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

APPLICATION OF SUNCO TRUCKING WATER DISPOSAL COMPANY FOR APPROVAL TO MODIFY ITS RULE 711-PERMITTED SURFACE WASTE DISPOSAL FACILITY PERMIT TO INCLUDE THE CONSTRUCTION AND OPERATION OF A LANDFARM FOR THE REMEDIATION OF HYDROCARBON CONTAMINATED SOILS, SAN JUAN COUNTY NEW MEXICO

CASE NO. 11518 Order No. R-10756

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 10:00 a.m. on November 19, 1996, at Farmington, New Mexico, before Examiner Rand Carroll.

NOW, on this 27th day of January, 1997, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises.

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Sunco Trucking Water Disposal Company ("Sunco") is the operator of the Sunco Trucking Commercial Surface Disposal Facility (the "Facility") located in the SW/4 NW/4, Section 2, Township 29 North, Range 12 West, San Juan County, New Mexico. The Facility is located approximately 7 miles east-northeast of Farmington, New Mexico.
- (3) The Facility was permitted by the Oil Conservation Commission in 1991 pursuant to Division Rule 711 by Order No. R-9485-A.
- (4) Sunco with this application requests approval to construct and operate a 5-acre landfarm using an enhanced bioremediation process within the 40-acre Facility which is currently permitted under Rule 711 to dispose of only produced waters. Sunco represents that the landfarm will receive contaminated soils and sludges from only the produced water disposal operation on the Facility, which are classified as "non-hazardous" oil field waste by RCRA Subtitle C exemption or by characteristic testing, to be spread on the ground in six inch lifts or less and periodically stirred to enhance the biodegradation of the contaminants.

- (5) The New Mexico Oil and Gas Act, Secs. 70-2-12.B(21) and (22), NMSA (1978), authorizes the Division 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.
- (6) Pursuant to that authority the Division has adopted a rule governing the operation of commercial surface disposal facilities (Rule 711, as amended) including both the existing Facility as well as the proposed landfarm within the Facility. Guidelines for Permit Application, Design, and Operation of Centralized & Commercial Landfarms have also been published by the OCD in July 1993.
- (7) There were four protests filed in response to Sunco's application: (1) Gary L. Horner on behalf of Doris J. Horner (Doris J. Horner later conveyed her interest to Gary L. Horner so at the time of hearing Gary J. Horner was representing himself) who owns a strip of land immediately west of the Facility ("Horner"); (2) Carroll Vaughn of Bloomfield, New Mexico; (3) Dewey K. Foutz who owns approximately 110 acres of land approximately one-half mile west of the landfarm; and (4) Valerie Hatch who also owns about 110 acres one-half mile west of the landfarm.
- (8) At the hearing held on November 19, 1996, only Gary Horner of the four protestors listed above entered an appearance and presented evidence and asked questions of Sunco's witnesses. Five members of the Cedar Hills Clean Water Coalition (CHCWC) attended the hearing but did not enter appearances. Two of the members asked questions of witnesses but none protested the granting of the subject application.
- (9) By "Letter of Protest and Comments" dated January 30, 1996, sent to and received by the OCD, Horner protested the granting of the subject landfarm application. Horner made the following comments in said Protest: (i) the landfarm location is inappropriate considering the residential development in the area; (ii) there have been problems with similar type facilities; (iii) the representations of Sunco and its agents and experts are not reliable based upon past experience; (iv) Sunco has ignored OCD permit conditions regarding the present Facility; and (v) the OCD, although given the regulatory authority to protect public health and the environment, is not doing its job in regulating the industry and should be considering the appropriateness of the landfarm and Facility for the area.
- (10) In summary at the end of his Protest, Horner states that the landfarm would harm the value of Horner's property, the environment, the health, safety and welfare of area residents and would unreasonably restrict Horner's use and enjoyment of his property. Horner requests that the application (i) be denied as proposed, (ii) be denied since it may be amended to change the location, and (iii) requests that the existing Facility be removed.

