NM1 - 53

GENERAL CORRESPONDENCE

YEAR(S):

2009 – 2011

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Daniel Sanchez
Acting Division Director
Oil Conservation Division

March 24, 2011

Kyle P. Kerr
Envirotech, Inc.
5796 US Highway 64
Farmington, New Mexico 87401

RE: Request for Additional Information – Permit Application Review for a Proposed Commercial Surface Waste Management Facility
Envirotech, Inc. – Landfarm #4
Facility Location: Sections 6, 7, and 8, Township 26 North, Range 10 West, NMPM
San Juan County, New Mexico

Dear Mr. Kerr:

The Oil Conservation Division (OCD) has reviewed Envirotech, Inc.'s (Envirotech) application for a commercial surface waste facility permit for Landfarm #4 located in Sections 6, 7, and 8, Township 26 North, Range 10 West NMPM, San Juan County, New Mexico. The review of the submittal is to determine if any additional information or modifications may be required before considering deeming the permit application complete. The application has been determined to be incomplete. Therefore, the OCD requests additional information.

Enclosed is a list of items that must be addressed prior to completing the review. Once this information is submitted, the OCD will complete another review to determine if information submitted is appropriate for compliance. The OCD suggests that meetings be conducted with the OCD on a periodic basis to discuss the request for information.

The OCD recommends that all corrections, additions, and modifications to the application be reviewed and cross-referenced before they are submitted, in order to verify that all responses correlate and coincide with each other throughout the application.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us. .

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

Attachment – Request for Additional Information

Cc: OCD District III Office, Aztec

Request for Additional Information
Envirotech, Inc. – Landfarm #4
Commercial Surface Waste Management Facility
March 24, 2011

Form C-137:
Page 1 of 4, Item 8:

Pursuant to Paragraph (2) of 19.15.36.8.C NMAC, the application shall include "a plat and topographic map showing the surface waste management facility's location in relation to governmental surveys (quarter-quarter section, township and range); *highways or roads giving access to the surface waste management facility site; watercourses; fresh water sources, including wells and springs; and inhabited buildings within one mile of the site's perimeter.*" The response provided for Item 8 references the Vicinity Map provided in Attachment #1. The map provided in Attachment #1 does not illustrate or assess all of the areas to the north, east, and west that are "*within one mile of the site's perimeter*" nor does it illustrate all of the required items. Please provide a map or maps that satisfy this requirement.

Page 2 of 4, Item 10:

Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the application shall include "*a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards*, and *detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.*" A written description was not provided in Attachment #3 or within the permit application as referenced in the response. Please provide. Also, Attachment #3 did not include any "*detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas*" as required. Please provide.

Page 2 of 4, Item 11:

Pursuant to Paragraph (5) of 19.15.36.8.C NMAC, the application shall include "engineering designs, certified by a registered professional engineer, including *technical data* on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments." The response provided for Item 11 references the Waste Stabilization Facility design drawings provided in Attachment #4. The design drawings provided in Attachment #4 do not illustrate the design or dimensions of the leak detection system. Please provide. Neither Sheet 1 nor 2 of the Waste Stabilization Facility design drawings address the subgrade soil construction details for the geomembrane liner installation nor are any manufacturer specifications are provided the geomembrane liner or proposed geotextile. Please provide the requested additional information.

Page 3 of 4, Item 22(b):

The information provided in the response does not coincide with the assessment of the proposed depth to ground water provided in Attachment 13, Hydro-Geologic Report. The Hydro-Geologic Report identifies a cathodic well within 380 feet of the proposed site indicating that ground water was encountered at 275 feet below the ground surface. The response for this section

of the form indicates that ground water is located "approximately 1250 feet below the ground surface." Please modify the response to coincide the information and supporting documentation of the Hydro-Geologic Report in Attachment 13.

Page 3 of 4, Item 22(g):

Pursuant to Subparagraph (g) of 19.15.36.8.C(15) NMAC, the application shall include "geological/hydrological data including porosity, permeability, conductivity, compaction ratios and swelling characteristics for the sediments on which the contaminated soils will be placed." The porosity and permeability assessments were not determined based upon site-specific conditions at the proposed location. The information provided in Attachment 13, the GEOMAT Laboratory Report, was not based upon testing of on-site soils. The information provided for porosity and permeability is from publications that do not provide assessments for this specific proposed location. Also, there was no data or results provided for conductivity. Please provide the required site-specific analytical data.

Attachment 1, Vicinity Map:

Pursuant to Paragraph (2) of 19.15.36.8.C NMAC, the application shall include "a plat and topographic map showing the surface waste management facility's location in relation to governmental surveys (quarter-quarter section, township and range); *highways or roads giving access to the surface waste management facility site; watercourses; fresh water sources, including wells and springs; and inhabited buildings within one mile of the site's perimeter.*" The map provided in Attachment #1 does not illustrate or assess all of the areas to the north, east, and west that are "*within one mile of the site's perimeter*" nor does it illustrate all of the required items. Please provide a map or maps that satisfy this requirement.

Attachment 2, San Juan County Assessor's Map:

Pursuant to Paragraph (3) of 19.15.36.8.C NMAC, the application shall include "the names and addresses of the surface owners of the real property on which the surface waste management facility is sited and surface owners of the real property within one mile of the site's perimeter." The map provided to demonstrate the "surface owners of the real property within one mile of the site's perimeter" does not illustrate the complete one-mile assessment to the north or the south. Also, the map does not completely identify the separation of land ownership between federal, state, and tribal lands. Please provide an appropriate map to demonstrate and support the list of land owners.

Attachment 3, Facility Diagram and Description:

Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the application shall include "*a description of the surface waste management facility* with a diagram indicating the location of fences and cattle guards, and *detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.*" The response provided for Item 10 of the Form C-137 identifies Attachment 3 as the demonstration of compliance to this provision. The only item provided in Attachment 3 was a survey map of the proposed facility. The map illustrates an entrance from the south into the large eastern section of the proposed landfarm. This entrance was not identified on the Vicinity Map provided in Attachment 1. Neither map

demonstrates how this entrance will be assessed from U.S. Hwy. 550. The Vicinity Map provided in Attachment 1 is required to demonstrate "*or roads giving access to the surface waste management facility site.*" Please modify the Vicinity Map provided in Attachment 1 and the survey map provided in Attachment 3. There is also a comment provided just above the southern entrance on the survey map which states "Limits of Landfarm- 100' buffer typical all outside property line." Pursuant to Paragraph (2) of 19.15.36.15.C NMAC, "the operator shall not place contaminated soils received after the effective date of 19.15.36 NMAC within 100 feet of the surface waste management facility's boundary." The 100 foot buffer is required to be within the facility boundary. Also, please provide "*a description of the surface waste management facility*" and "*detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas*" as required by this provision.

Attachment 4, Stabilization Facility Diagram:

Pursuant to Paragraph (5) of 19.15.36.8.C NMAC, the application shall include "engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments." Sheet 2, Longitudinal Section view, illustrates that the stabilization unit will have some type of sump. Please provide the design details of the sump construction. The design drawings provided in Attachment #4 do not illustrate the design or dimensions of the leak detection system. Please provide. Neither Sheet 1 nor 2 of the Waste Stabilization Facility design drawings address the subgrade soil construction details for the geomembrane liner installation nor are any manufacturer specifications are provided the geomembrane liner or proposed geotextile. Please provide. Please provide the requested additional information.

Attachment 5, Plan for Management of Approved Oil Field Wastes:

19.15.36.13.A(5): Pursuant to Paragraph (3) of 19.15.36.7.P NMAC, a pit "means a surface or sub-surface impoundment, man-made or natural depression or diked area on the surface. Excluded from this definition are berms constructed around tanks or other facilities solely for safety, secondary containment and storm water or run-on control." By definition the stabilization unit is a pit. Based upon the information provided in the application, the stabilization unit is proposed to treat waste so that it will pass the paint filter test and/or satisfy the chloride standard prior to placement in a landfarm cell. Please address all of the applicable provisions of 19.15.36 NMAC regarding pit/ponds.

19.15.36.13.B(1): The response provided for this provision states that the landfarm "is not within feet of a watercourse, lakebed, sinkhole or playa lake" and references the Hydro-Geologic Report in Attachment 13 as the demonstration. The Hydro-Geologic Report includes a Facility Inspection Sheet that indicates and illustrates a wash along the south side of the proposed facility boundary that was measured at 130 feet from the facility boundary. Pursuant to Paragraph (4) of 19.15.2.7.W NMAC, a watercourse means "a river, creek, arroyo, canyon, draw or wash or other channel having definite banks and bed with visible evidence of the occasional flow of water." Please clarify.

19.15.36.13.C: The response provided for this provision states that the proposed surface waste management facility "is 189 acres" and references Attachment 3 as the demonstration. The only item provided in Attachment 3 is a survey map of the proposed facility. The survey map provided in Attachment 3 illustrates two separate tracts. The area of Tract 1 is identified as "57.75 acres more or less" and Tract 2 is identified as "149.86 acres more or less" for a total of 207.61. Please clarify.

19.15.36.13.E: Please identify the types and/or sources of liquid waste Envirotech proposes to accept for stabilization. Please note that pursuant to Paragraph (3) of 19.15.36.7.A NMAC, a landfarm "means a discrete area of land designated and used for the remediation of petroleum hydrocarbon-contaminated soils and drill cuttings." The use and type of waste that can be accepted at a landfarm is limited by its' definition and should be identified within the permit application and considered when addressing waste acceptance provisions. If the stabilization of liquid waste does not generate petroleum hydrocarbon-contaminated soils for remediation, then such soils cannot be accepted at the proposed landfarm. Landfarms are not permitted for disposal like landfills. Also, the application fails to identify how liquid waste will be temporarily stored while awaiting stabilization. Please address all of the applicable provisions of 19.15.36 NMAC regarding the storage of liquid waste.

19.15.36.13.F: The response provided for this provision states that Envirotech "will not accept waste containing NORM" at the propose landfarm. Please clarify if Envirotech plans to accept hazardous waste. Also, this application is for a landfarm and not for a landfill. Pursuant to Paragraph (3) of 19.15.36.7.A NMAC, a landfarm "means a discrete area of land designated and used for the remediation of petroleum hydrocarbon-contaminated soils and drill cuttings." The use and type of waste that can be accepted at a landfarm is limited by its' definition and should be identified within the permit application and considered when addressing waste acceptance provisions.

19.15.36.13.F(1): This application is for a landfarm and not for a landfill. Pursuant to Paragraph (3) of 19.15.36.7.A NMAC, a landfarm "means a discrete area of land designated and used for the remediation of petroleum hydrocarbon-contaminated soils and drill cuttings." The use and type of waste that can be accepted at a landfarm is limited by its' definition and should be identified within the permit application and considered when addressing waste acceptance provisions. Please modify the response appropriately. Please identify the types and sources of exempt oilfield waste Envirotech plans and anticipates receiving at the proposed surface waste management facility.

19.15.36.13.F(2): Please explain why RCRA 8 metals are the only concern for any and all RCRA non-exempt, non-hazardous oil field waste. The testing of such waste should depend on the nature and source of contamination and must be determined on a case-by-case basis. RCRA hazardous characteristic tests such as Ignitability, Corrosivity, Reactivity, and Toxicity should be considered depending on the nature of the contamination. Also, this application is for a landfarm and not for a landfill. Pursuant to Paragraph (3) of 19.15.36.7.A NMAC, a landfarm "means a discrete area of land designated and used for the remediation of petroleum hydrocarbon-contaminated soils and drill cuttings." The use and type of waste that can be accepted at a landfarm is limited by its' definition and should be identified within the permit application and

considered when addressing waste acceptance provisions. Please modify the response appropriately. Please modify the response appropriately. Please identify the types and sources of RCRA non-exempt oilfield waste Envirotech plans and anticipates receiving at the proposed surface waste management facility.

19.15.36.13.F(3): This application is for a landfarm and not for a landfill. Pursuant to Paragraph (3) of 19.15.36.7.A NMAC, a landfarm "means a discrete area of land designated and used for the remediation of petroleum hydrocarbon-contaminated soils and drill cuttings." The use and type of waste that can be accepted at a landfarm is limited by its' definition. Landfarms are not permitted for disposal like landfills. If such emergency non-oil field waste does not possess petroleum hydrocarbons that can be remediated, then acceptance of such waste would be considered disposal for which this proposed facility (a landfarm) would not be permitted. Please modify the response appropriately.

19.15.36.13.G: Please provide a copy of a C-138 which Envirotech will accept and reference the location of the Form C-138 in the response. Please define "BOLs." Also, please provide a copy of an example of a BOL and reference the location of the example in the response.

19.15.36.13.I: Pursuant to Paragraph (3) of 19.15.36.7.P NMAC, a pit "means a surface or sub-surface impoundment, man-made or natural depression or diked area on the surface. Excluded from this definition are berms constructed around tanks or other facilities solely for safety, secondary containment and storm water or run-on control." By definition the stabilization unit is a pit. Please modify the response to identify the measures that will be implemented to protect migratory birds and demonstrate compliance to this provision.

19.15.36.13.K: Pursuant to Paragraph (2) of 19.15.29.7.A NMAC, major releases also include "an unauthorized release of a volume that: **(a)** results in a fire; **(b)** will reach a watercourse; **(c)** may with reasonable probability endanger public health; or **(d)** results in substantial damage to property or the environment." The response only identifies the actions Envirotech will implement for potential releases that may impact groundwater. Please modify the response to acknowledge Envirotech's responsibility to comply with all of the provisions and scenarios identified in 19.15.29 NMAC.

19.15.36.13.L: Please provide an example (i.e. facility inspection sheet) of how the monthly and quarterly inspections will be documented.

19.15.36.13.M: Pursuant to Paragraph (1) of 19.15.36.13.M NMAC, "the run-on and run-off control system shall prevent flow onto the surface waste management facility's active portion during the peak discharge from a 25-year storm." The response provided in Attachment 10 describes the run-on and run-off control system as "four (4) foot berms around each landfarm cell" and a four foot berm "constructed around the entire Landfarm #4 perimeter." No design drawings or calculations were provided in the application to demonstrate that the proposed features are capable of controlling and containing a 24 hour 25 year storm event and remain in compliance with 19.15.36.15 NMAC, Specific Requirements Applicable For Landfarms. Pursuant to Paragraph (8) of 19.15.36.15.C NMAC, "Pooling of liquids in the landfarm is prohibited. The

operator shall remove freestanding water within 24 hours." The current proposal could create "pooling." A separate feature should be incorporated into the landfarm cell design to capture run-off in an area that would not be in direct contact of any contaminated material. The feature should be designed to hold the calculated volume generated during a 24 hour 25 year storm event. A similar feature should be designed for each of the separate tracts within the facility boundary. Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the application shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and *detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.*" The "*detailed construction/installation diagrams*" required of this provision were not provided in the application. Such diagrams would include the run-on and run-off control system. Please demonstrate compliance with this provision.

Pursuant to Paragraph (2) of 19.15.36.13.M NMAC, "run-off from the surface waste management facility's active portion shall not be allowed to discharge a pollutant to the waters of the state or United States that violates state water quality standards." Please illustrate on one the facility maps or on a new map where the run-off control feature will be constructed and installed within the facility boundary to ensure compliance to this provision. A facility inspection sheet provided in Attachment 13 identifies a watercourse within 130 feet of the southern boundary of the proposed facility. Please demonstrate how the placement and design of the proposed run-off control features will prevent impacts to "waters of the state or United States that violates state water quality standards."

19.15.36.13.N: Please defer to the comments provided for Attachment 9, *Emergency Contingency Plan.*

19.15.36.15.A: Please identify the measures that will be implemented for oilfield waste that fails the paint filter test. Also, please describe the protocols that will be implemented and documentation generated when Envirotech denies the acceptance of waste due to exceeding the chloride limit.

19.15.36.15.B: Based upon a review of OCD files, the proposed landfarm site has never been approved by OCD for any previous landfarm operations. The response for this provision states that background samples will not be collected "from areas that have not been impacted by previous landfarm operations." Please clarify this statement. Also, the provision specifically identifies the required test method for TPH (418.1) and BTEX (8021B or 8260B). OCD has not issued any statement regarding an "other EPA method approved by the division" for either of the two constituents for this specific provision. Please modify the response to reflect the required test method for TPH and BTEX.

19.15.36.15.C(1): Please defer to the comments provided for 19.15.36.13.M.

19.15.36.15.C(6): Please clarify or define "clean water" and identify the source of such water.

19.15.36.15.C(8): Please identify what will happen to the freestanding water once it "removed using a vacuum truck."

19.15.36.15.C(9): Please provide an example of the form that will be utilized to document the remediation activities.

19.15.36.15.D: The response for this provision does not address or identify the constituents that must be analyzed, the specified test methods, and the concentrations that must be obtained and demonstrated in order to request approval for an additional lift. The response also does not recognize the requirement for semi-annual testing of the treatment zone or the required sampling technique and the constituents that must be analyzed. Please modify the response to identify and acknowledge Envirotech's responsibilities to comply with all of the applicable requirements of 19.15.36.15.D NMAC.

Also, the response provided for this provision states that Envirotech "will maintain a maximum thickness of treated soils in the landfarm cells, not to exceed (2) two feet or approximately 3000 cubic yards per acre, until it is demonstrated by monitoring that the contaminated soil has been treated to the standards specified in Subsection F of 19.15.36.15 NMAC." Pursuant to Subsection D of 19.15.36.15 NMAC, "The maximum thickness of treated soils in a landfarm cell shall not exceed two feet or approximately 3000 cubic yards per acre. When that thickness is reached, the operator shall not place additional oil field waste in the landfarm cell until it has demonstrated by monitoring the treatment zone at least semi-annually that the contaminated soil has been treated to the standards specified in Subsection F of 19.15.36.15 NMAC or the contaminated soils have been removed to a division-approved surface waste management facility." The response states that Envirotech "will maintain a maximum thickness of treated soils..." The provision is clear that the maximum thickness of treated soils in a landfarm cell shall not exceed two feet or approximately 3000 cubic yards per acre." Also, the response does not recognize Envirotech's responsibility to continue semi-annual testing until "the contaminated soil has been treated to the standards specified in Subsection F of 19.15.36.15 NMAC or the contaminated soils have been removed to a division-approved surface waste management facility." Please modify the response to identify and acknowledge Envirotech's responsibilities to comply with all of the applicable requirements of 19.15.36.15.D NMAC.

19.15.36.15.E(1): Pursuant to Paragraph (6) of 19.15.36.7.B NMAC, a landfarm cell "means a bermed area of 10 acres or less within a landfarm." Please identify the proposed landfarm cell size that will be utilized at the proposed surface waste management facility. Also, please modify the response to recognize Envirotech's responsibility to sample the vadose zone beneath "each landfarm cell" whenever vadose zone monitoring is required, such as required under either the semi-annual vadose zone monitoring program of Paragraph (2) of 19.15.36.15.E NMAC and/or the five year vadose zone monitoring program of Paragraph (3) of 19.15.36.15.E NMAC.

19.15.36.15.E(2): Pursuant to Paragraph (2) of 19.15.36.15.E NMAC, the samples collected during the semi-annual vadose zone monitoring program are to be analyzed "using the methods specified below for TPH, BTEX and chlorides." The only analytical methods "specified below for TPH, BTEX and chlorides" are identified Subsection F of 19.15.36.15 NMAC which specifically

identifies the required test method for TPH "as determined by EPA method 418.1 or other EPA method approved by the division," BTEX "as determined by EPA SW-846 method 8021B or 8260B," and chlorides "as determined by EPA method 300.1." Please modify the response to reflect the required test methods for compliance.

19.15.36.15.E(3): Pursuant to Paragraph (3) of 19.15.36.15.E NMAC, the five year vadose zone monitoring program requires the operator to "collect and analyze a minimum of four randomly selected, independent samples from the vadose zone, using the methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC at least every five years..." The response provided for this provision states that samples will be collected and analyzed "within five (5) years of opening a new landfarm cell or prior to adding a new lift." The proposed language in the response is not the equivalent to the required monitoring frequency. The conditions, "within five (5) years of opening a new landfarm cell or prior to adding a new lift," identified in the response are not a specified frequency as required by this provision. Please modify the response to demonstrate compliance.

Also, the provision requires the operator to analyze the samples "using the methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC." The only analytical methods "specified below" are identified Paragraph (5) of 19.15.36.15.F NMAC. Pursuant to Paragraph (5) of 19.15.36.15.F NMAC, the "concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by EPA SW-846 methods 6010B or 6020 or other methods approved by the division." Please modify the response to reflect the required test methods for compliance.

19.15.36.15.F: The response provided for this provision does not demonstrate compliance to the requirements. Pursuant to Subsection F of 19.15.36.15 NMAC, "After the operator has filled a landfarm cell to the maximum thickness... The operator shall demonstrate compliance with the closure performance standards by collecting and analyzing a minimum of one composite soil sample, consisting of four discrete samples." Thus, the sampling protocol is required per landfarm cell. Please modify the response to clarify this requirement. Also, Subsection F of 19.15.36.15 NMAC requires "the operator shall continue treatment until the contaminated soil has been remediated to the higher of the background concentrations or the following closure performance standards." Each Paragraph (1 through 5) of 19.15.36.15.F NMAC identifies if a comparison to the "PQL or background concentration" is allowed or a comparison to the specified "closure performance standards" is required. The comparison the PQL or background concentration is not allowed for all of the constituents, as it is expressed in the response provided for this provision. Paragraphs (1 through 4) of 19.15.36.15.F NMAC specifically identify the "closure performance standard" that each constituent, Benzene, Total BTEX, GRO and DRO combined fractions, TPH, and Chlorides, "shall not exceed." Please modify the response to clarify this requirement.

Pursuant to Paragraph 5 of 19.15.36.15.F NMAC, the "concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by EPA SW-846 methods 6010B or 6020 or other methods approved by the division. If the concentration of those constituents exceed the PQL or background concentration, the operator shall either perform a site specific risk assessment using EPA approved methods and shall propose closure standards based upon

individual site conditions that protect fresh water, public health, safety and the environment, which shall be subject to division approval or remove pursuant to Paragraph (2) of Subsection G of 19.15.36.15 NMAC." The provision above identifies two important factors. The first, are the specified test methods that inform and identify which constituents listed in Subsections A and B of 20.6.2.3103 NMAC require testing. The second is that only the results the constituents under this provision can be compared to the "higher of the PQL or background concentration." Please modify the response to clarify compliance to this provision.

19.15.36.17: Pursuant to Paragraph (3) of 19.15.36.7.P NMAC, a pit "means a surface or sub-surface impoundment, man-made or natural depression or diked area on the surface. Excluded from this definition are berms constructed around tanks or other facilities solely for safety, secondary containment and storm water or run-on control." By definition the stabilization unit is a pit. Based upon the information provided in the application, the stabilization unit is proposed to treat waste so that it will pass the paint filter test and/or satisfy the chloride standard prior to placement in a landfarm cell. Please address all of the applicable provisions of 19.15.36 NMAC regarding pits/ponds.

19.15.36.18.A(4): This provision specifically addresses changes to a closure plan, not a permit. Please modify the response by replacing "permit" with "closure plan' in order to appropriately express the intent and purpose of the provision.

19.15.36.18.A(5): Pursuant to Paragraph (5) of 19.15.36.18.A NMAC, "Closure shall proceed in accordance with the approved closure plan and schedule and modifications or additional requirements the division imposes." The response provided for this provision does not recognize Envirotech's responsibility to comply with this portion of the provision. Please modify the response to demonstrate Envirotech's willingness to implement closure "in accordance with the approved closure plan and schedule and modifications or additional requirements the division imposes."

19.15.36.18.C: Please modify the response to clarify compliance to this provision relating specifically to financial assurance.

19.15.36.18.D(4)(e): Pursuant to Subparagraph (e) of 19.15.36.18.D(4) NMAC, the operator "shall ensure that berms are removed." The provision does not identify the exception proposed in the response. Nor does 19.15.36 NMAC give Envirotech the authority to grant the exception (See 19.15.36.19 NMAC). Please modify the response appropriately.

19.15.36.18.D(4)(f): Pursuant to Subparagraph (f) of 19.15.36.18.D(4) NMAC, the operator "shall ensure that buildings, fences, roads and equipment are removed..." The provision does not identify the exception proposed in the response. Nor does 19.15.36 NMAC give Envirotech the authority to grant the exception (See 19.15.36.19 NMAC). Please modify the response appropriately.

19.15.36.18.D(4)(h): No response or comment was provided for this provision. It is OCD's understanding from the response provided to Subsection H of 19.15.36.15 NMAC in the

application, that "Envirotech, Inc. will not use the Environmentally Acceptable Bioremediation Endpoint Approach." Please provide a clarifying response.

19.15.36.18.E: Pursuant to Paragraph (3) of 19.15.36.7.P NMAC, a pit "means a surface or sub-surface impoundment, man-made or natural depression or diked area on the surface. Excluded from this definition are berms constructed around tanks or other facilities solely for safety, secondary containment and storm water or run-on control." By definition the stabilization unit is a pit. Based upon the information provided in the application, the stabilization unit is proposed to treat waste so that it will pass the paint filter test and/or satisfy the chloride standard prior to placement in a landfarm cell. Please address all of the applicable provisions of 19.15.36 NMAC regarding pits/ponds.

19.15.36.18.F: Pursuant to Subsection F of 19.15.36.18 NMAC, *Landfarm and pond and pit post closure*, the "post-closure care period for a landfarm or pond or pit shall be three years if the operator has achieved clean closure. During that period the operator or other responsible entity shall regularly inspect and maintain required re-vegetation. If there has been a release to the vadose zone or to ground water, then the operator shall comply with the applicable requirements of 19.15.30 NMAC and 19.15.29 NMAC." The response provided for this provision only states that "Envirotech's Landfarm #4 will not operate ponds or pits. This statement is incorrect. Pursuant to Paragraph (3) of 19.15.36.7.P NMAC, a pit "means a surface or sub-surface impoundment, man-made or natural depression or diked area on the surface. Excluded from this definition are berms constructed around tanks or other facilities solely for safety, secondary containment and storm water or run-on control." By definition the stabilization unit is a pit. Also, the response does not recognize the post-closure requirements or compliance with applicable requirements of 19.15.30 NMAC and 19.15.29 NMAC regarding a release to the vadose zone. Please modify the response to clarify compliance to this provision.

Attachment 6, Inspection and Maintenance Plan:

19.15.36.13.L(1): Please provide an example (i.e. facility inspection sheet) of how the monthly and quarterly inspections will be documented and reference the location of the example in the response.

19.15.36.13.L(2): The information provided in the response does not coincide with the assessment of the proposed depth to ground water provided in Attachment 13, Hydro-Geologic Report. The Hydro-Geologic Report identifies a cathodic well within 380 feet of the proposed site indicating that ground water was encountered at 275 feet below the ground surface. The response for this provision indicates that ground water is "greater than 1,000 feet below the ground surface." Please modify the response to coincide the information and supporting documentation of the Hydro-Geologic Report in Attachment 13.

19.15.36.13.L(3): Pursuant to Paragraph (1) of 19.15.36.13.M NMAC, "the run-on and run-off control system shall prevent flow onto the surface waste management facility's active portion during the peak discharge from a 25-year storm." Please defer to the additional comments provided for 19.15.36.13.M. Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the application

shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and *detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.*" The "*detailed construction/ installation diagrams*" required of this provision were not provided in the application. Such diagrams would include the run-on and run-off control system. Neither of the above referenced provisions has been appropriately addressed within the application. At this time, it is difficult to determine if the proposed four foot berm is appropriate.

Attachment 7, Hydrogen Sulfide Prevention and Contingency Plan:

19.15.36.8.C(8): Pursuant to Section 2 of 19.15.11 NMAC, "19.15.11 NMAC applies to a person subject to the division's jurisdiction, including a person engaged in drilling, stimulating, injecting into, completing, working over or producing an oil, gas or carbon dioxide well or a person engaged in gathering, transporting, storing, processing or refining of oil, gas or carbon dioxide. *19.15.11 NMAC does not exempt or otherwise excuse surface waste management facilities the division permits pursuant to 19.15.36 NMAC from more stringent conditions on the handling of hydrogen sulfide required of such facilities by 19.15.36 NMAC or more stringent conditions in permits issued pursuant to 19.15.36 NMAC, nor shall the facilities be exempt or otherwise excused from the requirements set forth in 19.15.11 NMAC by virtue of permitting under 19.15.36 NMAC.*"

Pursuant to Paragraph (1) of 19.15.11.9.B NMAC, the "person shall develop the hydrogen sulfide contingency plan with due consideration of paragraph 7.6 of the guidelines in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55, most recent edition, or with due consideration to another division-approved standard."

Hydrogen Sulfide Prevention and Contingency Plan:

Page 2 of 4,
7.0 Characteristics of Hydrogen Sulfide and Sulfur Dioxide:

As identified in Appendix A and B of in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55, such information as physical data (CAS number, vapor density, specific gravity, upper and lower explosive limits, boiling point, melting point, solubility, and odor warning properties), exposure limits (TWA, STEL, IDLH, Peak, and Maximum), and physiological effects (including acute and chronic toxicity) should be provided as required by Subparagraph (b) of 19.15.11.9.B(2) NMAC.

8.0 Personnel Protection, Training, and Drills:

Pursuant to Subparagraph (d) of 19.15.11.9.B(2) NMAC, the "hydrogen sulfide contingency plan shall provide for training and drills, including training in the responsibilities and duties of essential personnel and periodic on-site or classroom drills or exercises that simulate a release, and shall describe how the person will document the training, drills and attendance. The hydrogen sulfide contingency plan shall also provide for training of residents as appropriate on the proper

protective measures to be taken in the event of a release, and shall provide for briefing of public officials on issues such as evacuation or shelter-in-place plans." Please modify this section of the Hydrogen Sulfide Prevention and Contingency Plan to address the underlined items identified above.

Page 3 of 4,
10.0 Hydrogen Sulfide Prevention Plan:

The first sentence provided in this section states that Envirotech "will maintain a calibrated hydrogen sulfide detector in the landfarm office during all landfarming activities, to monitor for hydrogen sulfide." The statement raises several questions. Such as, how will a hydrogen sulfide detector *in the landfarm office* monitor an approximately 200 acre facility split into two separate tracts (as illustrated in Attachment 3)? Where will the landfarm office located within the facility boundary (it is not illustrated on any of the facility maps)? Is the hydrogen sulfide detector mounted to the outside of the landfarm office? Or does the statement mean that the hydrogen sulfide detector will be stored inside the landfarm office? Please clarify these points. What are the capabilities of the hydrogen sulfide detector? Can the hydrogen sulfide detector also detect sulfur dioxide? What device will be utilized to detector and monitor sulfur dioxide? Will any employees be wearing personal detectors? If so, how will a personal detector be worn and what is the capability of the device? Please modify this section to address the questions posed above. Also, please provide a copy of the manufacturer's specifications for the hydrogen sulfide detector.

The second sentence provided in this section states that Envirotech "will disk soils... thus preventing the possibility of the buildup of hydrogen sulfide." The soils placed within the landfarm cells are one of the potential sources of hydrogen sulfide. What measures will be implemented to address the hydrogen sulfide concerns related to the waste acceptance and stabilization of liquid waste, as proposed in the application? Please address.

11.1 Immediate Action Plan

Pursuant to Subparagraph (a) of 19.15.11.9.B(2) NMAC, the "hydrogen sulfide contingency plan shall contain information on emergency procedures the person will follow in the event of a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency, an immediate action plan as described in the API document referenced in Paragraph (1) of Subsection B of 19.15.11.9 NMAC, and telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities. The plan shall also include the locations of potentially affected public areas and public roads and shall describe proposed evacuation routes, locations of road blocks and procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans. The plan shall include information on the availability and location of necessary safety equipment and supplies." The items underlined above were either not addressed in enough detail to provide instruction to complete the task or satisfy the requirement or were just not addressed within the plan. Please modify the plan to demonstrate compliance with the requirement.

