

Landfarm Materials

Presented by Controlled Recovery, Inc.

to

Oil Conservation Division
Mark Fesmire, Division Director

2004

Publication and Permitting

Applications and public notification refer to "Remediation of Non-Hazardous Hydrocarbon-Contaminated Soils" and make no mention of other oilfield wastes. Publications also indicate that biodegradation will occur. Please see attached "Affidavit of Publications".

Most landfarm permits are issued by "administrative approval", however, C & C Landfarm, Inc. was approved by hearing and order 9769A (attached) with 2 votes for approval and 1 dissent by the commission members.

The construction and operations section of most landfarm permits pertain only to contaminated soils and make no mention of, or reference to other oilfield wastes.

The waste acceptance criteria section of the permits is generic language from NMOCD Rule 711 and is included in all permits issued under Rule 711. This language is included in Commercial Exchange, Inc., 711 Permit #NM-01-0037 for a treating plant. It is clearly understood that this is not a disposal facility or a landfarm. The waste acceptance criteria section of the permit conditions includes "oilfield wastes". The wording in this section is from Rule 711 and appears in other permits, including treating plants and surface waste disposals. The interpretation of this section to include wastes other than hydrocarbon-contaminated soils seems to be beyond the original intent of landfarming processes and may not be protective of Public Health and the Environment. There are no testing requirements for any other contaminants. Chlorides will not biodegrade and dilution with other soils or materials may not be acceptable environmental policy. The treatment zone monitoring may not be protective of surface resources, runoff, and long term subsurface resources.

Molecular sieve from a natural gas processing plant in Lea County is being applied to a permitted landfarm. Under the current interpretation of the permit, this may be a legal

activity but is not a sound environmental policy and may not protect the public health and environment. This material is not a candidate for remediation by landfarming. "Please see attached MSDS".

Most wells in drilled Southeast New Mexico use brine water and mud additives. A 7500' well in Lea County will use approximately 2500 BBLS of brine water with 180,000 to 190,000 Mg/Kg chlorides, MSDS are provided for some of the additives to the mud system, obviously not all are used in one well but are indicative of the mud system contents. Only one of these was suitable for land application (cedar wood for lost circulation material) but it does not meet the definition of soil.

A sample of drill cuttings from a drilling well south of Hobbs at approximately 6200' depth indicates chlorides – 45186 Mg/Kg, EC 114, ESP 47.1, SAR 414, it would not seem appropriate to land spread this material.

Drilling pits are also completion pits (unless the well is a dry hole) which will contain other contaminants, spent acid, frac sand, drilled cement, cast iron from bridge plugs, acid inhibitor, acid gels, potassium chloride, and brine water. A work over pit will have similar contents as a completion pit.

Plastic and synthetic materials from pit liners and bin liners, will not remediate, will migrate by wind to adjacent properties, are detrimental to livestock and wildlife, and are not candidates for landfarming.

Landfarming of tank bottoms containing, iron sulfides, heavy sludges, treating chemicals (MSDS attached), and brine solutions which have been mixed with other contaminated soils may not reach acceptable remediation levels.

Closure standards are for TPH and BTEX only, however "closure will be pursuant to all OCD requirements in effect at the time of closure and any other applicable local, state,

and/or federal regulations” and “contaminated soils exceeding OCD closure standards for the site will be removed or remediated” is included in the permit. This includes Water Quality Control Commissions rules. The generator and operator may be assuming future liabilities while they believe they are protected by operating as per OCD “Permitted Activity”. The closure section of landfarm permits also requires re-vegetation, which is not probable with high chlorides or other unknown contaminants.

The generator may have a false sense of security in that landfarming can remediate all the constituents contained in the waste and he is relieved of liability, this has not been proven nor has the waste been analyzed to determine other constituents and their levels.

Drilling pits in Southeast New Mexico, which have been buried for many years, do not support vegetation on the surface. It may be assumed that landfarming of these pits, will not result in soil suitable for plant growth, which again indicates this type of material was not intended to be landfarmed in the original creation of landfarm permitting and notice to the public.

The disclaimer included in the permit “Please be advised approval of this facility permit does not relieve John Doe Landfarm of liability should your operation result in pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve John Doe Landfarm of responsibility for compliance with other federal, state, or local laws and/or regulations.”, may protect OCD from future liability and litigation but offers no protection to the generator of the material.

It seems appropriate that landfarming be limited to volatile hydrocarbons soils, which was the foundation of this permitting process.

There are no “Rules” for landfarming, only guidelines which apparently have had no public input.

The guidelines for landfarm construction show OCD intent of the purpose of landfarming with this statement, “Because a landfarm is designed to remediate contaminated soils, and not transfer contaminants into the underlying native soil and/or groundwater.”

Water Quality Control Commission Regulations are administered and enforced by New Mexico Oil Conservation Division and New Mexico Environment Department.

Landfarming is permitted by both agencies, however the practice and interpretation has significant differences. This is not to intimate one agency is correct and the other incorrect but to point out all citizens and industries should have the rules applied in a like manner.

New Mexico Environmental Department Secretary Ron Curry at a public meeting at New Mexico Junior College, Hobbs, New Mexico on July 22, 2004, in response to a question from Representative Don Bratton commented, "The difference between NMED and NMOCD interruption and application of New Mexico Water Quality Commission Rules is like night and day".

Please see attached letter from NMED dated 12-27-02, which addresses this issue.

The "salt and anhydrite" are materials from the Salado formation in Southeast New Mexico, a formation commonly penetrated by drilling wells for Oil & Gas Exploration. NMED indicates these are not soils, do not qualify for landfarming, and salt (chloride), is counter productive for remediation processes. This would seem to indicate that materials removed by mining or drilling do not qualify as soils.

Please see definition of soil from NMOCD Interim Pit and Below Grade Tank Guidelines. "Soil" is defined as that earth material which has been so modified and acted upon by physical chemical, and biological agents that it will support rooted plants.

The attached memos from NMED provide guidance concerning landfarming practices.

NMED requirements are much different than NMOCD, no landfarming of materials that contain salt (chlorides), use of plastic or concrete barriers to prevent sub surface contamination, limited to petroleum contaminates, 100 feet to groundwater, soils must be remediated and considered acceptable for reuse, and soils must be analyzed prior to excavation.

LANDFARMING OF PETROLEUM AND RELATED CONSTITUENTS

- For the most part, discussions of landfarming (also known as land application or land treatment) are found in EPA Guidance documents associated with the remediation of refined petroleum products that have leaked or spilled from underground storage tanks (UST).
- Landfarming has been proven effective in reducing concentrations of constituents of petroleum products typically found at UST sites.
- Landfarming is particularly effective for remediation of soils contaminated with petroleum products with a significant volatile fraction.
- Although landfarming, in the context of best practices, is actually an active process by which concentrations of petroleum constituents are reduced through biodegradation, e.g. spreading excavated contaminated soils in a thin layer on the ground surface and stimulating aerobic microbial activity within the soils through aeration and/or the addition of minerals, nutrients, and moisture, much of the "remediation" is a function of releasing regulated volatile organic compounds (VOC) into the atmosphere.
- In the case of heavier (non-volatile) petroleum products or crude oil, evaporation of constituents is much less likely to occur and the only effective landfarming mechanism for remediation is biodegradation.
- Biodegradation is effective only if an intensive regime is established and properly maintained.

- **Consequently, landfarming of crude oil spills at remote sites tends to be ineffective and frequently lapses into the un-permitted disposal of petroleum contamination in an unregulated setting.**
- **Landfarming of chloride contaminated soil, unlike landfarming of petroleum contamination, is based on the premise that the concentration of the contaminant will not be reduced, but simply relocated to a shallow depth below the ground surface.**
- **Landfarming of chloride contamination is controversial because of the counter-intuitive notion that decontamination of the ground surface is achieved by intentionally contaminating a shallow sub-surface zone.**
- **In the context of New Mexico Water Quality Control Commission Regulations, the practice probably violates groundwater protection standards.**
- **Landfarming of drilling/completion fluids and tank bottom treatment chemicals represents a fundamental misuse of the concept as it was originally developed. There is no reported evidence of treatment efficacy for that range of constituents in a landfarming regime.**

Approval of landfarming oil and gas wastes and the mixing of liquid waste with contaminated soils to be landfarmed was an "Industry Friendly" interpretation at the time of the decision. The liability associated with these practices today suggests that these decisions may not be in the best interests of the Oil and Gas Industry.

The concerns of the Environmental Community, Farmers, Ranchers, Wildlife Organizations, Municipalities, and Political action groups are receiving more attention now than in the past. The OCD and Industry should be proactive in changing the practices, which will receive analysis and scrutiny by these groups.

Affidavit of Publication

STATE OF NEW MEXICO)

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 XNXXM Court of Lea County, New Mexico was published in a regular and entire issue of THE LOVINGTON DAILY LEADER and not in any supplement thereof. one (1) day for

beginning with the issue of June 24 19 92

and ending with the issue of June 24 19 92

And that the cost of publishing said notice is the sum of \$ 77.74

which sum has been (Paid) (As set off) as Court Costs

Subscribed and sworn to before me this 25th

day of June 19 92

Notary Public, Lea County, New Mexico

My Commission Expires Sept. 23 19 94

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

The State of New Mexico by its Oil Conservation Division hereby gives notice pursuant to law and Rules and Regulations of said Division promulgated thereunder of the following public hearing to be held at 8:15 A. M. on July 9, 1992, at the Oil Conservation Division Conference Room, State Land Office Building, Santa Fe, New Mexico, before Michael E. Stogner, Examiner or David R. Catanach, Alternate Examiner, duly appointed for said hearing as provided by law.

STATE OF NEW MEXICO TO:

All named parties and persons having any right, title, interest or claim in the following cases and notice to the public.

(NOTE: All land descriptions herein refer to the New Mexico Principal Meridian whether or not so stated.)

CASE 10499:
Application of Mitchell Energy Corporation for a unit agreement, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks approval of the Comanche State Unit Agreement for an area comprising 2568.56 acres, more or less, of State lands in all or portions of Sections 3, 4, 9, and 10 of Township 21 South, Range 33 East, which is centered approximately 1.5 miles south of State Highway No. 176 at mile marker 19.

CASE 10497: (Readvertised)
Application of Newbourne Oil Company for two secondary recovery pilot projects, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks authorization to institute two secondary recovery pilot projects in the Querecho Plains-Upper Bone Spring Pool within Township 18 South, Range 32 East, on its Government "K" Lease by the injection of water from approximately 8454 feet to 8515 feet in Well No. 2 located 1950 feet from the South line and 1980 feet from the West line (Unit K) of Section 23 and on its Federal "E" Lease by the injection of water into the perforated interval from approximately 6501 feet to 6530 feet in Well No. 10 located 2310 feet from the North and East lines (Unit G) and from approximately 6300 feet to 6485 feet in Well No. 11 located 660 feet from the North line and 530 feet from the East line (Unit A) both in Section 27. Said pool is centered approximately 9

New Mexico.

CASE 10502:

Application of Meridian Oil Inc. for compulsory pooling, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation or to a depth of 8700 feet, whichever is deeper, underlying the NW/4 NW/4 (Unit D) of Section 23, Township 22 South, Range 33 East, forming a standard 40-acre oil spacing and proration unit within said vertical extent. Said unit is to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling said well. Said unit is located approximately 6.25 miles north-northwest of the junction of State Highway No. 128 and the Delaware Basin Road.

CASE 10503:

Application of Meridian Oil Inc. for compulsory pooling, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation or to a depth of 8700 feet, whichever is deeper, underlying the SW/4 NW/4 (Unit E) of Section 23, Township 22 South, Range 33 East, forming a standard 40-acre oil spacing and proration unit within said vertical extent. Said unit is to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling said well. Said unit is located approximately 6 miles north-northwest of the junction of State Highway No. 128 and the Delaware Basin Road.