- close to residential development and that he thought it should be located in more remote areas near the source of the contaminated soil. Protestors Hatch and Foutz sent identical letters stating that use and value of their land and other area properties would be adversely affected by the landfarm and that the OCD should consider the adverse effects on the public health and environment as well as area properties prior to granting a permit. The concerns stated in these letters were: (i) protection of area groundwater, (ii) the potential expansion of operations being conducted at the Facility after the landfarm is permitted, (iii) adequate financial assurance (bonding) for corrective actions, and (iv) why a Discharge Plan pursuant to Water Quality Control Commission (WQCC) regulations is not required.
- (12) There is significant residential development, both current and planned, in the area. This area is locally known as Crouch Mesa and is located on a high point roughly in the middle of the triangle formed by Farmington, Bloomfield and Aztec.
- (13) There is a number of industrial uses of land on Crouch Mesa in the immediate vicinity of the Facility including landfarms and other waste disposal facilities and storage yards as well as the Facility itself.
- (14) The OCD is charged with the duty of protecting public health and the environment from the disposition of nondomestic wastes resulting from oil and gas activities. The OCD is not charged with the duty: (i) of protecting the value of land adjacent to oil and gas activities arising from the oil and gas activities, or (ii) of determining which uses a landowner can make of his land, other than protecting the public health and environment from oil and gas activities on such land. Local governments through the use of zoning laws can restrict certain activities to areas deemed appropriate for such uses. An adjacent landowner may also pursue an action against adjacent offending uses based upon a "nuisance" theory.
- (15) No evidence was introduced to show problems experienced with OCD Rule 711-permitted landfarms. Facilities cited in Protestor Horner's protest all were produced water facilities and not landfarms.
- (16) Sunco has been cited by the OCD for violations of its Rule 711 permit for the Facility. Upon being advised of these violations, Sunco has taken action to correct, and has corrected, the problems giving rise to the cited violations.
- (17) Protection of area groundwater will be accomplished through periodic testing and monitoring as provided in the permit conditions.
- (18) Protestors did not introduce any direct evidence to support the position that the landfarm could not be permitted without creating an unreasonable risk of contaminating fresh water supplies or posing a danger to public health or the environment.

- (19) A WQCC discharge plan is not required for the proposed landfarm and/or Facility because wastes resulting from oil and gas exploration and production activities are explicitly exempted from WQCC jurisdiction. OCD Rule 711 operates as the equivalent of a WQCC discharge plan.
- (20) Currently, the wastes Sunco proposes to remediate/dispose of at its landfarm are being trucked across County Road 3500 and remediated/disposed of at the Tierra Environmental Corporation landfarm, which is permitted under OCD Rule 711, which is located within one-half mile of the proposed Sunco landfarm and much closer to residential development than the proposed Sunco landfarm.
- (21) The OCD shall have the authority to modify the conditions of this permit should new information or technological improvements indicate that changes would improve the operation of the Facility and better protect the public health and the environment.
- (22) Approval of the application does not relieve Sunco of liability should operation of the landfarm result in pollution of surface or groundwater or the environment actionable under other laws and/or regulations.
- (23) All modifications and alterations to approved landfarming methods must receive prior OCD approval. Sunce is required to notify the OCD of any expansion or process modification and to file the appropriate documents with the OCD.
- (24) The current bond for the closure of the Facility in the amount of \$25,000 will cover both facilities because the landfarm is wholly contained within an OCD permitted and bonded facility. The bonding level will be re-evaluated within one calendar year to adjust the amount to the estimated cost of closure pursuant to OCD Rule 711.
- (25) With no evidence being introduced to indicate otherwise, the conditions imposed on the Sunco landfarm should be the same as those imposed on the Tierra landfarm, which was permitted under Rule 711 and is located within one-half mile of the Sunco landfarm. The Tierra landfarm is considerably larger (54 acres currently) and closer to residential development than the Sunco landfarm. No evidence was introduced to indicate that the Tierra landfarm was receiving complaints about its operations or that it was being operated in a manner causing harm to the public health or the environment.
- (26) The 5 acres comprising the landfarm site at the Facility are located considerably more than 100 feet from, and are well within, the boundary line and fence line of the property owned by Sunco and/or Sunco's owner, George Coleman.
- (27) Approval of this application will allow Sunco to dispose of the subject waste in the same manner as it is currently being disposed of, but will allow Sunco to do it itself rather than disposing of it at the Tierra facility.