11.1.a: Pursuant to Subparagraph (f) of 19.15.11.9.B(2) NMAC, the "hydrogen sulfide contingency plan shall include the activation level and a description of events that could lead to a

release of hydrogen sulfide sufficient to create a concentration in excess of the activation level." Please identify the "activation level" that will prompt this response.

11.1.b: The order of the actions and the actions identified under this section do not coincide with the recommended protocols and sequence proposed in paragraph 7.6 of the guidelines in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55, most recent edition. Please clarify why it is more important to "shut-down all equipment rather than "move away from the hydrogen sulfide or sulfur dioxide source and get out of the affected area." Please modify the plan to coincide with the recommended protocols and sequence proposed in paragraph 7.6 of the guidelines in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55, most recent edition.

11.1.b.2: Please identify how a person or employee would determine the wind direction during a release, in order to move upwind from the source. Also, please explain how a person or employee would determine the source in order to prevent moving toward the source while attempting to move upwind from the source. Please identify the protocols that will prevent unnecessary exposure to personnel and visitors during a release.

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11.1.b.4: Pursuant to Subparagraph (a) of 19.15.11.9.B(2) NMAC, the "plan shall include information on the availability and location of necessary safety equipment and supplies." This plan does not include the information required by this provision. Without it and additional information, OCD is unable to determine if the "proper personal breathing equipment" is available or if the employees at the site have been properly fit tested for the device (including facial hair requirements) or have the proper training to complete the task. Requiring personnel to attempt this task may place additional persons at risk of life and health. Please address the concerns identified above within the plan to support the protocol.

11.1.b.5: Please explain what actions will be taken to account for the "public citizen's," visitors, drivers, or operators that have been directed "to evacuate the area" as prescribed in Section 11.1.b.3 of this plan. Also, will road blocks established to prevent entry into the facility by operators while "all personnel" proceed to the designated emergency assembly area? Please identify the measures that will be implemented to ensure that unknowing visitors, drivers, or operators do not gain access to the facility after and during the evacuation of "all personnel."

11.1.c: Pursuant to Subparagraph (a) of 19.15.11.9.B(2) NMAC, the "plan shall include information on the availability and location of necessary safety equipment and supplies." This plan does not include the information required by this provision. Without it and additional information, OCD is unable to determine if the proper equipment is available or if the employees at the site have been properly fit tested for the device (including facial hair requirements) or have the proper training to complete the task. Requiring personnel to attempt this task may place additional persons at risk of life and health. Please address the concerns identified above within the plan to support the protocol. Also, Pursuant to Subparagraph (a) of 19.15.11.9.B(2) NMAC, the "plan shall contain information on emergency procedures the person will follow in the event of

a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency..." The second sentence of this section refers to "emergency shutdown procedures that will be initiated..." How can personnel be trained by this document and know how to implement the "emergency shutdown procedures" if the steps of the procedures are not provided within the plan? Please provide instructions on how to implement the "emergency shutdown procedures."

11.1.d: Please clarify the meaning or intent of "when the required action cannot be accomplished." Since the "emergency shutdown procedures" are not identified in Section 11.1c, it is difficult to determine what action is required. Please clarify and modify the response appropriately. Also, at the end of the response it instructs personnel to "proceed to the following steps, as appropriate for the site specific conditions." OCD assumes that the "following steps" are Sections 11.1e through 11.1h. Please clarify and modify the response appropriately. Also, please identify the "site specific conditions" or action level or concentration in which each of the "following steps" would be initiated.

11.1.e: Please identify the "monitoring and sampling" protocols and methods that will implemented in this step when the "required action cannot be accomplished in time to prevent exposing operating personnel or the public to hazardous concentrations of hydrogen sulfide or sulfur dioxide" as expressed in Section 11.1d. Pursuant to Subparagraph (a) of 19.15.11.9.B(2) NMAC, the "plan shall include information on the availability and location of necessary safety equipment and supplies." Such "monitoring and sampling" equipment should be identified within the plan and protocols should also be included to instruct personnel to take such equipment during the evacuation if the "monitoring and sampling" will occur after the evacuation. Please address the concerns identified above within the plan to support the protocol.

Pursuant to Subparagraph (e) of 19.15.11.9.B(2) NMAC, the "plan shall describe how the person will coordinate emergency response actions under the plan with the division and the New Mexico state police consistent with the New Mexico hazardous materials emergency response plan." Pursuant to Subparagraph (a) of 19.15.11.9.B(2) NMAC, the "plan shall contain information on emergency procedures the person will follow in the event of a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency, an immediate action plan as described in the API document referenced in Paragraph (1) of Subsection B of 19.15.11.9 NMAC, and telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities." Please identify the action level or concentration in which such agencies will be contacted. Also, please provide and/or reference the location of the emergency contact telephone list within the plan.

11.1.f: Please describe how and on what basis Envirotech's Emergency Response Personnel will determine that the recommendations to provide to the public official regarding evacuation operations and blocking unauthorized access are appropriate. Please identify the action level or concentration associated for each recommendation.

11.1.g: Pursuant to Subparagraph (e) of 19.15.11.9.B(2) NMAC, the "plan shall describe how the person will coordinate emergency response actions under the plan with the division and the

New Mexico state police consistent with the New Mexico hazardous materials emergency response plan." Pursuant to Subparagraph (a) of 19.15.11.9.B(2) NMAC, the "plan shall contain information on emergency procedures the person will follow in the event of a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency, an immediate action plan as described in the API document referenced in Paragraph (1) of Subsection B of 19.15.11.9 NMAC, and telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities." Please identify the action level or concentration in which such agencies will be contacted. Also, please provide and/or reference the location of the emergency contact telephone list within the plan.

Pursuant to 19.15.11.16 NMAC, the operator "shall notify the division upon a release of hydrogen sulfide requiring activation of the hydrogen sulfide contingency plan as soon as possible, but no more than four hours after plan activation, recognizing that a prompt response should supersede notification. The person shall submit a full report of the incident to the division on form C-141 no later than 15 days following the release." Please clarify the regulatory requirements for notice to the OCD in the response. Also, please provide and/or reference the location of form C-141 within the plan.

11.1.h: Please identify the personal protection equipment (PPE) Envirotech's Emergency Response Personnel will be required to don while monitoring the ambient air and awaiting a determination of "when it is safe for re-entry." Pursuant to Subparagraph (a) of 19.15.11.9.B(2) NMAC, the "plan shall include information on the availability and location of necessary safety equipment and supplies." Such equipment, PPE and monitoring, should be identified within the plan and protocols should also be included to instruct personnel to take such equipment during the evacuation if the "monitoring" will occur after the evacuation. Please address the concerns identified above within the plan to support the protocol. Also, please identify what concentration is "safe for re-entry."

The following underlined provisions were either incomplete or not addressed in the submitted hydrogen sulfide contingency plan:

19.15.11.9.B(1) NMAC The person shall develop the hydrogen sulfide contingency plan with due consideration of paragraph 7.6 of the guidelines in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55, most recent edition, or with due consideration to another division-approved standard.

19.15.11.9.B(2)(a) NMAC The hydrogen sulfide contingency plan shall contain information on emergency procedures the person will follow in the event of a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency, an immediate action plan as described in the API document referenced in Paragraph (1) of Subsection B of 19.15.11.9 NMAC, and telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities. The plan shall also include the locations of potentially affected public areas and public roads and shall describe proposed evacuation routes, locations of road blocks and procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans.

19.15.11.9.B(2)(b) NMAC The hydrogen sulfide contingency plan shall include a discussion of the characteristics of hydrogen sulfide and sulfur dioxide.

19.15.11.9.B(2)(c) NMAC The hydrogen sulfide contingency plan shall include maps and drawings that depict the area of exposure and public areas and public roads within the area of exposure.

19.15.11.9.B(2)(d) NMAC Training and drills. The hydrogen sulfide contingency plan shall provide for training and drills, including training in the responsibilities and duties of essential personnel and periodic on-site or classroom drills or exercises that simulate a release, and shall describe how the person will document the training, drills and attendance. The hydrogen sulfide contingency plan shall also provide for training of residents as appropriate on the proper protective measures to be taken in the event of a release, and shall provide for briefing of public officials on issues such as evacuation or shelter-in-place plans.

19.15.11.9.B(2)(e) NMAC Coordination with state emergency plans. The hydrogen sulfide contingency plan shall describe how the person will coordinate emergency response actions under the plan with the division and the New Mexico state police consistent with the New Mexico hazardous materials emergency response plan.

19.15.11.9.B(2)(f) NMAC Activation levels. The hydrogen sulfide contingency plan shall include the activation level and a description of events that could lead to a release of hydrogen sulfide sufficient to create a concentration in excess of the activation level.

19.15.11.13 NMAC PERSONNEL PROTECTION AND TRAINING: The person shall provide persons responsible for implementing a hydrogen sulfide contingency plan training in hydrogen sulfide hazards, detection, personal protection and contingency procedures.

19.15.11.13 NMAC NOTIFICATION OF THE DIVISION: The person shall notify the division upon a release of hydrogen sulfide requiring activation of the hydrogen sulfide contingency plan as soon as possible, but no more than four hours after plan activation, recognizing that a prompt response should supersede notification. The person shall submit a full report of the incident to the division on form C-141 no later than 15 days following the release.

Attachment 8, Closure and Post Closure Plan:

19.15.36.18.A(4): Pursuant to Paragraph (4) of 19.15.36.18.A NMAC, the "operator shall be entitled to a hearing concerning a modification or additional requirement the division seeks to impose if it files an application for a hearing within 10 days after receipt of written notice of the proposed modifications or additional requirements." This "modification or additional requirement" addressed in this provision only associated to the closure plan. The response provided to this provision in the application extends the scope of the provision to "this permit." Please replace "permit" with "closure plan" to correctly reflect the intent of the provision.

19.15.36.18.B: Pursuant to Paragraph (1) of 19.15.36.18.B NMAC, "When the division determines that closure is complete it shall release the financial assurance, except for the amount needed to maintain monitoring wells for the applicable post closure care period, to perform semi-annual analyses of such monitoring wells and to re-vegetate the site. Prior to the partial release of the financial assurance covering the surface waste management facility, the division shall inspect the site to determine that closure is complete." The response provided for this provision does not recognize the partial release of the financial assurance for completion of closure activities and

OCD's required inspection and determination. Please modify the response to acknowledge Envirotech's responsibility to comply with all of the provisions, phases, and conditions identified in Paragraphs (1 through 3) of 19.15.36.18.B NMAC.

Pursuant to Paragraph (2) of 19.15.36.18.B NMAC, "After the applicable post closure care period has expired, the division shall release the remainder of the financial assurance if the monitoring wells show no contamination and the re-vegetation in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC is successful. If monitoring wells or other monitoring or leak detection systems reveal contamination during the surface waste management facility's operation or in the applicable post closure care period following the surface waste management facility's closure the division shall not release the financial assurance until the contamination is remediated in accordance with 19.15.30 NMAC and 19.15.29 NMAC, as applicable." The response provided for this provision does not recognize the condition(s) of the site after the post closure care period has expired that may require additional actions in order to have OCD consider the release of the financial assurance. Please modify the response to acknowledge Envirotech's responsibility to comply with all of the phases and conditions identified in Paragraph (2) of 19.15.36.18.B NMAC.

Pursuant to Paragraph (3) of 19.15.36.18.B NMAC, "In any event, the division shall not finally release the financial assurance until it determines that the operator has successfully re-vegetated the site in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC, or, if the division has approved an alternative site use plan, until the landowner has obtained the necessary regulatory approvals and begun implementation of the use." Please modify the response to acknowledge Envirotech's responsibility to comply with this provision.

19.15.36.18.C: The response provided in the application does not recognize or identify any of the regulatory requirements or OCD regulatory rights of Paragraphs (1 through 5) of 19.15.36.18.C NMAC. Please provide the regulatory language in the permit application and an appropriate response for each provision.

19.15.36.18.D(4)(b): Pursuant to Subparagraph (b) of 19.15.36.18.D(4) NMAC, the operator "shall ensure that soils remediated to the foregoing standards and left in place are re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC." Please modify the response to acknowledge the conditions in which re-vegetation is required.

19.15.36.18.D(4)(e): Pursuant to Subparagraph (e) of 19.15.36.18.D(4) NMAC, the operator "shall ensure that berms are removed." The provision does not identify the exception proposed in the response. Nor does 19.15.36 NMAC give Envirotech the authority to grant the exception (See 19.15.36.19 NMAC). Please modify the response appropriately.

19.15.36.18.D(4)(f): Pursuant to Subparagraph (f) of 19.15.36.18.D(4) NMAC, the operator "shall ensure that buildings, fences, roads and equipment are removed..." The provision does not identify the exception proposed in the response. Nor does 19.15.36 NMAC give Envirotech the authority to grant the exception (See 19.15.36.19 NMAC). Please modify the response appropriately.

19.15.36.18.D(4)(h): No response or comment was provided for this provision. Please provide a clarifying response. It is OCD's understanding from the response provided to Subsection H of 19.15.36.15 NMAC in the application, that "Envirotech, Inc. will not use the Environmentally Acceptable Bioremediation Endpoint Approach."

19.15.36.18.E: Pursuant to Paragraph (3) of 19.15.36.7.P NMAC, a pit "means a surface or sub-surface impoundment, man-made or natural depression or diked area on the surface. Excluded from this definition are berms constructed around tanks or other facilities solely for safety, secondary containment and storm water or run-on control." By definition the stabilization unit is a pit. Based upon the information provided in the application, the stabilization unit is proposed to treat waste so that it will pass the paint filter test and/or satisfy the chloride standard prior to placement in a landfarm cell. Please address all of the applicable provisions of 19.15.36 NMAC regarding pits/ponds.

19.15.36.18.F: Pursuant to Subsection F of 19.15.36.18 NMAC, *Landfarm and pond and pit post closure*, the "post-closure care period for a landfarm or pond or pit shall be three years if the operator has achieved clean closure. During that period the operator or other responsible entity shall regularly inspect and maintain required re-vegetation. If there has been a release to the vadose zone or to ground water, then the operator shall comply with the applicable requirements of 19.15.30 NMAC and 19.15.29 NMAC." The response provided for this provision only states that "Envirotech's Landfarm #4 will not operate ponds or pits. This statement is incorrect. Pursuant to Paragraph (3) of 19.15.36.7.P NMAC, a pit "means a surface or sub-surface impoundment, man-made or natural depression or diked area on the surface. Excluded from this definition are berms constructed around tanks or other facilities solely for safety, secondary containment and storm water or run-on control." By definition the stabilization unit is a pit. Also, the response does not recognize the post-closure requirements or compliance with applicable requirements of 19.15.30 NMAC and 19.15.29 NMAC regarding a release to the vadose zone. Please modify the response to clarify compliance to this provision.

Landfarm No. 4 Financial Assurance:

The introductory paragraph for this section of the closure plan describes the size of the proposed surface waste management facility as "189 acres." The survey map provided in Attachment 3 illustrates two separate tracts. The area of Tract 1 is identified as "57.75 acres more or less" and Tract 2 is identified as "149.86 acres more or less" for a total of 207.61. Please clarify and make the appropriate adjustment throughout the permit application and this section. The last sentence of the paragraph states that the "remaining nineteen (19) cells will be in discontinued maintenance status for this analysis." The term "discontinued maintenance status" is not a term found or used in 19.15.36 NMAC. It is a term used in approvals associated with surface waste management facilities permitted prior to the effective date of 19.15.36 NMAC. Pursuant to Paragraph A of 19.15.36.20 NMAC, Transitional Provisions, "Existing surface waste management facilities shall comply with the operational, waste acceptance and closure requirements provided in 19.15.36 NMAC, except as otherwise specifically provided in the applicable permit or order, or in a specific waiver, exception or agreement that the division has granted in writing to the particular surface waste management facility." The term "discontinued maintenance status" is not applicable to the permit application since it for a new surface waste management facility. Pursuant to

Paragraph C of 19.15.36.20 NMAC, the "division shall process an application for a surface waste management facility permit filed prior to May 18, 2006 in accordance with 19.15.9.711 NMAC, and an application filed after May 18, 2006 in accordance with 19.15.36 NMAC." Please omit the use of the term "discontinued maintenance status" from this permit application.

The proposed closure and post closure cost estimates provided in this section do not address all of the regulatory requirements specified within 19.15.36 NMAC, nor do they reflect or coincide with Envirotech's proposals presented within the Closure and Post Closure Plan of Attachment 8. Please base the estimate upon the regulatory requirements specified within 19.15.36 NMAC and Envirotech's proposals presented within the Closure and Post Closure Plan of Attachment 8. If the proposed closure and post closure cost estimates for financial assurance cannot demonstrate compliance with the regulatory requirements specified within 19.15.36 NMAC and Envirotech's proposals presented within the Closure and Post Closure Plan of Attachment 8, then OCD cannot consider or recommend this permit application for approval.

Also, pursuant to Subpart B of 19.15.36.11 NMAC the "commercial facility's estimated closure and post closure cost shall be the amount provided in the closure plan the applicant submitted unless the division determines that such estimate does not reflect a reasonable and probable closure and post closure cost, in which event, the division shall determine the estimated closure and post closure cost and shall include such determination in its tentative decision." The proposed financial assurance proposal does not address or propose any post closure activities nor does it provide any third cost estimates. Please provide the required information and supporting documentation.

Also, OCD recommends that the closure and post closure cost estimates be broken down into the sequence in which the events will occur; closure activities and post closure activities. If done in the method, it will assist in the determination of partial releases of the financial assurance as such activities are completed.

Closure Costs Calculated For An Eighteen Month Closure Period:

1. Based on a Pohl Industries submittal:

The cost estimates and rates provided in this section cannot be directly associated with the estimate provided by Pohl Industries. The Pohl Industries estimate does not distinguish if the proposed costs for machinery, mobilization, labor, or fuel are a per hour rate or a one-time cost. The Pohl Industries estimate does not identify the tilling cost on a dollars per acre rate as it does in this section. It states "we will be able to cover the entire 95 acres in one day a cost of $1290.00." There is not an individual break down for the each cost associated with machinery, mobilization, labor, or fuel either on a per hour or day cost. The proposed "re-seeding costs" are not defined, nor do they demonstrate compliance with the regulatory requirements specified within 19.15.36 NMAC and Envirotech's proposals presented within the Closure and Post Closure Plan of Attachment 8.

Pursuant to Paragraph (3) of 19.15.36.7.P NMAC, a pit "means a surface or sub-surface impoundment, man-made or natural depression or diked area on the surface. Excluded from this definition are berms constructed around tanks or other facilities solely for safety, secondary

containment and storm water or run-on control." By definition the stabilization unit is a pit. Pursuant to Paragraph (4) of 19.15.36.18.E NMAC regarding the closure of a pond or pit, the "operator shall ensure that the site is sampled, in accordance with the procedures specified in chapter nine of EPA publication SW-846, test methods for evaluating solid waste, physical/ chemical methods for TPH, BTEX, metals and other inorganics listed in Subsections A and B of 20.6.2.3103 NMAC, in accordance with a gridded plat of the site containing at least four equal sections that the division has approved." The cost estimates provided by Pohl Industries and within this section do not address the required testing. Please provide third party cost estimates and a financial assurance cost estimate based upon the regulatory requirements specified within 19.15.36 NMAC and Envirotech's proposals presented within the Closure and Post Closure Plan of Attachment 8.

2. Based on semi-annual vadose zone monitoring, Envirotech's known laboratory costs:

Pursuant to Subsection D of 19.15.36.15 NMAC regarding treatment zone monitoring, the "operator shall collect and analyze at least one composite soil sample, consisting of four discrete samples, from the treatment zone at least semi-annually using the methods specified below for TPH and chlorides." The proposed closure and post closure cost estimate is based upon "an 18 month tilling program" of soils within the treatment zone, but does recognize the treatment zone sampling requirements. Please include the additional laboratory costs associated to the required treatment zone monitoring.

As addressed in the introductory paragraph of this section, the estimate is based upon the "remaining nineteen (19) cells will be in discontinued maintenance status for this analysis." The term "discontinued maintenance status" is not a term found or used in 19.15.36 NMAC. It is a term used in approvals associated with surface waste management facilities permitted prior to the effective date of 19.15.36 NMAC. Pursuant to Paragraph A of 19.15.36.20 NMAC, Transitional Provisions, "Existing surface waste management facilities shall comply with the operational, waste acceptance and closure requirements provided in 19.15.36 NMAC, except as otherwise specifically provided in the applicable permit or order, or in a specific waiver, exception or agreement that the division has granted in writing to the particular surface waste management facility." The term "discontinued maintenance status" is not applicable to the permit application since it for a new surface waste management facility. Pursuant to Paragraph C of 19.15.36.20 NMAC, the "division shall process an application for a surface waste management facility permit filed prior to May 18, 2006 in accordance with 19.15.9.711 NMAC, and an application filed after May 18, 2006 in accordance with 19.15.36 NMAC." Semi-annual vadose zone monitoring is required for all 38 cells during the closure period. Please modify the estimate to demonstrate compliance to the requirements of 19.15.36 NMAC. Also, pursuant to Paragraph (2) of 19.15.36.15.E NMAC, the samples collected during the semi-annual vadose zone monitoring program are to be analyzed "using the methods specified below for TPH, BTEX and chlorides." The only analytical methods "specified below for TPH, BTEX and chlorides" are identified Subsection F of 19.15.36.15 NMAC which specifically identifies the required test method for TPH "as determined by EPA method 418.1 or other EPA method approved by the division," BTEX "as determined by EPA SW-846 method 8021B or 8260B," and chlorides "as determined by EPA method 300.1." Please modify the estimate to reflect the required test method for TPH.

In regards to the proposed closure sample analysis, pursuant to Paragraph (5) of 19.15.36.15.F NMAC, the "concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by EPA SW-846 methods 6010B or 6020 or other methods approved by the division." Please modify the response to reflect the required test methods and associated constituents for compliance. Please modify the estimate appropriately.

Also, the closure plan and financial assurance estimate does not address the closure sampling and testing of the stabilization unit. Pursuant to Paragraph (3) of 19.15.36.7.P NMAC, a pit "means a surface or sub-surface impoundment, man-made or natural depression or diked area on the surface. Excluded from this definition are berms constructed around tanks or other facilities solely for safety, secondary containment and storm water or run-on control." By definition the stabilization unit is a pit. Pursuant to Paragraph (4) of 19.15.36.18.E NMAC regarding the closure of a pond or pit, the "operator shall ensure that the site is sampled, in accordance with the procedures specified in chapter nine of EPA publication SW-846, test methods for evaluating solid waste, physical/ chemical methods for TPH, BTEX, metals and other inorganics listed in Subsections A and B of 20.6.2.3103 NMAC, in accordance with a gridded plat of the site containing at least four equal sections that the division has approved." Please modify the cost estimate to include the additional laboratory costs.

3. Blagg Engineering estimates sample collection costs to be:

An estimate from Blagg Engineering was not provided in the permit application to support the proposed costs. Please the required supporting documentation. Also, please review all the comments provided above, especially those provide in *2. Based on semi-annual vadose zone monitoring, Envirotech's known laboratory costs*, regarding compliance to treatment and vadose sampling. Please modify the estimate to include the additional required sampling.

Also, pursuant to Subpart B of 19.15.36.11 NMAC the "commercial facility's estimated closure and post closure cost shall be the amount provided in the closure plan the applicant submitted unless the division determines that such estimate does not reflect a reasonable and probable closure and post closure cost, in which event, the division shall determine the estimated closure and post closure cost and shall include such determination in its tentative decision." The proposed financial assurance proposal does not address or propose any post closure activities nor does it provide any third cost estimates. Please provide the required information and supporting documentation.

Landfarm #4 Re-Vegetation Plan:

The eighth step provided in the re-vegetation plan proposes measures that will be implemented to re-vegetate access roads, if considered necessary. OCD is unable to determine if the proposed measures are appropriate since the detailed construction/installation diagrams required of Subparagraph (4) of 19.15.36.8.C NMAC were not provided in the permit application. Please provide the required detailed construction/installation diagrams of the roads in the permit application and determine if the proposal to "rip" such roads at "a minimum of 12 inches in depth" is appropriate based upon how the roads are constructed and of the material that will be proposed to construct such roads.

Attachment 9, Emergency Contingency Plan:

19.15.36.13.N: Pursuant to Paragraph (1) of 19.15.36.13.N NMAC, the contingency plan "shall describe the actions surface waste management facility personnel shall take..." for each situation and scenario identified: "fires, explosions or releases to air, soil, surface water or ground water of contaminants or oil field waste." Specific response actions should be identified to provide facility personnel step-by-step instructions on how to assess, control, contain, and isolate each individual scenario within the contingency plan. Please modify the contingency plan to individually address each event and type of release identified in Paragraph (1) of 19.15.36.13.N NMAC and also include protocols that identify the responsibilities of the operator/owner to comply with the applicable provisions of 19.15.29 NMAC and 19.15.30 NMAC regarding the submittal and approval of remediation plans and/or abatement plans.

19.15.36.13.N(1)a: The first step provided in the contingency plan provides general instruction for all scenarios. It states "Stop all activities, assess the situation and determine if emergency steps are needed." No instruction is provided on how to assess the situation and/or for what concerns. The response for each scenario (a fire, an explosion, a release to the air, a release to the soil, a release to surface water, and/or a release to ground water) would be performed differently and the concerns associated with each scenario would also be different. The only instruction within the plan is "assess the situation." Pursuant to Paragraph (1) of 19.15.36.13.N NMAC, the contingency plan "shall describe the actions surface waste management facility personnel shall take..." for each situation and scenario identified: "fires, explosions or releases to air, soil, surface water or ground water of contaminants or oil field waste." The current language provided in the contingency plan does not satisfy the requirement. Please provide the required information. The last part of the first step instructs personnel to "determine if emergency steps are needed." The plan does not provide a criteria or action level for any of the required scenarios in order for personnel to make a determination. Such as, at what point should facility personnel cease a response or not respond to a fire, by placing their health a risk or their person in danger, due to the source of the fire, the size, the weather conditions, and/or the limitations of the available response equipment (fire extinguishers and shovels as currently proposed) provided at the facility. Certain releases to the air, such as hydrogen sulfide gas, may require immediate evacuation. Please provide the required information for each type of scenario and the detailed instruction to assist facility personnel.

19.15.36.13.N(1)b: The second step instructs "management" to "notify NMOCD and all non-emergency agencies as needed." The review of the plan revealed that there are no phone numbers provided for OCD or the "non-emergency agencies" nor are any of the "non-emergency agencies" identified. It is difficult to determine who or what parties would be contacted and if contacting such parties would be appropriate. Please provide a contact list for the plan that identifies the parties and provide current phone numbers.

19.15.36.13.N(1)c: The third step states "If a fire has occurred, every effort shall be made to contain it using the proper fire extinguishers and shovels as appropriate." The plan does not provide a criteria or action level for any of the required scenarios in order for personnel to make a determination. Such as, at what point should facility personnel cease a response or not respond to a fire, by placing their health a risk or their person in danger, due to the source of the fire, the size,

the weather conditions, and/or the limitations of the available response equipment (fire extinguishers and shovels as currently proposed) provided at the facility.

Please described or recommend methods that may be utilized and implemented to contain and isolate a fire within the contingency plan. Is there heavy equipment that can be utilized to isolate a fire from the landfarm operations and/or to cover the fire with soils? If the use of water is required to extinguish a fire, what will be the source of the water, where will it be obtained, and how will it be contained during use? Also, please provide similar instruction to address the actions and concerns associated with an explosion.

Pursuant to Subparagraph (a) of Paragraph (2) of 19.15.29.2.A NMAC, the definition of a major release includes "an unauthorized release of a volume that results in a fire." Please modify the information to reflect the operator's responsibility regarding proper notice. Also, please identify the responsibilities of the operator/owner to comply with the applicable provisions of 19.15.29 NMAC and 19.15.30 NMAC regarding the submittal and approval of remediation plans and/or abatement plans.

Please address the emergency coordinator's responsibility in regards to a fire or explosion in accordance with the requirements of Paragraph (11) of 19.15.36.13.N NMAC.

19.15.36.13.N(1)d: The fourth step states "In the case of a spill, every effort shall be made to contain the spill using shovels, equipment, and absorbent material." The response and actions taken to assess, control, contain, isolate, and remedy may not be the same in all cases. A release to the air could not be addressed by the instructions provided in the plan. A release to soil would lead one to assume that something has infiltrated the soil and may not be available or accessible on the ground surface. If such of a release occurred, how would facility personnel respond? How would the extent of the release be determined? If excavated, where and how would the contaminated soils to stored? How would the source of the contamination be assessed or determined? Can the source of the contamination be controlled? How would Envirotech dispose or treat the material? The answer to such questions should assist facility personnel in responding to the release. The same type of considerations should also be applied to potential release to ground water, surface water and the air. Please modify the plan to "describe the actions surface waste management facility personnel shall take..." for each situation and scenario identified: "releases to air, soil, surface water or ground water of contaminants or oil field waste."

Also, please identify the responsibilities of the operator/owner to comply with the applicable provisions of 19.15.29 NMAC and 19.15.30 NMAC regarding notice and the submittal and approval of remediation plans and/or abatement plans.

19.15.36.13.N(1)e: The fifth step states "All activities will follow the most current NMOCD regulations." Neither the contingency plan nor the protocol identifies which regulations may be applicable nor are any copies of applicable regulations provided within the contingency plan. Without copies of the applicable regulations, how will facility personnel know which OCD regulation to "follow?" Please identify the applicable regulations in the plan and provide current

copies, unless specific instructions are provided in the contingency plan and the instructions demonstrate compliance to the specific applicable provisions.

19.15.36.13.N(2): Please clarify in the response compliance to Paragraph (2) of 19.15.36.13.N NMAC and identify which parties in which a copy of the contingency plan will be provided. Also, will Envirotech provide any cross-training to first responders?

19.15.36.13.N(4): Pursuant to Paragraph (4) of 19.15.36.13.N NMAC, the "contingency plan for emergencies shall include a list, which shall be kept current, of emergency equipment at the surface waste management facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems and decontamination equipment, containing a physical description of each item on the list and a brief outline of its capabilities." The first item on the emergency equipment list is "20 lb A,B,C Fire Extinguishers." "A", "B", and "C" are used to classify different types of fires and in this case the types of fires in which a fire extinguisher is considered appropriate for use. The classification can be for single use or combined use. Based upon the current description provided in the list, it is difficult to determine the "capabilities" of each fire extinguisher or all. Please clarify. Also, the steps provided in the responses of (a-d) of 19.15.36.13.N(1) of the contingency plan mention the use of a shovel in response to a fire or a spill. The shovel is not identified on the emergency equipment list. Please modify the list in order to demonstrate compliance with Paragraph (4) of 19.15.36.13.N NMAC.

19.15.36.13.N(5)b: Please reference the location of the "Evacuation Map" provided within the contingency plan in order to illustrate and clearly identify the locations of the proposed muster areas mentioned in the response.

19.15.36.13.N(6): Pursuant to Paragraph (6) of 19.15.36.13.N NMAC, the "contingency plan for emergencies shall include an evaluation of expected contaminants, expected media contaminated and procedures for investigation, containment and correction or remediation." Pursuant to Subsection N of 19.15.36.13 NMAC, the "contingency plan shall be designed to minimize hazards to fresh water, public health, safety or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water." Please identify the "procedures for investigation, containment and correction or remediation" as required by this provision and also address the "unplanned sudden" and "non-sudden" releases not associated with compliance to the operational requirements of 19.15.36 NMAC.