CASE 10504:

Application of Meridian Oil Inc. for compulsory pooling, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation or to a depth of 8700 feet, whichever is deeper, underlying the NW/4 SW/4 (Unit L) of Section 24, Township 22 South, Range 33 East, forming a standard 40-acre oil spacing and proration unit within said vertical extent. Said unit is to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost

operating costs and charges for supervision, designation

applicant as the operator of well and a charge for risk involved in drilling said well. Said unit is located approximately 6.5 miles north by road of the junction of State Highway No. 128 and the Delaware Basin Road.

CASE 10505:

Application of United Oil Search, Inc. for a credit enhanced oil recovery, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks a credit enhanced oil recovery over the following leases: Glt Ryan (Leonard Federal) Lease comprising all of Section 11 the 8/2 of Section 14, Town 26 South, Range 37 East, and except as to depths to 3600 feet subsurface in the SE/4 of said Section 11 and to depths between the surface and 3600 feet subsurface in SW/4 SW/4 of said Section 13 and the N/2 of Section 26 South, Range East, save and except as to Queen formation in the SE SW/4 of said Section 13; the Leonard Brothers "A" L. comprising the N/2 N/2, NW/4, and the SW/4 NE Section 23, Township 26 South, Range 37 East, save and except as to the Queen formation in the NE/4 NE/4 of said Section 23. Said leases are located approximately 5 miles southeast of Bennett, Mexico.

CASE 10507:

Application of C & C Lease Inc. for a commercial air waste disposal facility, County, New Mexico.

Applicant, in the above-styled cause, seeks authorization to construct and operate a commercial landfill for remediation of non-hazardous hydrocarbon-contaminated soils using an enhanced biodegradation process. Area is to be located in the NE/4 (Unit G) of Section 20 Township 20 South, Range East, which is approximately 2 miles southeast of Morun New Mexico. This application has been administratively determined to be approved and this hearing is scheduled to allow parties the opportunity to present technical evidence why the application should be approved pursuant to rules of the Division. In absence of objection, application will be taken under advisement.

Given under the Seal of State of New Mexico Conservation Commission, Santa Fe, New Mexico on 18th day of June, 1992.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEA
143
SEAL
Published in the Lovington

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

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

J&L Landfarm, Judy L. Robert, Landowner, 8301 Eunice Highway, Hobbs, New Mexico, 88240, has submitted for approval an application to construct and operate a Rule 711 commercial solids landfarm remediation facility located in the N/2 of N/2 of Section 9 and the N/2 of N/2 of Section 10, Township 20 South, Range 38 East, NMPM, Lea County, New Mexico. Hydrocarbon contaminated soils associated with oil and gas production will be remediated by spreading them on the ground surface in 6 inch lifts or less and periodically disking them to enhance biodegradation of contaminants. Ground water most likely to be affected by any accidental discharges at the surface is estimated to be at a depth of 42 to 69 feet with a total dissolved solids concentration estimated to be at 1038 parts per million. The facility is underlain by the Triassic red beds. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be incorporated at the proposed site.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed application, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to her and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 2nd day of November, 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


for LORI WROTENBERY, Director

SEAL

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

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

Case No. 10507 (De Novo)
Order No. R-9769-A

APPLICATION OF C & C LANDFARM, INC.
FOR A COMMERCIAL SURFACE WASTE
DISPOSAL FACILITY, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on February 25, 1993, at Santa Fe, New Mexico, before the Oil Conservation Commission of the State of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 29th day of April, 1993, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) Sections 70-2-12.B(21) and (22) N.M.S.A. (1978) Compilation, also known as the New Mexico Oil and Gas Act, authorizes the New Mexico Oil Conservation Commission ("Commission") to regulate the disposition of non-domestic wastes resulting from various oil and gas activities and operations and to protect public health and the environment.

(3) The applicant, C & C Landfarm, Inc. (C & C) filed an application, pursuant to General Rule 711 with the Division on October 8, 1991 seeking authorization to construct and operate a commercial landfarm facility for the remediation of non-hazardous and exempt hydrocarbon contaminated soils. C & C proposes to utilize biodegradation process on a site located in the SW/4 NE/4 (Unit G) of Section 2, Township 20 South, Range 37

EXHIBIT A TO APPLICATION
FOR REHEARING

RP 035

East, NMPM, Lea County, New Mexico, which is located approximately two miles southeast of Monument, New Mexico. The term "non-hazardous and exempt" is synonymous as defined in the Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations.

(4) This application was reviewed by the Environmental Bureau of the Oil Conservation Division and determined to be approvable.

(5) A Division Examiner hearing was scheduled to provide to interested parties an opportunity to present technical evidence why this application should not be approved pursuant to the applicable rules of the Division.

(6) Within the time frame authorized by Division rule, certain parties of interest filed written objections to the proposed facility including Elsie M. Reeves and W. T. Stradley, President of S-W Cattle Company.

(7) An Examiner hearing was held on September 1, 1992 at which time Elsie M. Reeves and W. T. Stradley presented evidence in opposition to this application.

(8) On November 16, 1992 the Division entered Order No. R-9769 approving this application and thereafter Elsie M. Reeves, S-W Cattle Company and W. T. Stradley timely filed for a hearing De Novo.

(9) Properly managed landfarming is an excellent method to manage contaminated soil, because those soils are remediated to a useful condition and contaminants can be contained and any movement observed and stopped before they cause any harm.

(10) The proposed landfarm is to be located on a forty-acre tract of land, as described in Finding Paragraph No. (3) which is bordered on the east by Lea County Road No. 58. Oil field contaminated soils will be trucked to the site and deposited within cells in six inch lifts; these soils will be tilled or plowed to ensure proper aeration and bioremediation to proper government standards. Prior to any soil being deposited in a cell, the soil in the cell or "treatment zone" will be sampled and tested. Six months after the first oil field contaminated soil is deposited in the cell and quarterly thereafter the treatment zone will be tested again to assure that no contamination is occurring.

(11) Applicant presented factual evidence that supports the following conclusions:

(a) There is no fresh water under the disposal site because there is no Ogalalla aquifer present.

(b) The berm to be constructed and maintained and operational

requirements will be adequate to prevent precipitation run-off and run-on for the treatment portion of the facility.

- (c) Quarterly testing within the treatment zone will determine if there has been downward migration of contaminants.
- (d) The process of bio-remediation to be employed at the proposed landfarm is a proven, cost effective technology for treatment of oil contaminated soils.

(12) There is a need for landfarms to remediate oil contaminated soils in the oil fields of Southeast New Mexico.

(13) Elsie M. Reeves and W. T. Stradley, property owners in the area, appeared in opposition to the application and expressed concern that the proposed facility could contaminate fresh water. They called a hydrologist who testified that additional requirements might be necessary to assure there was no contamination of fresh water supplies but admitted that such requirements would need to be developed based on inspection of the facility and sampling and testing of the water and soil in the area. He stated he had not been to the site and had taken no samples nor conducted any tests at the proposed facility. His expert opinion was based upon general hydrologic information from the literature and not upon specific knowledge at the site and the type of operation and therefore was not useful in this case.

(14) The Division's Environmental Bureau has reviewed the proposed facility, inspected the site and made specific permit recommendations for this facility which it requests be incorporated into and made part of a Commission Order approving this application. These "Conditions of Approval" should be adopted to assure safe operations and to provide for a monitoring system to detect any leaching or movement of contaminants that could cause the pollution of nearby underground fresh water supplies.

(15) If contaminant migration occurs, the Division should immediately order the operator to stop taking additional contaminated soils and implement steps to remediate the contaminated zone and provide a procedure to prevent future contamination migration.

(16) Approval of this application and operation of the proposed landfarm in accordance with the Environmental Bureau's proposed "Conditions of Approval" will not impair fresh water supplies in the area, will have no adverse effect on human health nor on the environment, will not cause waste and should be approved.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, C & C Landfarm, Inc. is hereby authorized to construct and operate a commercial "landfarm" facility for the remediation of non-hazardous hydrocarbon contaminated soils utilizing an enhanced biodegradation process on a site located in the SW/4 NE/4 (Unit G) of Section 2, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico.

PROVIDED HOWEVER THAT: the proposed facility shall be constructed and operated in accordance with the permit conditions attached hereto as Exhibit "A" which are incorporated herein and made a part of this order, and in accordance with such additional conditions and requirements as may be directed by the Division Director, and shall be operated and maintained in such a manner as to preclude spills, fires, limit emissions and protect persons, livestock and the environment.

PROVIDED FURTHER THAT, prior to initiating operations, the facility shall be inspected by a representative of the Hobbs District Office of the Oil Conservation Division in order to determine the adequacy of fences, gates and cattle guards necessary to preclude livestock and unauthorized persons from entering and/or utilizing said facility, and also to determine the adequacy of berms to assure safe facility operations.

(2) Prior to commencing operations on said facility, the applicant shall submit, to the Santa Fe Office of the Division, a surety or cash bond pursuant to General Rule 711, in the amount of \$25,000 in a form approved by the Division.

(3) The Director of the Division shall be authorized to administratively grant approval for the expansion or modification of the proposed disposal facility after notice to interested parties.

(4) Authority for operation of the landfarm shall be transferrable only upon written application and approval by the Division Director.

(5) Authority for operation of the landfarm facility shall be suspended or rescinded whenever such suspension or rescission appears necessary to protect human health or property, to protect fresh water supplies from contamination, to prevent waste, or for non-compliance with the terms and conditions of this order or Division Rules and Regulations.

(6) The permit granted by this order shall become effective only upon acceptance by the applicant of the "Conditions of Approval" attached hereto as Exhibit A.

(7) The Division shall have the authority to administratively change any condition

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Case No. 10507 (De Novo)
Order No. R-9769-A

of this permit to protect fresh water, human health and the environment. Applicant may request a hearing upon any change which materially affects the operation of the facility.

(8) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Bill Weiss

WILLIAM W. WEISS, Member

William J. Lemay

WILLIAM J. LEMAY, Chairman

I Dissent

Gary Carlson

GARY CARLSON, Member

SEAL

dr/

RP 033



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

February 5, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. P-326-936-507

Ms. Judy L. Roberts
J&L Landfarm.
8301 Eunice Highway
Hobbs, NM 88240

RE: OCD Rule 711 Permit Approval NM-01-0023
J&L Landfarm
Commercial Landfarm
N/2 N/2 of Section 9 and the N/2 N/2 of Section 10, Township 20 South, Range 38
East, NMPM, Lea County, New Mexico

Dear Ms. Roberts:

The permit application for the J&L Landfarm (J&L) commercial surface waste management landfarm facility located in the N/2 N/2 of Section 9 and the N/2 N/2 of Section 10, Township 20 South, Range 38 East, NMPM, Lea County, New Mexico, **is hereby approved** in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. **This permit approval is conditional upon the receipt and approval by the Director of financial assurance in the amount of \$168,000.**

According to the schedule outlined in the financial assurance section of the enclosed attachment, 25% of the \$168,000 bond (\$42,000) is required within thirty (30) days of the date of this permit approval letter. The application consists of the permit application Form C-137 dated May 10, 1998, the public notice dated November 10, 1998, and supplemental materials dated July 20, 1998 and November 12, 1998.

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. J&L is 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 permit does not relieve J&L Landfarm of liability should your operation result in pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve J&L Landfarm of responsibility for compliance with other federal, state or local laws and/or regulations.

Ms. Judy L. Roberts
February 5, 1999
Page 2

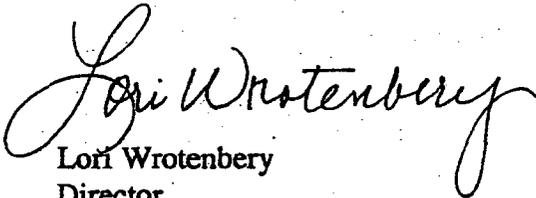
Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered nonhazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs, or open receptacles.

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

Enclosed are two copies of the conditions of approval. Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.

