situation by telephone after our meeting.

The particular soils which were not spread I believe to have been hauled from Basin Disposal or Sunco late last fall they may have been in place 9 months or more definitely in excess of 90 days. I notified both Envirotech and Tierra that all soils must be spread and worked on schedule during this dry period as we have had moisture problems throughout much of the summer. I met with Tierra personnel in their office 8/26/97 and outlined this position and was assured the situation would be taken care of--subsequently I mentioned the seriousness of this problem to both Tim Nobis and Blaine Williams who are in charge while Phil Nobis is on vacation. The material in the stabilization pad is material from the Conoco San Juan Gas Plant which was run into the pad onto some dirt but has not been worked. Blaine Williams asserts they will be working on the problem today after equipment is up and running--I believe 24 hours is sufficient to come into compliance.

~ 450 cubic yards of Material to be Spread
Approximation by Frank C.

Big Field?



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

September 9, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-326-936-336

Mr. Phillip C. Nobis
Tierra Environmental Company, Inc.
P.O. Drawer 15250
Farmington, NM 87401

RE: NOTICE OF VIOLATION
Tierra Environmental Company, Inc.
NW/4 SE/4 (Unit J), Section 2, Township 29 North, Range 12 West,
NMPM, San Juan County, New Mexico
Waste Management Facility Permit No. NM-01-0010

Dear Mr. Nobis:

On September 8, 1997, the New Mexico Oil Conservation Division (OCD), Aztec District Office inspected Tierra Environmental Company, Inc., (Tierra), waste management facility located in NW/4 SE/4 (unit J), Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. The OCD inspected Tierra in response to complaints of odors from residences east of the landfarm. During the Tierra facility inspection the following permit violations were identified.

1. The stabilization pad was full of liquid and wet material which has a **highly pervasive and offensive odor**. Evidence indicates that this material has been in place for several weeks.

Tierra's permit requires that: Unstabilized material is not permitted to be in the pad more than 24 hours.

2. The stabilization pad appears to be leaking or weeping around the edges due to wet material being left in the pad.

Tierra's permit requires that: The OCD Santa Fe and Aztec offices will be notified within 24 hours of discovery of a containment leak.

3. The pad has been run over or slopped over during stabilization of material. Little or no remedial work has been done on this slop material.

Mr. Phillip C. Nobis
August 9, 1997
Page 2

Tierra's permit requires that: All contaminated soils received at the facility will be spread and disked within 72 hours of receipt.

4. Contaminated soils to the south of the Tierra office have not been spread at all or have not been spread sufficiently to meet the conditions of the Tierra permit.

Tierra's permit requires that: All contaminated soils received at the facility will be spread and disked within 72 hours of receipt. Soils will be spread on the surface in 6 inch lifts or less.

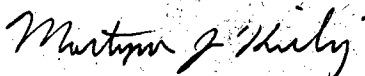
Denny Foust of the OCD informed you (Phillip Nobis) and Tim Nobis on August 26, 1997, of the permit requirement that all contaminated soils received at the facility will be spread and disked within 72 hours of receipt and that soils will be spread on the surface in 6 inch lifts or less. In addition, both Tim Nobis and Blaine Williams were notified of the permit violation by telephone after the meeting on August 26, 1997. The material piled south of the Tierra office is believed to have been hauled to Tierra last fall and has been in place for at least 9 months. This is a gross violation of the Tierra permit. The OCD understands that it has been unusually wet these past few months, however, these soils are reportedly dry enough to be worked.

Pursuant to OCD rules and regulations, Tierra Environmental Company, Inc., is in violation of their Permit No. NM-01-0010 and is potentially impacting public health with the odor emanating from the stabilization pad. **Tierra Environmental Company, Inc. has until no later than 5:00 PM September 9, 1997 to solidify, remove and landfarm the liquids within the stabilization pad and the slop or over flow around the exterior of the stabilization pad. In addition, Tierra Environmental Company, Inc., will landfarm all contaminated soils piled south of the office by no later than 5:00 PM September 14, 1997. Soils shall be spread on the surface in 6 inch lifts or less.**

Upon completion of these tasks Tierra Environmental Company, Inc., shall notify the OCD Santa Fe and Aztec Offices in writing that the work has been completed.

If you require any further information concerning this matter please contact me at (505) 827-7153.

Sincerely,



Martyne J. Kieling
Environmental Geologist

xc: OCD Aztec Office

10/11/96

Non-UIC Inspection Results:

→ TIERRA DROP OFF PAPERWORK, WALK THROUGH REVEALS NEED TO PICK UP PLASTIC AND WORK ON THICKNESS OF LIFTS, SPREADING CONTINUES TO LAG USUALLY DUE TO WET STABILIZED SLUDGES. DROPPED OFF PAPERWORK AT ENVIROTECH. BASIN DISPOSAL HAS ANOTHER 200 CY STABILIZED SLUDGES TO MOVE MEANING THEY HAD 400 CY ONSITE. THE NEW STABILIZED MATERIAL IS VERY WET. RECEIPT BOOK FOR 10/8/96 SHOWS A LOAD WENT TO THE CONCRETE PIT AS APPROVED BY TOM FISH. THE LEAK DETECTION HAS BEEN AS HIGH AS 3', I AM CONCERNED ABOUT THE POSSIBILITY OF A LEAK. PUMPED OUT 10/10/96, ONLY SHOWS 3" TODAY, NEED TO CHECK ON THIS FURTHER.

Drop off
5/5/97
MJK



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

June 21, 1996

CERTIFIED MAIL

RETURN RECEIPT NO. P-176-013-153

Phil C. Nobis
Tierra Environmental Corporation
PO Drawer 15250
Farmington, New Mexico 87401

Re: Concrete Holding and Treating Trough
Crouch Mesa Landfarm (NM-01-0010)
San Juan County, New Mexico

Dear Mr. Nobis:

The Oil Conservation Division (OCD) inspected the above referenced facility on April 18, 1996 for compliance with the permit conditions of approval for the facility. Based upon that inspection please provide the New Mexico Oil Conservation Division with the following:

1. The concrete holding and treating trough was seeping hydrocarbons and other liquids out of the walls. Provide the New Mexico Oil Conservation Division with a procedure to inspect for and repair any leaks.

Please provide the above requested information by July 21, 1996.

If you have any questions, please do not hesitate to call me at (505) 827-7153.

Sincerely,

Chris Eustice
Geologist

xc: OCD - Aztec Office