19.15.36.13.N(7): Pursuant to Paragraph (7) of 19.15.36.13.N NMAC, the "contingency plan for emergencies shall list where copies of the contingency plan will be kept, which shall include the surface waste management facility; local police departments, fire departments and hospitals; and state and local emergency response teams." Other than Envirotech's Landfarm Administrator's Office and the Landfarm Office, the only other party or parties identified are "local emergency response teams." This does not demonstrate compliance to the provision. Please properly identify which parties Envirotech will provide a copy of the contingency plan as specified in and required of Paragraph (7) of 19.15.36.13.N NMAC.

19.15.36.13.N(8): Please format this section of the contingency plan appropriately. The list begins with "e" when "a-d" are not provided. Please modify.

19.15.36.13.N(9): Please format this section of the contingency plan appropriately. The list begins with "j" when "a-i" are not provided. Please modify. Also, pursuant to Subparagraph (b) of 19.15.36.13.N(9) NMAC the "contingency plan for emergencies shall describe how the emergency coordinator or the coordinator's designee, whenever there is an imminent or actual emergency situation, will immediately notify appropriate state and local agencies with designated response roles if their assistance is needed." The review of the plan revealed that there are no phone numbers provided for OCD or the "other agencies" nor are any of the "other agencies" identified. It is difficult to determine who or what parties would be contacted and if contacting such parties would be appropriate. Please provide a contact list for the plan that identifies the parties and provide current phone numbers.

19.15.36.13.N(10): Pursuant to Paragraph (10) of 19.15.36.13.N NMAC, the "contingency plan for emergencies shall describe how the emergency coordinator, whenever there is a release, fire or explosion, will immediately identify the character, exact source, amount and extent of released materials (the emergency coordinator may do this by observation or review of surface waste management facility records or manifests, and, if necessary, by chemical analysis) and describe how the emergency coordinator will concurrently assess possible hazards to fresh water, public health, safety or the environment that may result from the release, fire or explosion (this assessment shall consider both the direct and indirect hazard of the release, fire or explosion)." The response provided to this provision states that Envirotech "will" do the required actions but fail to "describe how" the required actions will be performed and accomplished. The provision requires the operator to "describe how" the required actions will be performed and accomplished. Please modify the response to demonstrate compliance to the provision.

19.15.36.13.N(11): The response provided for this provisions states that the blending facility will be monitored for "gas generation using air quality monitors." Please identify the type of "gas" that will be monitored and include and identify the capabilities of the "air quality monitors" on the emergency equipment list of 19.15.36.13.N(4) since it is proposed for use during an emergency action within the contingency plan. Also, facility drawings provided in the permit application demonstrate that the proposed location has several natural gas transportation pipelines that cross the proposed facility. Please explain if and how these pipelines will be inspected in response to a fire, explosion or release..

19.15.36.13.N(12): Pursuant to Paragraph (12) of 19.15.36.13.N NMAC, the "contingency plan for emergencies shall describe how the emergency coordinator, immediately after an emergency, will provide for treating, storing or disposing of recovered oil field waste, or other material that results from a release, fire or explosion at a surface waste management facility." The response fails to identify how "material deemed hazardous" will be stored awaiting off-site disposal. As for non-hazardous materials, proposing to allow such material to "remain at the landfarm for remediation" may not be appropriate and contrary to the type of permit being sought. This application is for a landfarm and not for a landfill. Pursuant to Paragraph (3) of 19.15.36.7.A NMAC, a landfarm "means a discrete area of land designated and used for the remediation of

petroleum hydrocarbon-contaminated soils and drill cuttings." The use and type of waste that can be accepted at a landfarm is limited by its' definition and should be identified within the permit application and considered when addressing waste acceptance. Please modify the response appropriately.

19.15.36.13.N(13): Pursuant to Paragraph (13) of 19.15.36.13.N NMAC, the "contingency plan for emergencies shall describe how the emergency coordinator will ensure that no oil field waste, which may be incompatible with the released material, is treated, stored or disposed of until cleanup procedures are complete." Pursuant to Subsection N of 19.15.36.13 NMAC, the "contingency plan shall be designed to minimize hazards to fresh water, public health, safety or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water." The considerations for a release is not limited to the nature and type of oil field waste accepted, as identified by the requirements above. The response provided for this provision is limited to that consideration and fails to describe how such incompatible material would be "treated, stored, or disposed" of properly. Please modify the response to demonstrate compliance with the provision.

Attachment 10, Plan to Control Water Run-On and Run-Off:

19.15.36.13.M(1): Pursuant to Paragraph (1) of 19.15.36.13.M NMAC, "the run-on and run-off control system shall prevent flow onto the surface waste management facility's active portion during the peak discharge from a 25-year storm." The response provided in Attachment 10 describes the run-on and run-off control system as "four (4) foot berms around each landfarm cell" and a four foot berm "constructed around the entire Landfarm #4 perimeter." No design drawings or calculations were provided in the application to demonstrate that the proposed features are capable of controlling and containing a 24 hour 25 year storm event and remain in compliance with 19.15.36.15 NMAC, Specific Requirements Applicable For Landfarms. Pursuant to Paragraph (8) of 19.15.36.15.C NMAC, "Pooling of liquids in the landfarm is prohibited. The operator shall remove freestanding water within 24 hours." The current proposal could create "pooling." A separate feature should be incorporated into the landfarm cell design to capture run-off in an area that would not be in direct contact of any contaminated material. The feature should be designed to hold the calculated volume generated during a 24 hour 25 year storm event. A similar feature should be designed for each of the separate tracts within the facility boundary. Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the application shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and *detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.*" The "*detailed construction/installation diagrams*" required of this provision were not provided in the application. Such diagrams would include the run-on and run-off control system. Please demonstrate compliance with this provision.

19.15.36.13.M(2): Pursuant to Paragraph (2) of 19.15.36.13.M NMAC, "run-off from the surface waste management facility's active portion shall not be allowed to discharge a pollutant to the waters of the state or United States that violates state water quality standards." Please illustrate on one the facility maps or on a new map where the run-off control feature will be constructed and

installed within the facility boundary to ensure compliance to this provision. A facility inspection sheet provided in Attachment 13 identifies a watercourse within 130 feet of the southern boundary of the proposed facility. Also, please specifically identify which section of Envirotech's Hydro-Geologic Report clearly demonstrates and "indicates that water of the state or United States would not be affected during the peak discharge from a twenty-five (25)-year storm," as indicated in the response for this provision.

Attachment 11, Best Management Practice Plan:

The first paragraph provided for this section states that the "purpose of this plan is to ensure conservation of natural areas, to prevent or minimize contamination due to storm water run-on and run-off, to provide design standards for structural and treatment control, and to provide ongoing maintenance." None of the following paragraphs address "conservation of natural areas." Attachment 10, *Plan to Control Water Run-On and Run-Off*, and compliance to 19.15.36.13.M NMAC is where prevention and minimization of "contamination due to storm water run-on and run-off" should be appropriately addressed. Also, the "design standards" for the berms have not been properly demonstrated for a 24 hour, 25 year storm event nor have any design drawings been located in the permit application.

The second paragraph provided for this section states that the "first usable aquifer is the Ojo Amarillo at approximately 1,250 feet below the ground surface." The information provided in the response does not coincide with the assessment of the proposed depth to ground water provided in Attachment 13, Hydro-Geologic Report. The Hydro-Geologic Report identifies a cathodic well within 380 feet of the proposed site indicating that ground water was encountered at 275 feet below the ground surface. Please modify the response to coincide the information and supporting documentation of the Hydro-Geologic Report in Attachment 13.

The fourth paragraph provided for this section discusses the construction of "four (4) foot berms around each landfarm cell to prevent rainwater run-on and run-off." No design drawings or calculations were provided in the application to demonstrate that the proposed features are capable of controlling and containing a 24 hour 25 year storm event and remain in compliance with 19.15.36.15 NMAC, Specific Requirements Applicable For Landfarms. Pursuant to Paragraph (8) of 19.15.36.15.C NMAC, "Pooling of liquids in the landfarm is prohibited. The operator shall remove freestanding water within 24 hours." The current proposal could create "pooling." A separate feature should be incorporated into the landfarm cell design to capture run-off in an area that would not be in direct contact of any contaminated material. The feature should be designed to hold the calculated volume generated during a 24 hour 25 year storm event. A similar feature should be designed for each of the separate tracts within the facility boundary. Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the application shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and *detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.*" The "*detailed construction/installation diagrams*" required of this provision were not provided in the application. Such diagrams would include the run-on and run-off control system. Please demonstrate compliance with this provision in Attachment 10. Also, pursuant to Paragraph (2) of 19.15.36.13.M NMAC, "run-off from the surface waste management

facility's active portion shall not be allowed to discharge a pollutant to the waters of the state or United States that violates state water quality standards." Please illustrate on one the facility maps or on a new map where the run-off control feature will be constructed and installed within the facility boundary to ensure compliance to this provision. A facility inspection sheet provided in Attachment 13 identifies a watercourse within 130 feet of the southern boundary of the proposed facility. Also, please specifically identify which section of Envirotech's Hydro-Geologic Report clearly demonstrates and "indicates that water of the state or United States would not be affected during the peak discharge from a twenty-five (25)-year storm," as indicated in the response for this provision. Please demonstrate compliance with this provision in Attachment 10.

The fifth paragraph provided for this section states that "in the event of water accumulation in the blending facility for a period of 24 hours, the water would be blended with clean soil, and placed into a designated landfarm cell." This application is for a landfarm and not for a landfill. Pursuant to Paragraph (3) of 19.15.36.7.A NMAC, a landfarm "means a discrete area of land designated and used for the remediation of petroleum hydrocarbon-contaminated soils and drill cuttings." The use and type of waste that can be accepted at a landfarm is limited by its' definition and should be identified within the permit application and considered when addressing waste acceptance. Also, pursuant to Subsection A of 19.15.36.15 NMAC, additional testing such as paint filter and chloride testing must be demonstrated prior to placement of any waste material into a landfarm cell. Based upon this proposal, the stabilized water waste material may not satisfy the waste acceptance criteria for consideration for remediation. Disposal is not allowed at landfarms, only a landfill. Please reassess this proposal and make the appropriate modifications.

Attachment 12, Demonstration of Compliance with Siting Requirements of Subsections A and B of 19.15.36.13 NMAC:

19.15.36.13.B(1): A facility inspection sheet provided in Attachment 13 identifies a watercourse within 130 feet of the southern boundary of the proposed facility. This contradicts the assessment provided in the response. Please modify the response to reflect the finds presented in Attachment 13.

Attachment 13, Geological/Hydrological Data:

GEOMAT Laboratory Report: Pursuant to Subparagraph (g) of 19.15.36.8.C(15) NMAC, the application shall include "geological/hydrological data including porosity, permeability, conductivity, compaction ratios and swelling characteristics for the sediments on which the contaminated soils will be placed." The porosity and permeability assessments were not determined based upon site-specific conditions at the proposed location. The information provided in Attachment 13, the GEOMAT Laboratory Report, was not based upon testing of on-site soils. The information provided for porosity and permeability is from publications that do not provide assessments for this specific proposed location. Also, there was no data or results provided for conductivity. Please provide the required site-specific analytical data.

Envirotech Inc. Landfarm Hydro-Geologic Report:

Water Wells: The comparison provided for this section is a comparison of wells documented in the New Mexico Office of the State Engineer's New Mexico Water Rights Reporting System database and the "Landfarm #4 average elevation." A comment provided in this section states "the average elevation of Envirotech's Landfarm #4 was determined by averaging the elevation data collected from five (5) points at the Landfarm. See Figure 1, Topographic Map – Elevation Data Locations for data collections points." Pursuant to Paragraph (2) of 19.15.36.13.A NMAC, "No landfarm that accepts soil or drill cuttings with a chloride concentration that exceeds 500 mg/kg shall be located *where ground water is less than 100 feet below the lowest elevation at which the operator will place oil field waste*. See Subsection A of 19.15.36.15 NMAC for oil field waste acceptance criteria." Pursuant to Paragraph (3) of 19.15.36.13.A NMAC, "No landfarm that accepts soil or drill cuttings with a chloride concentration that is 500 mg/kg or less shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste." Pursuant to Paragraph (5) of 19.15.36.13.A NMAC, "No other surface waste management facility shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste." Based upon the plain language of 19.15.36 NMAC when assessing the siting criteria in regards to depth of ground water, the comparison is required to be from "the lowest elevation at which the operator will place oil field waste" and not from an average elevation as performed within this permit application. Also, the search of the New Mexico Office of the State Engineer's New Mexico Water Rights Reporting System database was not complete. Three additional wells were identified in a comprehensive 10 kilometer radius search performed by OCD. The three additional wells are SJ 01206, SJ 23077, and SJ 03918 POD1 (based upon available records is also listed as SJ 03923 POD1). There are additional concerns about elevations identified on Figure 1, Topographic Map – Elevation Data Locations for data collections points. The two most northern elevation data collection points on Figure 1 illustrate a 486 foot difference in elevation within a 4000 foot separation from elevation data collection point 6209 feet to elevation data collection point 6695 feet. This drastic change in elevation is not confirmed by the survey plat provided in Attachment 3 of the permit application. Also, the two most southern elevation data collection points on Figure 1 illustrate a 304 foot difference in elevation within a 2000 foot separation from elevation data collection point 6339 feet to elevation data collection point 6643 feet. This drastic change in elevation is not confirmed by the survey plat provided in Attachment 3 of the permit application. Please explain and clarify why different elevations are assigned to the same locations. Is the survey plat not accurate? Should the measured elevation of 6209 feet be used for the comparison to depth to ground water since it is the "the lowest elevation at which the operator will place oil field waste"? Please clarify and justify this assessment.

Cathodic Wells: Pursuant to Paragraph (2) of 19.15.36.13.A NMAC, "No landfarm that accepts soil or drill cuttings with a chloride concentration that exceeds 500 mg/kg shall be located *where ground water is less than 100 feet below the lowest elevation at which the operator will place oil field waste*. See Subsection A of 19.15.36.15 NMAC for oil field waste acceptance criteria." Pursuant to Paragraph (3) of 19.15.36.13.A NMAC, "No landfarm that accepts soil or drill cuttings with a chloride concentration that is 500 mg/kg or less shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field

waste." Pursuant to Paragraph (5) of 19.15.36.13.A NMAC, "No other surface waste management facility shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste." Based upon the plain language of 19.15.36 NMAC when assessing the siting criteria in regards to depth of ground water, the comparison is required to be from "the lowest elevation at which the operator will place oil field waste" and not from an average elevation as performed within this permit application. Please properly complete the comparison to determine the suspected separation to ground water. An appropriate comparison would be the ground water elevation of the cathodic well at Huerfano Unit #68 (which is located within 380 feet of the proposed facility boundary) and the "lowest elevation at which the operator will place oil field waste" within the proposed facility boundary. The result of this comparison should be utilized within the permit application when there is any discussion regarding the depth of ground water beneath the proposed facility.

Groundwater Assessment: Please provide a copy of the OCD approved boring plan and reference its location within the permit application or this section. Also, OCD personnel were present during the site assessment investigation as observers only. OCD is and was not responsible for overseeing the drilling activities or recording the lithology. The responsibility of overseeing the drilling activities and/or recording the lithology is that of the applicant, in this case Envirotech. The soil boring lithology logs were generated from field notes of Envirotech personnel, not OCD. Please clarify these points within the current language. Also, OCD could not find a "Figure 4, Topographic Map – Soil Borings," within the permit application. Please provide and reference its location within the permit application. The last sentence of this section states "These findings give definitive proof that depth to groundwater is greater than 100 feet below the lowest elevation of Envirotech's landfarm." The statement in the last sentence is confusing since none of the "findings" have been discussed prior to this statement. Also, all of the pervious assessments prior to this statement were comparisons to the "Landfarm #4 average elevation," instead of the required "lowest elevation at which the operator will place oil field waste." Please provide a discussion of the findings and prepare appropriate comparisons. Also, please clearly state the determined depth to ground water beneath the proposed facility. "Greater than 100 feet" is not a definitive determined depth to ground water beneath the proposed facility.

Surface Flow: Pursuant to Paragraph (4) of 19.15.2.7.W NMAC, a watercourse "means a river, creek, arroyo, canyon, draw or wash or other channel having definite banks and bed with visible evidence of the occasional flow of water." Based upon the August 21, 2009 Landfarm Facility Inspection Sheet provided in Attachment 13, a watercourse was identified and measured to be within 130 feet of the southern boundary of the proposed facility. This contradicts the assessment provided in the response for this section. Also, as illustrated on Figure 3 provided in this attachment, the distance measured from the south-east corner of the proposed facility boundary to the illustrated wash is $1/16^{th}$ of an inch. Based upon the scale provided on Figure 3, one inch equals 2083.3 feet. Therefore, the measured $1/16^{th}$ of an inch equals 130.20 feet which is also the distance measured and documented on the August 21, 2009 Landfarm Facility Inspection Sheet provided in Attachment 13. Please modify the response to reflect the findings presented in Attachment 13. Pursuant to Paragraph (1) of 19.15.36.13.B NMAC, "No surface waste management facility shall be located within 200 feet of a watercourse, lakebed, sinkhole or playa lake." The comparison and assessment of watercourses to "first and/or second order tributary of a

named wash" is not applicable to this permit application. Neither the applicable definitions nor regulatory language within 19.15.36 NMAC make such distinctions. Also, several of the comparisons discussed compare elevations to the "Landfarm #4 average elevation," which is not an applicable comparison. Please provide an assessment based upon appropriate comparisons.

Soil Description: Please include a discussion of the analytical results from the testing of on-site soils for this section. Also, please provide a reference to the supporting documentation for the information that is currently provided.

Figure 1, Elevation Data Locations: Please explain why the measured elevations illustrated on this map do not coincide with the elevation illustrated on the survey plat provided in Attachment 3 of the permit application. Please explain and clarify why different elevations are assigned to the same locations. Is the survey plat not accurate?

Figure 2, Hydro-geologic Map Water Wells: The text and information provided on this map is too small and is not legible. Also, the topographical features are not present on the map to support the "regional" surface run-off flow direction. The landfarm elevation presented on the map is inappropriate since is an "average elevation" and there are conflicts between the measured data on Figure 1 and the survey plat provided in Attachment 3. Please provide a legible map or maps that support the conclusions based on the map and illustrate the information provided on the current map.

Figure 3, Hydro-geologic Map Cathodic Wells: This map tries to illustrate too much information and is inappropriate for the illustration of certain information. This map is not appropriate for the illustration of the soil description information, especially since the transitions between soil types and classifications cannot be properly identified. Also, the topographical features presented on the map to only support the "regional" surface run-off flow direction. An assessment of the site-specific surface water flow conditions has not been completed to determine appropriate locations for the construction and installation of run-off and run-on control features. The landfarm elevation presented on the map is inappropriate since is an "average elevation" and there are conflicts between the measured data on Figure 1 and the survey plat provided in Attachment 3. Also, as illustrated on Figure 3, the distance measured from the south-east corner of the proposed facility boundary to the illustrated wash is $1/16^{th}$ of an inch. Based upon the scale provided on Figure 3, one inch equals 2083.3 feet. Therefore, the measured $1/16^{th}$ of an inch equals 130.20 feet which is also the distance measured and documented on the August 21, 2009 Landfarm Facility Inspection Sheet provided in Attachment 13. Figure 3 currently states that this distance is 390 feet. Please clarify and provide an appropriate map or maps to properly illustrate the information.

Figure 4: A Figure 4, Topographic Map – Soil Borings was referenced within the Groundwater Assessment section of Attachment 13. This map was not provided with this permit application.

Drilling Narrative: This section fails to mention or discuss the OCD approved boring plan for the proposed landfarm site. Please provide a copy OCD approved boring plan and the amendment and discuss the differences between the activities that occurred during the site assessment investigative work and the work approved within the boring plan.

Please provide Envirotech's field notes and photo documentation of the 10 foot cores from the drilling activities that occurred on September 2, 2008. I was present to observe the site assessment investigative work on September 2nd and 3rd of 2008. My field notes indicate that the first 50 feet below the ground surface (bgs) was drilled using hollow stem auger and split spoon samples were collected every 5 feet. My field notes indicate that the drill rig was switched to air rotary and from 50 feet bgs to 101 feet bgs was drilled using air rotary only. Photo documentation from my field trip demonstrates that the drill rig on-site was not capable of drilling air and coring at the same time. No coring occurred from 50 feet bgs to 101 feet bgs on September 2, 2008 for soil boring #1. Also, the first 20 feet of soil boring #2 was drilled using hollow stem auger and split spoon samples were collected every 5 feet. Please properly document the events that occurred during the site assessment investigative work at the proposed surface waste management facility location.

Please provide Envirotech's field notes and photo documentation of the 10 foot cores from the drilling activities that occurred on March 9th and 10th of 2009. Based upon the narrative of the events that took place on the March 10, 2009, the last 20 feet were not cored and the soil boring was not left open for 72 hours to determine if any ground water would enter the boring. Please clarify or explain why these activities were not completed on the second soil boring.

Soil Boring Lithology Logs: Please provide the surface elevation for each soil boring location.

SB-2: The lithology matrix column, between 92 feet BGS and 100 feet bgs, illustrates changes in the lithology that are not described. Please update the lithology log and provide copies of the field notes to support the lithology logs.

San Juan County Parcel Map: Please illustrate the facility boundary of the proposed surface waste management facility on the map. Also, clearly define and identify the ownership of the illustrated parcels. The map does not clearly define where certain ownership begins and ends.

Envirotech, Inc. Landfarm Facility Inspection Sheet (dated August 21, 2009): The August 21, 2009 Landfarm Facility Inspection Sheet indicates that a watercourse was identified and measured to be within 130 feet of the southern boundary of the proposed facility. This observation is not mentioned in the within the permit application. Also pursuant to Paragraph (2) of 19.15.36.13.B NMAC, "No surface waste management facility shall be located within an existing wellhead protection area..." Pursuant to Paragraph (8) of 19.15.2.7.W NMAC, a wellhead protection area "means the area within 200 horizontal feet of a private, domestic fresh water well or spring used by less than five households for domestic or stock watering purposes or within 1000 horizontal feet of any other fresh water well or spring. Wellhead protection areas do not include areas around water wells drilled after an existing oil or gas waste storage, treatment or disposal site was established." The August 21, 2009 Landfarm Facility Inspection Sheet indicates that the assessment of the nearest well was performed within 500 feet of the proposed facility. Also, please explain how the depth to ground water was determined during a visual inspection when no wells are documented on or near the proposed facility.

envirotech

RECEIV
2009 NOV 30 PM

November 23, 2009

Project No. 1-02-60002

Mr. Brad Jones
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Phone: (505) 476-3487

RE: APPLICATION FOR SURFACE WASTE MANAGEMENT FACILITY FOR LANDFARM #4, OWNED AND OPERATED BY ENVIROTECH, INC.

Dear Mr. Jones,

Please find enclosed, Form C-137, ***Application for Surface Waste Management Facility***, for Landfarm #4, owned and operated by Envirotech, Inc., located in Sections, 6, 7, and 8, Township 26N, Range 10W, San Juan County, New Mexico.

Please note on the ***Vicinity Map***, included in the application, that the "Great Northern Road" crosses the proposed Landfarm #4 area. This is an Ancestral Puebloan road that connects the Chaco and Salmon Ruins. This road was surveyed and marked by the San Juan County Museum Association and by Mr. Jim Copeland and Ms. Peggy Gardy, Bureau of Land Management (BLM) archeologists. We have designated a 400 foot buffer area to protect the road from any disturbance associated with landfarm operations. This buffer area consists of 200 feet on each side of the road. The buffer area will be bermed and marked to prevent any disturbance.

If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully Submitted,
ENVIROTECH, INC.

Morris D. Young

Morris D. Young, President

Enclosure: Form C-137, Application for Surface Waste Management Facility

Cc: Project File No. 1-02-60002

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

State of New Mexico
Energy Minerals and Natural Resources

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

For State Use Only

Form C-137
Revised March 1, 2007

Submit 1 Copy to Santa Fe Office

APPLICATION FOR SURFACE WASTE MANAGEMENT FACILITY

A meeting should be scheduled with the Division's Santa Fe office Environmental Bureau prior to pursuing an application for a surface waste management facility in order to determine if the proposed location is capable of satisfying the siting requirements of Subsections A and B of 19.15.36.13 NMAC for consideration of an application submittal.

1 Application: ☒ New ☐ Modification ☐ Renewal

2. Type: ☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfill ☒ Landfarm ☐ Other

3. Facility Status: ☒ Commercial ☐ Centralized

4. Operator: Envirotech, Inc.

Address: 5796 U.S. Hwy 64, Farmington, NM 87401

Contact Person: Morris D. Young Phone: (505) 632-0615

5. Location: _____/4 _____/4 Section 6, 7, 8 Township 26N Range 10W

6. Is this an existing facility? ☐ Yes ☒ No If yes, provide permit number _____

7. Attach the names and addresses of the applicant and principal officers and owners of 25 percent or more of the applicant. Specify the office held by each officer and identify the individual(s) primary responsible for overseeing management of the facility.

Name and address of applicant:
Mr. Morris D. Young, Owner
Envirotech, Inc.
5796 U.S. Hwy 64
Farmington, NM 87401

Name and address of facility manager:
Mr. Morris D. Young, Owner
Envirotech, Inc.
5796 U.S. Hwy 64
Farmington, NM 87401

No other parties own 25% or more of the applicant.

8. Attach a plat and topographic map showing the surface waste management facility's location in relation to governmental surveys (quarter-quarter section, township and range); highways or roads giving access to the surface waste management facility site; watercourses; fresh water sources, including wells and springs; and inhabited buildings within one mile of the site's perimeter.

See Attachment #1, Vicinity Map

9. Attach the names and addresses of the surface owners of the real property on which the surface waste management facility is sited and surface owners of the real property within one mile of the site's perimeter.

See Attachment #2, Surface Owner Information and San Juan County Assessor's Office Maps

10. Attach a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.

See Attachment #3, Facility Diagram and Description

11. Attach engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments.

See Attachment #4, Stabilization Facility Design

12. Attach a plan for management of approved oil field wastes that complies with the applicable requirements contained in 19.15.36.13, 19.15.36.14, 19.15.36.15 and 19.15.36.17 NMAC.

See Attachment #5, Plan for Management of Approved Oil Field Wastes

13. Attach an inspection and maintenance plan that complies with the requirements contained in Subsection L of 19.15.36.13 NMAC.

See Attachment #6, Inspection and Maintenance Plan

14. Attach a hydrogen sulfide prevention and contingency plan that complies with those provisions of 19.15.3.118 NMAC that apply to surface waste management facilities.

See Attachment #7, Hydrogen Sulfide Prevention and Contingency Plan

15. Attach a closure and post closure plan, including a responsible third party contractor's cost estimate, sufficient to close the surface waste management facility in a manner that will protect fresh water, public health, safety and the environment (the closure and post closure plan shall comply with the requirements contained in Subsection D of 19.15.36.18 NMAC).

See Attachment #8, Closure and Post Closure Plan

16 Attach a contingency plan that complies with the requirements of Subsection N of 19.15.36.13 NMAC and with NMSA 1978, Sections 12-12-1 through 12-12-30, as amended (the Emergency Management Act).

See Attachment #9, Emergency Contingency Plan

17. Attach a plan to control run-on water onto the site and run-off water from the site that complies with the requirements of Subsection M of 19.15.36.13 NMAC.

See Attachment #10, Plan to Control Water Run-On and Run-Off

18. In the case of an application to permit a new or expanded landfill, attach a leachate management plan that describes the anticipated amount of leachate that will be generated and the leachate's handling, storage, treatment and disposal, including final post closure options.

Not Applicable (this is a landfarm, not a landfill)

19. In the case of an application to permit a new or expanded landfill, attach a gas safety management plan that complies with the requirements of Subsection O of 19.15.36.13 NMAC

Not Applicable (this is a landfarm, not a landfill)

20. Attach a best management practice plan to ensure protection of fresh water, public health, safety and the environment.

See Attachment 11, Best Management Practice Plan

21. Attach a demonstration of compliance with the siting requirements of Subsections A and B of 19.15.36.13 NMAC.

See Attachment 12, Demonstration of Compliance with Siting Requirements of Subsections A and B of 19.15.36.13 NMAC

22. Attach geological/hydrological data including:

(a) a map showing names and location of streams, springs or other watercourses, and water wells within one mile of the site; **See Attachment 13, Geological/ Hydro-Geological Data,**.

(b) laboratory analyses, performed by an independent commercial laboratory, for major cations and anions; benzene, toluene, ethyl benzene and xylenes (BTEX); RCRA metals; and total dissolved solids (TDS) of ground water samples of the shallowest fresh water aquifer beneath the proposed site; **Not applicable; The first aquifer is the Ojo Amarillo formation located approximately 1,250 feet below ground surface with total dissolved solids (TDS) of approximately 650 milligrams per liter. TDS and depth information are based on San Juan Basin, New Mexico, Hydrological Report No. 6, New Mexico Institute of Mining and Technology, 1983.**

(c) depth to, formation name, type and thickness of the shallowest fresh water aquifer; **See (b) above.**

(d) soil types beneath the proposed surface waste management facility, including a lithologic description of soil and rock members from ground surface down to the top of the shallowest fresh water aquifer; **See Attachment 13, Geological/ Hydro-Geological Data, Soil Boring Lithology Logs.**

(e) geologic cross-sections; **See Attachment 13, Geological/ Hydro-Geological Data, Soil Boring Lithology Logs.**

(f) potentiometric maps for the shallowest fresh water aquifer; **Not Applicable** and

(g) porosity, permeability, conductivity, compaction ratios and swelling characteristics for the sediments on which the contaminated soils will be placed; **See Attachment 13, Geological/Hydro-Geological Data, GEOMAT Laboratory Report.**

See Attachment 13, Geological/Hydro-Geological Data

23. In the case of an existing surface waste management facility applying for a minor modification, describe the proposed change and identify information that has changed from the last C-137 filing.

Not Applicable

24. The division may require additional information to demonstrate that the surface waste management facility's operation will not adversely impact fresh water, public health, safety or the environment and that the surface waste management facility will comply with division rules and orders

Additional information will be provided to the division upon request.