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

Sincerely,



Lori Wrotenbery
Director

LW/mjk

xc with attachments:
Hobbs OCD Office

PERMIT NM-01-0023

J & L LANDFARM

**N/2 N/2 of Section 9 and the N/2 N/2 of Section 10, Township 20 South, Range 38 East,
NMPM, Lea County, New Mexico**

(February 5, 1999).

LANDFARM CONSTRUCTION

1. The facility will be fenced and have a sign at the entrance. The sign will be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.
2. Contaminated soils will not be placed within one hundred (100) feet of the boundary of the facility.
3. Contaminated soils will not be placed within twenty (20) 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.
4. The portion of the facility containing contaminated soils will be bermed to prevent runoff and runoff. A perimeter berm no less than five (5) feet above grade with a base of eight (8) feet and a crown of two (2) feet will be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells will be contained with a berm five (5) feet above grade with a base of eight (8) feet and a crown of two (2) feet.
5. Diverted storm water runoff may be stored in above ground tanks and applied to the landfarm for dust suppression and to enhance bioremediation.
6. All above-ground tanks located at the facility and containing materials other than fresh water must be placed on an impermeable pad. The tanks will be labeled as to contents and hazards and will be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks

LANDFARM OPERATION

1. Disposal will occur only when an attendant is on duty. The facility will be secured when no attendant is present.

2. All contaminated soils received at the facility will be spread and disked within 72 hours of receipt.
3. Soils will be spread on the surface in six-inch lifts or less.
4. Soils will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
5. Exempt contaminated soils will be placed in the landfarm so that they are physically separate (*i.e.*, bermed) from non-exempt contaminated soils. There will be no mixing of exempt and non-exempt soils.
6. 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), 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 and/or removal of the remediated soils.
7. Moisture will be added as necessary to enhance bioremediation and to control blowing dust. There will be no ponding, pooling or run-off of water allowed. Any ponding of precipitation will be removed within twenty-four (24) hours of discovery.
8. Enhanced bio-remediation through the application of microbes (bugs) and/or fertilizers will only be permitted after prior approval from the OCD. Requests for application of microbes or fertilizers will include the location of the area designated for the program, the composition of additives, and the method, amount and frequency of application.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only:
 - a. Oilfield wastes that are exempt from RCRA Subtitle C regulations. All loads of these wastes received at the facility shall be accompanied by a "Generator Certificate of Waste Status" signed by the generator.
 - b. "Non-hazardous" non-exempt oilfield wastes on a case-by-case basis after conducting a hazardous waste characterization including corrosivity, reactivity, ignitability, and toxic constituents. The samples for these analyses will be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures. All "non-hazardous" non-exempt wastes

received at the facility shall be accompanied by:

- i. An approved OCD Form C-138 "Request For Approval To Accept Solid Waste."
 - ii. A "Generator Certificate of Waste Status" signed by the generator.
 - iii. A verification of waste status issued by the appropriate agency, for wastes generated outside OCD jurisdiction. The agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the exempt or non-hazardous classification of the waste.
- c. Non-oilfield wastes that are non-hazardous if ordered by the Department of Public Safety in a public health emergency. OCD approval must be obtained prior to accepting the wastes.
2. At no time will any OCD-permitted surface waste management facility accept wastes that are hazardous by either listing or characteristic testing
 3. No free liquids or soils with free liquids will be accepted at the facility.
 4. The transporter of any wastes to the facility will supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

TREATMENT ZONE MONITORING

1. One (1) background soil sample will be taken from the center portion of the landfarm two (2) feet below the native ground surface prior to operation. The sample will be analyzed for total petroleum hydrocarbons (TPH), major cations/anions, volatile aromatic organics (BTEX), and eight (8) RCRA heavy metals using EPA-approved methods.
2. A treatment zone not to exceed three (3) feet beneath the landfarm native ground surface will be monitored. A minimum of one random soil sample will be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample will be taken at two (2) to three (3) feet below the native ground surface.
3. The soil samples will be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and for major cations/anions and eight (8) RCRA heavy metals annually.

4. After obtaining the soil samples the boreholes will be filled with an impermeable material such as cement or bentonite.

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. Background sample analytical results will be submitted to the OCD Santa Fe office **within thirty (30) days** of receipt from the laboratory.
3. In accordance with OCD Rule 116, the applicant will notify the **OCD Hobbs District office within 24 hours** of any fire, break, leak, spill, or blow out.
4. Comprehensive records of all material disposed of at the facility will be maintained at the facility. The records for each load will include: 1) generator; 2) origin; 3) date received; 4) quantity; 5) certification of exempt status or analysis for hazardous constituents if non-exempt; 6) NORM status declaration; 7) transporter; 8) exact cell location; and 9) any addition of microbes, moisture, fertilizers, *etc.*
5. The OCD will be notified prior to the installation of any pipelines or wells or other construction within the boundaries of the facility.

FINANCIAL ASSURANCE

1. Financial assurance in the amount of **\$168,000** (the estimated cost of closure) in the form of a surety or cash bond or a letter of credit, which is approved by the Division, is required from J&L Landfarm for the commercial surface waste management facility.

By March 5, 1999 J&L Landfarm must submit financial assurance in the amount of **\$42,000**.

By March 5, 2000 or when the facility is filled to 50% of the permitted capacity, whichever comes first, J&L Landfarm must submit financial assurance in the amount of **\$84,000**.

By March 5, 2001 or when the facility is filled to 75% of the permitted capacity, whichever comes first, J&L Landfarm must submit financial assurance in the amount of **\$126,000**.

By March 5, 2002 or when the facility is filled to 100% of the permitted capacity, whichever comes first, J&L Landfarm must submit financial assurance in the amount of \$168,000.

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

CLOSURE

1. The OCD Santa Fe and Hobbs offices will be notified when operation of the facility is discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Upon cessation of landfarming operations for six (6) consecutive months, the operator shall complete cleanup of constructed facilities and restoration of the facility site within the following six (6) months, unless an extension of time is granted by the Director.
2. A closure plan to include the following procedures will be submitted to the OCD Santa Fe office for approval:
 - a. When the facility is to be closed no new material will be accepted.
 - b. Existing landfarm soils will be remediated until they meet the OCD standards in effect at the time of closure.
 - c. The soils beneath the landfarm cells will be characterized as to the total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content in order to determine potential migration of contamination beneath the facility.
 - d. Contaminated soils exceeding OCD closure standards for the site will be removed or remediated.
 - e. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses the structures, berms, or fences may be left in place.
 - f. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

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

Accepted:

J & L LANDFARM

Signature



Title owner

Date

2-8-99



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

July 29, 2003

Lori Wrotenbery
Director
Oil Conservation Division

Mr. TG Herring
Commercial Exchange, Inc.
P.O. Box 3236
Lubbock, TX 79452

RE: OCD Rule 711 Permit Approval NM-01-0037
Commercial Exchange, Inc.
Commercial Surface Waste Management Facility
NE/4 of Section 1, Township 20 South, Range 36 East, NMPM,
Lea County, New Mexico

Dear Mr. Herring:

The permit application for the Commercial Exchange, Inc. commercial surface waste management facility located in NE/4 of Section 1, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico is hereby approved in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. This permit approval is conditional upon the receipt and approval by the Director of financial assurance in the amount of \$125,737. According to the schedule outlined in the financial assurance section of the enclosed attachment, a portion of the \$125,737 financial assurance (\$31,435) is required within 30 days of the date of this permit approval letter. The application consists of the permit application Form C-137 dated March 31, 2003, supplemental information dated May 18, 2003 supplemental information received May 22, 2003, May 28, 2003, June 9, 2003, June 16, 2003 and June 23, 2003.

The operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved treating plant methods must receive prior OCD approval. Commercial Exchange, Inc. is 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 permit does not relieve Commercial Exchange, Inc. of liability should your operation result in pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Commercial Exchange, Inc. of responsibility for compliance with other federal, state or local 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 non-hazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

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

Enclosed are two copies of the conditions of approval. Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.

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

Sincerely,



Roger C. Anderson
Environmental Bureau Chief

RCA/mjk

xc with attachments:
Hobbs OCD Office

ATTACHMENT TO OCD 711 PERMIT APPROVAL
PERMIT WM-1-037
COMMERCIAL EXCHANGE, INC.
NE/4 of Section 1, Township 20 South, Range 36 East, NMPM,
Lea County, New Mexico
(July 29, 2003)

RECEIVED

AUG 13 2003

OIL CONSERVATION
DIVISION

TREATING PLANT OPERATION

- 1 The facility must be fenced to prevent keep cattle from entering the facility. The facility must have a sign at the entrance. The sign must be legible from at least 50 feet and contain the following information: a) name of the facility; b) permit number; c) location by section, township and range; and d) emergency phone number.
- 2 All existing above-ground tanks must be cleaned and hydrostatically tested prior to the use of the tank(s). All below-grade pipes must be hydrostatically tested prior to beginning operations at the treating plant.
- 3 Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.
- 4 The facility must be maintained such that there will be no storm water runoff beyond the boundaries of the facility.
- 5 Any major design changes to the surface waste management facility must be submitted to the OCD Santa Fe office for approval and a copy must be sent to the Hobbs District office.
- 6 Facility inspection and maintenance must be conducted on at least a daily basis and immediately following each consequential rainstorm or windstorm. The OCD Santa Fe and Hobbs offices must be notified within 24 hours if any defect is noted. Repairs must be made as soon as possible. If the defect will jeopardize the integrity of the tank(s), additional material may not be placed into the affected tank(s) until repairs have been completed.
- 7 All process and maintenance areas that show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
- 8 All saddle tanks or drums located at the facility and containing materials other than fresh water must be placed on an impermeable pad with curb containment. The pad and curb containment must be able to hold one and one-third the volume of the largest tank or all interconnected tanks. The tanks and containers must be labeled as to contents and hazards.

- 9 All existing above-ground tanks located at the facility and containing materials other than fresh water must be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks, whichever is greater. All above-ground tanks must be labeled as to contents and hazards.
- 10 All new or replacement above-ground tanks located at the facility and containing materials other than fresh water must be placed on an impermeable pad and be bermed so that the area will contain one and one-third the volume of the largest tank or all interconnected tanks, whichever is greater. All above-ground tanks must be labeled as to contents and hazards.
11. Below-grade sumps and below-grade tanks must be inspected on a daily basis and fluid must be removed to prevent overflow.
12. Below-grade sumps and below-grade tanks must be cleaned and visually inspected annually. Results must be recorded and maintained at the facility for OCD review. If sump/tank integrity has failed the OCD must be notified within 48 hours of discovery and the sump/tank must be replaced.
13. All new or replacement below-grade sumps and below-grade tanks at the facility must have secondary impermeable containment with a leak detection system. The leak detection system must be inspected for fluids weekly. Results must be recorded and maintained at the facility for OCD review. If fluids are present they must be removed and properly disposed of or recycled and the primary containment checked for leaks and repaired or replaced. Records of inspections and repairs must be made available to the OCD upon request.
14. Below-grade pipelines associated with the treating plant must be pressure tested annually. Results must be recorded and maintained at the facility for OCD review. If pipeline integrity has failed the OCD must be notified within 48 hours of discovery and the line must be repaired or replaced. Contaminated soil must be removed and disposed of at an OCD-approved facility. Soil remediation must follow OCD surface impoundment closure guidelines. The permittee must submit a report to the OCD Santa Fe and appropriate District offices that describes the investigation and remedial actions taken.
15. Liquid and solid waste generated at the treating plant or from cleanup of leaks and spills must be disposed of at an OCD-approved disposal facility.
16. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits and ponds shall be screened, netted or covered.
17. Within 24 hours of receiving notification from the OCD that an objectionable odor has been detected or reported, the facility must implement the following response procedure:
 - a. log date and approximate time of notice that an odor exists;

- b. log investigative steps taken, including date and time, and conclusions reached; and
- c. log actions taken to alleviate the odor, which may include adjusting chemical treatment, air sparging, or other similar responses.