- (28) Approval of this application, with the conditions imposed, should protect the public health and the environment.
- (29) All conditions of the Rule 711 permit granted to the Facility by OCD Order No. R-9485-A shall remain in effect.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Sunco Trucking Water Disposal Company to construct and operate a landfarm within the site of its existing Facility in the SW/4 NW/4 of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico for the purpose of treating and remediating hydrocarbon-contaminated soils, which are exempt from RCRA Subtitle C regulations, using an enhanced bioremediation process, is hereby approved subject to conditions.
- (2) The permit conditions contained in Exhibit "A" attached hereto shall be the permit conditions for the landfarm within the Facility
- (3) The Director shall have the authority to revise the permit conditions at any time he determines such changes are in the interest of protecting public health and the environment.
- (4) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

WILLIAM J LEMAY

Director

S E A L

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LANDFARM OPERATION

- 1. Only soils generated exclusively from operations at the Sunco disposal facility will be allowed for landfarming.
- 2. All contaminated soils received at the landfarm 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 tilled a minimum of one time every two weeks (bi-weekly) to enhance biodegradation of contaminates. Methods suggested by the U.S. Soil Conservation Service should be utilized in the tilling of the soils which will reduce to the most possible degree the occurrence of natural wind erosion.
- 5. Moisture shall be added to all contaminated soils received at the facility. The soils within each individual cell will be characterized using the Soil Survey of San Juan County, New Mexico, prepared by the United States Department of Agriculture, Soil Conservation Service, for the purpose of pre-determining amounts of moisture to be added to those particular soils, to (1) prevent emissions from volatile organic compounds, (2) enhance natural and artificial biodegradation, and (3) suppress erosion of contaminated soils from natural wind action.
- 6. There will be no ponding, pooling or run-off of water allowed. Any ponding of precipitation will be removed within seventy-two (72) hours of discovery.
- 7. Successive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
- 8. Only solids which are non-hazardous by RCRA Subtitle C exemption or by characteristic testing will be accepted at the landfarm. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt or are non-hazardous by characteristic testing will only be accepted on a case-by-case basis and with prior OCD approval.

- 9. Comprehensive records of all material disposed of at the landfarm will be maintained at the facility. The records for each load will include: 1) the origin, 2) analysis for hazardous constituents if required, 3) transporter, and 4) exact cell location and method of remediation.
- 10. Bio-remediation through the application of microbes will only be permitted in the designated 5-acre area. The microbes will be mixed with water and applied to the contaminated soils. There will be no ponding, pooling or run-off of water allowed during the application phase or afterwards. Any change in the composition (i.e. chemical additives), process or location of the bio-remediation program must receive prior OCD approval.
- 11. No free liquids or soils with free liquids will be accepted at the landfarm.
- 12. Disposal will only occur when an attendant is on duty. The facility will be secured when no attendant is present.
- 13. The facility will 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.
- 14. An adequate berm will be constructed and maintained to prevent run-off and run-on for that portion of the facility containing contaminated soils.

TREATMENT ZONE MONITORING

- 1. A treatment zone not to exceed three (3) feet beneath the landfarm 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 and quarterly thereafter. The sample will be taken at two (2) or three (3) feet below the native ground surface.
- 2. 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. Immediate remedial measures will be taken and no additional contaminated soils will be placed in the cell until testing indicates that the TPH is below 100 ppm, BTEX is below 50 ppm and benzene, if any, is below 10 ppm.
- 3. After obtaining the soil samples the boreholes will be filled with an impermeable material such as bentonite cement.

- 4. Any cells that have moisture added to them will be analyzed on a quarterly basis following the requirements above.
- 5. Annually, samples obtained from the treatment zones will be collected and a laboratory analysis conducted using approved EPA methods in accordance with the procedures outlined in item 1. The samples will be analyzed for TPH, BTEX, general chemistry, and heavy metals.
- 6. 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 TPH, BTEX, general chemistry and heavy metals using approved EPA methods and for TPH using an OCD-approved field method.

OTHER MONITORING

- 1. An OCD-approved device capable of measuring emissions of volatile organic compunds (VOC) will be kept at the facility at all times. A measurement of VOCs will be taken a minimum of four (4) times per working day, which will include one measurement upon opening and one measurement upon closing of the facility. Monitoring of VOCs will be recorded and include the date, time, location, and level measured. Records will be retained at the facility and made available for OCD inspection.
- 2. A particulate collector or similar device shall be kept in place and operational at the prevailing downwind side of the landfarm. The collector shall be examined daily and records will include time, date, location and level of particulate measured. Records will be maintained at the facility and made available for OCD inspection.

REPORTING

- 1. Analytical results from the treatment zone monitoring will be submitted to the OCD in Santa Fe within thirty (30) days in written form from Sunco with appropriate laboratory analysis included as may be required. Reports will be filed for both the field and laboratory analyses.
- 2. The OCD will be notified of any break, spill, blow out, or fire or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

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TRANSFERABILITY

1. Authority for operation of the landfarm facility shall be transferable only upon written application and approval by the Division Director.

CLOSURE

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