25. CERTIFICATION

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

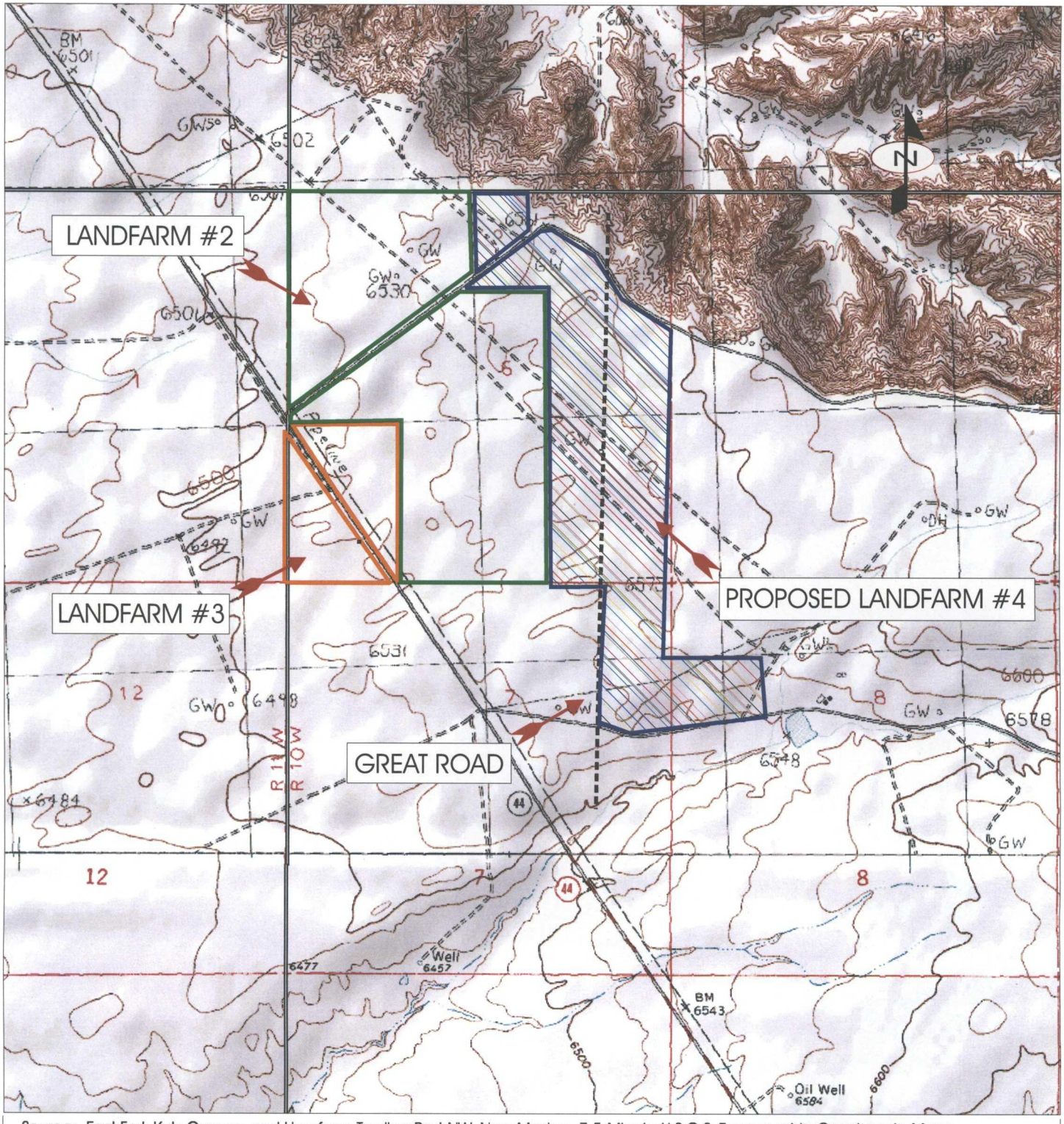
Name: Morris D. Young Title: President

Signature: Morris D. Young Date: 11-23-09

E-mail Address: myoung@envirotech-inc.com

ATTACHMENT 1:

Vicinity Map



Source: East Fork Kutz Canyon and Huerfano Trading Post NW, New Mexico, 7.5-Minute U.S.G.S. Topographic Quadrangle Maps
Scale: 1:24,000 1" = 2000'

Envirotech, Inc. Landfarm #4 San Juan County, New Mexico	ENVIROTECH INC. ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 FARMINGTON, NEW MEXICO 87401 PHONE (505) 632-0615	Vicinity Map	
		Attachment 1	
Date Drawn: 10/07/09		DRAWN BY: Sherry Auckland	PROJECT MANAGER: Kyle P. Kerr

ATTACHMENT 2:

Surface Owner Information and San Juan County Assessor's Office Map

Attachment #2: Surface Owner Information

The surface owner of the real property is:

Morris D. Young
Envirotech, Inc.
5796 U.S. Highway 64
Farmington, New Mexico 87401

Owners of real property located within one mile of the site's perimeter are:

Young Engineering
5796 U.S. Highway 64
Farmington, New Mexico 87401

U.S. Bureau of Land Management
1235 La Plata Highway, Suite A
Farmington, New Mexico 87401

Larry Groen Trust
c/o Larry Groen
29 CR 5267
Bloomfield, New Mexico 87413

Entrust Administration Inc. Et Al
c/o Michael Schwebach
30 Road 2337
Aztec, New Mexico 87410

David C. Sullivan Trustees
1003 Road 333
Ignacio, Colorado 81137-9608

Wallace C. Sullivan
P.O. Box 316
Keene, Texas 76059

Gary and Jane Felix
1700 N. Kirby
Bloomfield, New Mexico 87413

Dorothy Sullivan
2000 Ramar, Space 430
Bullhead City, Arizona 86442-8372

Navajo Nation
Division of Natural Resources
Navajo Land Department
P.O. Box 2249
Window Rock, Arizona 86515

New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

See Attached San Juan County Assessor's Office Maps for Real Property Locations.

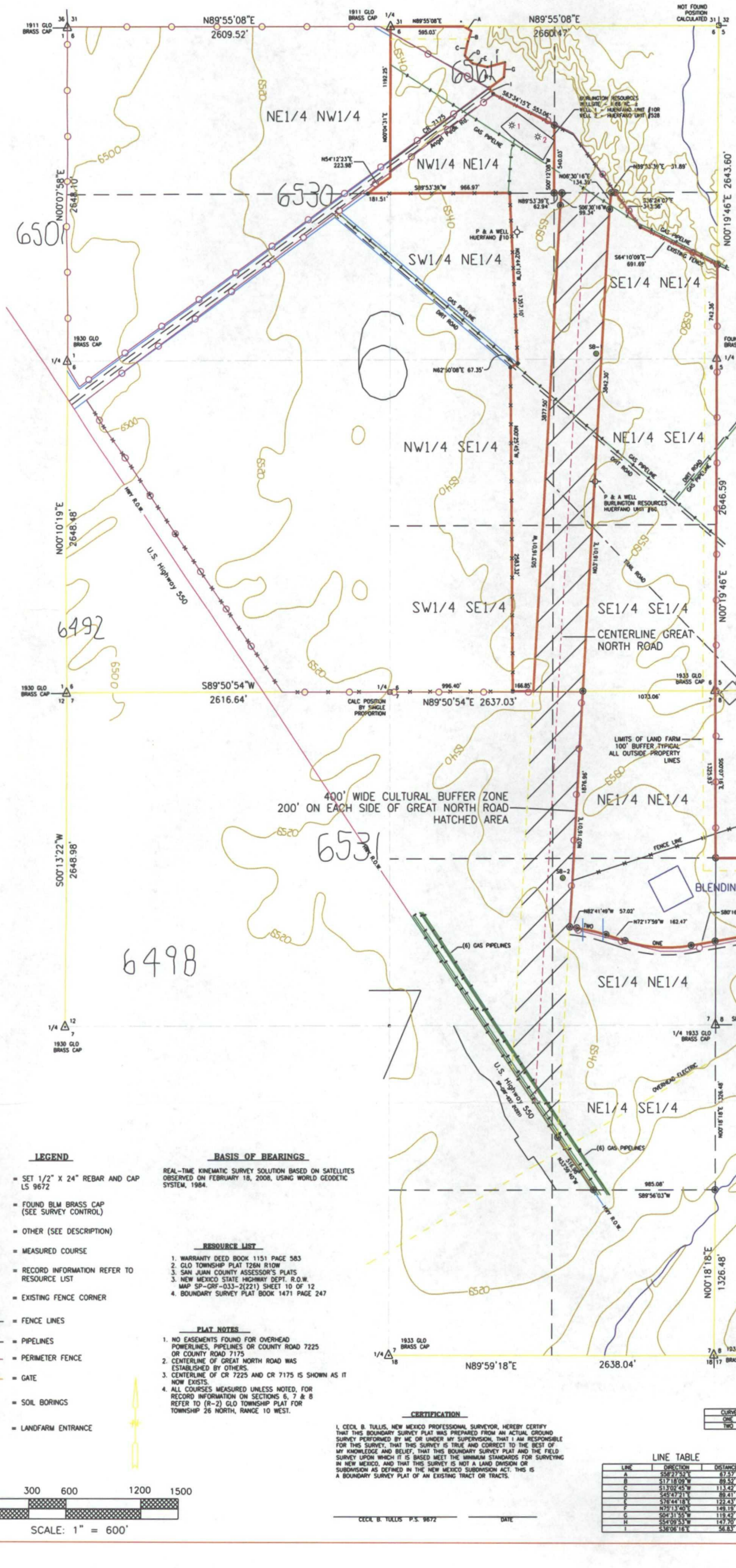
ATTACHMENT 3:

Facility Diagram and Description

Attachment #3

Envirotech Inc.

LANDFARM #4
LOCATED IN SECTIONS 6, 7 & 8 IN T26N R10W
N.M.P.M., SAN JUAN COUNTY, NEW MEXICO



TRACT ONE - WEST OF GREAT NORTH ROAD FROM EXISTING LAND FARM

57.75 ACRES MORE OR LESS LOCATED IN THE NORTHEAST ONE-QUARTER OF THE NORTHWEST ONE-QUARTER (NE1/4 NW1/4) AND THE NORTHWEST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER (NW1/4 NE1/4) AND THE SOUTHWEST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER (SW1/4 NE1/4) AND THE SOUTHEAST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER (SE1/4 NE1/4) AND THE NORTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER (NW1/4 SE1/4) AND THE SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER (SW1/4 SE1/4) OF SECTION SIX (6) IN TOWNSHIP TWENTY-SIX (26) OF RANGE TEN (10) WEST, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO, BEING DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT ON THE SOUTH LINE OF SAID SECTION 6 THAT IS 996.40 FEET N 89°50'54" E FROM THE SOUTH ONE-QUARTER CORNER OF SAID SECTION 6;
THENCE: N 0°25'45" W 2583.32 FEET ALONG AN EXISTING FENCE TO A FENCE CORNER;
THENCE: N 62°50'08" E 67.35 FEET TO A FENCE CORNER;
THENCE: N 2°44'10" W 1357.10 FEET ALONG AN EXISTING FENCE TO A POINT ON THE SOUTH LINE OF SAID NW1/4 NE1/4;
THENCE: S 89°53'39" W 966.97 FEET ALONG THE SOUTH LINE OF AND TO THE SOUTHWEST CORNER OF SAID NW1/4 NE1/4;
THENCE: S 89°53'39" W 181.51 FEET ALONG THE SOUTH LINE OF SAID NE1/4 NW1/4;
THENCE: N 54°12'23" E 223.98 FEET TO A POINT ON THE WEST LINE OF SAID NW1/4 NE1/4;
THENCE: N 0°04'31" E 1192.25 TO THE NORTH 1/4 CORNER OF SAID SECTION 6;
THENCE: N 89°55'08" E 595.03 FEET ALONG THE NORTH LINE OF SAID SECTION 6;
THENCE: S 58°27'52" E 67.57 FEET;
THENCE: S 17°18'09" W 89.52 FEET;
THENCE: S 13°02'45" W 113.42 FEET;
THENCE: S 45°47'21" E 89.41 FEET;
THENCE: S 76°44'18" E 122.43 FEET;
THENCE: N 75°13'40" E 149.19 FEET;
THENCE: S 4°31'55" W 119.42 FEET;
THENCE: S 54°09'53" W 147.70 FEET;
THENCE: S 36°06'16" E 56.83 FEET ALONG AN EXISTING FENCE;
THENCE: S 63°34'15" E 553.06 FEET ALONG AN EXISTING FENCE TO A POINT ON THE EAST LINE OF SAID NW1/4 NE1/4;
THENCE: S 0°12'08" W 540.03 ALONG THE EAST LINE OF AND TO THE SOUTHEAST CORNER OF SAID NW1/4 NE1/4;
THENCE: N 89°53'39" E 62.94 FEET ALONG THE NORTH LINE OF SAID SE1/4 NE1/4;
THENCE: S 6°30'16" W 99.34 FEET;
THENCE: S 3°16'01" W 3877.50 FEET TO A POINT ON THE SOUTH LINE OF SAID SECTION 6;
THENCE: S 89°50'54" W 166.85 FEET ALONG THE SOUTH LINE OF SAID SECTION 6 TO THE POINT OF BEGINNING.

TRACT TWO - EAST OF GREAT NORTH ROAD

149.86 ACRES MORE OR LESS BEING THAT PART OF THE SOUTHEAST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER (SE1/4 NE1/4) AND THE NORTHEAST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER (NE1/4 NE1/4) OF SECTION SEVEN (7) IN TOWNSHIP TWENTY-SIX (26) NORTH OF RANGE TEN (10) WEST, N.M.P.M. AND THAT PART OF THE SOUTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER (SE1/4 SE1/4) AND THE NORTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER (NE1/4 SE1/4) AND THE SOUTHEAST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER (SE1/4 NE1/4) OF SECTION SIX (6) IN TOWNSHIP TWENTY-SIX (26) NORTH OF RANGE TEN (10) WEST, N.M.P.M. AND THE SOUTHWEST ONE-QUARTER OF THE NORTHWEST ONE-QUARTER (SW1/4 NW1/4) OF SECTION 8 IN TOWNSHIP TWENTY-SIX (26) NORTH OF RANGE TEN (10) WEST, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 6;
THENCE: S 0°07'16" E 1325.93 FEET ALONG THE EAST LINE OF SAID SECTION 7;
THENCE: N 89°52'49" E 1324.28 FEET ALONG THE NORTH LINE OF THE SW1/4 NW1/4 OF SAID SECTION 8;
THENCE: S 0°04'46" W 436.10 FEET ALONG THE EAST LINE OF THE SW1/4 NW1/4 OF SAID SECTION 8 TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF COUNTY ROAD 7225;
THENCE: S 80°08'22" W 1347.21 FEET ALONG SAID NORTH RIGHT-OF-WAY LINE;
THENCE: S 80°16'26" W 197.74 FEET ALONG SAID RIGHT-OF-WAY;
THENCE: 541.95 FEET ALONG SAID RIGHT-OF-WAY LINE AROUND A CURVE TO THE RIGHT HAVING A RADIUS OF 1132.18 FEET WITH A CENTRAL ANGLE OF 27°25'34" AND A CHORD BEARING AND DISTANCE OF N 86°00'46" W 536.79 FEET;
THENCE: N 72°17'59" W 162.47 FEET ALONG SAID RIGHT-OF-WAY;
THENCE: 243.57 FEET ALONG SAID RIGHT-OF-WAY LINE AROUND A CURVE TO THE LEFT HAVING A RADIUS OF 1342.23 FEET WITH A CENTRAL ANGLE OF 10°23'50" AND A CHORD BEARING AND DISTANCE OF N 77°29'54" W 243.23 FEET;
THENCE: N 82°41'49" W 57.02 FEET ALONG SAID RIGHT-OF-WAY;
THENCE: N 3°16'01" E 1876.96 FEET TO A POINT ON THE SECTION LINE COMMON TO SAID SECTIONS 6 AND 7;
THENCE: N 3°16'01" E 3842.30 FEET;
THENCE: N 6°30'16" E 134.39 FEET TO A POINT ON THE NORTH LINE OF THE SE1/4 NE1/4 OF SAID SECTION 6;
THENCE: N 89°53'39" E 31.89 FEET ALONG SAID NORTH LINE TO A POINT IN AN EXISTING FENCE;
THENCE: S 36°24'07" E 343.56 FEET ALONG AN EXISTING FENCE;
THENCE: S 64°10'09" E 691.69 FEET ALONG AN EXISTING FENCE TO A POINT ON THE EAST LINE OF THE SE1/4 NE1/4 OF SAID SECTION 6;
THENCE: S 0°19'46" W 742.36 FEET ALONG THE EAST LINE OF AND TO THE EAST 1/4 CORNER OF SAID SECTION 6;
THENCE: S 0°19'46" W 2646.59 FEET ALONG THE EAST LINE OF SAID SECTION 6 TO THE POINT OF BEGINNING.

LEGEND

- ◉ = SET 1/2" X 24" REBAR AND CAP LS 9672
- △ = FOUND BLM BRASS CAP (SEE SURVEY CONTROL)
- ⊡ = OTHER (SEE DESCRIPTION)
- (M) = MEASURED COURSE
- (R-X) = RECORD INFORMATION REFER TO RESOURCE LIST
- • = EXISTING FENCE CORNER
- —x— = FENCE LINES
- —•— = PIPELINES
- —o— = PERIMETER FENCE
- —•— = GATE
- ◉ = SOIL BORINGS
- = LANDFARM ENTRANCE

BASIS OF BEARINGS

REAL-TIME KINEMATIC SURVEY SOLUTION BASED ON SATELLITES OBSERVED ON FEBRUARY 18, 2008, USING WORLD GEODETIC SYSTEM, 1984.

RESOURCE LIST

1. WARRANTY DEED BOOK 1151 PAGE 583
2. GLO TOWNSHIP PLAT T26N R10W
3. SAN JUAN COUNTY ASSESSOR'S PLATS
3. NEW MEXICO STATE HIGHWAY DEPT. R.O.W. MAP SP-CRF-033-2(221) SHEET 10 OF 12
4. BOUNDARY SURVEY PLAT BOOK 1471 PAGE 247

PLAT NOTES

1. NO EASEMENTS FOUND FOR OVERHEAD POWERLINES, PIPELINES OR COUNTY ROAD 7225 OR COUNTY ROAD 7175
2. CENTERLINE OF GREAT NORTH ROAD WAS ESTABLISHED BY OTHERS.
3. CENTERLINE OF CR 7225 AND CR 7175 IS SHOWN AS IT NOW EXISTS.
4. ALL COURSES MEASURED UNLESS NOTED. FOR RECORD INFORMATION ON SECTIONS 6, 7 & 8 REFER TO (R-2) GLO TOWNSHIP PLAT FOR TOWNSHIP 26 NORTH, RANGE 10 WEST.

CERTIFICATION

I, CECIL B. TULLIS, NEW MEXICO PROFESSIONAL SURVEYOR, HEREBY CERTIFY THAT THIS BOUNDARY SURVEY PLAT WAS PREPARED FROM AN ACTUAL GROUND SURVEY PERFORMED BY ME OR UNDER MY SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THIS BOUNDARY SURVEY PLAT AND THE FIELD SURVEY UPON WHICH IT IS BASED MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT. THIS IS A BOUNDARY SURVEY PLAT OF AN EXISTING TRACT OR TRACTS.

CECIL B. TULLIS P.S. 9672 — DATE

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
ONE	1132.18'	541.95'	536.79'	N86°00'46"W	27°25'34"
TWO	1342.23'	243.57'	243.23'	N77°29'54"W	10°23'50"

LINE TABLE

LINE	DIRECTION	DISTANCE
A	S58°27'52"E	67.57'
B	S17°18'09"W	89.52'
C	S13°02'45"W	113.42'
D	S45°47'21"E	89.41'
E	S76°44'18"E	122.43'
F	N75°13'40"E	149.19'
G	S04°31'55"W	119.42'
H	S54°09'53"W	147.70'
I	S36°06'16"E	56.83'

0 300 600 1200 1500
SCALE: 1" = 600'

INDEXING INFORMATION FOR COUNTY CLERK

OWNER: MORRIS D. YOUNG
SECTIONS: 6, 7 & 8
TOWNSHIP: 26 NORTH
RANGE: 10 WEST
COUNTY: SAN JUAN
STATE: NEW MEXICO

DATE OF FIELD SURVEY: 2/22/08
JOB NO. 268908 A
DRAWING: C:\ACAD\DRAWINGS\EVTECH2.DWG

ATTACHMENT 5:

Plan for Management of Approved Oil Field Wastes

Attachment # 5: Plan for Management of Approved Oil Field Wastes

This plan complies with the applicable requirements contained in 19.15.36.13, 19.15.36.14, 19.15.36.15 and 19.15.36.17 NMAC.

19.15.36.13 Siting and Operational Requirements Applicable to All Permitted Surface Waste Management Facilities: Except as otherwise provided in 19.15.36 NMAC.

A. Depth to ground water.

(1) No landfill shall be located where ground water is less than 100 feet below the lowest elevation of the design depth at which the operator will place oil field waste.

Not Applicable.

(2) No landfarm that accepts soil or drill cuttings with a chloride concentration that exceeds 500 mg/kg shall be located where ground water is less than 100 feet below the lowest elevation at which the operator will place oil field waste. See Subsection A of 19.15.36.15 NMAC for oil field waste acceptance criteria.

Depth to groundwater at Envirotech's Landfarm #4 is greater than 100 feet; see ***Attachment 13, Geological/Hydro-Geological Data.***

(3) No landfarm that accepts soil or drill cuttings with a chloride concentration that is 500 mg/kg or less shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste.

Depth to groundwater at Envirotech's Landfarm #4 is greater than 100 feet; see ***Attachment 13, Geological/ Hydro-Geological Data.***

(5) No other surface waste management facility shall be located where groundwater is less than 50 feet below the lowest elevation at which the operator will place oil field waste.

Depth to groundwater at Envirotech's Landfarm #4 is greater than 100 feet; see ***Attachment 13, Geological/ Hydro-Geological Data.***

B. No surface waste management facility shall be located:

(1) Within 200 feet of a watercourse, lakebed, sinkhole or playa lake;

Envirotech's Landfarm #4 is not within 200 feet of a watercourse, lakebed, sinkhole or playa lake; see ***Envirotech, Inc., Landfarm #4 Hydro-Geologic Report*** included in ***Attachment 13, Geological/ Hydro-Geological Data.***

(2) Within an existing wellhead protection area or 100-year floodplain;

Envirotech's Landfarm #4 is not within an existing wellhead protection area or 100-year floodplain; see the FEMA Flood Insurance Rate Map (FIRM) map included in ***Attachment 13, Geological/ Hydro-Geological Data.***

(3) Within, or within 500 feet of, a wetland;

Envirotech's Landfarm #4 is not within, or within 500 feet of, a wetland; see the U.S. Fish and Wildlife Service, National Wetlands Inventory Map included in ***Attachment 13, Geological/ Hydro-Geological Data.***

(4) Within the area overlying a subsurface mine;

Envirotech's Landfarm #4 is not within an area overlying a subsurface mine; see the NM EMNRD web map and visual inspection sheet included in ***Attachment 13, Geological/ Hydro-Geological Data.***

(5) Within 500 feet from the nearest permanent residence, school, hospital, institution or church in existence at the time of initial application; or

Envirotech's Landfarm is more than 500 feet from the nearest permanent residence, school, hospital, institution or church. See San Juan County parcel (zoning) maps and visual inspection sheet included in ***Attachment 13, Geological/ Hydro-Geological Data.***

(6) Within an unstable area, unless the operator demonstrates that engineering measures have been incorporated into the surface waste management facility design to ensure that the surface waste management facility's integrity will not be compromised.

The topographical map and visual inspection sheet included in ***Attachment 13, Geological/ Hydro-Geological Data*** indicates that the Landfarm #4 is not within an unstable area.

C. No surface waste management facility shall exceed 500 acres.

Envirotech's Proposed Landfarm #4 is 189 acres; see ***Attachment 3, Facility Diagram and Description.***

D. The operator shall not accept oil field wastes transported by motor vehicle at the surface waste management facility unless the transporter has a form C-133, authorization to move liquid waste, approved by the division.

Envirotech will visually examine Form C-133 for each transporter transporting waste to Landfarm #4.

E. The operator shall not place oil field waste containing free liquids in a landfill or landfarm cell. The operator shall use the paint filter test, as prescribed by the EPA (EPA SW-486, Method 9095) to determine conformance of the oil field waste to this criterion.

Envirotech, Inc. will perform paint filter testing on each load received, in accordance with EPA SW-486, Method 9095. Testing will be performed upon arrival and prior to unloading. Any material that doesn't pass paint filter testing will be stabilized in Envirotech's Landfarm #4 Stabilization Facility. After stabilizing, paint filter testing will be conducted again prior to placing waste in any landfarm cell. This process will continue until the material passes the paint filter test.

F. Surface waste management facilities shall accept only exempt or non-hazardous waste, except as provided in Paragraph (3) of Subsection F of 19.15.36.13 NMAC. The operator shall not accept hazardous waste at a surface waste management facility. The operator shall not accept wastes containing NORM at a surface waste management facility except as provided in 19.15.35 NMAC. The operator shall require the following documentation for accepting oil field wastes, and both the operator and the generator shall maintain and make the documentation available for division inspection.

Envirotech, Inc. will not accept waste containing NORM at Landfarm #4.

(1) Exempt oil field wastes. The operator shall require a certification on form C-138, signed by the generator or the generator's authorized agent, that represents and warrants that the oil field waste are generated from oil and gas exploration and production operations, are exempt waste and are not mixed with non-exempt waste. The operator shall have the option to accept such certifications on a monthly, weekly or per load basis. The operator shall maintain and shall make the certificates available for the division's inspection.

Envirotech, Inc. will require a completed Form C-138 for exempt oil field wastes, signed by the generator or the generator's authorized agent, prior to acceptance of waste at the Landfarm #4. The completed form will typically be valid for thirty (30) calendar days for a single event at a given site. The completed C-138 forms will be maintained in the Landfarm Administrative Office located at 5796 U.S. Highway 64, Farmington, New Mexico, and will be available to the division upon request. These records will be maintained until five (5) years after closure of Landfarm #4.

(2) Non-exempt, non-hazardous, oil field wastes. The operator shall require a form C-138, oil field waste document, signed by the generator or its authorized agent. This form shall be accompanied by acceptable documentation to determine that the oil field waste is non-hazardous.

Envirotech, Inc. will require a completed Form C-138 for non-exempt, non-hazardous, oil field wastes, signed by the generator or its authorized agent. In addition, the form must be accompanied by analytical results for RCRA 8 Metals. The completed C-138 forms and analytical results will be maintained in the Landfarm administrative office located at 5796 U.S. Highway 64, Farmington, New Mexico, and will be available to the division upon request. These records will be maintained until five (5) years after closure of Landfarm #4.

(3) Emergency non-oil field wastes. The operator may accept non-hazardous, non-oil field wastes in an emergency if ordered by the department of public safety. The operator shall complete a form C-138, oil field waste document, describing the waste, and maintain the same, accompanied by the department of public safety order, subject to division inspection.

In the event of Envirotech's Landfarm accepting emergency non-hazardous, non-oil field wastes, as ordered by the department of public safety, the completed C-138 form and the department of public safety order would be maintained in the Landfarm Administrative Office located at 5796 U.S. Highway 64, Farmington, New Mexico, and will be available to the division upon request. These records will be maintained until five (5) years after closure of Landfarm #4.

G. The operator of a commercial facility shall maintain records reflecting the generator, the location of origin, the location of disposal within the commercial facility, the volume and type of oil field waste, the date of disposal and the hauling company for each load or category of oil field waste accepted at the commercial facility. The operator shall maintain such records for a period of not less than five years after the commercial facility's closure, subject to division inspection.

Envirotech, Inc. will maintain the following documentation for oil field wastes received at Landfarm #4:

- C-138 forms containing the generator name and the location of origin of the waste.

- The BOLs containing the location of disposal within the landfarm, the volume and description of oil field waste, the date of disposal, and the name of the hauling company.

Envirotech, Inc. will maintain the above documents in the Landfarm Administrative Office located at 5796 U.S. Highway 64, Farmington, New Mexico, for at least five (5) years after closure of Landfarm #4. These documents will be available to the division upon request.

H. Disposal at a commercial facility shall occur only when an attendant is on duty unless loads can be monitored or otherwise isolated for inspection before disposal. The surface waste management facility shall be secured to prevent unauthorized disposal.

Disposal at Envirotech's Landfarm #4 will only occur when an attendant is on duty to receive the completed Form C-138, perform the paint filter testing and chloride testing, and complete the BOL. Envirotech's Landfarm #4 will be fenced and gated, and will be signed to prevent unauthorized disposal.

I. To protect migratory birds, tanks exceeding eight feet in diameter, and exposed pits and ponds shall be screened, netted or covered. Upon the operator's written application, the division may grant an exception to screening, netting or covering upon the operator's showing that an alternative method will protect migratory birds or that the surface waste management facility is not hazardous to migratory birds. Surface waste management facilities shall be fenced in a manner approved by the division.

Envirotech's Landfarm #4 will not operate pits, ponds, or house tanks exceeding eight feet in diameter.

J. Surface waste management facilities shall have a sign, readable from a distance of 50 feet and containing the operator's name; surface waste management facility permit or order number; surface waste management facility location by unit letter, section, township and range; and emergency telephone numbers.

Envirotech's Landfarm #4 will be signed in such a manner that the sign is readable from a distance of fifty (50) feet. The sign will include Envirotech's name and emergency telephone numbers, the surface waste management facility permit number, the facility location including the unit letter(s), section, township, and range.

K. The operators shall comply with the spill reporting and corrective action provisions of 19.15.30 NMAC or 19.15.29 NMAC.

Envirotech, Inc. will notify the division of unauthorized release(s), as defined in Subsections A and B of 19.15.29 NMAC, occurring at Envirotech's Landfarm.

Envirotech, Inc. will report major releases at the landfarm by giving verbal notice within twenty-four (24) hours of the discovery to the division district office for Envirotech's Landfarm. In addition, Envirotech will provide immediate verbal notification of a release of a volume that may with reasonable probability be detrimental to water or exceed the standards in Subsections A and B or C of 19.15.30.9 NMAC. The verbal notification will provide the same information required on Form C-141. Additionally, Envirotech, Inc. will report major releases at the landfarm by completing and filing Form C-141 within (15) fifteen days to the division district office for Envirotech's Landfarm. Envirotech, Inc. will provide timely written notification of a release of a volume that may with reasonable probability be detrimental to water or exceed the standards in Subsections A and B or C of 19.15.30.9 NMAC to the division's environmental bureau chief within (15) fifteen days after the release is discovered. The written notification shall verify the prior verbal notification and provide appropriate additions or corrections to the information contained in the prior verbal notification.

Envirotech, Inc will report minor releases at the landfarm by completing and filing Form C-141, within fifteen (15) days to the division district office for Envirotech's Landfarm.

In the event of a release, Envirotech, Inc. will perform abatement and remediation activities in accordance with 19.15.30 NMAC, and as approved by the division.

L. Each operator shall have an inspection and maintenance plan that includes the following:

(1) Monthly inspection of leak detection sumps including sampling if fluids are present with analyses of fluid samples furnished to the division; and maintenance of records of inspection dates, the inspector and the leak detection system's status;
(2) Semi-annual inspection and sampling of monitoring wells as required, with analyses of ground water furnished to the division, and maintenance of records of inspection dates, the inspector and groundwater monitoring wells' status; and
(3) Inspections of the berms and the outside walls of pond levees quarterly and after a major rainfall or windstorm, and maintenance of berms in such a manner to prevent erosion.

Envirotech, Inc. maintains an inspection and maintenance plan including the elements outlined above; see ***Attachment 6, Inspection and Maintenance Plan***.

M. Each operator shall have a plan to control run-on water onto the site and run-off water from the site, such that:

(1) The run-on and run-off control system shall prevent flow onto the surface waste management facility's active portion during the peak discharge from a 25-year storm; and
(2) Run-off from the surface waste management facility's active portion shall not be allowed to discharge a pollutant to the waters of the state or United States that violates state water quality standards.

Envirotech, Inc. maintains a plan to control run-on water onto the site and run-off water from the Landfarm; see ***Attachment 10, Plan to Control Water Run-On and Run-Off***.