A copy of the log, signed and dated by the facility manager, must be maintained for OCD review.

TANKS AND EQUIPMENT TO BE TAKEN OUT OF SERVICE

1. All existing tanks at Commercial Exchange, Inc. that will not be used must be emptied of all waste and product. The waste removed must be sent to an OCD approved facility. The recoverable hydrocarbons must be processed at the Commercial Exchange, Inc. treating plant or sent to an OCD approved facility.
2. Tanks and equipment at Commercial Exchange, Inc. that will not be used and that are emptied and cleaned must be removed from the facility and either recycled, sold for reuse or disposed of at an OCD approved facility.
3. Contaminated soil must be remediated from around and below the decommissioned tanks and around any of the operational tanks. Soil remediation must follow OCD surface impoundment closure guidelines. Commercial Exchange, Inc must submit a report to the OCD Santa Fe and Hobbs offices that describes the investigation and remedial actions taken.
4. Commercial Exchange Inc. must notify the OCD Santa Fe and Hobbs District office within 36 hours of all soil and groundwater sampling events associated with the tank removal and historical spills and leaks so that the OCD may have the option to witness or split samples.

H₂S PREVENTION & CONTINGENCY PLAN

1. **Commercial Exchange, Inc. must develop a prevention and contingency plan for ambient H₂S levels to protect public health. The H₂S prevention and contingency plan must be submitted to the OCD Santa Fe and Hobbs offices for approval by September 25, 2003. The plan must address how Commercial Exchange, Inc. will monitor for H₂S to ensure the following:**
 - a. **If H₂S of 1.0 ppm or greater leaves the property:**
 - i. the operator must notify the Hobbs office of the OCD immediately; and
 - ii. the operator must begin operations or treatment that will mitigate the source.

- b. If H₂S of 10.0 ppm or greater leaves the property:
 - i. the operator must immediately notify the Hobbs office of the OCD and the following public safety agencies:

New Mexico State Police;
Lea County Sheriff; and
Lea County Fire Marshall;
 - ii. the operator must notify all persons residing within one-half (½) mile of the fence line and assist public safety officials with evacuation as requested; and
 - iii. the operator must begin operations or treatment that will mitigate the source.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only:
 - a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material regulated pursuant to 20 NMAC 3.1 Subpart 1403 (NORM). All loads of these wastes other than wastes returned from the well bore in the normal course of well operations such as produced water and spent treating fluids received at the facility shall be accompanied by a "Generator Certificate of Waste Status" signed by the generator.
 - b. "Non-hazardous" non-exempt oilfield wastes that do not contain NORM. These wastes may be accepted on a case-by-case basis after a hazardous waste determination is made. Samples, if required, must be obtained from the wastes prior to removal from the generator's facility and without dilution in accordance with EPA SW-846 sampling procedures. All "non-hazardous" non-exempt wastes received at the facility must be accompanied by:
 - i. An approved OCD Form C-138 "Request For Approval To Accept Solid Waste."
 - ii. A "Generator Certificate of Waste Status" signed by the generator.
 - iii. A verification of waste status issued by the appropriate agency, for wastes generated outside OCD jurisdiction. The agency verification is based on specific information on the subject waste submitted by the generator and demonstrating the exempt or non-hazardous classification of the waste.

- c. Non-oilfield wastes that are non-hazardous if ordered by the Department of Public Safety in a public health emergency. OCD approval must be obtained prior to accepting the wastes.
2. At no time may any OCD-permitted surface waste management facility accept wastes that are hazardous by either listing or characteristic testing.
3. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.
4. No waste will be accepted at the treating plant unless it is accompanied by an approved Form C-117-A.
5. No produced water may be received at the facility unless the transporter has a valid Form C-133, Authorization to Move Produced Water, on file with the Division.

REPORTING

1. The Treating Plant Operator's Monthly Report (Form C-118 sheet 1 and 1-A), which details the oil recovered and sold during the preceding month, must be submitted to the OCD Hobbs district office according to form directions.
2. The Tank Cleaning, Sediment Oil Removal, Transportation of Miscellaneous Hydrocarbons and Disposal Permit (Form C-117) must be submitted to the OCD Hobbs office according to form directions.
3. Records of treating plant inspections and maintenance and of pipeline testing and maintenance must be kept and maintained for OCD review.
4. Commercial Exchange, Inc. must notify the OCD Santa Fe and Hobbs offices within 24 hours of any fire, break, leak, spill, blow out or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
5. Comprehensive records of all material disposed of at the facility must be maintained. The records for each load must include: 1) generator; 2) origin; 3) date received; 4) quantity; 5) certification of waste status as exempt; 6) NORM status declaration if applicable; and 7) transporter.
6. The OCD must be notified prior to the installation of any pipelines or wells or other construction within the boundaries of the facility.

FINANCIAL ASSURANCE

1. Financial assurance in the amount of \$125,737 in the form of a surety or cash bond or a letter of credit, which is approved by the Division, is required from Commercial Exchange, Inc. for the commercial surface waste management facility.

By August 29, 2003 Commercial Exchange, Inc. must submit 25% of the financial assurance in the amount of \$ 31,435.

By August 29, 2004 Commercial Exchange, Inc. must submit 50% of the financial assurance in the amount of \$62,870.

By August 29, 2005 Commercial Exchange, Inc. must submit 75% of the financial assurance in the amount of \$94,305.

By August 29, 2006 Commercial Exchange, Inc. must submit 100% of the financial assurance in the amount of \$125,737.

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

CLOSURE

1. The OCD Santa Fe and Hobbs offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility a closure plan must be submitted to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is granted by the Director.
2. The closure plan to be submitted must include the following procedures:
 - a. When the facility is to be closed no new material may be accepted.
 - b. All tanks must be emptied and any waste and recyclable material must be hauled to an OCD-approved facility. The empty tanks and equipment must be removed.
 - c. Contaminated soils exceeding OCD closure standards for the site must be removed or remediated.
 - d. The area must be contoured, seeded with native grasses and allowed to return to

its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses, the structures, berms, or fences may be left in place.

- e. Closure must be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

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

Accepted:

COMMERCIAL EXCHANGE, INC.

Signature J. B. Herring Title Pres Date 8-11-03

GRACE Grace Davison

W. R. GRACE & Co.-Conn.
 P. O. Box 2117
 Baltimore, Maryland 21203
 (410)531-4000

MATERIAL SAFETY DATA SHEET

SAFETY DATA

REF. NO. 2501

PRODUCT: Formed Molecular Sieve

DATE: June 15, 1998

Emergency Contact:

J. H. Convey, Manager Environmental Services Telephone No. (Home) 301-874-2009 (Office) 410-531-4000

The following information includes safety data required by OSHA. The recipient of this safety data is responsible for passing the safety information on so that it reaches the ultimate user who may come in contact with the material.

TRADE NAME:

Formed Molecular Sieves
 GRADES: 511, 511H, 512, 513, 513SGP, 514, 514SGP, 516, 518, 519, 521, 522, 542, 542HP, 544HP, 544XP, 544 C, 548, 562, 562CS, 564, 564CS, 562 OXS, 564 OXS, 514, 625, SNG - III, SZ-5, SZ-9, PSE, IGE, WZ-10, SNG-3, VSP-5

CHEMICAL NAME & FAMILY:

Synthetic Zeolite, A-TYPE Sieves, X-TYPE Sieves, Y-TYPE Sieves

SYNONYMS:

Sodium*, Calcium* or Potassium* Aluminosilicate
 * Depending on product grade.

CHEMICAL NOTATION OR STRUCTURE:

A-TYPE: $\text{Na}_2\text{O}, \text{CaO}$ or $\text{K}_2\text{O}(\text{Al}_2\text{O}_3 \cdot 2.0\text{SiO}_2 \cdot x\text{H}_2\text{O})$
 X-TYPE: $\text{Na}_2\text{O}, \text{CaO}$ or $\text{K}_2\text{O}(\text{Al}_2\text{O}_3 \cdot 2.8\text{SiO}_2 \cdot x\text{H}_2\text{O})$
 Y-TYPE: $\text{Na}_2\text{O}, \text{CaO}$ or $\text{K}_2\text{O}(\text{Al}_2\text{O}_3 \cdot 5.0\text{SiO}_2 \cdot x\text{H}_2\text{O})$
 Clay: $3 \text{MgO} : 1.5 \text{Al}_2\text{O}_3 : 8 \text{SiO}_2 : 9 \text{H}_2\text{O}$

INGREDIENTS:

		Na ₂ O* Sodium Oxide	CaO* Calcium Oxide	K ₂ O* Potassium Oxide	SiO ₂ ** Silica (Synthetic)	Al ₂ O ₃ Alumina	Clay	Quartz
OSHA: PEL mg/m ³	total respirable	n.l.	5	n.l.	6	10 5	n.l.	0.1
ACGIH: TLV mg/m ³	total respirable	n.l.	2	n.l.	10	10	n.l.	0.1
CAS NO:		1313-59-3	1305-78-8	12136-43-7	7631-86-9	1344-28-1	1332-58-7	7732-18-5
RTECS NO:		WC180000	EW310000	TI379000	VV7322000	HC120000	n.l.	VV733000

n.l. = not listed

** Should not be confused with quartz, cristobalite or tridymite.

The information contained herein is based upon data considered true and accurate. However, Grace makes no warranty, express or implied, as to the accuracy or adequacy of the information contained herein or the results to be obtained from the use thereof. This information is offered solely for the user's consideration, investigation and verification. Errors, omissions and conditions of use of this information and the material described herein are not within the control of Grace. Grace assumes no responsibility for injury to the user or third persons. The material described herein is sold only pursuant to Grace's Terms and Conditions of Sale, including those relating to warranties and remedies contained therein. It is the responsibility of the user to determine whether any use of this data and information is in compliance with applicable Federal, state or local laws and regulations.

REF. NO. 2501

TSCA: EPA has defined zeolites as complex chemical products consisting of silica (SiO_2) and alumina (Al_2O_3), in various proportions plus metallic oxides and certain cations. For purposes of TSCA, zeolites are statutory mixtures.

The information contained herein is based upon data considered true and accurate. However, Genco makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or the results to be obtained therefrom. This information is offered solely for the user's consideration, investigation and verification. Since the use and conditions of use of this information and the material described herein are not within the control of Genco, Genco assumes no responsibility for injury to the user or third persons. The material described herein is sold only pursuant to Genco's Terms and Conditions of Sale, including those relating to warranties and remedies contained therein. It is the responsibility of the user to determine whether any use of this data and information is in accordance with applicable federal, state or local laws and regulations.

REF. NO. 2501

HEALTH INFORMATION

PRECAUTION IN USE:

Avoid prolonged breathing of the dust or contact of dust with the skin. The drying action of this material can cause irritation of the mucous membranes of the nose and throat and irritation of the skin. If its use requires manual handling, wear long sleeves and close-weave cotton gloves with tight-fitting wristlets. If dusty conditions prevail, use of an approved NIOSH/MSHA dust mask is recommended.

When pouring into a container of flammable liquid, ground both containers electrically to prevent a static electric spark.

Will release heat when adsorbing water. If a large quantity of sieve quickly adsorbs the equilibrium amount of water, the sieves can become hot enough to cause thermal burns of the skin. Avoid contact under these conditions. See SPECIAL INFORMATION, p. 4.

FIRST AID:

EYES: Immediately wash from eyes with large amounts of water, occasionally lifting upper & lower eye lids. If irritation occurs and persists, seek medical attention.

SKIN: Wash with soap & water.

INGESTION: Material will pass through body normally.

INHALATION: Remove to fresh air.

TOXICOLOGY

ANIMAL TOXICOLOGY

TESTS FOR DOT HAZARD CLASSIFICATION:

Tests on Na₂O X-TYPE sieves gave the following results:

1-hour LC₅₀ (rat) > 2.8 mg/l

48-hour oral LD₅₀ (rat) est. > 31,600 mg/kg

48-hour dermal LD₅₀ (rabbit) est. > 2,000 mg/kg

Not considered an ocular irritant.