N. Contingency plan. Each operator shall have a contingency plan. The operator shall provide the division's environmental bureau with a copy of an amendment to the contingency plan, including amendments required by Paragraph (8) of Subsection N of 19.15.36.13 NMAC; and promptly notify the division's environmental bureau of changes in the emergency coordinator or in the emergency coordinator's contact information. The contingency plan shall be designed to minimize hazards to fresh water, public health, safety or the environmental from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water. The operator shall carry out the plan's provisions immediately whenever there is a fire, explosion or release of contaminants or oil field waste constituents that could threaten

fresh water, public health, safety or the environment; provided that the emergency coordinator may deviate from the plan as necessary in an emergency situation. The contingency plan for emergencies shall:

(1) Describe the actions surface waste management facility personnel shall take in response to fires, explosions or releases to air, soil, surface water or ground water of contaminants or oil field waste containing constituents that could threaten fresh water, public health, safety or the environment;

(2) Describe arrangements with local police departments, fire department, hospitals, contractors and state and local emergency response teams to coordinate emergency services;

(3) List the emergency coordinator's name; address; and office, home and mobile phone number (where more than one person is listed, one shall be named as the primary emergency coordinator);

(4) Include a list, which shall be kept current, of emergency equipment at the surface waste management facility, such as fire extinguishing systems, spill control equipment, communications, alarm systems, and decontamination equipment, containing a physical description of each item on the list and a brief outline of its capabilities;

(5) Include an evacuation plan for surface waste management facility personnel that describes signals to be used to begin evacuation, evacuation routes and alternate evacuation routes in cases where fire or releases of wastes could block the primary routes;

(6) Include an evaluation of expected contaminants, expected media contaminated and procedures for investigation, containment and correction or remediation;

(7) List where copies of the contingency plan will be kept, which shall include the surface waste management facility; local police departments, fire departments and hospitals; and state and local emergency teams;

(8) Indicate when the contingency plan will be amended, which shall be within five working days whenever:

a. The surface waste management facility permit is revised or modified;
b. The plan fails in an emergency;
c. The surface waste management facility changes design, construction, operation, maintenance or other circumstances in a way that increases the potential for fires, explosions or releases of oil field waste constituents that could threaten fresh water, public health, safety or the environment or change the response necessary in an emergency;

d. The list of emergency coordinators or their contact information changes; or

e. The list of emergency equipment changes;

(9) Describe how the emergency coordinator or the coordinator's designee, whenever there is an imminent or actual emergency situation, will immediately;

a. Activate internal surface water management facility alarms or communication systems, where applicable, to notify surface waste management facility personnel; and

b. Notify appropriate state and local agencies with designated response roles if their assistance is needed;

(10) Describe how the emergency coordinator, whenever there is a release, fire or explosion, will immediately identify the character, exact source, amount and extent of released materials (the emergency coordinator may do this by observation or review of surface waste management facility records or manifests, and, if necessary, by chemical analysis) and describe how the emergency coordinator will concurrently assess possible hazards to fresh water, public health, safety or the environment that may result from the release, fire or explosion (this assessment shall consider both the direct and indirect hazard of the release, fire or explosion);

(11) Describe how, if the surface waste management facility stops operations in response to fire, explosion or release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or rupture in valves, pipes or the equipment, wherever this is appropriate;

(12) Describe how the emergency coordinator, immediately after an emergency, will provide for treating, storing or disposing of recovered oil field waste, or other material that results from a release, fire or explosion at a surface waste management facility;

(13) Describe how the emergency coordinator will ensure that no oil field waste, which may be incompatible with the released material, is treated, stored or disposed of until cleanup procedures are complete; and

(14) Provide that the emergency coordinator may amend the plan during an emergency as necessary to protect fresh water, public health, safety or the environment.

Envirotech, Inc. maintains a contingency plan implementing all of the requirements in Subsection N of 19.15.36.13 NMAC. See ***Attachment 9, Emergency Contingency Plan***.

O. Gas safety management plan. Each operator of a surface waste management facility that includes a landfill shall have a gas safety management plan that describes in detail procedures and methods that will be used to prevent landfill-generated gases from interfering or conflicting with the landfill's operation and protect fresh water, public health, safety and the environment. The plan shall address anticipated amounts and types of gases that may be generated, an air monitoring plan that includes the vadose zone and measuring, sampling, analyzing, handling, control and processing methods. The plan shall also include final post closure monitoring to control options.

Not Applicable. Envirotech's surface waste management facility does not include a landfill.

P. Training Program. Each operator shall conduct an annual training program for key personnel that includes general operations, permit conditions, emergencies proper sampling methods and identification of exempt and non-exempt waste and hazardous waste. The operator shall maintain records of such training, subject to division inspection, for five years.

Envirotech, Inc. will conduct annual training for key personnel that includes general operations, permit conditions, emergency procedures, sampling methods, and identification of exempt, non-exempt, and hazardous wastes. Personnel training records are located in the Envirotech, Inc. Health and Safety Manger's Office and are available for division inspection. Training records are maintained for a period of five (5) years.

19.15.36.15 Specific Requirements Applicable to Landfarms:

A. Oil field waste acceptance criteria. Only soils and drill cuttings predominantly contaminated by petroleum hydrocarbons shall be placed in a landfarm. The division may approve placement of tank bottoms in a landfarm if the operator demonstrates that the tank bottoms do not contain economically recoverable petroleum hydrocarbons. Soils and drill cuttings placed in a landfarm shall be sufficiently free of liquid content to pass the paint filter test, and shall not have a chloride concentration exceeding 500 mg/kg if the landfarm is located where ground water is less than 100 feet but at least 50 feet below the lowest elevation at which the operator will place oil field waste or exceeding 1000 mg/kg if the landfarm is located where ground water is 100 feet or more below the lowest elevation at which the operator will place oil field waste. The person tendering oil field waste for treatment at a landfarm shall certify, on form C-138, that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content, and that the samples have been found to conform to these requirements. The landfarm's operator shall not accept oil field waste for landfarm treatment unless accompanied by this certification.

Envirotech's Landfarm will accept only oil field wastes such as soil and/or drill cuttings predominantly contaminated by petroleum hydrocarbons. Hydrocarbon contamination will be determined either by sampling or by generator statement of waste generation. Tank bottoms are accepted at Envirotech's landfarm only when the generator demonstrates that the waste does not contain economically recoverable petroleum hydrocarbons, either by statement, or by analytical results. Paint filter tests and chloride tests are performed on every load delivered to Envirotech's Landfarm and attached to the respective Bill of Lading (BOL). Waste exceeding 1000 mg/kg chloride will not be accepted at Envirotech's landfarm. Analytical results, BOLs, and *Form C-138, Request for Approval to Accept Solid Waste*, are maintained in the Landfarm Administrative office located at 5796 U.S. Highway 64, Farmington, New Mexico. This documentation is available for division inspections and will be maintained for five (5) years after closure of the landfarm. Additionally, depth to ground water is greater than 100 feet, as evidenced in ***Attachment 13, Geological/ Hydro-Geological Data.***

B. *Background testing. Prior to beginning operation of a new landfarm or to opening a new cell at an existing landfarm at which the operator has not already established background, the operator shall take, at a minimum, 12 composite background soil samples, with each consisting of 16 discrete samples from areas that previous operations have not impacted at least six inches below the original ground surface, to establish background soil concentrations for the entire surface waste management facility. The operator shall analyze the background soil samples for TPH, as determined by EPA method 418.1 or other EPA method approved by the division; BTEX, as determined by EPA SW-846 method 8021B or 8260B; chlorides; and other constituents listed in Subsections A and B of 20.6.2.3103 NMAC, using approved EPA methods.*

Envirotech Inc. will conduct background sampling at least thirty (30) days prior to operation of Landfarm #4. Envirotech, Inc. will collect at a minimum, twelve (12) composite background soil samples, each consisting of sixteen (16) discrete samples from areas that have not been impacted by previous landfarm operations, at least six (6) inches below ground surface. Samples will be placed into four (4)-ounce glass jars, capped headspace free, and transported on ice under chain of custody to Envirotech's laboratory or another certified laboratory to be analyzed for TPH using USEPA Method 8015, for BTEX using USEPA Method 8021, for total chlorides using USEPA Method 4500, and for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC using approved USEPA Methods.

C. *Operation and oil field waste treatment.*

(1) The operator shall berm each landfarm cell to prevent rainwater run-on and run-off.

Envirotech, Inc. will construct and maintain four (4) foot berms around each landfarm cell to prevent rainwater run-on and run-off.

(2) The operator shall not place contaminated soils received after the effective date of 19.15.36 NMAC within 100 feet of the surface waste management facility's boundary.

Berms will be constructed and flagging and signage will be used in a manner to ensure contaminated soils are not placed within 100 feet of the Landfarm #4 boundary.

(3) The operator shall not place contaminated soils received at a landfarm after the effective date of 19.15.36 NMAC within 20 feet of a pipeline crossing the landfarm.

Berms will be constructed and flagging and signage will be used in a manner to ensure contaminated soils are not placed within twenty (20) feet of a pipeline crossing the landfarm.

(4) With 72 hours after receipt, the operator shall spread and disk contaminated soils in eight-inch or less lifts or approximately 1000 cubic yards per eight-inch lift or biopile.

Envirotech, Inc. will maintain a schedule and a procedure to ensure contaminated soils are spread and disked in eight (8)-inch or less lifts or approximately 1000 cubic yards per eight-inch lift, within seventy-two (72) hours after receipt.

(5) The operator shall ensure that soils are disked biweekly and biopiles are turned at least monthly.

Envirotech, Inc. will maintain a schedule and a procedure to ensure contaminated soils are disked at least biweekly. Landfarm #4 will not use biopiles as a method of remediation.

(6) The operator shall add moisture, as necessary, to enhance bioremediation and to control blowing dust.

Envirotech, Inc. will land apply clean water, as needed, to control blowing dust and to enhance bioremediation.

(7) The application of microbes for the purposes of enhancing bioremediation requires prior division approval.

Envirotech, Inc. will not use microbes for the purposes of enhancing bioremediation at Landfarm #4 without obtaining prior approval from the division.

(8) Pooling of liquids in the landfarm is prohibited. The operator shall remove freestanding water within 24 hours.

In the event of freestanding water, the water will be removed using a vacuum truck, within twenty-four (24) hours. However, due to topographical conditions, freestanding water lasting for twenty-four (24) hours is unlikely.

(9) The operator shall maintain records of the landfarm's remediation activities in a form readily accessible for division inspection.

Envirotech, Inc. will record and maintain all landfarm remediation activities at the Landfarm Administrator's Office at 5796 U.S. Highway 64, Farmington, New Mexico. These records will be available for division inspection and will be maintained for five (5) years after closure.

(10) The division's environmental bureau may approve other treatment procedures if the operator demonstrates that they provide equivalent protection for fresh water, public health, safety and the environment.

D. Treatment zone monitoring.

The operator shall spread contaminated soils on the surface in eight-inch or less lifts or approximately 1000 cubic yards per acre per eight-inch lift.

Envirotech, Inc. will maintain a schedule and a procedure to ensure contaminated soils are spread on the surface in eight (8)-inch or less lifts or approximately 1000 cubic yards per acre per eight (8)-inch lift.

The operator shall conduct treatment zone monitoring to ensure that prior to adding an additional lift the TPH concentration of each lift, as determined by EPA SW-846 Method 8015M or EPA Method 418.1 or other EPA method approved by the division, does not exceed 2500 mg/kg and that the chloride concentration, as determined by EPA method 300.1, does not exceed 500 mg/kg if the landfarm is located where ground water is less than 100 feet but at least 50 feet below the lowest elevation at which the operator will place oil field waste or 1000 mg/kg if the landfarm is located where ground water is 100 feet or more below the lowest elevation at which the operator will place oil field waste. The operator shall collect and analyze at least one composite soil sample, consisting of four discrete samples, from the treatment zone at least semi-annually using the methods specified below for TPH and chlorides. The maximum thickness of treated soils in a landfarm cell shall not exceed two feet or approximately 3000 cubic yards per acre. When the thickness is reached, the operator shall not place additional oil field waste in the landfarm cell until it has demonstrated by monitoring the treatment zone at least semi-annually that the contaminated soil has been treated to the standards specified in Subsection F of 19.15.36.15 NMAC or the contaminated soils have been removed to a division-approved surface waste management facility.

Prior to adding an additional lift to a landfarm cell, Envirotech, Inc. will sample the treatment zone, provide the NMOCD with analytical results, and request approval to add an additional lift based on ground water being greater than 100 feet below ground surface at Landfarm #4. Envirotech, Inc. will maintain a maximum thickness of treated soils in landfarm cells, not to exceed (2) two feet or approximately 3000 cubic yards per acre, until it is demonstrated by monitoring that the contaminated soil has been treated to the standards specified in Subsection F of 19.15.36.15 NMAC.

E. *Vadose zone monitoring.*

(1) Sampling. The operator shall monitor the vadose zone beneath the treatment zone in each landfarm cell. The operator shall take the vadose zone samples from soils between three and four feet below the cell's original ground surface.

Envirotech, Inc. will perform vadose zone monitoring, collecting samples from between three (3) and four (4) feet below the cell's original ground surface.

(2) Semi-annual monitoring program. The operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone, using the methods specified below for TPH, BTEX and chlorides and shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred.

At least semi-annually, Envirotech, Inc. will collect a minimum of four (4) randomly selected, independent samples from the vadose zone. The samples will be analyzed for TPH using USEPA Method 8015, for BTEX using USEPA Method 8021, and for total chlorides. Each sample result will be compared to the higher of the PQL or the background soil concentrations to determine whether a release has occurred. All sample results are maintained in the Landfarm Administrator's Office at 5796 U.S. Highway 64, Farmington, New Mexico. These records will be available to the agency and will be maintained for at least five (5) years after closure of Landfarm #4.

(3) Five year monitoring program. The operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone, using the methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC at least every five years and shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred.

Within five (5) years of opening a new landfarm cell, or prior to adding a new lift, Envirotech, Inc. will collect a minimum of four (4) randomly selected, independent samples from the vadose zone. The samples will be analyzed for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. The sample results will be compared to the higher of the PQL or the background soil concentrations to determine whether a release has occurred.

(4) Record keeping. The operator shall maintain a copy of the monitoring reports in a form readily accessible for division inspection.

All monitoring reports will be immediately available for division inspection upon request. Monitoring reports will be maintained in the Landfarm Administrator's Office at 5796 U.W. Highway 64, Farmington, New Mexico, for at least five (5) years after Landfarm #4 closure.

(5) Release response. If vadose zone sampling results show that the concentrations of TPH, BTEX or chlorides exceed the higher of the PQL or the background soil concentrations, then the operator shall notify the division's environmental bureau of the exceedance, and shall immediately collect and analyze a minimum of four randomly selected independent samples for TPH, BTEX, chlorides and the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. The operator shall submit the results of the re-sampling event and a response action plan for the division's approval within 45 days of the initial notification. The response action plan shall address changes in the landfarm's operation to prevent further contamination and, if necessary, a plan for remediation existing contamination.

In the event that vadose zone sampling results show that the concentrations of TPH, BTEX, or chlorides exceed the higher of the PQL or the background soil concentrations, Envirotech, Inc. will notify the division's environmental bureau of the exceedance, and immediately collect a minimum of four (4) randomly selected independent samples and analyze the samples for TPH, BTEX, chlorides, and the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. Envirotech, Inc. will submit the results of the re-sampling including a response action plan, for the division's approval within forty-five (45) days of the initial notification. The response action plan will address changes in the landfarm's operation to prevent further contamination and, if necessary, a remediation plan for existing contamination.

F. Treatment zone closure performance standards. After the operator has filled a landfarm cell to the maximum thickness of two feet or approximately 3000 cubic yards per acre, the operator shall continue treatment until the contaminated soil has been remediated to the higher of the background concentrations or the following closure performance standards. The operator shall demonstrate compliance with the closure performance standards by collecting and analyzing a minimum of one composite soil sample, consisting of four discrete samples.

(1) Benzene, as determined by EPA SW-846 method 8021B or 8260B, shall not exceed 0.2 mg/kg.

(2) Total BTEX, as determined by EPA SW-846 method 8021B or 8260B, shall not exceed 50 mg/kg.

(3) The GRO and DRO combined fractions, as determined by EPA SW-846 method 8015M, shall not exceed 500 mg/kg. TPH, as determined by EPA method 418.1 or other EPA method approved by the division, shall not exceed 2500 mg/kg.

(4) Chlorides, as determined by EPA method 300.1, shall not exceed 500 mg/kg if the landfarm is located where ground water is less than 100 feet but at least 50 feet below the lowest elevation at which the operator will place oil field waste or 1000 mg/kg if the landfarm is located where ground water is 100 feet or more below the lowest elevation at which the operator will place oil field waste.

(5) The concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by EPA SW-846 methods 6010B or 6020 or other methods approved by the division. If the concentration of those constituents exceed the PQL or background concentration, the operator shall either perform a site specific risk assessment using EPA approved methods and shall propose closure standards based upon individual site conditions that protect fresh water, public health, safety and the environment, which shall be subject to division approval or remove pursuant to Paragraph (2) of Subsection G of 19.15.36.15 NMAC.

In order to demonstrate compliance with treatment zone closure performance standards, Envirotech, Inc. will collect one (1) composite sample consisting of four (4) discrete samples. The samples will be analyzed for benzene and BTEX using USEPA Method 8021, for GRO/DRO using USEPA Method 8015, for TPH using USEPA Method 418.1, for chlorides using USEPA Method 300.1, and for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. The sample results will be compared to the higher of the PQL or the background soil concentrations. If the concentrations of any of the constituents analyzed exceed PQL or background concentration, Envirotech, Inc. will either perform a site specific risk assessment using USEPA approved methods and propose closure standards based upon individual site conditions that protect fresh water, public health, safety and the environment, which shall be subject to division approval, or remove the soil in accordance with Paragraph (2) of Subsection G of 19.15.36.15 NMAC.

G. *Disposition of treated soils.*

(1) If the operator achieves the closure performance standards specified in Subsection F of 19.15.36.15 NMAC, then the operator may either leave the treated soils in place, or, with prior division approval, dispose or reuse of the treated soils in an alternative manner.

Upon achieving closure performance standards specified in Subsection F of 19.15.36.15 NMAC, Envirotech, Inc. will leave treated soils in place.

(2) If the operator cannot achieve the closure performance standards specified in Subsection F of 19.15.36.15 NMAC within five years or as extended by the division, then the operator shall remove contaminated soils from the landfarm cell and properly dispose of it at a division-permitted landfill, or reuse or recycle it in a manner approved by the division.

In the event Envirotech, Inc. cannot achieve the closure performance standards specified in Subsection F of 19.15.36.15 NMAC within five (5) years or as extended by the division, Envirotech, Inc. will remove contaminated soils from the landfarm cell and dispose of the soils at a division-permitted landfill, or reuse or recycle the soils in a manner approved by the division.

(3) If the operator cannot achieve the closure performance standards specified in Subsection F of 19.15.36.15 NMAC within five years or as extended by the division, then the division may review the adequacy of the operator's financial assurance, as provided in Subsection G of 19.15.36.11 NMAC. In that event, the division may require the operator to modify its financial assurance to provide for the appropriate disposition of contaminated soil in a manner acceptable to the division.

In the event Envirotech, Inc. cannot achieve the closure performance standards specified in Subsection F of 19.15.36.15 NMAC within five (5) years or as extended by the division, Envirotech, Inc. will modify the financial assurance, if required by the division, to provide for the appropriate disposition of contaminated soil in a manner acceptable to the division.

(4) The operator may request approval of an alternative soil closure standard from the division, provided that the operator shall give division-approved public notice of an application for alternative soil closure standards in the manner provided in 19.15.36.9 NMAC. The division may grant the request administratively if no person files an objection thereto within 30 days after publication of notice; otherwise the division shall set the matter for hearing.

In the event Envirotech, Inc. cannot achieve the closure performance standards specified in Subsection F of 19.15.36.15 NMAC within five (5) years or as extended by the division, Envirotech, Inc. may request approval of an alternative soil closure standard from the division. If Envirotech, Inc. requests approval for an alternative soil closure standard, Envirotech, Inc. will give division-approved public notice in the manner provide in 19.15.36.9 NMAC.

H. Environmentally acceptable bioremediation endpoint approach.

(1) A landfarm operator may use an environmentally acceptable bioremediation endpoint approach to landfarm management in lieu of compliance with the requirements of Paragraph (3) of Subsection F of 19.15.36.15 NMAC. The bioremediation endpoint occurs when TPH, as determined by EPA method 418.1 or other EPA method approved by the division, is reduced to a minimal concentration as a result of bioremediation and is dependent upon the bioavailability of residual hydrocarbons. An environmentally acceptable bioremediation endpoint occurs when the TPH concentration has been reduced by at least 80 percent by a combination of physical, biological and chemical processes and the rate of change in the reduction in the TPH concentration is negligible. The environmentally acceptable bioremediation endpoint in soil is determined statistically by the operator's demonstration that the rate of change in the reduction of TPH concentration is negligible.

(2) In addition to the requirements specified in Subsection C of 19.15.38.8 NMAC, an operator who plans to use an environmentally acceptable bioremediation endpoint approach shall submit for the division's review and approval a detailed landfarm operation plan for those landfarm cells exclusively dedicated to the use of the environmentally acceptable bioremediation endpoint approach. At a minimum, the operations plan shall include detailed information on the native soils, procedure to characterize each lift of contaminated soil, operating procedures and management procedures that the operator shall follow.

(3) In addition to other operational requirements specified in 19.15.36.15 NMAC, the operator using an environmentally acceptable bioremediation endpoint approach shall comply with the following.

(a) Native soil information required. The operator shall submit detailed information on the soil conditions present for each of its landfarm cells immediately prior to the application of petroleum hydrocarbon-contaminated soils, including: treatment cell size, soil porosity, bluk soil density, soil pH, moisture content, field capacity, organic matter concentration, soil structure, SAR, EC, soil composition, soil temperature, soil nutrient (C:N:P) (calcium, nitrogen, and phosphate) concentrations and oxygen content.

(b) Characterization of contaminated soil. The operator shall submit a description of the procedures that it will follow to characterize each lift of contaminated soil or drill cuttings, prior to treating each lift of contaminated soil or drill cuttings, for petroleum hydrocarbon loading factor, TPH, BTEX, chlorides, constituents listed in Subsections A and B of 20.6.2.3103 NMAC, contaminated soil moisture, contaminated soil pH and API gravity of the petroleum hydrocarbons.

(c) Operating procedures. The operator shall submit a description of the procedures, including a schedule, that it shall follow to properly monitor and amend each list of contaminated soil in order to maximize bioremediation, including tilling procedures and schedule; procedures to limit petroleum hydrocarbon loading to less than five percent; procedures to maintain pH between six and eight; procedures to monitor and apply proper nutrients; procedures to monitor, apply and maintain moisture to 60 to 80 percent of field capacity; and procedures to monitor TPH concentrations.

(d) Management procedures. The operator shall submit a description of the management procedures that it shall follow to properly schedule landfarming operations, including modifications during cold weather, record keeping, environmentally acceptable bioremediation endpoint and closure and post closure plans.

Envirotech, Inc. will not use the "Environmentally Acceptable Bioremediation Endpoint Approach".

19.15.36.17 Specific Requirements Applicable to Evaporation, Storage, Treatment and Skimmer Ponds

Envirotech, Inc. will not operate evaporation, storage, treatment, or skimmer ponds at Landfarm #4.

19.15.36.18 Closure and Post Closure

A. Surface waste management facility closure by operator.

(1) The operator shall notify the division's environmental bureau at least 60 days prior to cessation of operations at the surface waste management facility and provide a proposed schedule for closure. Upon receipt of such notice and proposed schedule, the division shall review the current closure plan for adequacy and inspect the surface waste management facility.

Envirotech, Inc. will notify the division's environmental bureau at least sixty (60) days prior to cessation of operations at Landfarm #4 and provide a proposed schedule for closure.

(2) The division shall notify the operator within 60 days after the date of cessation of operations specified in the operator's closure notice of modifications of the closure plan and proposed schedule or additional requirements that it determines are necessary for the protection of fresh water, public health, safety or the environment.

Envirotech, Inc. will implement any modifications of the closure plan and proposed schedule, or implement any additional requirements that the division determines is necessary for the protection of fresh water, public health, safety or the environment.

(3) If the division does not notify the operator of additional closure requirements within 60 days as provided, the operator may proceed with closure in accordance with the approved closure plan; provided that the director may, for good cause, extend the time for the division's response for an additional period not to exceed 60 days by written notice to the operator.

If Envirotech, Inc. does not receive additional closure requirements within sixty (60) days as provided, Envirotech, Inc. will proceed with closure in accordance with the approved closure plan; unless the director extends the time for the divisions response for an additional period, not to exceed sixty (60) days, by written notice to Envirotech, Inc.

(4) The operator shall be entitled to a hearing concerning a modification or additional requirements the division seeks to impose if it files an application for a hearing within 10 days after receipt of written notice of the proposed modifications or additional requirements.

In the event the division proposes a modification or additional requirement to this permit, Envirotech, Inc. will file an application for a hearing within ten (10) days of receipt of written notice of the proposed modifications or additional requirements, if appropriate.

(5) Closure shall proceed in accordance with the approved closure plan and schedule and modifications or additional requirements the division imposes. During closure operations the operator shall maintain the surface waste management facility to protect fresh water, public health, safety and the environment.

During closure operations, Envirotech, Inc. will maintain Landfarm #4 in a manner to protect fresh water, public health, safety, and the environment, to include adequate berming, and surface contouring.

(6) Upon completion of closure, the operator shall re-vegetate the site unless the division has approved an alternative site use plan as provided in Subsection G of 19.15.36.18 NMAC. Re-vegetation, except for landfill cells, shall consist of establishment of a vegetative cover equal to 70 percent of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) or scientifically documented ecological description consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons.

Re-vegetation will be completed in accordance with ***Attachment 8, Closure and Post Closure Plan***.

B. *Release of financial assurance.*

(1) When the division determines that closure is complete it shall release the financial assurance, except for the amount needed to maintain monitoring wells for the applicable post closure care period, to perform semi-annual analyses of such monitoring wells and to re-vegetate the site to determine that closure is complete.

(2) After the applicable post closure care period has expired, the division shall release the remainder of the financial assurance if the monitoring wells show no contamination and the re-vegetation in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC is successful. If monitoring wells or other monitoring or leak detection systems reveal contamination during the surface waste management facility's operation or in the applicable post closure care period following the surface waste management facility's closure the division shall not release the financial assurance until the contamination is remediated in accordance with 19.15.30 NMAC and 19.15.29 NMAC, as applicable.

(3) In any event, the division shall not finally release the financial assurance until it determines that the operator has successfully re-vegetated the site in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC, or, if the division has approved an alternative site use plan, until the landowner has obtained the necessary regulatory approvals.

Envirotech, Inc. will request release of financial assurance only when closure has been completed. Envirotech will comply with all regulatory requirements related to release of financial assurance.

C. *Surface waste management facility closure initiated by the division. Forfeiture of financial assurance.*

(1) For good cause, the division may, after notice to the operator and an opportunity for a hearing, order immediate cessation of a surface waste management facility's operation when it appears that cessation is necessary to protect fresh water, public health, safety or the environment, or to assure compliance with statutes or division rules and orders. The division may order

closure without notice and an opportunity for hearing in the event of an emergency, subject to NMSA 1978, Section 70-2-23, as amended.

(2) If the operator refuses or is unable to conduct operations at a surface waste management facility in a manner that protects fresh water, public health, safety and the environment; refuses or is unable to conduct or complete an approved closure plan is in material breach of the term and conditions of its surface waste management facility permit; or the operator defaults on the conditions under which the division accepted the surface waste management facility's financial assurance; or if disposal operations have ceased and there has been no significant activity at the surface waste management facility for six months the division may take the following actions to forfeit all or part of the financial assurance:

a. Send written notice by certified mail, return receipt requested, to the operator and the surety, if any, informing them of the decision to close the surface waste management facility and to forfeit the financial assurance, including the reasons for forfeiture and the amount to be forfeited, and notifying the operator and surety that a hearing request or other response shall be made within 10 days of receipt of the notice; and

b. Advise the operator and surety of the conditions under which they may avoid the forfeiture; such conditions may include but are not limited to an agreement by the operator or another party to perform closure and post closure operations in accordance with the surface waste management facility permit conditions, the closure plan (including modifications or additional requirements imposed by the division) and division rules, and satisfactory demonstration that the operator or other party has the ability to perform such agreement.

(3) The division may allow a surety to perform closure if the surety can demonstrate an ability to timely complete the closure and post closure in accordance with the approved plan.

(4) If the operator and the surety do not respond to a notice of proposed forfeiture within the time provided, or fail to satisfy the specified conditions for non-forfeiture, the division shall proceed, after hearing if the operator or surety has timely requested a hearing, to declare the financial assurance's forfeiture. The division may then proceed to collect the forfeited amount and use the funds to complete the closure, or, at the division's election, to close the surface waste management facility and collect the forfeited amount as reimbursement.

a. The division shall deposit amounts collected as a result of forfeiture of financial assurance in the oil and gas reclamation fund.

b. In the event the amount forfeited and collected is insufficient for closure, the operator shall be liable for the deficiency. The division may complete or authorize completion of closure and post closure and may recover from the operator reasonably incurred costs of closure and forfeiture in excess of the amount collected pursuant to the forfeiture.

c. *In the event the amount collected pursuant to the forfeiture was more than the amount necessary to complete closure, including remediation costs, and forfeiture costs, the division shall return the excess to the operator or surety, as applicable, reserving such amount as may be reasonably necessary for post closure monitoring and re-vegetation in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC. The division shall return excess of the amount retained over the actual costs of post closure monitoring and re-vegetation to the operator or surety at the later of the conclusion of the applicable post closure period or when the site re-vegetation in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC is successful.*

(5) If the operator abandons the surface waste management facility or cannot fulfill the conditions and obligations of the surface waste management facility permit or division rules, the state of New Mexico, its agencies, officers, employees, agents, contractors and other entities designated by the state shall have all rights of entry into, over and upon the surface waste management facility property, including all necessary and convenient rights of ingress and egress with all materials and equipment to conduct operation, termination and closure of the surface waste management facility, including but not limited to the temporary storage of equipment and materials, the right to borrow or dispose of materials and all other rights necessary for the surface waste management facility's operation, termination and closure in accordance with the surface waste management facility permit and to conduct a post closure monitoring.

Envirotech, Inc. will comply with all regulatory requirements related to landfarming; therefore, a division initiated closure is not foreseeable.

D. *Surface waste management facility and cell closure and post closure standards. The following minimum standards shall apply to closure and post closure of the installations indicated, whether the entire surface waste management facility is being closed or only a part of the surface waste management facility.*

Paragraphs 1 through 3 of Subsection D of 19.15.36.18 NMAC do not apply.

(4) Landfarm closure. The operator shall ensure that:

a. *Disking and addition of bioremediation enhancing materials continues until soils within the cells are remediated to the standards provided in Subsection F of 19.15.36.15 NMAC, or as otherwise approved by the division;*

Envirotech, Inc. will maintain a schedule and a procedure to ensure disking occurs at least once every two (2) weeks during remediation activities until the cells are remediated to the standards provided in Subsection F of 19.15.36.15 NMAC, or as otherwise approved by the division.

b. *Soils remediated to the foregoing standards and left in place are re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC;*

Re-vegetation will be completed in accordance with ***Attachment 8, Closure and Post Closure Plan***.

c. *Landfarm soils that have not been or cannot be remediated to the standards in Subsection F of 19.15.36.15 NMAC are removed to a division-approved surface waste management facility and the landfarm remediation area is filled in with native soil and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC;*

In the event landfarm soils have not been or cannot be remediated to the standards in Subsection F of 19.15.36.15 NMAC, the soils will be removed and placed in a division-approved surface waste management facility. The landfarm remediation area will then be backfilled with native soils and re-contoured. The area(s) will then be re-vegetated in accordance with ***Attachment 8, Closure and Post Closure Plan***.

d. *If treated soils are removed, the cell is filled in with native soils and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC;*

If treated soils are removed, the landfarm remediation area will then be backfilled with native soils and re-contoured. The area(s) will then be re-vegetated in accordance with ***Attachment 8, Closure and Post Closure Plan***.

e. *Berms are removed;*

Upon closure of Landfarm #4 or any part of Landfarm #4, berms will be removed as appropriate and the applicable portion(s) of the site will be re-contoured. The area(s) will then be re-vegetated in accordance with ***Attachment 8, Closure and Post Closure Plan***. The berms may be left in place if officially requested by the property owner in writing.

f. *Buildings, fences, roads and equipment are removed, the site cleaned-up and tests conducted on the soils for contamination;*

Upon closure of Landfarm #4 or any part of Landfarm #4, buildings, fences, roads, and equipment will be removed as appropriate and the applicable portion(s) of the site will be sampled and re-contoured. The area(s) will then be re-vegetated in accordance with ***Attachment 8, Closure and Post Closure Plan***. Buildings, fences, roads, and

equipment will be left in place if requested by the land owner in writing.

g. *Annual reports of vadose zone and treatment zone sampling are submitted to the division's environmental bureau until the division has approved the surface waste management facility's final closure; and*

Envirotech, Inc. will provide annual reports of vadose and treatment zone sampling to the division's environmental bureau until the division has approved the final closure of Landfarm #4

h. *For an operator who chooses to use the landfarm methods specified in Subsection H of 19.15.36.15 NMAC, that the soil has an ECs of less than or equal to 4.0 mmhos/cm (dS/m) and a SAR of less than or equal to 13.0.*

E. *Pond and pit closure.*

Envirotech's Landfarm #4 will not operate ponds or pits.

F. *Landfarm and pond and pit post closure.*

Envirotech's Landfarm #4 will not operate ponds or pits.

G. *Alternatives to re-vegetation. If the landowner contemplates use of the land where a cell or surface waste management facility is located for purposes inconsistent with re-vegetation, the landowner may, with division approval, implement an alternative surface treatment appropriate for the contemplated use, provided that the alternative treatment will effectively prevent erosion. If the division approves an alternative to re-vegetation, it shall not release the portion of the operator's financial assurance reserved for post-closure until the landowner has obtained necessary regulatory approvals and begun implementation of such alternative use.*

In the event Envirotech, Inc. contemplates use of the Landfarm #4 or any part of Landfarm #4 for purposes inconsistent with re-vegetation, Envirotech, Inc. may request division approval to implement an alternative surface treatment appropriate for the contemplated use and will ensure that the alternative treatment will effectively prevent erosion.

Also see ***Attachment 8, Closure and Post Closure Plan***.

ATTACHMENT 6:

Inspection and Maintenance Plan

Attachment #6: Inspection and Maintenance Plan

This plan complies with the applicable requirements contained in Subsection L of 19.15.36.13 NMAC:

(1) Monthly inspection of leak detection sumps including sampling if fluids are present with analyses of fluid samples furnished to the division; and maintenance of records of inspection dates, the inspector and the leak detection system's status;

Envirotech, Inc. will perform monthly inspections of the leak detection for the stabilization facility, including sampling if fluids are present. Envirotech, Inc. will provide the following to the division as applicable:

- Analytical results of fluid samples
- Records of maintenance including:
  - Inspection date(s)
  - Inspector's name(s)
  - Status of the leak detection system(s)

(2) Semi-annual inspection and sampling of monitoring wells as required, with analyses of ground water furnished to the division, and maintenance of records of inspection dates, the inspector and ground water monitoring wells' status; and

Envirotech, Inc. will perform semi-annual inspection and sampling of monitoring wells as required. Envirotech will provide the following to the division as applicable:

- Analytical results of ground water samples
- Records of maintenance including:
  - Inspection date(s)
  - Inspector's name(s)
  - Status of ground water monitoring well(s)

Envirotech, Inc. will not have monitoring wells for Landfarm #4 due to depth to groundwater being greater than 1,000 feet below ground surface. In the event monitoring wells are completed in the future, Envirotech, Inc. will perform inspections and sampling in accordance with the provisions of this plan.

(3) Inspections of the berms and the outside walls of pond levees quarterly and after a major rainfall or windstorm, and maintenance of berms in such a manner as to prevent erosion.

Envirotech, Inc will perform quarterly inspections of the berms within and surrounding Landfarm #4. Additionally, Envirotech will inspect the berms after a major rainfall or windstorm. Berms will be constructed within the landfarm, around each landfarm cell. Additionally, a berm will be constructed around the entire perimeter of Landfarm #4. Berms will be constructed and maintained at four (4) feet tall.

ATTACHMENT 7:

Hydrogen Sulfide Prevention and Contingency Plan

Attachment #7: Hydrogen Sulfide Prevention and Contingency Plan

This Hydrogen Sulfide Prevention and Contingency Plan will comply with the applicable requirements contained in 19.15.11.9 NMAC and in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55 .

19.15.11.9 Hydrogen Sulfide Contingency Plan:

A. *When required. If a well, facility or operation involves a potentially hazardous volume of hydrogen sulfide, the person shall develop a hydrogen sulfide contingency plan that the person will use to alert and protect the public in accordance with the Subsections B through I of 19.15.11.9 NMAC.*

B. *Plan Contents.*

(1) *API guidelines. The person shall develop the hydrogen sulfide contingency plan with due consideration of paragraph 7.6 of the guidelines in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55, most recent edition, or with due consideration to another division-approved standard.*

(2) *Required contents. The hydrogen sulfide contingency plan shall contain information on the following subjects, as appropriate to the well, facility or operation to which it applies.*

a. *Emergency procedures. The hydrogen sulfide contingency plan shall contain information on emergency procedures the person will follow in the event of a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency, an immediate action plan as described in the API document referenced in Paragraph (1) of Subsection B of 19.15.11.9 NMAC, and telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities. The plan shall also include the locations of potentially affected public areas and the public roads and shall describe proposed evacuation routes, locations of road blocks and procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans. The plan shall include information on the availability and location of necessary safety equipment and supplies.*

b. *Characteristics of hydrogen sulfide and sulfur dioxide. The hydrogen sulfide contingency plan shall include a discussion of the characteristics of hydrogen sulfide and sulfur dioxide.*

c. *Maps and drawings. The hydrogen sulfide contingency plan shall*

include maps and drawings that depict the area of exposure and public areas and public roads within the area of exposure.

d. Training and drills. The hydrogen sulfide contingency plan shall provide for training and drills, including training in the responsibilities and duties of essential personnel and periodic on-site or classroom drills and attendance. The hydrogen sulfide contingency plan shall also provide for training of residents as appropriate on the proper protective measures to be taken in the event of a release, and shall provide for briefing of public officials on issues such as evacuation or shelter-in-place plans.

e. Coordination with state emergency plans. The hydrogen sulfide contingency plan shall describe how the person will coordinate emergency response actions under the plan with the division and the New Mexico state police consistent with the New Mexico hazardous materials emergency response plan.

f. Activation levels. The hydrogen sulfide contingency plan shall include the activation level and a description of events that could lead to a release of hydrogen sulfide sufficient to create a concentration in excess of the activation level.

C. Plan activation. The person shall activate the hydrogen sulfide contingency plan when a release creates a hydrogen sulfide concentration greater than the activation level set forth in the hydrogen sulfide contingency plan. At a minimum, the person shall activate the plan whenever a release may create a hydrogen sulfide concentration of more than 100 ppm in a public area, 500 ppm at a public road or 100 ppm 3000 feet from the site of release.

D. Submission

(1) Where submitted. The person shall submit the hydrogen sulfide contingency plan to the division.

(2) When submitted. The person shall submit a hydrogen sulfide contingency plan for a new well, facility or operation before operations commence. The hydrogen sulfide contingency plan for a drilling, completion, workover or well servicing operation shall be on file with the division before operations commence and may be submitted separately or along with the APD or may be on file from a previous submission. A person shall submit a hydrogen sulfide contingency plan within 180 days after the person becomes aware or should have become aware that a public area or public road is established that creates a potentially hazardous volume where none previously existed.

(3) Electronic submission. A filer who operates more than 100 wells or who operates an oil pump station, compressor station, refinery or gas plant shall submit each hydrogen sulfide contingency plan in electronic format. The file may submit the

hydrogen sulfide contingency plan through electronic mail, through an Internet filing or by delivering electronic media to the division, so long as the electronic submission is compatible with the division's system.

A. *Failure to submit plan. A person's failure to submit a hydrogen sulfide contingency plan when required may result in denial of an application for permit to drill, cancellation of an allowable for the subject well or other enforcement action appropriate to the well, facility or operation.*

B. *Review, amendment. The person shall review the hydrogen sulfide contingency plan any time a subject addressed in the plan materially changes and make appropriate amendments. If the division determines that a hydrogen sulfide contingency plan is inadequate to protect public safety, the division may require the person to add provisions to the plan or amend the plan as necessary to protect public safety.*

C. *Retention and inspection. The hydrogen sulfide contingency plan shall be reasonably accessible in the event of a release, maintained on file at all times and available for division inspection.*

D. *Annual inventory of contingency plans. On an annual basis, each person required to prepare one or more hydrogen sulfide contingency plans pursuant to 19.15.11 NMAC shall file with the appropriate local emergency planning committee and the state emergency response commission an inventory of the wells, facilities and operations for which plans are on file with the division and the name, address and telephone number of a point of contact.*

E. *Plans required by other jurisdictions. The person may submit a hydrogen sulfide contingency plan the BLM or other jurisdiction require that meets the requirements of 19.15.11 NMAC to the division in satisfaction of 19.15.11.9 NMAC. [19.15.11.9 NMAC – Rp, 19.15.3.118 NMAC, 12/1/08]*

19.15.11.10 Signs, Markers: For each well, facility or operation involving a hydrogen sulfide concentration of 100 ppm or greater, the person shall install and maintain signs or markers that conform with the current ANSI standard Z535.1-2002 (Safety Color Code), or some other division-approved standard. The sign or marker shall be readily readable, and shall contain the words "poison gas" and other information sufficient to warn the public that a potential danger exists. The personal shall prominently post signs or markers at locations, including entrance points and road crossings, sufficient to slert the public that a potential danger exists. [19.15.11.10 NMAC – Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.11 Protection from Hydrogen Sulfide During Drilling, Completion, Workover and Well Servicing Operations:

Envirotech, Inc. Landfarm #4 does not perform drilling, completion, or workover and well servicing operations.

19.15.11.12 Protection from Hydrogen Sulfide at the Oil Pump Stations, Producing Wells, Tank Batteries and Associated Production Facilities, Pipelines, Refineries, Gas Plants and Compressor Stations:

Envirotech, Inc. Landfarm #4 does not operate oil pump stations, producing wells, tank batteries or associated production facilities, pipelines, refineries, gas plants and compressor stations.

19.15.11.13 Personnel Protection and Training: the person shall provide persons responsible for implementing a hydrogen sulfide contingency plan training in hydrogen sulfide hazards, detection, personal protection and contingency procedures. [19.15.11.9 NMAC – Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.14 Standards for Equipment that May be Exposed to the Hydrogen Sulfide: Whenever a well, facility or operation involves a potentially hazardous hydrogen sulfide volume, the person shall select equipment with consideration for both the hydrogen sulfide working environment and anticipated stresses and shall use NACE Standard MR0175 (latest edition) or some other division-approved standard for selection of metallic equipment or, if applicable, us adequate protection by chemical inhibition or other methods that control or limit hydrogen sulfide's corrosive effects. [19.15.11.9 NMAC – Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.16 Notification of the Division: The person shall notify the division upon a release of hydrogen sulfide requiring activation of the hydrogen sulfide contingency plan as soon as possible, but no more than four hours after plan activation, recognizing that a prompt response should supersede notification. The person shall submit a full report of the incident to the division on form C-141 no later than 15 days following the release.

Envirotech, Inc. will use representative sampling and/or process knowledge to reasonably represent hydrogen sulfide concentrations within the facility in accordance with 19.15.11.8 NMAC, to determine hydrogen sulfide concentrations.

If any changes in the operation of the facility could potentially increase the hydrogen sulfide concentrations within the facility, the operator will conduct new sampling and/or process knowledge activities to make a new determination.

Envirotech, Inc. will notify the division upon a release of hydrogen sulfide, requiring activation of the hydrogen sulfide contingency plan as soon as possible, but no more than four (4) hours after plan activation, recognizing that a prompt response should supersede notification. Envirotech, Inc. will submit a full report of the incident to the division on Form C-141 no later than fifteen (15) days following the release.

See Attached; ***Envirotech, Inc. Landfarm Hydrogen Sulfide Prevention and Contingency Plan***

Envirotech, Inc.
Landfarm
Hydrogen Sulfide Prevention
and
Contingency Plan

November 2009

Table of Contents

1.0 Purpose

The purpose of this prevention and contingency plan is to provide guidance to landfarm personnel in recognizing, preparing, and mitigating potentially dangerous hydrogen sulfide situations during landfarming operations. This plan was developed in accordance with the requirements in 19.15.11.9 NMAC using the guidelines in the API publication *Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55.*

Due to the nature of operations, a hydrogen sulfide release is highly unlikely; however, in the event of a release (10 ppm hydrogen sulfide or more or 2 ppm sulfur dioxide or more), go directly to the "Immediate Action Plan" in *Section 11.0, Hydrogen Sulfide Contingency Plan*, in this document.

2.0 Submission

This plan will be submitted to the division prior to operation of a new landfarm.

3.0 Review and Amendment

Envirotech, Inc. will review and amend this plan as needed to protect public safety.

4.0 Retention and Inspection

This plan will be located at the landfarm and immediately accessible in the event of a release. Additionally, a copy of this plan will be maintained at the Landfarm Administrator's Office at 5796 U.S. Highway 64, Farmington, New Mexico. This plan will be available for division inspection upon request.

5.0 Annual Inventory of Contingency Plans

Annually, Envirotech, Inc. will provide a facility name, address, and telephone number of a point of contact for the landfarms covered by this contingency plan, to the local emergency planning committee and the state emergency response commission.

6.0 Signs and Markers

In the event Envirotech's landfarm operations involve a hydrogen sulfide concentration of 100 ppm or greater, Envirotech, Inc. will install and maintain signs or markers in accordance with ANSI Standard Z535.1-2002. The sign or marker will be readily readable and will contain the words "poison gas" and other information sufficient to warn the public that a potential danger exists. Signs or markers will be prominently posted at locations including entrance points and road crossings to alert the public that a potential danger exists.

7.0 Characteristics of Hydrogen Sulfide and Sulfur Dioxide

- As stated in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55

- Hydrogen sulfide is a flammable, toxic gas that is heavier than air and sometimes found in fluids encountered in oil and gas producing and gas processing operations. Inhalation at certain concentrations can lead to injury or death. Hydrogen sulfide has an extremely unpleasant odor, characteristic of rotten eggs, and is easily detected at low concentrations. However, due to rapid onset of olfactory fatigue and paralysis (inability to smell) ODOR SHALL NOT BE USED AS A WARNING MEASURE.

- Sulfur dioxide is a toxic product of combustion of hydrogen sulfide. This gas is heavier than air. Inhalation at certain concentrations can lead to injury or death. Sulfur dioxide has a pungent odor associated with burning sulfur. It produces a suffocating effect and produces sulfurous acid on membranes of the nose and throat.

8.0 Personnel Protection, Training, and Drills

All landfarm personnel receive forty (40)-hour HAZWOPER training and eight (8)-hour annual refresher training, which includes hydrogen sulfide hazards, detection, personal protection, and contingency procedures. Documentation of this training is maintained in each employee's personnel file, located in the Human Resources Office at 5796 U.S. Highway 64, Farmington, New Mexico. Classroom drills, using this plan, are conducted annually. Documentation of the drills is maintained in the Health and Safety Manager's Office at 5796 U.S. Highway 64, Farmington, New Mexico.

9.0 Notification of the Division

Envirotech, Inc. will notify the division upon a release of hydrogen sulfide requiring activation of this plan, as soon as possible, but no more than four (4) hours after activation of this plan, ensuring that emergency response supersedes notification to the division.

10.0 Hydrogen Sulfide Prevention Plan

Envirotech, Inc. will maintain a calibrated hydrogen sulfide detector in the landfarm office during all landfarming activities, to monitor for hydrogen sulfide.

Envirotech, Inc. will disk soils placed into a landfarm cell within seventy-two (72) hours. Additionally, landfarm cells are disked every two (2) weeks, thus preventing the possibility of the buildup of hydrogen sulfide.

11.0 Hydrogen Sulfide Contingency Plan

11.1 Immediate Action Plan

a. In the event of a release or potential release, the employee identifying the release or potential release will immediately alert facility personnel and other affected personnel using air horns or cellular phones, as appropriate.

b. The employee identifying the release will notify the Landfarm Emergency Coordinator and account for facility personnel if it is safe to do so.

   1. Landfarm employees will shut-down all equipment.

   2. All landfarm employees will then move away (upwind) from the hydrogen sulfide or sulfur dioxide source and get out of the affected area and proceed to the designated assembly area. Evacuation routes are identified on the attached Evacuation Map.

      Emergency Response Handbooks are located in the landfarm office, in each vehicle, and on each piece of equipment dedicated to the landfarm; see attached Emergency Medical Contacts. These handbooks contain the following:

      - Medical Emergency Plan
      - Emergency Medical Contacts for the Farmington area
      - Maps Providing Directions to Local Medical Centers and Hospitals

      In addition, emergency medical contacts and maps providing directions to local medical facilities, specific to the Landfarm, are attached to this plan.

   3. Landfarm employees will direct any public citizens in the area to evacuate the area, moving away from the hydrogen sulfide or sulfur dioxide source by moving upwind.

4. In the event of any person is in distress, employees trained to do so, will don proper personal breathing equipment and assist person in distress, if it is safe to do so.

5. Once evacuation is complete, all personnel will proceed to the designated emergency assembly area (the Mustang convenience store north-east of the landfarm in Hilltop, New Mexico) where the Landfarm Emergency Coordinator will account for all personnel. The Landfarm Emergency Coordinator will contact Envirotech, Inc. Management who will determine further actions.

c. Envirotech's Emergency Response Personnel will take immediate action to control the present or potential hydrogen sulfide or sulfur dioxide discharge and to eliminate possible ignition sources. Emergency shutdown procedures will be initiated as necessary to correct or control specific situations.

d. When the required action cannot be accomplished in time to prevent exposing operating personnel or the public to hazardous concentrations of hydrogen sulfide or sulfur dioxide, proceed to the following steps, as appropriate for the site specific conditions.

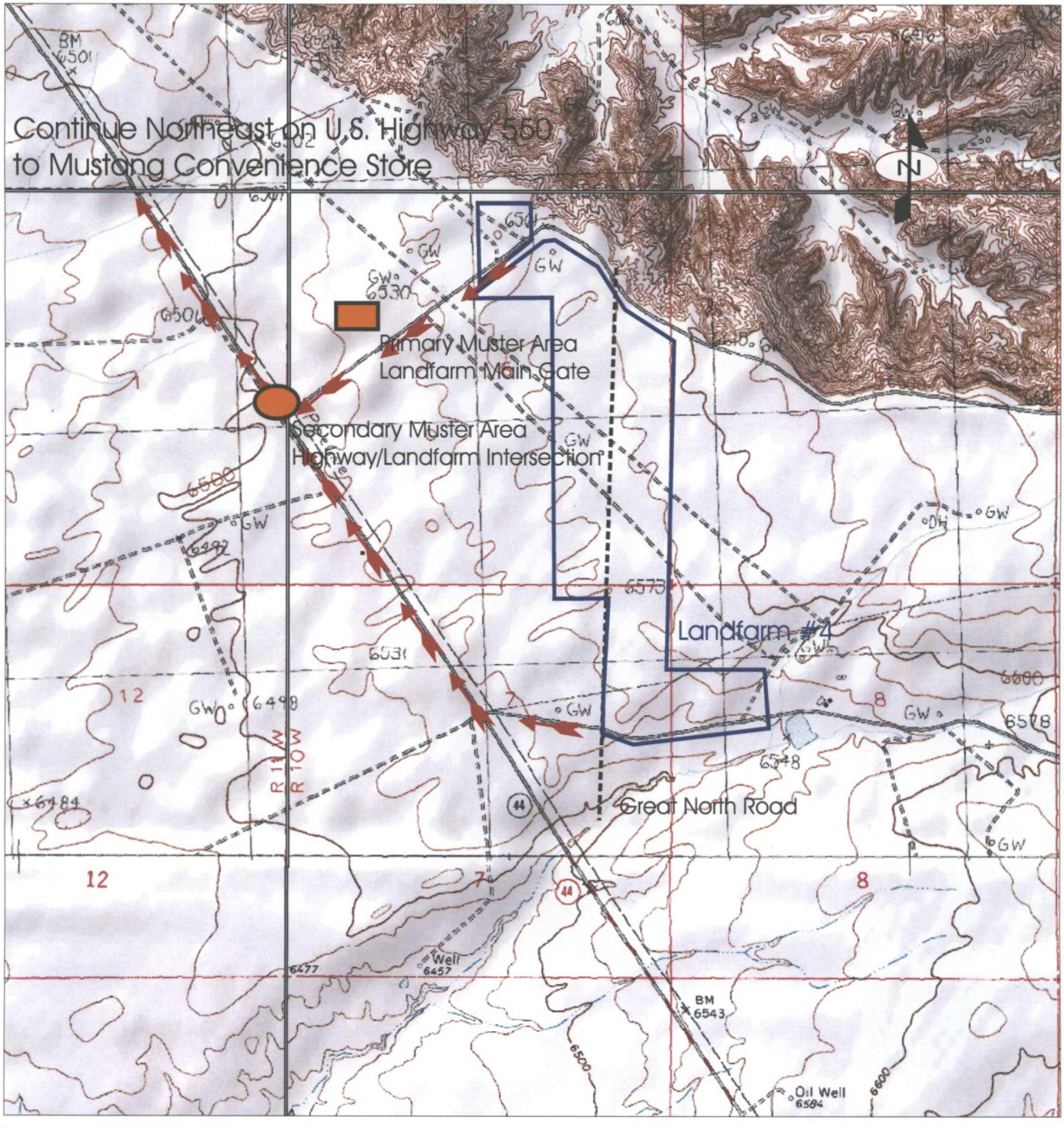
e. If necessary, as determined by monitoring and sampling, the Landfarm Emergency Coordinator will alert the public through the New Mexico State Police and through the San Juan County Sheriff's Office who will initiate evacuation operations as necessary.

f. Envirotech's Emergency Response Personnel will make recommendations to the public officials regarding evacuation operations and blocking unauthorized access to the unsafe area and assist as appropriate.

g. Envirotech, Inc. Management will notify, as required, state and local officials, the National Response Center, and the New Mexico Oil Conservation Division, to comply with release reporting requirements.

h. Envirotech's Emergency Response Personnel will monitor the ambient air in the area of exposure (after following abatement measures) to determine when it is safe for re-entry.

This plan will be tested and revised as necessary to ensure all personnel responsible for implementing this plan are confident that this plan is operational.



Source: East Fork Kutz Canyon and Huerfano Trading Post NW, New Mexico, 7.5-Minute U.S.G.S. Topographic Quadrangle Maps
Scale: 1:24,000 1" = 2000'

Envirotech, Inc. Landfarm San Juan County, New Mexico		ENVIROTECH INC. ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 FARMINGTON, NEW MEXICO 87401 PHONE (505) 632-0615	Evacuation Map	
	Date Drawn: 08/27/09		DRAWN BY: Sherry Auckland	PROJECT MANAGER: Kyle P. Kerr

EMERGENCY MEDICAL PROVIDERS

Land Farm

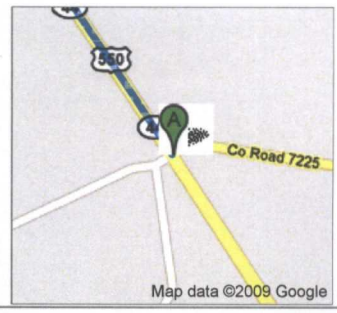
City	*Facility*	*Address*	*Phone*
Farmington	San Juan Regional Medical Center	801 W. Maple St	505-325-5011
Farmington	Reliance Medical Group-Occupational	3451 N Butler	505-566-1915
Farmington	Reliance Urgent Care	3751 N Butler	505-324-1255

Google maps

Directions to Farmington, NM
29.5 mi – about **47 mins**

Landfarm to Farmington, New Mexico

A U.S. 550 & Co Road 7225, Bloomfield, NM 87413



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44 1. Head **northwest** on **NM-44 N/US-550 N** toward **Co Rd 7175**
About 24 mins

go 15.9 mi
total 15.9 mi

64 2. Turn **left** at **W Broadway Ave/US-64 W**
About 18 mins

go 11.3 mi
total 27.2 mi

3. Turn **right** at **W Broadway Ave**
About 5 mins

go 2.3 mi
total 29.5 mi

B Farmington, NM

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Google maps

Directions to San Juan Regional Medical Center
San Juan Regional Medical Center, Farmington,
New Mexico 87401, 87401 - (505) 564-8563
27.7 mi – about **48 mins**

San Juan Regional Medical Center

A U.S. 550 & Co Road 7225, Bloomfield, NM 87413

1.	Head **northwest** on **NM-44 N/US-550 N** toward **Co Rd 7175** About 19 mins	go 12.7 mi total 12.7 mi
2.	Turn **left** at **Rd 5500** About 10 mins	go 5.4 mi total 18.1 mi
3.	Turn **left** to stay on **Rd 5500** About 4 mins	go 2.2 mi total 20.3 mi
4.	Turn **left** at **W Broadway Ave/US-64 W** About 9 mins	go 5.1 mi total 25.4 mi
5.	Continue onto **E Murray Dr/US-64 Bypass W** About 3 mins	go 1.7 mi total 27.0 mi
6.	Turn **right** at **S Auburn Ave**	go 0.2 mi total 27.2 mi
7.	Continue onto **S Lorena Ave** About 1 min	go 0.2 mi total 27.4 mi
8.	Turn **left** at **W Maple St** Destination will be on the left About 1 min	go 0.3 mi total 27.7 mi

B San Juan Regional Medical Center
San Juan Regional Medical Center, Farmington, New Mexico 87401, 87401 - (505) 564-8563

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route

Google maps

Directions to Reliance Medical Center
3451 N Butler Ave, Farmington, NM 87401-2361 - (505) 325-1100
47.7 mi – about **1 hour 19 mins**

Reliance Medical Center

U.S. 550 & Co Road 7775, Bloomfield, NM 87413

1.	Head **northwest** on **NM-44 N/US-550 N** About 50 mins	go 33.1 mi total 33.1 mi
2.	Turn **left** at **W Broadway Ave/US-64 W** About 18 mins	go 11.3 mi total 44.4 mi
3.	Turn **right** at **W Broadway Ave** About 2 mins	go 1.1 mi total 45.5 mi
4.	Turn **right** at **S Butler Ave** Destination will be on the left About 8 mins	go 2.1 mi total 47.7 mi

Reliance Medical Center
3451 N Butler Ave, Farmington, NM 87401-2361 - (505) 325-1100

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly You must obey all signs or notices regarding your route.

ATTACHMENT 8:

Closure and Post Closure Plan

Attachment #8: Closure and Post Closure Plan

This plan complies with the applicable requirements contained in 19.15.36.18 NMAC.

19.15.36.18 Closure and Post Closure

A. Surface waste management facility closure by operator.

(1) The operator shall notify the division's environmental bureau at least 60 days prior to cessation of operations at the surface waste management facility and provide a proposed schedule for closure. Upon receipt of such notice and proposed schedule, the division shall review the current closure plan for adequacy and inspect the surface waste management facility.

Envirotech, Inc. will notify the division's environmental bureau at least sixty (60) days prior to cessation of operations at Landfarm #4 and provide a proposed schedule for closure.

(2) The division shall notify the operator within 60 days after the date of cessation of operations specified in the operator's closure notice of modifications of the closure plan and proposed schedule or additional requirements that it determines are necessary for the protection of fresh water, public health, safety or the environment.

Envirotech, Inc. will implement any modifications of the closure plan and proposed schedule, or implement any additional requirements that the division determines is necessary for the protection of fresh water, public health, safety or the environment

(3) If the division does not notify the operator of additional closure requirements within 60 days as provided, the operator may proceed with closure in accordance with the approved closure plan; provided that the director may, for good cause, extend the time for the division's response for an additional period not to exceed 60 days by written notice to the operator.

If Envirotech, Inc. does not receive additional closure requirements within sixty (60) days as provided, Envirotech, Inc. will proceed with closure in accordance with the approved closure plan; unless the director extends the time for the divisions response for an additional period, not to exceed sixty (60) days, by written notice to Envirotech, Inc.

(4) The operator shall be entitled to a hearing concerning a modification or additional requirements the division seeks to impose if it files an application for a hearing within 10 days after receipt of written notice of the proposed modifications or additional requirements.

In the event the division proposes a modification or additional requirement to this permit, Envirotech, Inc. will file an application for a hearing within ten (10) days of receipt of written notice of the proposed modifications or additional requirements, if appropriate.

(5) Closure shall proceed in accordance with the approved closure plan and schedule and modifications or additional requirements the division imposes. During closure operations the operator shall maintain the surface waste management facility to protect fresh water, public health, safety and the environment.

During closure operations, Envirotech, Inc. will maintain Landfarm #4 in a manner to protect fresh water, public health, safety, and the environment, to include adequate berming, and surface contouring.

(6) Upon completion of closure, the operator shall re-vegetate the site unless the division has approved an alternative site use plan as provided in Subsection G of 19.15.36.18 NMAC. Re-vegetation, except for landfill cells, shall consist of establishment of a vegetative cover equal to 70 percent of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) or scientifically documented ecological description consisting of at least three native plant species, including at least on grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons.

Re-vegetation will be completed in accordance with the attached ***Landfarm #4 Re-Vegetation Plan***.

B. Release of financial assurance.

Envirotech, Inc. will request release of financial assurance only when closure has been completed. Envirotech, Inc. will comply with all regulatory requirements related to release of financial assurance.

C. Surface waste management facility closure initiated by the division. Forfeiture of financial assurance.

Envirotech, Inc. will comply with all regulatory requirements related to landfarming; therefore, a division initiated closure is not foreseeable.

D. Surface waste management facility and cell closure and post closure standards. The following minimum standards shall apply to closure and post closure of the installations indicated, whether the entire surface waste management facility is being closed or only a part of the surface waste management facility.

Paragraphs 1 through 3 of Subsection D of 19.15.36.18 NMAC are not applicable.

(4) Landfarm closure. The operator shall ensure that:

a. Disking and addition of bioremediation enhancing materials continues until soils within the cells are remediated to the standards provided in Subsection F of 19.15.36.15 NMAC, or as otherwise approved by the division;

Envirotech, Inc. will maintain a schedule and a procedure to ensure disking occurs at least once every two (2) weeks during remediation activities until the cells are remediated to the standards provided in Subsection F of 19.15.36.15 NMAC, or as otherwise approved by the division.

b. Soils remediated to the foregoing standards and left in place are re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC;

Re-vegetation will be completed in accordance with the attached ***Landfarm #4 Re-Vegetation Plan***.

c. Landfarm soils that have not been or cannot be remediated to the standards in Subsection F of 19.15.36.15 NMAC are removed to a division-approved surface waste management facility and the landfarm remediation area is filled in with native soil and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC;

In the event landfarm soils have not been or cannot be remediated to the standards in Subsection F of 19.15.36.15 NMAC, the soils will be removed and placed in a division-approved surface waste management facility. The landfarm remediation area will then be backfilled with native soils and re-contoured. The area(s) will then be re-vegetated in accordance with the attached ***Landfarm #4 Re-Vegetation Plan***.

d. If treated soils are removed, the cell is filled in with native soils and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC;

If treated soils are removed, the landfarm remediation area will then be backfilled with native soils and re-contoured. The area(s) will then be re-vegetated in accordance with the attached ***Landfarm #4 Re-Vegetation Plan***.

e. *Berms are removed;*

Upon closure of Landfarm #4 or any part of Landfarm #4, berms will be removed as appropriate and the applicable portion(s) of the site will be re-contoured. The area(s) will then be re-vegetated in accordance with the attached ***Landfarm #4 Re-Vegetation Plan***. The berms may be left in place if officially requested by the property owner in writing.

f. *Buildings, fences, roads and equipment are removed, the site cleaned-up and tests conducted on the soils for contamination;*

Upon closure of Landfarm #4 or any part of Landfarm #4, buildings, fences, roads, and equipment will be removed as appropriate and the applicable portion(s) of the site will be sampled and re-contoured. The area(s) will then be re-vegetated in accordance with the attached ***Landfarm #4 Re-Vegetation Plan***. Buildings, fences, roads, and equipment will be left in place if requested by the land owner in writing.

g. *Annual reports of vadose zone and treatment zone sampling are submitted to the division's environmental bureau until the division has approved the surface waste management facility's final closure; and*

Envirotech, Inc. will provide annual reports of vadose and treatment zone sampling to the division's environmental bureau until the division has approved the final closure of Landfarm #4.

h. *For an operator who chooses to use the landfarm methods specified in Subsection H of 19.15.36.15 NMAC, that the soil has an ECs of less than or equal to 4.0 mmhos/cm (dS/m) and a SAR of less than or equal to 13.0.*

E. *Pond and pit closure.*

Envirotech's Landfarm #4 will not operate ponds or pits.