TESTS FOR FDA APPROVAL FOR USE IN FOODS:

Not a food-grade product.

HUMAN TOXICOLOGY:

Molecular Sieves are non-fibrous, synthetic aluminosilicates (zeolites) not to be confused with natural zeolites. All studies to date indicate that they do not cause significant health problems. When activated, molecular sieves act as a desiccant and can cause a drying irritation of the mucous membranes and skin in cases of severe exposure. The average concentration of quartz in this material is less than 2.0% (maximum = 3.0%). Quartz has been classified by IARC as a Class 2A Carcinogen. Quartz can cause cancer, silicosis or other fibrotic lung disease with prolonged exposure. Davison knows of no medical conditions abnormally aggravated by exposure to this product. The primary route of entry is inhalation.

ENVIRONMENTAL DATA

Not known to have any adverse effect on the aquatic environment when properly disposed. Insoluble and nontoxic.

TYPICAL CHEMICAL & PHYSICAL INFORMATION

APPEARANCE: White, gray, or tan, beads.

pH IN 5% SLURRY: 10.3 - 10.5

ODOR: Odorless

SPECIFIC GRAVITY: 2.1

BULK DENSITY: Beaded Grades 40-50 lbs/ft.³

**SOLUBILITY
IN WATER:** Insoluble

APPROXIMATE
ANALYSIS:

Mol ratios:	A-TYPE:	$1\text{Na}_2\text{O}:1\text{Al}_2\text{O}_3:2\text{SiO}_2:\text{xH}_2\text{O}$
	A-TYPE:	$0.8\text{CaO}:0.2\text{Na}_2\text{O}:1.0\text{Al}_2\text{O}_3:2.0\text{SiO}_2:\text{xH}_2\text{O}$
	A-TYPE:	$0.6\text{K}_2\text{O}:0.4\text{Na}_2\text{O}:1.0\text{Al}_2\text{O}_3:2.0\text{SiO}_2:\text{xH}_2\text{O}$
	X-TYPE:	$1\text{Na}_2\text{O}:1\text{Al}_2\text{O}_3:2.8\text{SiO}_2:\text{xH}_2\text{O}$
	Y-TYPE:	$1\text{Na}_2\text{O}:1\text{Al}_2\text{O}_3:5.0\text{SiO}_2:\text{xH}_2\text{O}$
	CLAY:	$3\text{MgO}.1\text{Al}_2\text{O}_3.8\text{SiO}_2.9\text{H}_2\text{O}$
Weight %:	Quartz:	< 2 (typical) Maximum = 3.0

STABILITY: Stable

REACTIVITY: Reacts with HF and strong acids or alkali

FIRE & EXPLOSION
DATA:

Non-flammable

REGULATORY STATUS

OSHA- PEL: Molecular Sieve - not listed in 29 CFR 1910.1000. See page 1.

NIOSH- Not included on the list of substances requiring toxicity studies.

EPA- This product contains no toxic chemicals in excess of the applicable de minimis concentration as specified under § 313 of Title III SARA.

ACGIH- TLV: Molecular Sieve - not listed in ACGIH - TLV's. See page 1.

USDA- Not applicable.

FDA- Not applicable.

DOT- Not classified as a hazardous material.

HANDLING INFORMATION**STORAGE AND
TRANSPORTATION:**

Keep containers tightly sealed to protect product quality.

DISPOSAL:

Landfill in accordance with local, state and federal regulations. Cover to avoid blowing of dust. See Special Information, below.

SPILLAGE AND CLEANUP:

Vacuum or sweep up or flush to sewer treated for suspended solids removal.

CONTAINERS:

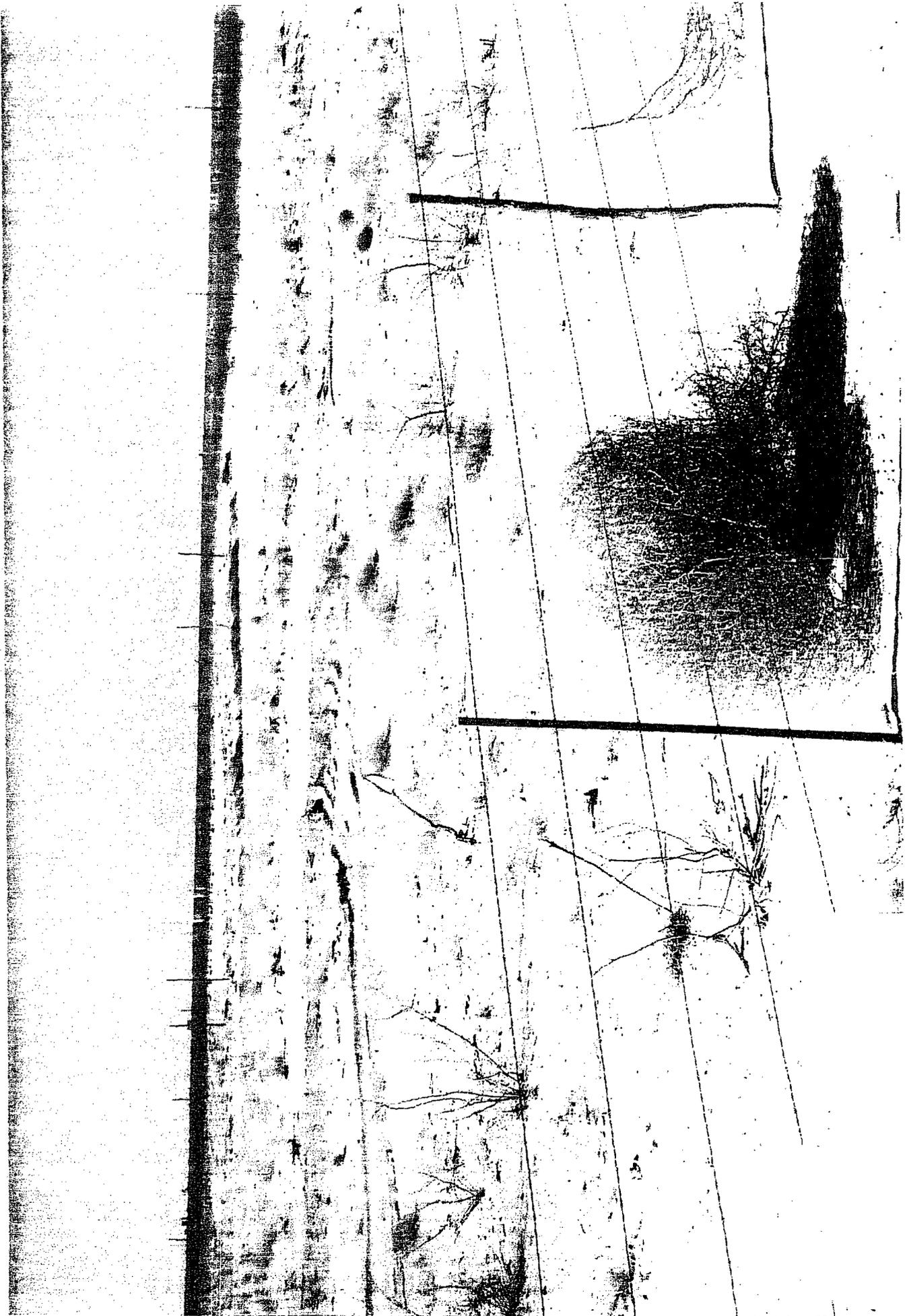
Bags and drum containers.
Also available in other packaging as required, including bulk shipments by truck.

SPECIAL INFORMATION

When transferring beaded molecular sieves with high pressure air, wear goggles. Malfunction of equipment can propel beads with enough velocity to penetrate the skin. Make sure that the transfer system and receiving vessels are properly grounded. Follow standard operating instructions.

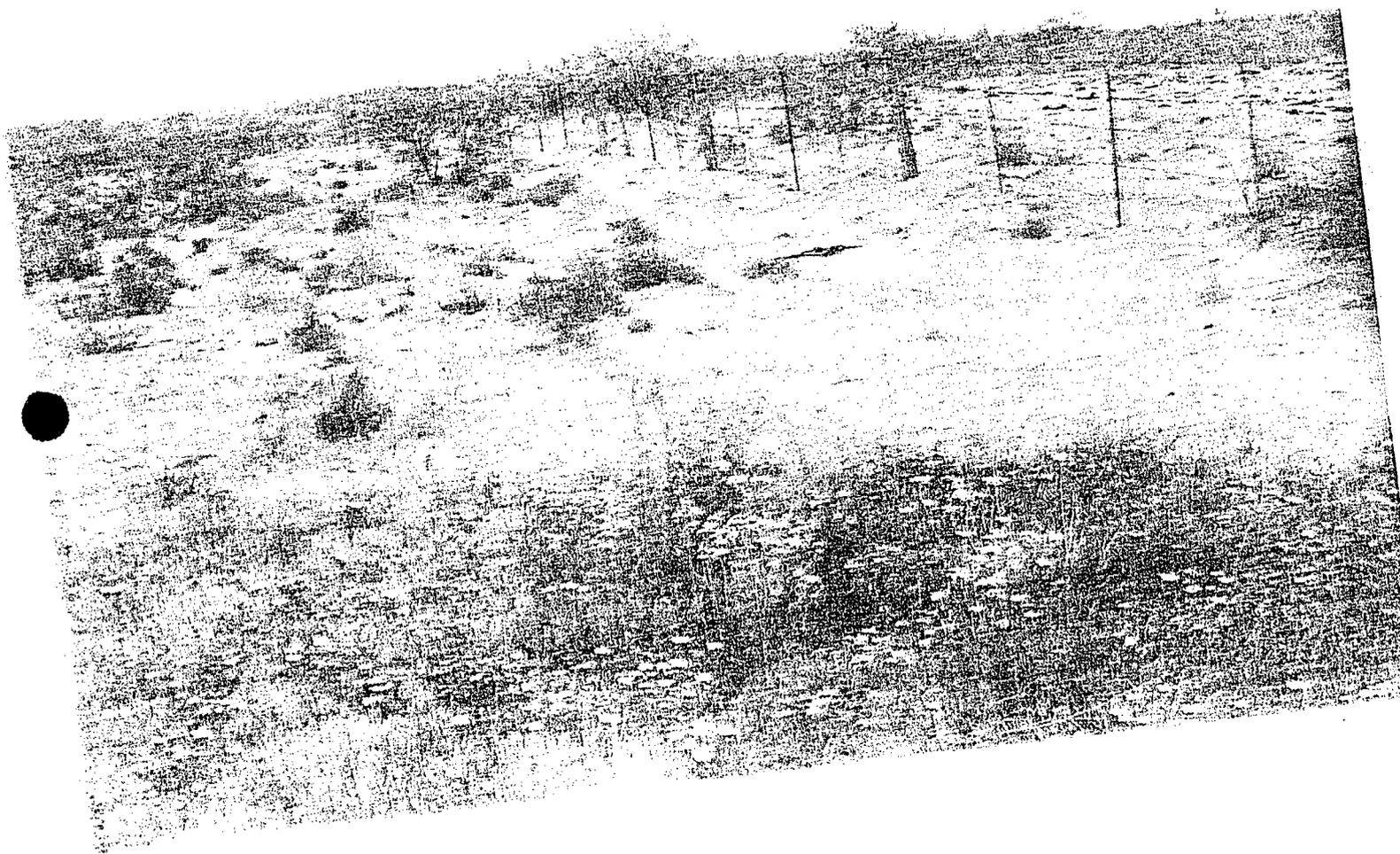
Following contact with typical petrochemicals or gases, molecular sieves must be handled with special precautions. The combination of molecular sieves and retained material can be flammable and toxic. Care should be taken to avoid sources of ignition and to avoid personal contact. Use approved disposal methods suitable for toxic wastes.