F. *Landfarm and pond and pit post closure.*

Envirotech's Landfarm #4 will not operate ponds or pits.

G. *Alternatives to re-vegetation. If the landowner contemplates use of the land where a cell or surface waste management facility is located for purposes inconsistent with re-vegetation, the landowner may, with division approval, implement an alternative surface treatment appropriate for the contemplated use, provided that the alternative treatment will effectively prevent erosion. If the division approves an alternative to re-vegetation, it shall not release the portion*

of the operator's financial assurance reserved for post-closure until the landowner has obtained necessary regulatory approvals and begun implementation of such alternative use.

In the event Envirotech, Inc. contemplates use of the Landfarm #4 or any part of Landfarm #4 for purposes inconsistent with re-vegetation, Envirotech, Inc. may request division approval to implement an alternative surface treatment appropriate for the contemplated use and will ensure that the alternative treatment will effectively prevent erosion.

October 5, 2009

ENVIROTECH, INC.
LAND FARM NO. 4 FINANCIAL ASSURANCE

This analysis is based on a maximum of nineteen (19) out of thirty-eight (38) cells open for remediation and/or one half of the 189 acres included in the active landfarm operation. The remaining nineteen (19) cells will be in discontinued maintenance status for this analysis.

CLOSURE COSTS CALCULATED FOR AN EIGHTEEN MONTH CLOSURE PERIOD

The closure costs are based on one-half of the cells being open and active for the 189 acre landfarm area. Remediation experience shows that an 18-month tilling program will remediate the contaminated soil.

1. Based on a Pohl Industries submittal:
    a. Tilling costs of $11.68 per acre for thirty-nine (39) tilling events on an average of ninety-five (95) acres open for the 18-month closure period is $43,274.40
    b. One (1) hour for mobilization and one (1) hour for demobilization will be needed for each of the thirty-nine (39) tilling events (78 hours x $90.00/hr.) for a cost of $7,020.00.
    c. Re-seeding costs for grass seed applied with a grain drill is $205.50 per acre for 189 acres, including grass seed and amendments for a total of $38,839.50.
    d. Berm and fence removal is estimated to be $6,950.00.
    e. There are no permanent tanks at the land farm. Removal of the stabilization pad for demolition, trucking, and disposal will be $16,273.00.

    SUB-TOTAL: $112,356.90

2. Based on semi-annual vadose zone monitoring, Envirotech's known laboratory costs:
    a. Semi-annual 8021B BTEX, 8015M TPH and Chloride analysis are $169.00 for a total of nineteen (19) cells open for the closure period of eighteen (18) months (3 semi-annual events x 19 cells x $169.00) for a total of $9,633.00.
    b. Closure sample analysis based on five (5) acre cells will be thirty-eight (38) cells multiplied by $1,357.50 per cell for a total of $51,585.00.

    SUB-TOTAL: $61,218.00

3. Blagg Engineering estimates sample collection costs to be:
    a. Quarterly vadose zone sample collection will cost $150.34 per sample event. Calculated on an average of nineteen (19) cells open over the three (3) semi-annual sampling events is 3 x 19 cells x $150.34 for a total of $8,569.38.
    b. Closure sampling for remediation is $150.34 per sample suite for thirty-eight (38) cells for a cost of $5,712.92.
    c. Backfilling material for 380 auger holes approximately three (3) feet deep will take 120 sacks of bentonite at $10.50 per sack for a total of $1,260.00. Time and equipment costs are $10.00 for each of the 380 auger holes for a total of $3,800.00.
    d. Mobilization and demobilization for four (4) sample events is eight (8) hours at $80.00 per hour (equipment and labor) is $640.00.

    SUB-TOTAL: $19,982.30

TOTAL CLOSURE COSTS: $193,557.20

MDY:jno/Environmental/Other/Landfarm/LandfarmFinancialAssurance.doc

LABORATORY CHARGES

VADOSE MONITORING BACKGROUND SAMPLES	
TPH (USEPA Method 8015M)	$69.50
Chloride (USEPA Method 300.1)	$30.00
BTEX (USEPA Method 8021)	$69.50
Total per sample suite	**$169.00**

CLOSURE SAMPLES	
GRO/DRO (USEPA Method 8015)	$69.50
TPH (USEPA Method 418.1)	$74.00
Chloride	$30.00
RCRA 12 Metals	$175.00
Cyanide	$15.00
Flouride	$15.00
Nitrate	$15.00
Sulfrate	$15.00
PAHs (USEPA Method 8100)	$200.00
VOCs (USEPA Method 8260)	$180.00
TDS	$15.00
pH	$15.00
Phenols	$225.00
Uranium	$30.00
Radium	$189.00
Polychlorinated Biphenyls (PCBs)	$95.00
Total per sample suite	**$1,357.50**

envirotech

2009 RATE SCHEDULE
Environmental / Construction Services

PERSONNEL		RATE	PER
Principal	$	120.00	Hour
Senior Engineer / Scientist	$	96.00	Hour
Project Engineer / Scientist	$	76.00	Hour
Staff Engineer / Scientist	$	59.50	Hour
Computer Draftsperson	$	49.50	Hour
Construction Superintendent	$	69.50	Hour
Field Foreman	$	49.50	Hour
Equipment Operator	$	39.00	Hour
Sr. Environmental Field Technician	$	55.00	Hour
Field Technician II	$	37.50	Hour
Field Technician I	$	32.80	Hour
Spill Response Technician	$	38.80	Hour
Heath & Safety Officer	$	55.00	Hour
Administrator	$	55.00	Hour
Secretary / Clerk	$	30.00	Hour
Per Diem	$	85.00	Day

EQUIPMENT		RATE	PER
Extendahoe	$	44.00	Hour
Backhoe	$	38.00	Hour
Track Hoe Excavator	$	82.00	Hour
Track Hoe Excavator (HD)	$	95.00	Hour
Mini Excavator	$	25.00	Hour
Loader - 3 Cubic Yard	$	65.00	Hour
Loader - 4 Cubic Yard	$	70.00	Hour
Skid Steer Loader	$	30.00	Hour
D-6H Caterpillar Dozer	$	78.00	Hour
Telescopic Forklift	$	50.00	Hour
Boom Lift (Z34)	$	180.00	Day
Boom Lift (S60)	$	290.00	Day
750 CFM Air Compressor	$	235.00	Day
185 CFM Air Compressor	$	135.00	Day
6500 W Generator	$	60.00	Day
Job Support Pickup	$	15.00	Hour
Job Support Trailer w/ Tools	$	195.00	Day
Emergency Response Trailer w/ Tools	$	250.00	Day

ENVIRONMENTAL TESTING		RATE	PER
Carbon Monoxide Multimeter	$	25.00	Day
Digital Camera	$	25.00	Day
Disposable Bailers	$	8.75	Each
Dissolved Oxygen Analyzer	$	35.00	Day
Flighted Auger	$	250.00	Day
Fluid Level Detector	$	25.00	Day
GPS	$	25.00	Day
Hand Auger	$	15.00	Day
Interface Probe	$	65.00	Day
I-R Spectrophotometer	$	65.00	Hour
Jerome Mercury Meter	$	300.00	Day
Norm Tests	$	25.00	Each
O2 / LEL Meter	$	65.00	Day
OVM (PID/FID)	$	65.00	Day
Total Station Surveyor	$	16.25	Hour
TPH 418.1 Field Test	$	48.00	Test
Water Test Kit / pH - E.C. Meter	$	45.00	Day
Stationary Source Emissions Testing	Price Upon Request		

TRUCKING (with Driver)		RATE	PER
Dump Truck - 20 Cubic Yard	$	99.00	Hour
Dump Truck - 12 Cubic Yard	$	76.00	Hour
Water Truck - 4,000 Gallon	$	75.00	Hour
Heavy Equipment Transport	$	105.00	Hour
Light Equipment Transport	$	90.00	Hour
Articulating Off Road Dump Truck	$	110.00	Hour

LANDFARM SERVICES		RATE	PER
Liquid/Sludge Remediation	$	18.00	Barrel
Soil Remediation	$	18.00	Cubic Yard
Clean, Virgin Backfill - Loaded	$	3.95	Cubic Yard
Metal Drum / 55 Gallon - New	$	94.50	Each
Metal Drum / 55 Gallon - Reconditioned	$	60.50	Each
Metal Drum / 55 Gallon - Clean Used	$	42.00	Each
Poly Drum / 55 Gallon - New	$	95.00	Each
Poly Drum / 55 Gallon - Clean Used	$	59.00	Each
5 Gallon DOT Buckets	$	30.00	Each
UST Destruct - Up to 8,000 Gallons	$	500.00	Each
UST Destruct - Over 8,000 Gallons	$	1,000.00	Each

* Payment Terms - Net 30 days
* Labor and Equipment Rates Billed Portal To Portal
* Per Diem Will Be Adjusted As Specific Location Warrants
* Rates Listed For Regular Work Week M-F, 7:00 am - 5:00 pm
* Outside Services & Materials Billed At Cost Plus 18%
* Rates may be subject to Fuel Surcharge For Vehicles and Equipment
* After Hours Emergency Spill Response Charge is $1,000

*Listed Rates Effective Through December 31, 2009

Envirotech, Inc. is a full-service environmental consulting firm providing a broad range of services in the Four Corners Area.

Rate Sheets available for other Services:

* Analytical Laboratory Services
* Asbestos Inspection & Abatement / Indoor Air Quality
* Mold Inspection & Remediation
* Emergency Spill Clean-Up
* General Construction

To receive additional information and / or rates on the above services or for a site specific price quote, please call our office.

revised 1/08/09

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

POHL INDUSTRIES
5 CR 5255
BLOOMFIELD NM 87413
505-632-0647

We are pleased to provide the following estimate for remediation of Landfarm #4 owned and operated by Young Environmental Services Inc DBA Envirotech Inc.

The area is comprised of a total of 189 acres. We understand that one half of the 189 or 95 acres will requiring disking every two (2) weeks for a period of eighteen (18) months.

Using that base information we are prepared to submit the following bid:

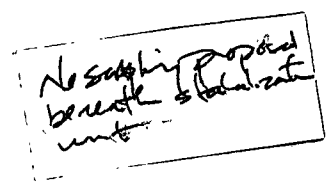
Machinery	$70.00
Mobilization	$90.00
Labor	$15.00
Fuel	$35.00
	$210.00

We are able to disk approximately ten (10) acres per hour for a ten (10) hour day which averages 100 acres a day (+ or -). So we will be able to cover the entire 95 acres in one day at a cost of $1290.00. Over a period of eighteen months the total cost would be $50,310.00. In addition we would charge an additional $205.50 per acre to reseed the designated area, which includes the cost of seed and labor. That additional cost would be $38,839.50.

In the event you require the fences to be removed and the berms leveled, the additional cost would be $6,950.00.

In the event you require the blending facility area to be removed the additional cost breaks down as follows:

Excavator	27 hrs @ $105.00 an hour	$2835.00
Excavator with hammer	27 hrs @ $105.00 an hour	$2835.00
Equipment mobilization		$950.00
Operators (2)	30 hrs @ $90.00 an hour	$2700.00
Trucking	46 hrs @ $90.50 an hour	$4163.00
Landfill Disposal		$2340.00
Support vehicle with driver		$450.00
Total		$16,273.00



Thanks you for the opportunity to provide this quote to you.

David L Pohl
David L Pohl
August 25, 2009

Landfarm #4 Re-Vegetation Plan

These applied practices by Envirotech, Inc. will at a minimum comply with Paragraph (5) of Subsection A of 19.15.36.18 NMAC.

1. The first growing season after closure of a landfarm cell, the cell will be re-seeded with the specified seed mixture.

2. The seed mixture used will be certified with no primary or secondary noxious weeds in seed mixtures. The seed labels from each bag shall be available for inspection while seed is being sown.

3. Envirotech, Inc. will accomplish seeding by drilling on the contour whenever practical or by other division-approved methods. Envirotech, Inc. will obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three (3) native plant species, including at least one (1) grass, but not including noxious weeds, and maintain that cover through two (2) successive growing seasons. During the two (2) growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

4. Hand seeding with hydro-mulch, excelsior netting or mulch with netting is required on the cut/fill slopes. Mulch will be spread at a rate of 2,000-3,000 pounds per acre.

5. Compacted areas determined by visual inspection will be ripped to a depth of twelve (12) inches below ground surface and disked to a depth of six (6) inches before seeding. Seeding shall be done with a disk type drill with two (2) boxes for various seed sizes. The drill rows shall be eight (8) to ten (10) inches apart. Seed shall be planted at no less than one-half (1/2) inch deep or more than one (1) inch deep. The seeder shall be followed with a drag, packer, or roller to ensure uniform coverage of the seed and adequate compaction. Drilling will be done on the contour where possible, but not up and down the slope.

6. Where slopes are too steep for contour drilling a hand seeder will be used. Seed will be covered to the depth above by whatever means is practical. If the seed is unable to be covered by the means listed above, the prescribed seed mixture amount will be doubled.

7. Envirotech, Inc. will repeat seeding or planting until it successfully achieves the required vegetative cover of 70% of the native perennial vegetation cover.

8. Upon abandonment of the Landfarm, if the retention of access roads is not considered necessary for the management and multiple uses of the natural resources, or deemed necessary by the surface owner, applicable access roads will be ripped a minimum of 12 inches in depth. After ripping, water bars will be installed. All ripped surfaces are to be protected from vehicular travel

by construction of a dead end ditch and earthen barricade at the entrance to these ripped areas. Re-seeding of areas affected by the ditch and barriers will be re-seeded if necessary.

9. Envirotech, Inc. will inform the division once successful re-vegetation has occurred.

ATTACHMENT 9:

Emergency Contingency Plan

Attachment #9: Emergency Contingency Plan

This contingency plan complies with the applicable requirements contained in Subsection N of 19.15.36.13 NMAC and will be implemented in accordance with NMSA 1978, Sections 12-12-1 through 12-12-30 as amended (the Emergency Management Act).

The operator shall provide the division's environmental bureau with a copy of an amendment to the contingency plan, including amendments required by Paragraph (8) of subsection N of 19.15.36.13 NMAC; and promptly notify the division's environmental bureau of changes in the emergency response coordinator or in the emergency coordinator's contact information.

Envirotech, Inc. will provide the division's environmental bureau with a copy of any amendment to this contingency plan, including amendments required by Paragraph (8) of Subsection N of 19.15.36.13 NMAC; and promptly notify the division's environmental bureau of changes in the emergency coordinator or in the emergency coordinator's contact information.

The contingency plan shall be designed to minimize hazards to fresh water, public health, safety or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water. The operator shall carry out the plan's provisions immediately whenever there is a fire, explosion or release of contaminants or oil field waste constituents that could threaten fresh water, public health, safety or the environment; provided that the emergency coordinator may deviate from the plan as necessary in an emergency situation.

This contingency plan is designed to minimize hazards to fresh water, public health, safety or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water. Envirotech, Inc. will carry out the provisions of this plan, immediately, whenever there is a fire, explosion or release of contaminants or oil field waste constituents that could threaten fresh water, public health, safety or the environment. Envirotech's emergency coordinator may deviate from the plan as necessary in an emergency situation.

The contingency plan for emergencies shall:

(1) Describe the actions surface waste management facility personnel shall take in response to fires, explosions or releases to air, soil, surface water or ground water of contaminants or oil field waste containing constituents that could threaten fresh water, public health, safety or the environment;

In the event of a fire, explosion, or release to air, soil, surface water, or groundwater, of contaminants or oil field waste that could threaten fresh water, public health, safety or the environment, Envirotech, Inc. Landfarm employees will implement the following steps:

a. Stop all activities, assess the situation and determine if emergency steps are needed.

b. Communicate to facility personnel, any necessary emergency response agencies, and management via the cellular phones and air horns, that emergency condition(s) exists. In the event of an after hours emergency, contact 911 for appropriate dispatch of emergency services. Management will then notify NMOCD and all non-emergency agencies as needed.

c. If a fire has occurred, every effort shall be made to contain it using the proper fire extinguishers and shovels as appropriate.

d. In the case of a spill, every effort shall be made to contain the spill using shovels, equipment, and absorbent materials.

e. All activities will follow the most current NMOCD regulations.

(2) Describe arrangements with local police departments, fire departments, hospitals, contractors and state and local emergency response teams to coordinate emergency services;

All local police departments, fire departments, hospitals, and state and local emergency response teams will be notified of the location of the landfarm and the nature of business taking place at this location. If contractors are needed for emergency response purposes, the landfarm will rely on Envirotech's 24-Hour Emergency Response Team.

(3) List the emergency coordinator's name; address; and office, home, and mobile phone numbers (where more than one person is listed, one shall be named as the primary emergency coordinator);

The emergency coordinator for the landfarm is:

April Pohl
5796 US Hwy 64
Farmington, NM 87401
505-320-6431 Cell
505-632-0647 Home
505-632-0615 Office

(4) Include a list, which shall be kept current, of emergency equipment at the surface waste management facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems and decontamination equipment, containing a physical description of each item on the list and a brief outline of its capabilities:

List of emergency equipment on site:

- 20 lb A,B,C, Fire Extinguishers are located in the Landfarm Office, in each vehicle, and on each piece of equipment dedicated to the landfarm – These are used in the event of small fires;

- 55 gallon drum Emergency Spill Kit (located in office) containing oil absorbent booms, and oil absorbent spreading material – the kit is used to minimize the impact of localized spills;

- 150 DB Air Horns (located in office & equipment) – These are used to notify facility personnel of an evacuation;

- First Aid Kits in the office, each vehicle, and on each piece of equipment dedicated to the landfarm. First Aid Kits include bandages, gauze pads, hot and cold therapy, instruments (scissors, tweezers, etc.), ointments, preparation pads, over the counter medications, and accessories (eyewash, gloves, finger splints, etc.) – the kits are used for medical assistance;

- Cellular phones (in possession of all employees) – Phones are the primary means of communication among landfarm personnel;

- Emergency Response Handbooks (located in the Landfarm Office, in each vehicle, and on each piece of equipment dedicated to the landfarm) containing the following:

    a. Medical Emergency Plan
    b. Emergency Medical Contacts for the Farmington,area
    c. Maps Providing Directions to Local Medical Centers and Hospitals

In addition, emergency medical contacts and maps providing directions to local medical facilities, specific to the landfarm, are attached to this plan.

(5) Include an evacuation plan for surface waste management facility personnel that describes signals to be used to begin evacuation, evacuation routes, and alternative evacuation routes in cases where fire or releases of wastes could block the primary routes;

In the event of an emergency, evacuation will be initiated using 150 DB Air Horns. Evacuation will proceed as follows:

a. Employee initiating evacuation will sound air horn;

b. All employees will proceed to the appropriate designated muster area as follows:

   i. Primary - Landfarm Main Gate

   ii. Secondary - Intersection of Highway 550 and Angel Peak Road

   iii. Alternate - Upwind;

c. Employees will complete evacuation by traveling to Highway 550 and North if it is safe to do so;

d. The meeting location, once evacuation is completed, will be the Mustang convenience store north-east of the landfarm in Hilltop, New Mexico.

(6) Include an evaluation of expected contaminants, expected media contaminated and procedures for investigation, containment and correction or remediation;

Envirotech's Landfarm is permitted to accept hydrocarbon contaminated soil and sludge. Should an emergency occur, information regarding expected contaminants will be available at both the Landfarm Office as well as the Landfarm Administrator Office at 5796 U.S. Highway 64, Farmington, New Mexico. Documentation will include Forms C-138, Bills of Lading, and Analytical Results. These documents detail the origin of materials, transportation information, and placement of the materials. This information will be readily available and would aid in an investigation. Sludge authorized for acceptance will be placed directly into the Blending Facility (a concrete containment), where it will be blended to promote stability of the material. Soil to be remediated is placed directly into the grid it has been assigned. The grid will be surrounded by four (4) feet berms. Corrections to operation procedures will be made on a case by case basis when necessary.

(7) List where copies of the contingency plan will be kept, which shall include the surface waste management facility; local police departments, fire departments and hospitals; and state and local emergency response teams;

Copies of this contingency plan are available at the Landfarm Administrator's Office, located at 5796 US Hwy 64, Farmington, New Mexico. An additional copy of this contingency plan is available at the Landfarm Office. A copy of this contingency plan will be provided to local emergency response agencies.

(8) Indicate when the contingency plan will be amended, which shall be within five working days whenever:

This contingency plan will be amended as necessary and as soon as possible, but no later than five (5) working days after any of the following events take place:

e. *The surface waste management facility permit is revised or modified;*

f. *The plan fails in an emergency;*

g. *The surface waste management facility changes in design, construction, operation, maintenance, or other circumstances in a way that increases the potential for fires, explosions, or releases of oilfield waste that could threaten fresh water, public health, safety, and environment;*

h. *The list of emergency coordinators or their contact information changes; or*

i. *The list of emergency equipment changes.*

(9) Describe how the emergency coordinator or the coordinator's designee, whenever there is an imminent or actual emergency situation, will immediately;

j. *Activate internal surface waste management facility alarms or communication systems, where applicable, to notify surface waste management facility personnel; and*

Envirotech, Inc. employees will immediately notify personnel via air horn or cellular phones that an emergency has occurred.

k. *Notify appropriate state and local agencies with designated response roles if their assistance is needed;*

Envirotech, Inc. employees will immediately notify local and state emergency response agencies by contacting 911. All other agencies will be notified accordingly once the emergency is under control.

(10) Describe how the emergency coordinator, whenever there is a release, fire or explosion, will immediately identify the character, exact source, amount and extent of released materials (the emergency coordinator may do this by observation or review of surface waste management facility records or manifests, and, if necessary, by chemical analysis) and describe how the emergency coordinator will concurrently assess the possible hazards to fresh water, public health, safety or the environment

that may result from a release, fire or explosion (this assessment shall consider both the direct and indirect hazard of the release, fire or explosion);

In the event of a release, fire, or explosion, the Envirotech, Inc. Emergency Coordinator will immediately identify the exact source, amount, and extent of any released materials, by observation or review of Landfarm Records, and if necessary, by performing chemical analysis. By landfarm process knowledge and review of geological and hydrological documentation, the Emergency Coordinator, with the assistance of an Environmental Scientist, will concurrently assess possible hazards to fresh water, public health, safety or the environment.

(11) Describe how, if the surface waste management facility stops operations in response to fire, explosion or release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or rupture in valves, pipes of the equipment, wherever this is appropriate.

If landfarm operations are stopped in response to a fire, explosion, or release, visual assessments will be performed to determine the extent(s) of damage to the landfarm and to the equipment. The Blending Facility will be monitored for leaks by visual inspection and for gas generation using air quality monitors. Equipment will be visually assessed for ruptures in valves or piping and repaired as appropriate.

(12) Describe how the emergency coordinator, immediately after an emergency, will provide for treating, storing or disposing of recovered oil field waste, or other material that results from a release, fire or explosion at a surface waste management facility;

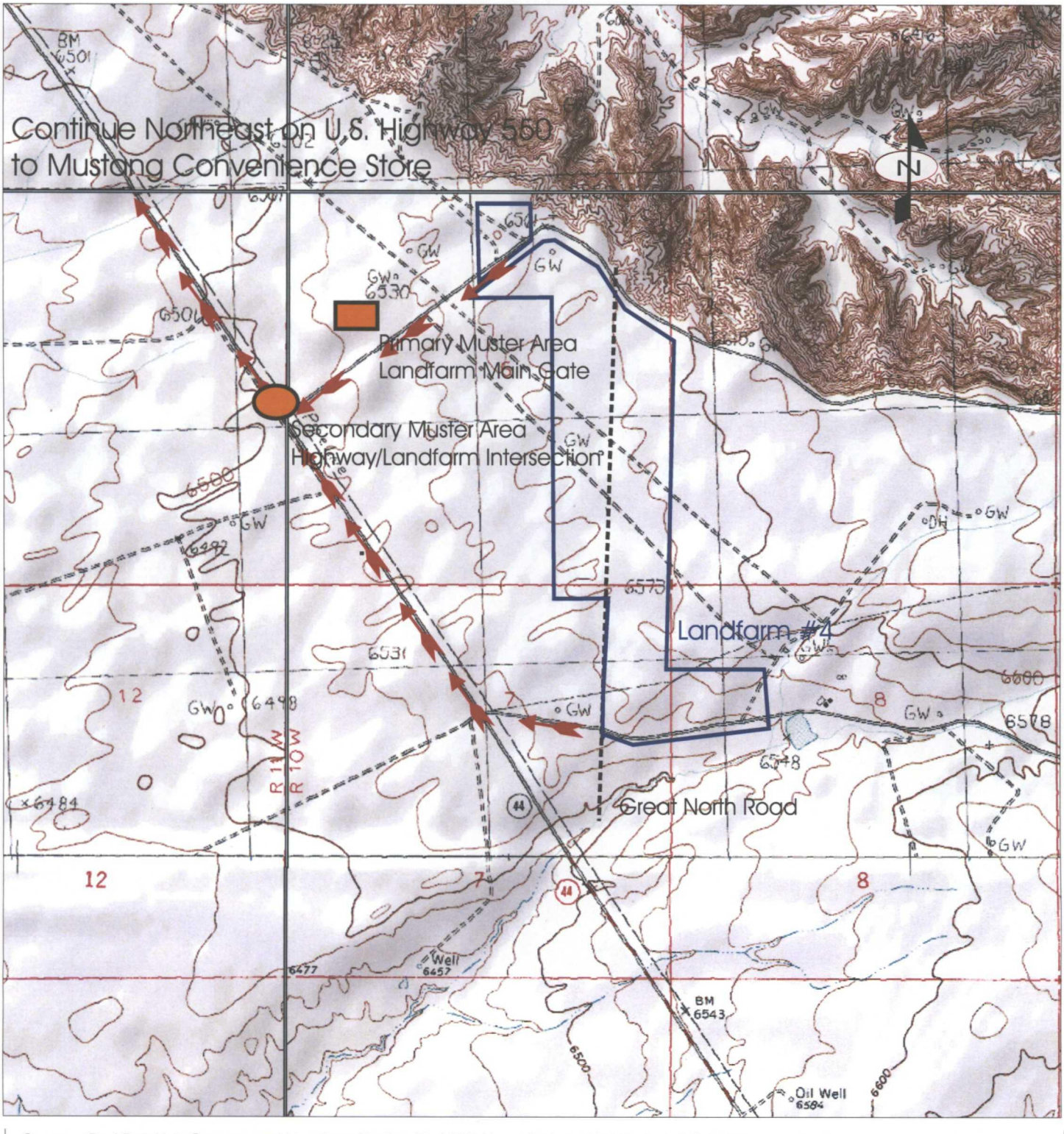
Due to the nature of operations of this facility, which is acceptance of hydrocarbon contaminated soil and sludge, once the emergency phase of a fire, explosion, or spill has been completed, landfarming activities will continue upon completion of any necessary visual inspections, sampling activities, monitoring activities, and equipment repair. Any material that has been deemed hazardous due to the emergency will be disposed of at a permitted hazardous waste facility as soon as arrangements can be made. Non-hazardous materials shall remain at the landfarm for remediation.

(13) Describe how the emergency coordinator will ensure that no oil field waste, which may be incompatible with the released material, is treated, stored or disposed of until cleanup procedures are complete; and

Due to the nature of operation of this facility, which is acceptance of hydrocarbon contaminated soil and sludge, all contaminated material authorized for acceptance should consist of a similar chemical makeup. The landfarm will suspend normal operations and will not accept material while attempting to control any emergency situation.

(14) *Provide that the emergency coordinator may amend the plan during an emergency as necessary to protect fresh water, public health, safety or the environment.*

Envirotech's Emergency Coordinator will amend this plan during an emergency, as necessary, to protect fresh water, public health, safety, or the environment



Source: East Fork Kutz Canyon and Huerfano Trading Post NW, New Mexico, 7.5-Minute U.S.G.S. Topographic Quadrangle Maps
Scale: 1:24,000 1" = 2000'

Envirotech, Inc. Landfarm San Juan County, New Mexico	ENVIROTECH INC. ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 FARMINGTON, NEW MEXICO 87401 PHONE (505) 632-0615	Evacuation Map	
Date Drawn: 08/27/09		DRAWN BY: Sherry Auckland	PROJECT MANAGER: Kyle P. Kerr

EMERGENCY MEDICAL PROVIDERS

Land Farm

City	*Facility*	*Address*	*Phone*
Farmington	San Juan Regional Medical Center	801 W. Maple St	505-325-5011
Farmington	Reliance Medical Group-Occupational	3451 N Butler	505-566-1915
Farmington	Reliance Urgent Care	3751 N Butler	505-324-1255

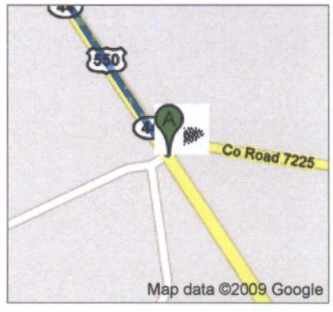
Google maps

Directions to Farmington, NM
29.5 mi – about **47 mins**

Landfarm to Farmington, New Mexico

A U.S. 550 & Co Road 7225, Bloomfield, NM 87413

44 1. Head **northwest** on **NM-44 N/US-550 N** toward **Co Rd 7175**
About 24 mins

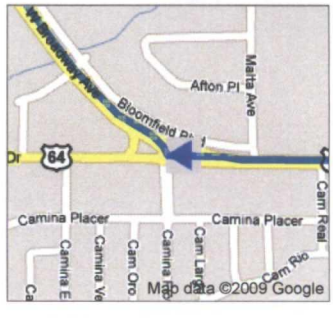


go 15.9 mi
total 15.9 mi

64 2. Turn **left** at **W Broadway Ave/US-64 W**
About 18 mins

go 11.3 mi
total 27.2 mi

3. Turn **right** at **W Broadway Ave**
About 5 mins



go 2.3 mi
total 29.5 mi

B Farmington, NM

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2009 , Google

Google maps

Directions to San Juan Regional Medical Center
San Juan Regional Medical Center, Farmington,
New Mexico 87401, 87401 - (505) 564-8563
27.7 mi – about **48 mins**

San Juan Regional Medical Center

U.S. 550 & Co Road 7225, Bloomfield, NM 87413

1.	Head **northwest** on **NM-44 N/US-550 N** toward **Co Rd 7175** About 19 mins	go 12.7 mi total 12.7 mi
2.	Turn **left** at **Rd 5500** About 10 mins	go 5.4 mi total 18.1 mi
3.	Turn **left** to stay on **Rd 5500** About 4 mins	go 2.2 mi total 20.3 mi
4.	Turn **left** at **W Broadway Ave/US-64 W** About 9 mins	go 5.1 mi total 25.4 mi
5.	Continue onto **E Murray Dr/US-64 Bypass W** About 3 mins	go 1.7 mi total 27.0 mi
6.	Turn **right** at **S Auburn Ave**	go 0.2 mi total 27.2 mi
7.	Continue onto **S Lorena Ave** About 1 min	go 0.2 mi total 27.4 mi
8.	Turn **left** at **W Maple St** Destination will be on the left About 1 min	go 0.3 mi total 27.7 mi

San Juan Regional Medical Center
San Juan Regional Medical Center, Farmington, New Mexico 87401, 87401 - (505) 564-8563

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Google maps

Directions to Reliance Medical Center
3451 N Butler Ave, Farmington, NM 87401-2361 - (505) 325-1100
47.7 mi – about **1 hour 19 mins**

Reliance Medical Center

A U.S. 550 & Co Road 7775, Bloomfield, NM 87413

44	1. Head **northwest** on **NM-44 N/US-550 N** About 50 mins	go 33.1 mi total 33.1 mi
64	2. Turn **left** at **W Broadway Ave/US-64 W** About 18 mins	go 11.3 mi total 44.4 mi
	3. Turn **right** at **W Broadway Ave** About 2 mins	go 1.1 mi total 45.5 mi
	4. Turn **right** at **S Butler Ave** Destination will be on the left About 8 mins	go 2.1 mi total 47.7 mi

B Reliance Medical Center
3451 N Butler Ave, Farmington, NM 87401-2361 - (505) 325-1100

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly You must obey all signs or notices regarding your route.