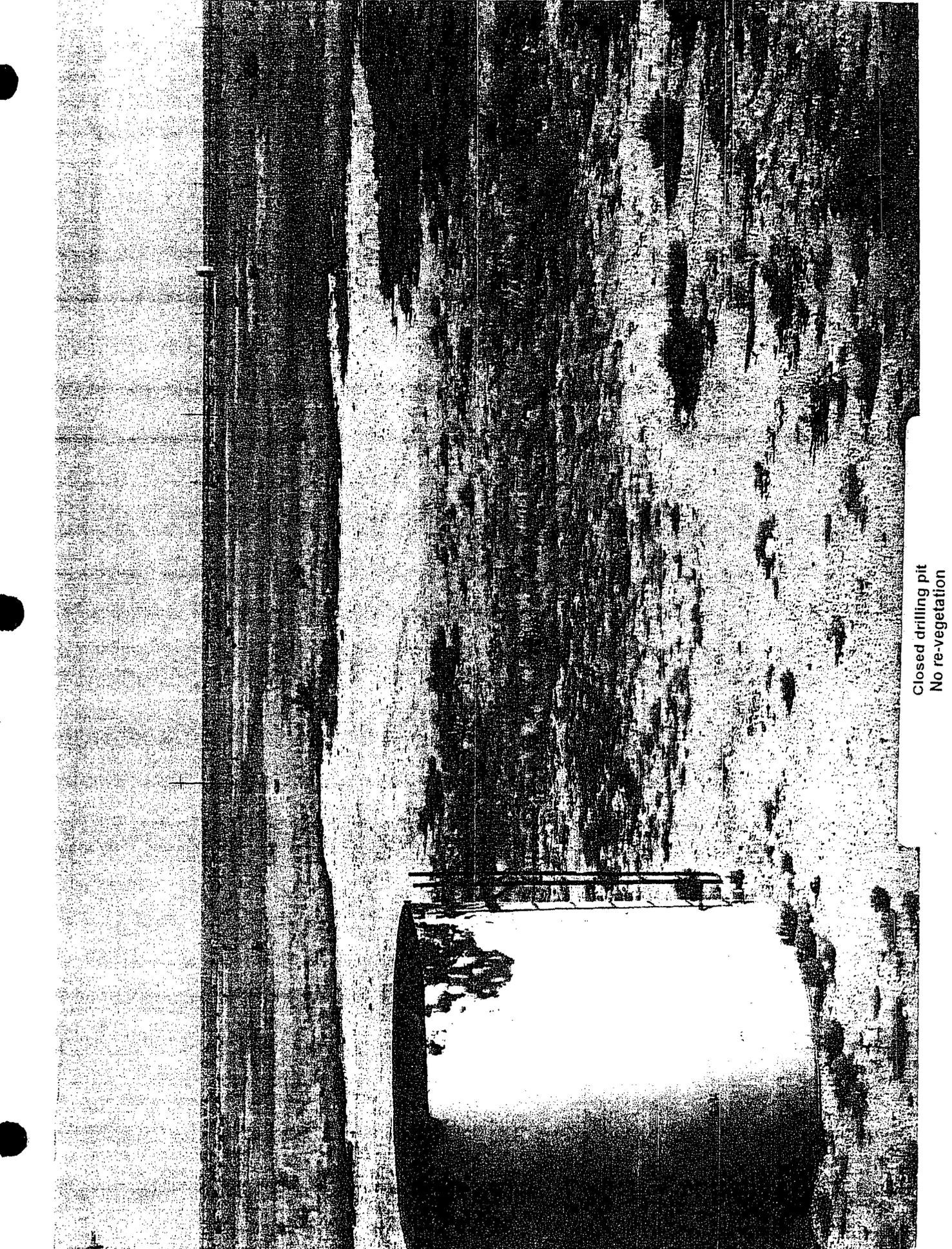




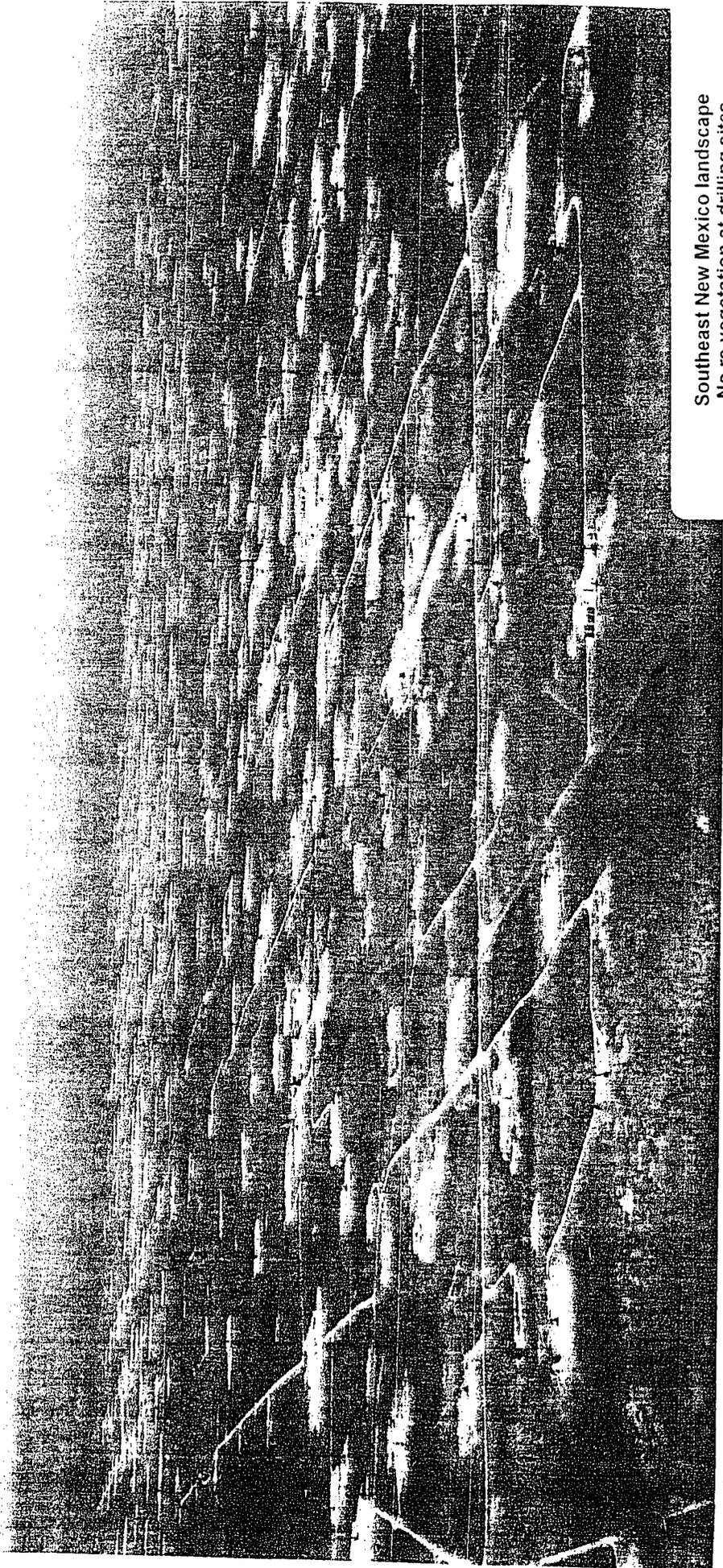
Drilling pit several years after closure
No re-vegetation
Plastic pit liner material



Neighboring land to closed drilling pit
Wind erosion, including plastic liner
material



Closed drilling pit
No re-vegetation



Southeast New Mexico landscape
No re-vegetation at drilling sites



**ARDINAL
LABORATORIES**

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR
CONTROLLED RECOVERY, INC.
ATTN: DAVID PARSONS
P.O. BOX 388
HOBBS, NM 88241
FAX TO: (505) 393-3615

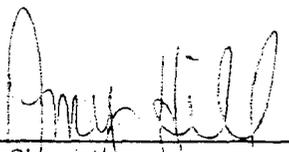
Receiving Date: 06/28/04
Reporting Date: 07/13/04
Project Number: NOT GIVEN
Project Name: DRILLING MUD
Project Location: NOT GIVEN

Analysis Date: 07/13/04
Sampling Date: 06/28/04
Sample Type: MUD
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: HM

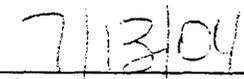
LAB NUMBER	SAMPLE ID	Cl ⁻ (mg/Kg)
H8860-1	DRILLING MUD	45186
Quality Control		990
True Value QC		1000
% Recovery		99.0
Relative Percent Difference		1.0

METHOD: Standard Methods 4500-Cl⁻B

Note: Analysis performed on a 1:4 w/v aqueous extract.



Chemist



Date



PHONE (325) 873-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
CONTROLLED RECOVERY, INC.
ATTN: DAVID PARSONS
P.O. BOX 388
HOBBS, NM 88241
FAX TO: (505) 393-3815

Receiving Date: 06/28/04
Reporting Date: 07/09/04
Project Number: NOT GIVEN
Project Name: DRILLING MUD
Project Location: NOT GIVEN
Laboratory Number: H8860-1
Sample ID: DRILLING MUD

Analysis Date: 07/08/04
Sampling Date: 06/28/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: GP

Na (ppm)	Ca (ppm)	Mg (ppm)	EC (ms/cm)	ESP (Calculated)	SAR (by saturated paste)
86440	2223	636	114	47.1	414.0

Burgess A. Alonzi
Chemist

7/9/04
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. Client shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

Oil Conservation Division approved
landfarms in Monument Draw
watercourse

Landfarm in watercourse

Oil Conservation Division approved
landfarm
Offsite erosion

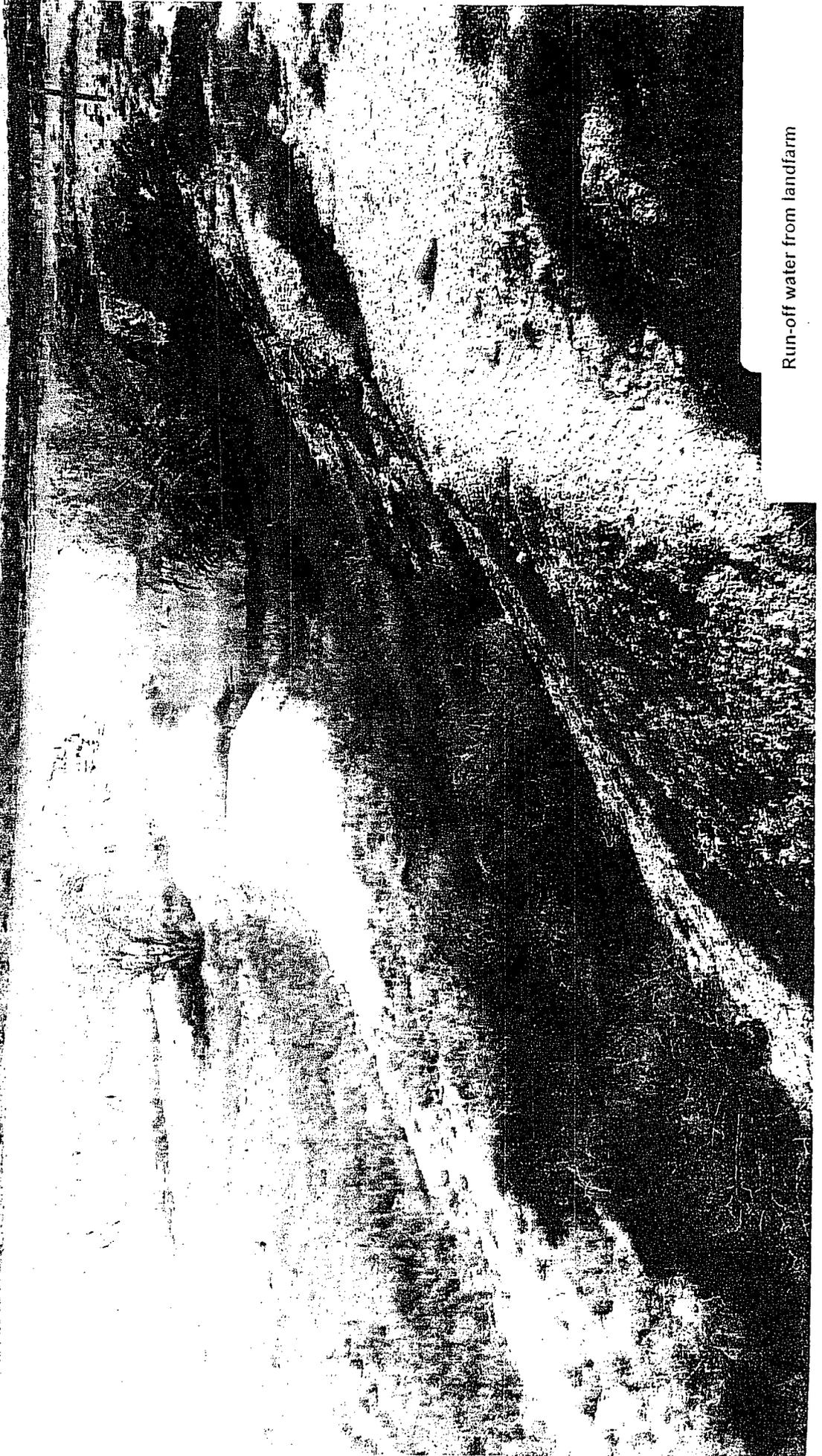


Collected water and erosion at
landfarm

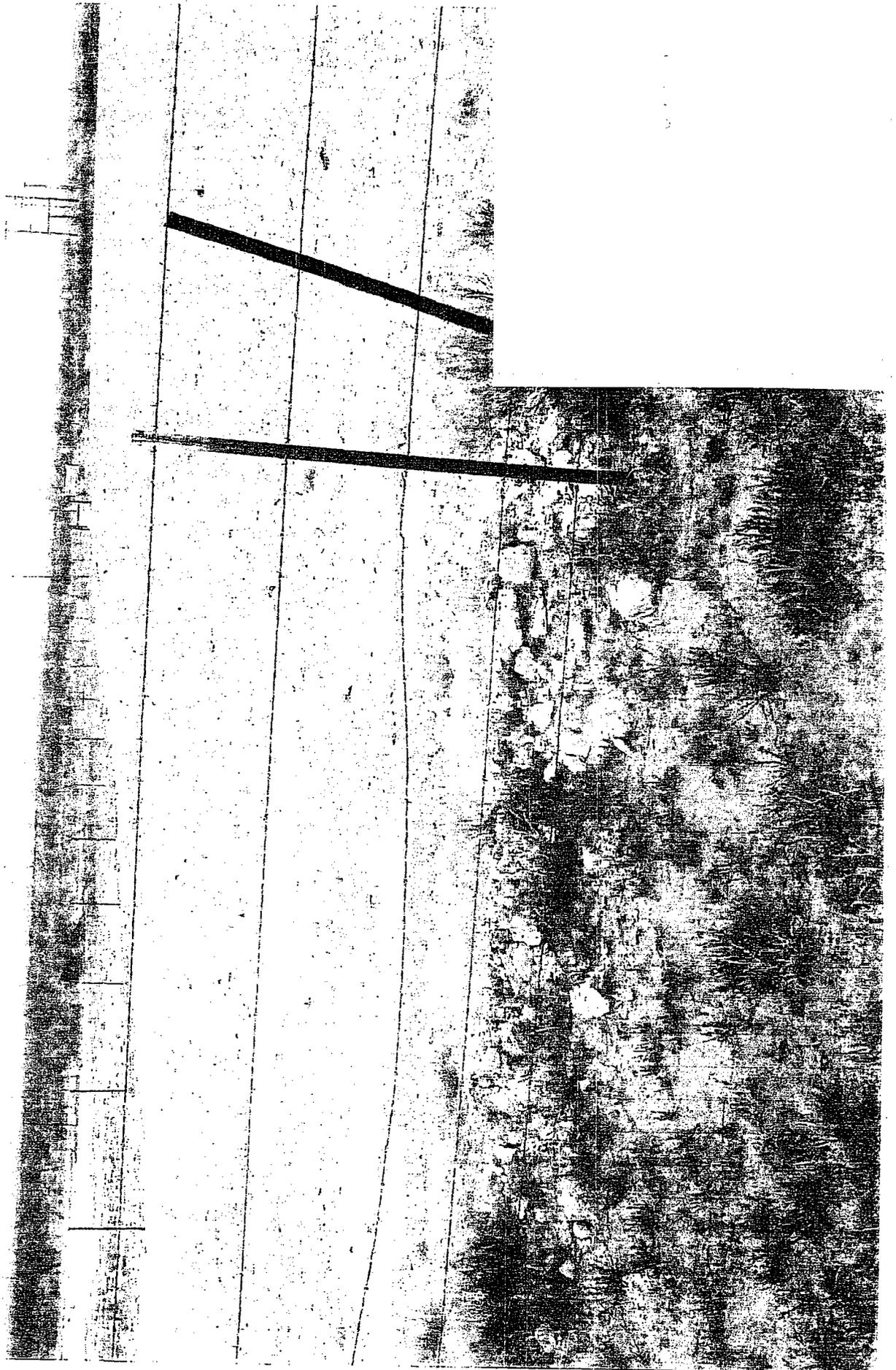


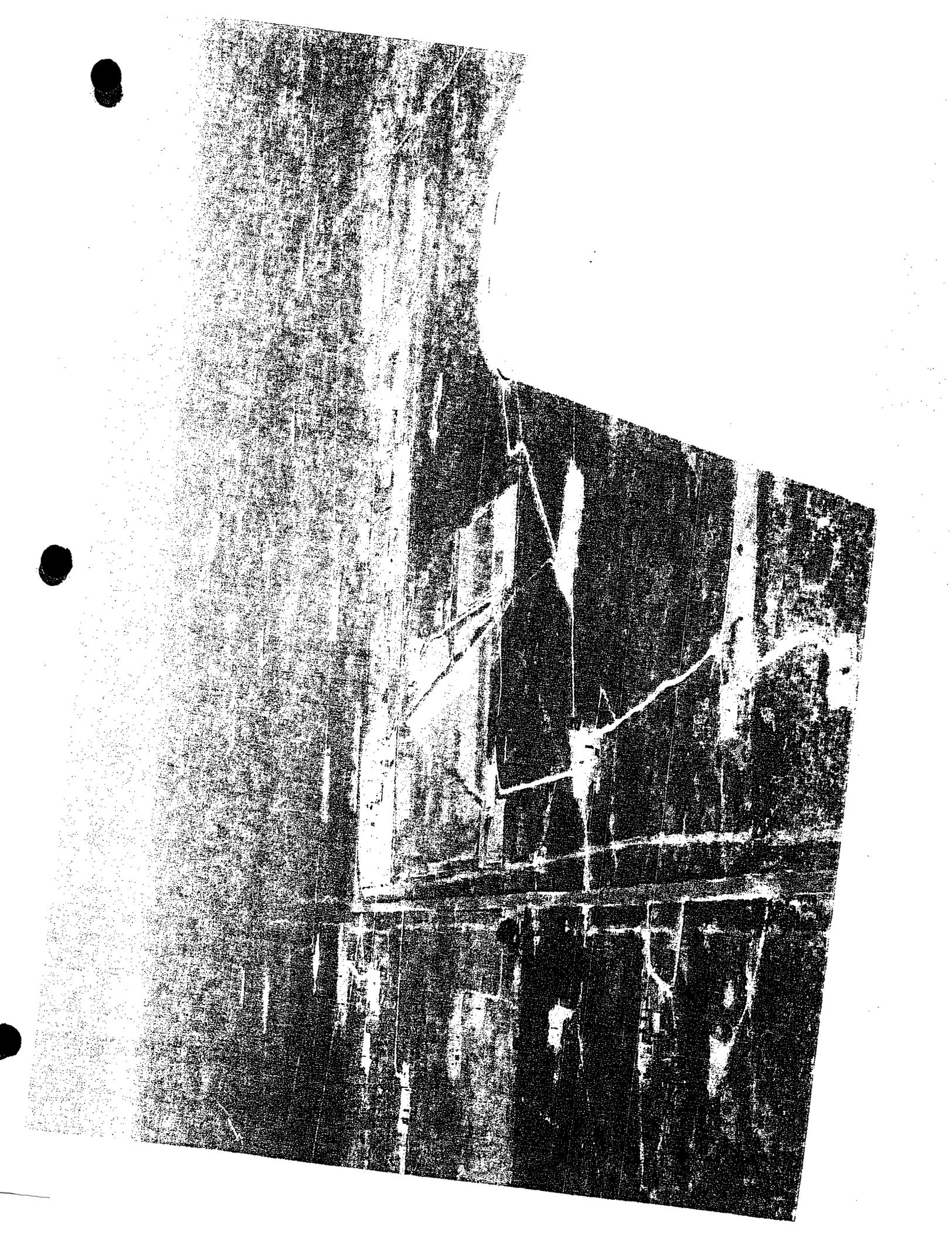
Wind and water erosion at
landfarm

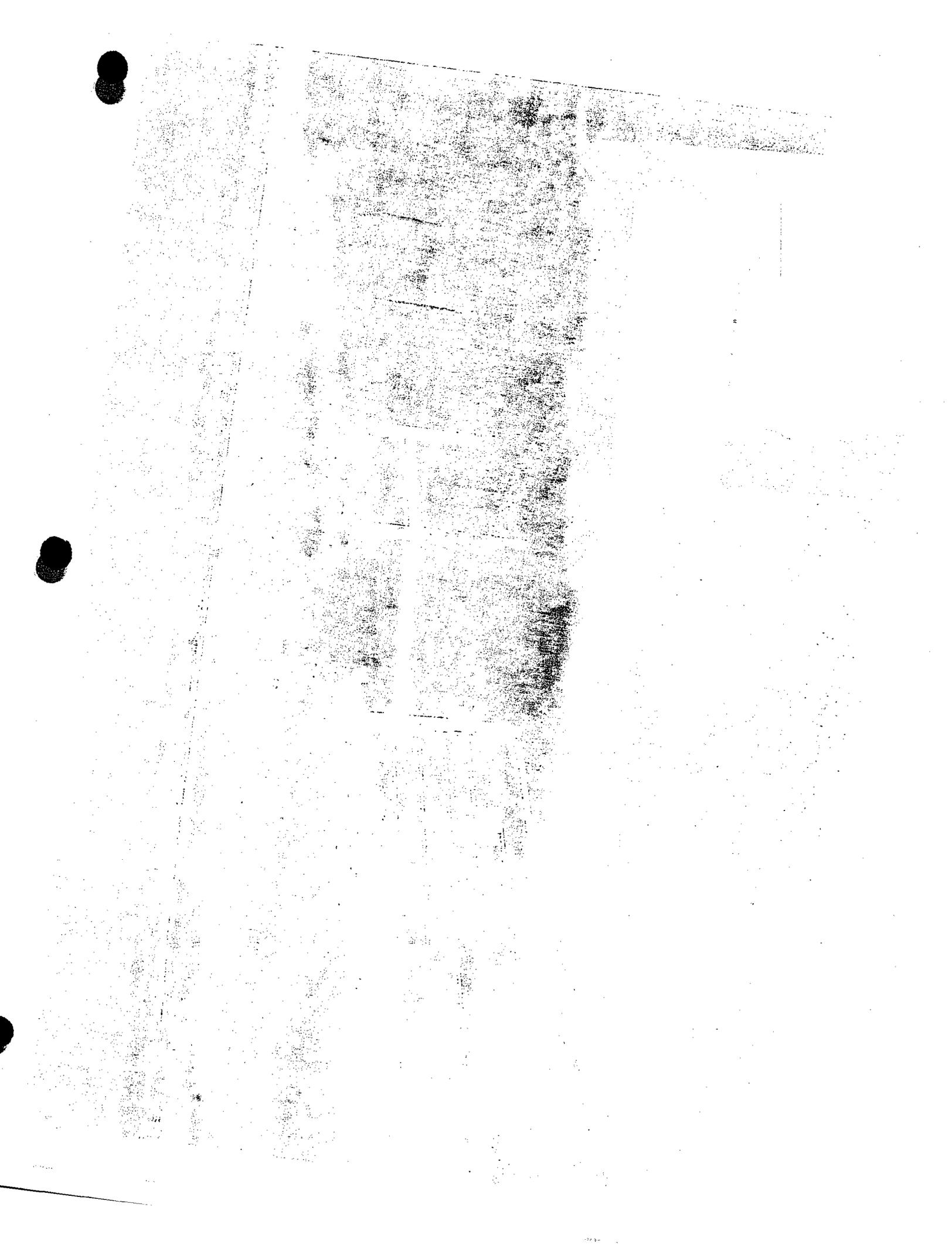
Water erosion at landfarm

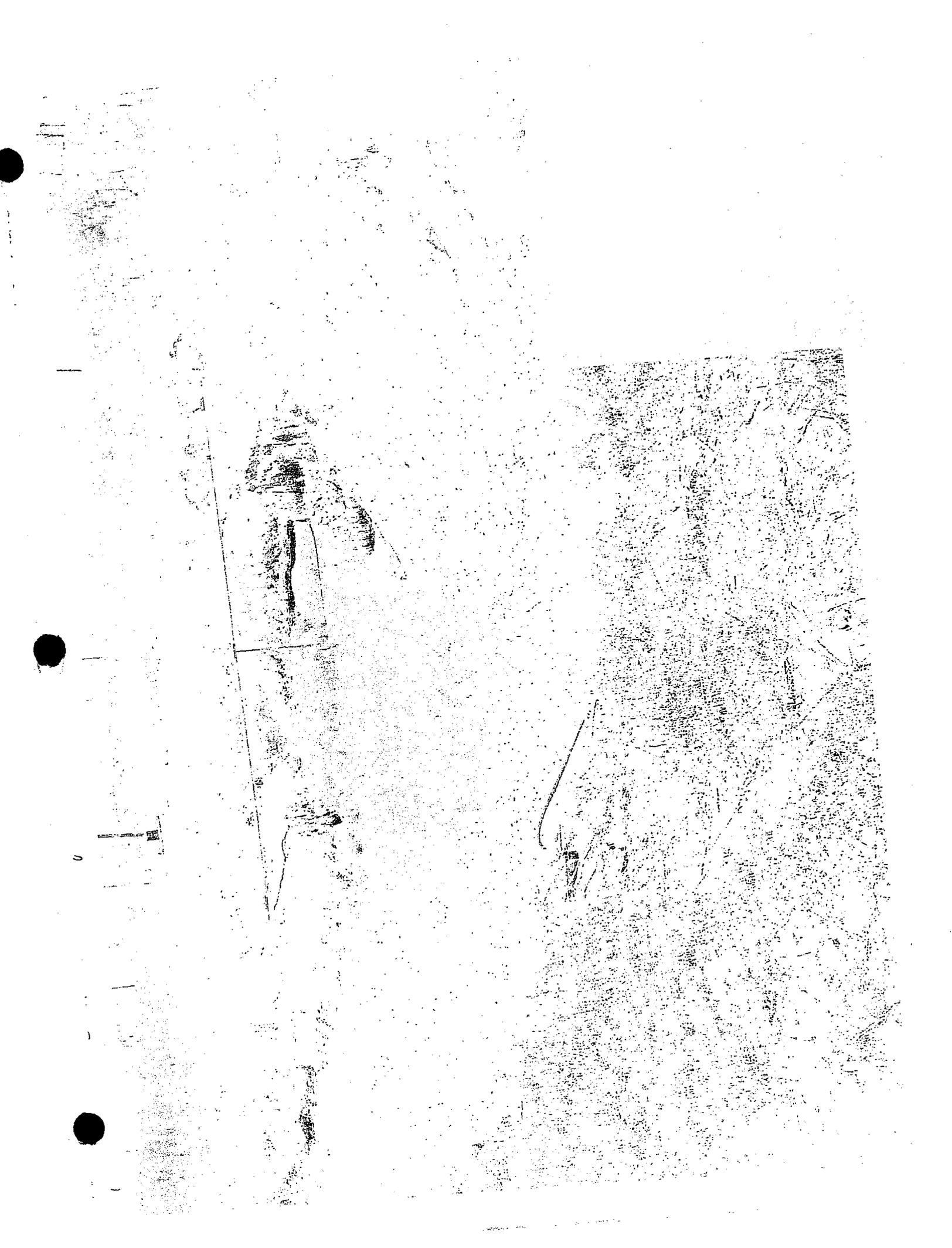


Run-off water from landfarm









C. General Landfarm Construction Requirements

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

- b. A treatment zone not to exceed three (3) feet beneath the land farm should be monitored. A minimum of one random soil sample should be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample should be taken at two to three (2-3) feet below the native ground surface.
 - c. The soil samples should be analyzed using approved EPA methods for TPH and BTEX quarterly, and for major cations/anions and heavy metals annually.
 - d. After obtaining the soil samples the boreholes should be filled with an impermeable material such as cement.
 - e. Analytical results from the treatment zone monitoring should be submitted to the OCD Santa Fe Office for review on a regular schedule to be proposed by the applicant.
7. **Double-Lined System:** If the native ground surface is composed of resistant cemented materials which make it infeasible to sample a treatment zone then another method shall be proposed to guarantee that contaminants do not leach into the underlying soils and/or groundwater. This may be accomplished by installing a double-lined system with leak detection in accordance with the OCD "Engineering Design Guidelines for Construction of Waste Storage/Disposal Ponds (10/90). In addition, the facility shall be constructed so that the primary liner will not be ripped or punctured when the contaminated soils are disked.

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

1. Disposal shall only occur when an attendant is on duty. The facility shall be secured when no attendant is present.
2. All contaminated soils received at the facility should be spread and disked within 72 hours of receipt.
3. Soils should be spread on the surface in six inch lifts or less unless the applicant can demonstrate that the equipment will adequately disk a thicker lift

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GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Ground Water Quality Bureau
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502-6110
Telephone (505) 827-2918
Fax (505) 827-2965



JOHN D'ANTONIO, JR.
SECRETARY

December 27, 2002

Ken Marsh, Owner
Controlled Recovery Inc.
P.O. Box 388
Hobbs, New Mexico 88241

RE: Rescission of August 31, 1998 Letter, DP-818, Controlled Recovery, Inc.

Dear Mr. Marsh:

The purpose of this letter is to address a letter issued to Controlled Recovery, Inc. (CRI) from the Ground Water Quality Bureau of the New Mexico Environment Department (NMED) on August 31, 1998. In this letter NMED gave approval to CRI to accept up to 500 cubic yards of hydrocarbon-contaminated salt and anhydrite per year.

NMED has reconsidered this permitting action and hereby rescinds this approval. The approval is rescinded because your discharge permit specifically allows for the remediation of contaminated soils, and salt and anhydrite are not considered soils. Furthermore, the presence of large quantities of salt is not conducive for biological growth in a medium intended for bioremediation of hydrocarbons.

CRI is still permitted to accept hydrocarbon-contaminated materials as specified in your in your discharge permit dated May 7, 1997. If you have any questions, please call me at 505-827-0027.

Sincerely,

Clint Marshall
Ground Water Pollution Prevention Section
Ground Water Quality Bureau

RM
1-3-03

Ron Curry

From: chris bynum [chris_bynum@nmenv.state.nm.us]
Sent: Wednesday, March 10, 2004 12:30 PM
To: ron_curry@nmenv.state.nm.us
Cc: jerry schoeppner
Subject: Landfarming Guidelines

Ron-

Jerry Schoeppner asked me to forward this information to you. Although the Ground Water Quality Bureau Remediation Oversight Section does not have specific written guidance for landfarming hydrocarbon soil, we do have the option of using the PSTB guidance. I have excised the pertinent information from the PSTB Corrective Action Guidelines (Section 1) as follows:

"Unsaturated Soils: The department may direct or approve the expedited removal and treatment/disposal of contaminated soils pursuant to 20 NMAC 5.12.1208. Soils with contaminant concentrations in excess of the Total Petroleum Hydrocarbon (TPH) criteria specified in 20 NMAC 5.12.1219 must be remediated according to that section of the regulations. Soils with contaminant levels in excess of the applicable site-specific target levels (SSTLs) must be remediated, as required by 20 NMAC 5.12.1215 or 20 NMAC 5.12.1217. The specific method of remediation must be proposed to the UST Bureau for approval prior to commencing the work. Soil remediation shall be considered complete when the criteria specified in 20 NMAC 5.12.1226 are met."

1.6.5 On-Site Thin Spreading / Landfarming

As stated in 20 NMAC 5.12.1208, soils to be landfarmed on-site must be spread in a single layer, no greater than six inches thick, over an impervious liner or other surface approved by the department, such as plastic sheeting or a concrete pad. The soils should be placed in a bermed area and on level ground to prevent runoff. All necessary precautions should be taken to prevent the infiltration of contaminants below ground surface or the runoff of contaminants. The soil should be turned or disked to enhance aeration approximately once every two weeks. Soils will be considered acceptable for reuse when each contaminant of concern is below the lowest of the Tier 1 soil target levels, as presented in Table 1-1. It should be noted that some city, county, or other local jurisdictions may have stricter requirements or prohibitions on the landfarming of contaminated soils. It is advisable to investigate local requirements prior to excavating soils. It is important to sufficiently characterize the soil prior to initiating excavation to determine (i) the appropriate disposal method and (ii) the quantity to be excavated.

Ron Curry

From: Jerry Schoeppner [jerry_schoeppner@nmenv.state.nm.us]
Sent: Wednesday, March 10, 2004 12:50 PM
To: Ron Curry
Subject: FW: Pet. Cont. soils

Ron:

This is the information that I sent Charles on Monday. Chris will, if she hasn't already sent you, the PSTB guidelines that GWQB typically uses.

Jerry Schoeppner
Chief, Ground Water Quality Bureau
New Mexico Environment Department
1190 St. Francis Dr., P.O. Box 26110
Phone: (505) 827-2919
Fax: (505) 827-2965
jerry_schoeppner@nmenv.state.nm.us

-----Original Message-----

From: Jerry Schoeppner [mailto:jerry_schoeppner@nmenv.state.nm.us]
Sent: Monday, March 08, 2004 4:28 PM
To: Charles Lundstrom
Subject: Pet. Cont. soils

Charles:

Individual bureaus have specific guidance for handling petroleum contaminated soils. VRP guidelines, OSHA safety trenching and limits for breathing space guidelines, on-site stockpiling on plastic under the GWQB and PSTB regs (no runoff or runoff, no greater than 6" lifts, berming, etc.), and Solid Waste regs on hauling (require special waste hauler certificate). The ultimate disposal options are limited to one of the following:

1. On-site disposal – soils must be placed on plastic unless ground water is greater than 100 below ground surface. Petroleum saturated soils must also be placed on plastic regardless of the depth to ground water. The soil must also be bermed, tilled or remediated in some fashion below action levels (verified by lab) before using for any purpose.
2. Off-site disposal – the soil has to be taken to a permitted facility that has obtained approval to accept petroleum contaminated soils. The Solid Waste Bureau permits some landfills for this purpose and the GWQB issues discharge permits for landfills.

If you need additional information, let me know

Jerry Schoeppner
Chief, Ground Water Quality Bureau
New Mexico Environment Department
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Phone: (505) 827-2919
Fax: (505) 827-2965
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