ATTACHMENT 10:

Plan to Control Water Run-On and Run-Off

Attachment #10: Plan to Control Water Run-On and Run-Off

This plan complies with the applicable requirements contained in Subsection M of 19.15.36.13 NMAC.

(1) The run-on and run-off control system shall prevent flow onto the Landfarm's active portion during the peak discharge from a 25-year storm; and

Envirotech, Inc. will construct four (4) foot berms around each landfarm cell to prevent rainwater run-on and run-off. Additionally, a four (4) foot berm will be constructed around the entire Landfarm #4 perimeter. Landfarm cells will be contoured and surfaced in a manner to prevent artificial run-off and ponding.

(2) Run-off from the Landfarm's active portion shall not be allowed to discharge a pollutant to the waters of the state or United States that violates state water quality standards.

Envirotech's Hydro-geologic Report included in ***Attachment 13, Geological/Hydro-Geological Data***, indicates that waters of the state or United States would not be affected during the peak discharge from a twenty-five (25)-year storm.

If any break of the berm system occurs, Envirotech, Inc. will immediately notify the division, repair the break, and take appropriate measures to contain any runoff.

ATTACHMENT 11:

Best Management Practice Plan

Attachment #11: Best Management Practice Plan

The purpose of this plan is to ensure conservation of natural areas, to prevent or minimize contamination due to storm water run-on and run-off, to provide design standards for structural and treatment control, and to provide for ongoing maintenance.

Envirotech's landfarm is located on a plain or mesa that has no fresh water resources. The first usable aquifer is the Ojo Amarillo at approximately 1,250 feet below ground surface.

The landfarm is located in an area remote to human habitation. There are no residences with one (1) mile of the facility boundaries; see ***Attachment 13, Geological/Hydro-Geological Data.*** This is an open air facility with a prevailing westerly breeze that aids in preventing any vapor or odor accumulation that may affect employees stationed at the landfarm or wildlife in the area. This was visually confirmed by a visual inspection performed by Envirotech, Inc.; see visual inspection sheet included in ***Attachment 13, Geological/Hydro-Geological Data.*** .

The landfarm will be constructed in a manner to prevent erosion, to manage run-on and run-off, to prevent ponding and pooling, and to prevent unauthorized access. Specifically, Envirotech, Inc. will construct four (4) foot berms around each landfarm cell to prevent rainwater run-on and run-off. Additionally, a four (4) foot berm will be constructed around the entire landfarm perimeter. Landfarm cells will be surfaced in a manner to prevent artificial run-off, pooling and ponding. The entire landfarm facility will be signed, and enclosed with four-wire barbed wire fence and locked gates.

Envirotech, Inc. will operate a blending facility at Landfarm #4; see ***Attachment 4, Stabilization Facility Diagram.*** In the event of water accumulation in the blending facility for a period of 24 hours, the water would be blended with clean virgin soil, and placed into a designated landfarm cell.

All landfarm employees have completed 40-hour HAZWOPER training and H2S awareness training. Employees attend monthly safety meetings and seminars. A tailgate safety meeting is conducted before each shift noting the dangers of heavy equipment operation, temperature extremes, slips, trips, or falls, and other dangers at the site. This tailgate safety meeting also refreshes the employees on the emergency procedures to follow in the event of an incident.

ATTACHMENT 12:

Demonstration of Compliance with Siting Requirements of Subsections A and B of 19.15.36.13 NMAC

Attachment #12: Demonstration of Compliance with Siting Requirements of Subsections A and B of 19.15.36.13 NMAC

19.15.36.13 Siting and Operational Requirements Applicable to All Permitted Surface Waste Management Facilities: Except as otherwise provided in 19.15.36 NMAC.

A. Depth to ground water.

(1) No landfill shall be located where ground water is less than 100 feet below the lowest elevation of the design depth at which the operator will place oil field waste.

Not Applicable. Envirotech, Inc. operates a landfarm, not a landfill.

(2) No landfarm that accepts soil or drill cuttings with a chloride concentration that exceeds 500 mg/kg shall be located where ground water is less than 100 feet below the lowest elevation at which the operator will place oil field waste. See Subsection A of 19.15.36.15 NMAC for oil field waste acceptance criteria.

Depth to groundwater at Envirotech's Landfarm #4 is greater than 100 feet; see ***Attachment 13, Geological/Hydro-Geological Data.*** .

(3) No landfarm that accepts soil or drill cuttings with a chloride concentration that is 500 mg/kg or less shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste.

Depth to groundwater at Envirotech's Landfarm #4 is greater than 100 feet; see ***Attachment 13, Geological/Hydro-Geological Data.*** .

(4) No small landfarm shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste.

Not applicable. Envirotech, Inc. does not operator a small landfarm.

(5) No other surface waste management facility shall be located where groundwater is less than 50 feet below the lowest elevation at which the operator will place oil field waste.

Depth to groundwater at Envirotech's Landfarm #4 is greater than 100 feet; see ***Attachment 13, Geological/ Hydro-Geological Data.***

B. No surface waste management facility shall be located:

(1) Within 200 feet of a watercourse, lakebed, sinkhole or playa lake;

Envirotech's Landfarm #4 is not within 200 feet of a watercourse, lakebed, sinkhole or playa lake; see ***Envirotech, Inc., Landfarm #4 Hydro-Geologic Report*** included in ***Attachment 13, Geological/ Hydro-Geological Data.***

(2) Within an existing wellhead protection area or 100-year floodplain;

Envirotech's Landfarm #4 is not within an existing wellhead protection area or 100-year floodplain; see the FEMA Flood Insurance Rate Map (FIRM) map included in ***Attachment 13, Geological/Hydro-Geological Data.***

(3) Within, or within 500 feet of, a wetland;

Envirotech's Landfarm #4 is not within, or within 500 feet of, a wetland; see the U.S. Fish and Wildlife Service, National Wetlands Inventory map included in ***Attachment 13, Geological/Hydro-Geological Data.***

(4) Within the area overlying a subsurface mine;

Envirotech's Landfarm #4 is not within an area overlying a subsurface mine; see the NM EMNRD web map and visual inspection sheet included in ***Attachment 13, Geological/Hydro-Geological Data.***

(5) Within 500 feet from the nearest permanent residence, school, hospital, institution or church in existence at the time of initial application; or

Envirotech's Landfarm is more than 500 feet from the nearest permanent residence, school, hospital, institution or church. See San Juan County parcel (zoning) maps and visual inspection sheet included in ***Attachment 13, Geological/Hydro-Geological Data.***

(6) Within an unstable area, unless the operator demonstrates that engineering measures have been incorporated into the surface waste management facility design to ensure that the surface waste management facility's integrity will not be compromised.

The topographical map included in ***Attachment 13, Geological/Hydro-Geological Data*** indicates that the Landfarm #4 is not within an unstable area.

ATTACHMENT 13:

Geological/Hydrological Data

Attachment #13: Geological/Hydro-Geological Data

- GEOMAT Laboratory Report
- Envirotech, Inc. Landfarm #4 Hydro-Geologic Report
- FEMA Flood Insurance Rate Map (FIRM)
- U.S. Fish and Wildlife Service, National Wetlands Inventory Map
- NM EMNRD web map
- San Juan County Parcel Maps
- Envirotech, Inc. Landfarm Facility Inspection Sheet and Photographs

GEOMAT Laboratory Report

GEOMAT INC
2060 Afton Place ◆ Farmington, NM 87401 ◆ Tel (505) 327-7928 ◆ Fax (505) 326-5721

May 12, 2008
GEOMAT Project No. 81-0657

RECEIVED
MAY 12 2008

Morris Young
Envirotech Inc.
5796 U.S. Highway 64
Farmington, New Mexico 87401

RE: Land Farm Expansion Area
U.S. Highway 550 South of Bloomfield, NM

As you requested we have performed laboratory testing on a sample representative of the surface soils at the above referenced project. The sample was submitted to our laboratory for testing on May 6, 2008. The tests performed and results follow.

Soil Index Tests

Sieve Analysis, ASTM C117, C136	
Sieve Size	Accumulative % Passing
No. 10	100
No. 16	99
No. 30	94
No. 40	85
No. 50	73
No. 100	35
No. 200	19
Plasticity Index, ASTM D4318	
Liquid Limit	NLL
Plastic Limit	NPL
Plasticity Index	Non Plastic
Soil Classification for Engineering Purposes, ASTM D2487	
SM, Silty Sand, Brown	

Compaction / Swelling Characteristics

Compaction		
Test Method	Dry Density	Optimum Moisture Content
Moisture-Density Relationship, ASTM D698	117.7 pcf	11.0 %
Swelling Characteristics		
[1]Remolded Swell Potential, %	0.0	

[1]Sample molded to 90% compaction at 3% below optimum moisture content, surcharged with 100 psf, then wetted.

Morris Young
Envirotech Land Farm
GEOMAT Project No. 81-0657
May 12, 2008

Soil Resistivity

Minimum Resistivity, ARIZ 236b	20,207 ohm-cm

Porosity / Permeability Properties

[2]Porosity	23% (assuming dense condition)
[3]Permeability	Semi-Pervious to Impervious (when compacted)
[2]From B.K. Hough, Basic Soils Engineering, 2nd Edition	
[3]From Bureau of Reclamation, U.S. Department of the Interior	

Thank you for the opportunity to work with you on this project. If you have any questions or need additional information, please let us know.

Sincerely yours,
GEOMAT Inc.

George A. Madrid, P.E.
President, Principal Engineer

Envirotech, Inc. Landfarm Hydro-Geologic Report

Envirotech, Inc., Landfarm #4 Hydro-Geologic Report

Water Wells

The attached iWATERS database radius search for water wells located within ten (10) kilometers of the Landfarm #4 location and the attached topographic map show three (3) water wells within five (5) miles of Envirotech, Inc's Landfarm #4 location. One (1) water well is approximately 2.63 miles to the north-west of the north-west boundary of Landfarm #4 with a depth to groundwater of 550 feet at an elevation approximately 132 feet lower than the Landfarm #4 averaged elevation. One (1) water well is approximately 4.5 miles to the south-west of the south-west boundary of Landfarm #4 with a depth to groundwater of 200 feet at an elevation approximately 307 feet lower than the Landfarm #4 averaged elevation. One (1) water well is approximately 4.8 miles to the south-east of the south-east boundary of Landfarm #4 with a depth to groundwater of 500 feet at an elevation approximately three (3) feet lower than the Landfarm #4 averaged elevation. The average elevation of Envirotech's Landfarm #4 was determined by averaging the elevation data collected from five (5) points at the Landfarm. See ***Figure 1, Topographic Map – Elevation Data Locations*** for data collection points. Water wells are labeled on the attached topographic map with a blue flag. Please reference ***Figure 2, Topographic Map - Water Wells***, for water well locations.

Cathodic Wells

The attached cathodic well data sheet for a cathodic well drilled in 1975 for the Huerfano Unit #68 well site shows that groundwater was encountered at 275 feet. This cathodic well data sheet is stamped as being accepted by the NMOCD in May of 1991. The Huerfano Unit #68 well site is approximately 380 feet west of the south-west border of Landfarm #4 Landfarm #4 at an elevation approximately 37 feet lower than the Landfarm #4 averaged elevation. The attached cathodic well data sheet for a cathodic well drilled in 1993 for the Huerfano Unit NP #270 well site shows that groundwater was encountered at 140 feet. This cathodic well data sheet is stamped as being accepted by the NMOCD in January of 1994. The Huerfano Unit NP #270 well site is approximately 3,550 feet south-west of the south-west corner of Landfarm #4 at an elevation approximately 97 feet lower than the Landfarm #4 averaged elevation. Cathodic well sites are labeled on the attached topographic map with a yellow flag. Please reference ***Figure 3, Topographic Map – Cathodic Wells***, for cathodic well locations.

Groundwater Assessment

The attached ***Soil Boring Lithology*** logs for two (2) soil borings drilled on Envirotech's landfarm show that groundwater was not encountered in either of the 100 foot borings. Soil Boring #1 was completed on September 2, 2008, with Mr. Brad Jones of the NMOCD overseeing drilling activities and lithology recording. Soil Boring #2 was completed on March 9, 2009 with Mr. Brandon Powell of the NMOCD overseeing drilling activities and lithology recording. See attached ***Figure 4, Topographic Map – Soil Borings***, for soil boring locations.

These findings give definitive proof that depth to groundwater is greater than 100 feet below the lowest elevation of Envirotech's landfarm.

Surface Flow

The nearest wash is approximately 390 feet to the south-east of the south-east corner of the Landfarm #4 boundary at an elevation of 6,549 feet. This is a south-west flowing ephemeral wash which only flows during periods of heavy precipitation. This wash is not a first or second order tributary of a named wash. Two (2) washes are approximately 3,400 feet and 3,860 feet to the west of the north-west boundary of Landfarm #4 at elevations of 6,506 feet and 6,490 feet respectively. These are west flowing ephemeral washes which only flow during periods of heavy precipitation. These washes are not first or second order tributaries of a named wash. Three (3) washes are between 800 – 1000 feet north of the north boundary of Landfarm #4 at elevations ranging from 6,466 feet to 6,536 feet. These are north flowing ephemeral washes which only flow during periods of heavy precipitation. These washes are first order tributaries of the Kutz wash. These washes range from 36 to 106 feet lower in elevation than the Landfarm #4 average elevation; however, the surface topography and drainage area of Landfarm #4 slopes and flows to the south-west, away from these washes. The landfarm location lies in the Nacimiento Formation Aquifer which dips at 6 degrees to the north-east (Frenzel, 1983); see Topographic Map for aquifer dip direction. The Nacimiento Formation lies at the surface in a broad belt at the western and southern edges of the central basin and dips beneath the San Jose Formation in the basin center (Frenzel, 1983). All above information, excluding the aquifer dip, was confirmed by a visual inspection performed by Envirotech, Inc. See ***Figure 3, Topographic Map – Cathodic Wells***, for wash locations and elevations.

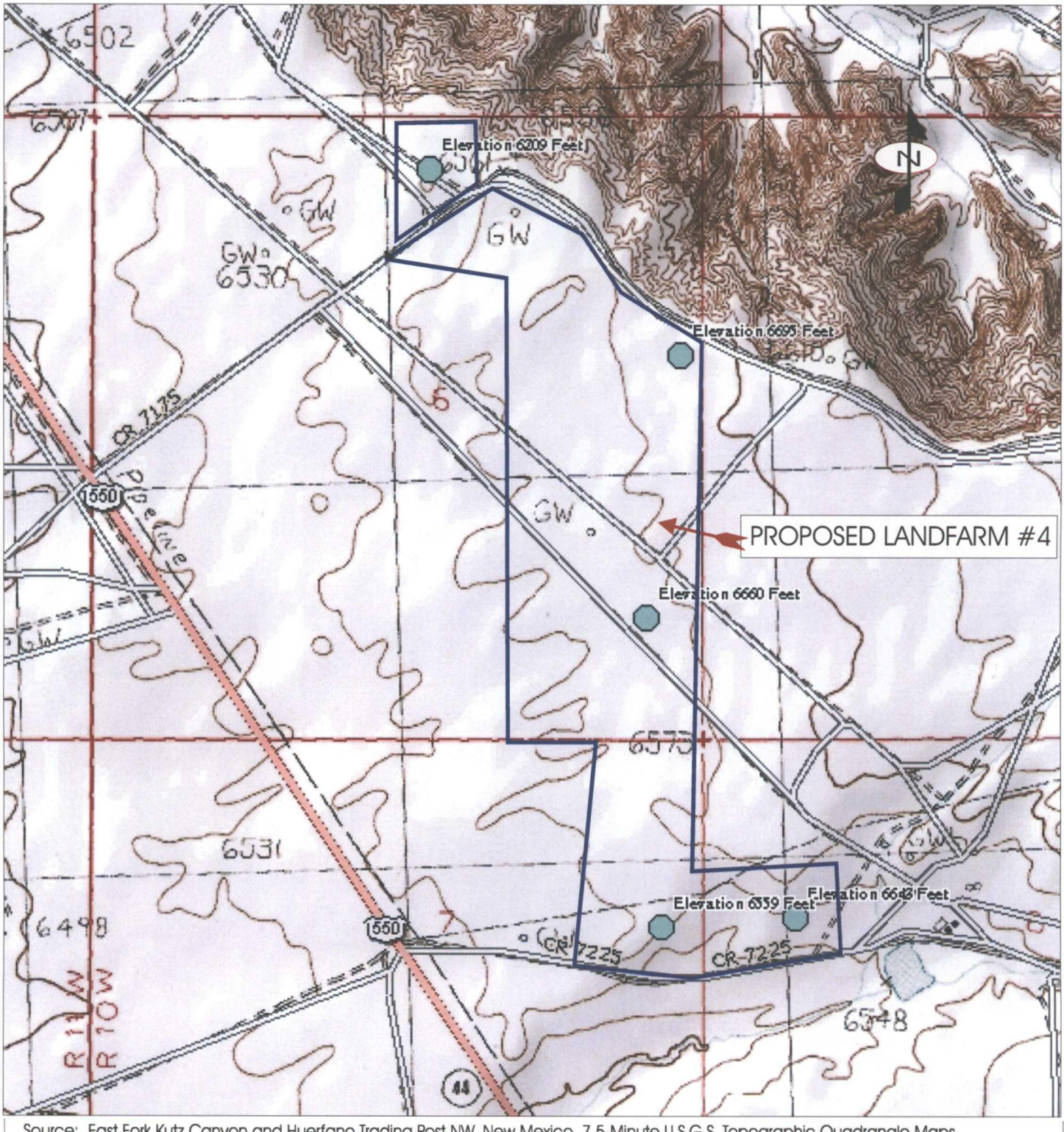
Soil Description

The soil type at Envirotech's landfarm location in Section 6 is a Sheppard-Mayqueen-Shiprock complex that is 0-8 percent slope. This is a somewhat excessively drained soil, characterized by eolian deposits derived from sandstone and shale with a moderate to low available water capacity. The soil type at the landfarm location in the northern section of Section 7 is a Doak-Sheppard-Shiprock Association, rolling. This is a well drained soil, characterized by eolian deposits over alluvium derived from sandstone and shale with a high to low available water capacity. The soil type at the landfarm location in the southern section of Section 7 is a Fruitland-Persayo-Sheppard complex, hilly. This is a well drained soil, characterized by eolian deposits over alluvium and residuum derived from sandstone and shale with a moderate to very low available water capacity. The soil type at the landfarm location in Section 8 is a Blancot-Notal association that is gently sloping. This is a well drained soil, characterized by fan and stream alluvium derived from sandstone and shale with a high to low available water capacity.

Geologic Formation

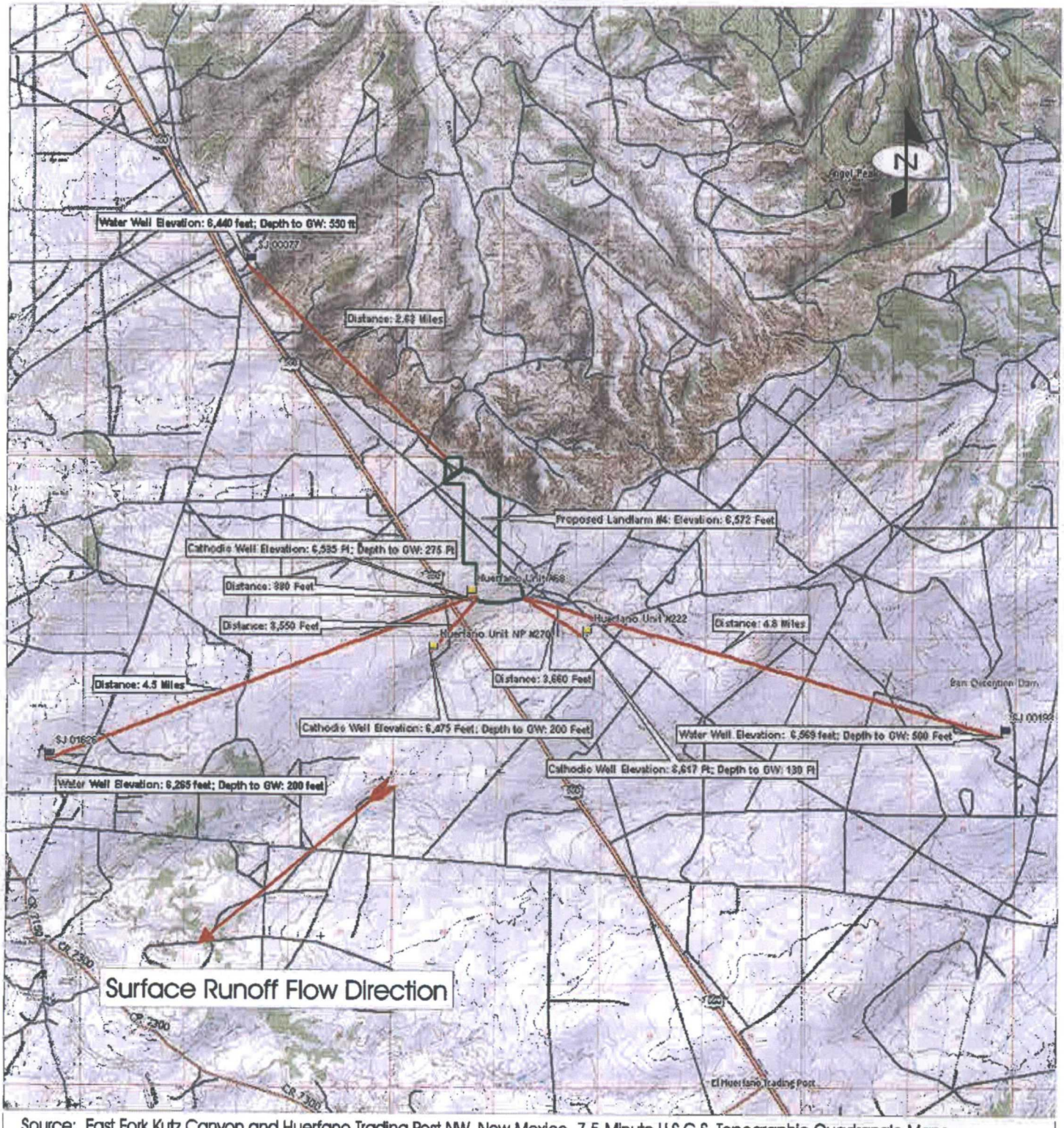
The Nacimiento Formation (Tn) is Paleocene in age and grades laterally into the Animas Formation (Tka) around Dulce, New Mexico thickening considerably around Durango,

Colorado. The Animas occurs at the same stratigraphic interval as the Nacimientos (Fassett and Hinds, 1971, p. 34). The Nacimiento sits unconformably to conformably below the San Jose Formation, outcrops in a broad band inside the southern and western boundaries of the central basin and rises structurally as a narrow band along the west side of the Nacimiento Uplift (Baltz, 1967, p. 35). The Nacimiento is the surface formation in the eastern third of the San Juan Basin, and being nonresistant, erodes to low rounded hills or the formation of badlands-type physiography distinctive from the much more resistant overlying San Jose Formation. The Nacimiento Formation is present in only the southern two-thirds of the Basin where it conformably both overlies and intertongues with the much thinner Ojo Alamo Sandstone (Fassett, 1974, p. 229). Thickness ranges from 800 feet in the southern part to nearly 2232 feet (Stone, et al, 1983, p. 30) in the subsurface of the northern part. In the eastern outcrops, the thickness is less than 500 feet to nearly 1400 feet due to folding and erosion (Baltz, 1967, p. 1). In general, the total thickness of the Nacimiento thickens from the basin margins towards the basin center. The Nacimiento in the southern area is comprised predominantly of drab interbedded black and gray claystones and siltstones with some discontinuous relatively unconsolidated white, medium to coarse-grained arkosic sandstone with a few interbedded resistant sandstone strata (Stone, etal, 1983, p.30). To the north, the Naciemento Formation contains a much greater proportion of sandstone, and at some localized places more than 50 percent (Baltz, 1967, p. 1), although most of the sandstones extend only a few thousand feet (Brimhall, 1973, p. 201). Overall, the environment of deposition is predominantly lake deposits and to a lesser extent localization in stream channels (Brimhall, 1973, p. 201).



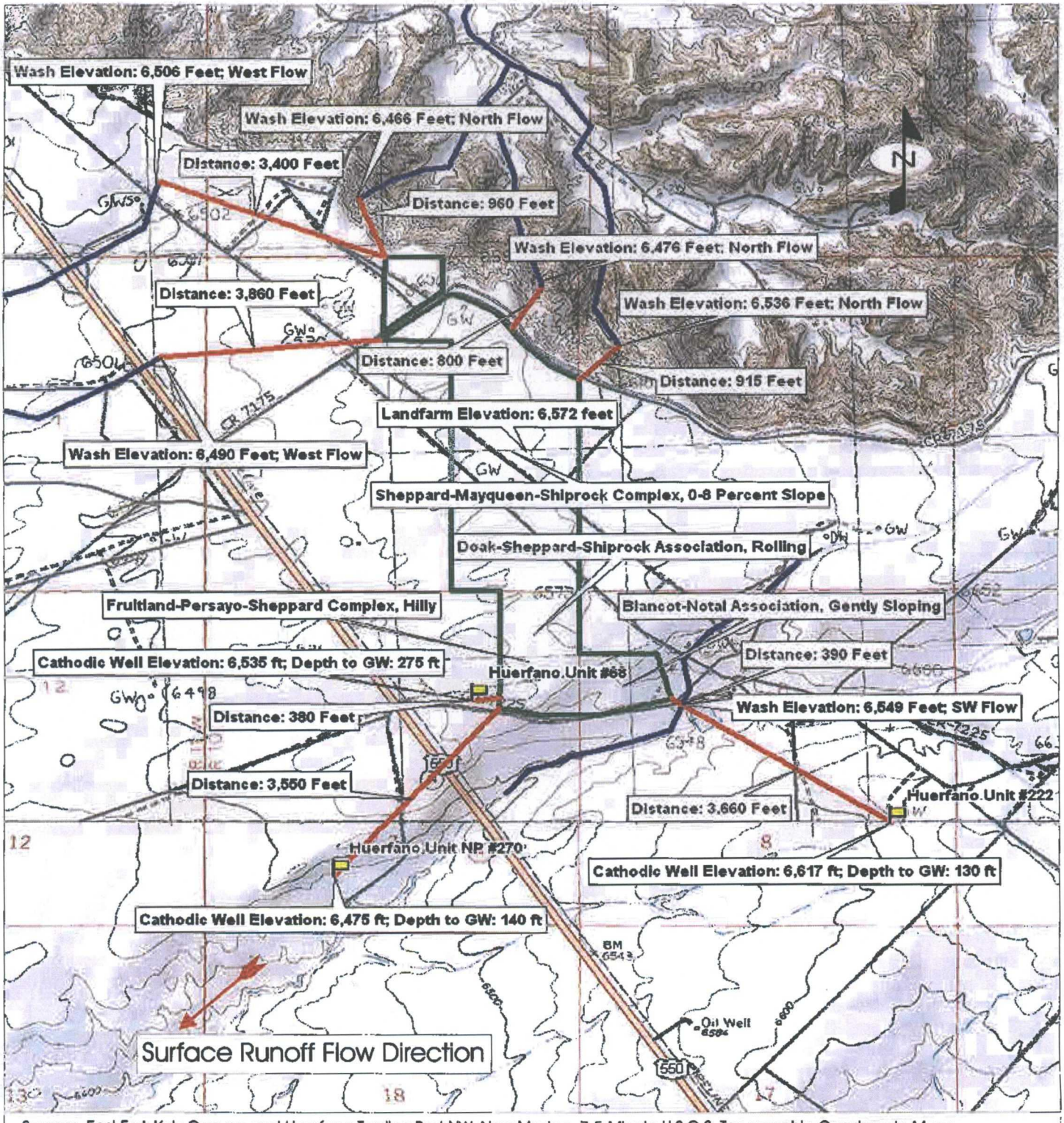
Source: East Fork Kutz Canyon and Huerfano Trading Post NW, New Mexico, 7.5-Minute U.S.G.S. Topographic Quadrangle Maps
Scale: 1:24,000 1" = 2000'

Envirotech, Inc. Proposed Landfarm #4 San Juan County, New Mexico	ENVIROTECH INC. ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 FARMINGTON, NEW MEXICO 87401 PHONE (505) 632-0615	Elevation Data Locations	
Date Drawn: 11/23/09		Figure 1	
		DRAWN BY: Sherry Auckland	PROJECT MANAGER: Kyle P. Kerr



Source: East Fork Kutz Canyon and Huerfano Trading Post NW, New Mexico, 7.5-Minute U.S.G.S. Topographic Quadrangle Maps
Scale: 1:90,000 1" = 1.42 miles

Envirotech, Inc. Proposed Landfarm #4 Sections 6,7,8, Twp 26N, Rge 10W San Juan County, New Mexico	ENVIROTECH INC. ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 FARMINGTON, NEW MEXICO 87401 PHONE (505) 632-0615	Hydro-geologic Map Water Wells	
PROJECT No 03037-0005 / Date Drawn: 06/18/09		Figure 2	
		DRAWN BY: Toni McKnight	PROJECT MANAGER: Kyle P. Kerr



Source: East Fork Kutz Canyon and Huerfano Trading Post NW, New Mexico, 7.5-Minute U.S.G.S. Topographic Quadrangle Maps
Scale: 1:25,000 1" = 2083.3'

Envirotech, Inc. Proposed Landfarm #4 Sections 6,7,8, Twp 26N, Rge 10W San Juan County, New Mexico	ENVIROTECH INC. ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 FARMINGTON, NEW MEXICO 87401 PHONE (505) 632-0615	Hydro-geologic Map Cathodic Wells Figure 3
PROJECT No 03037-0005 | Date Drawn: 06/18/09		DRAWN BY: Toni McKnight | PROJECT MANAGER: Kyle P. Kerr

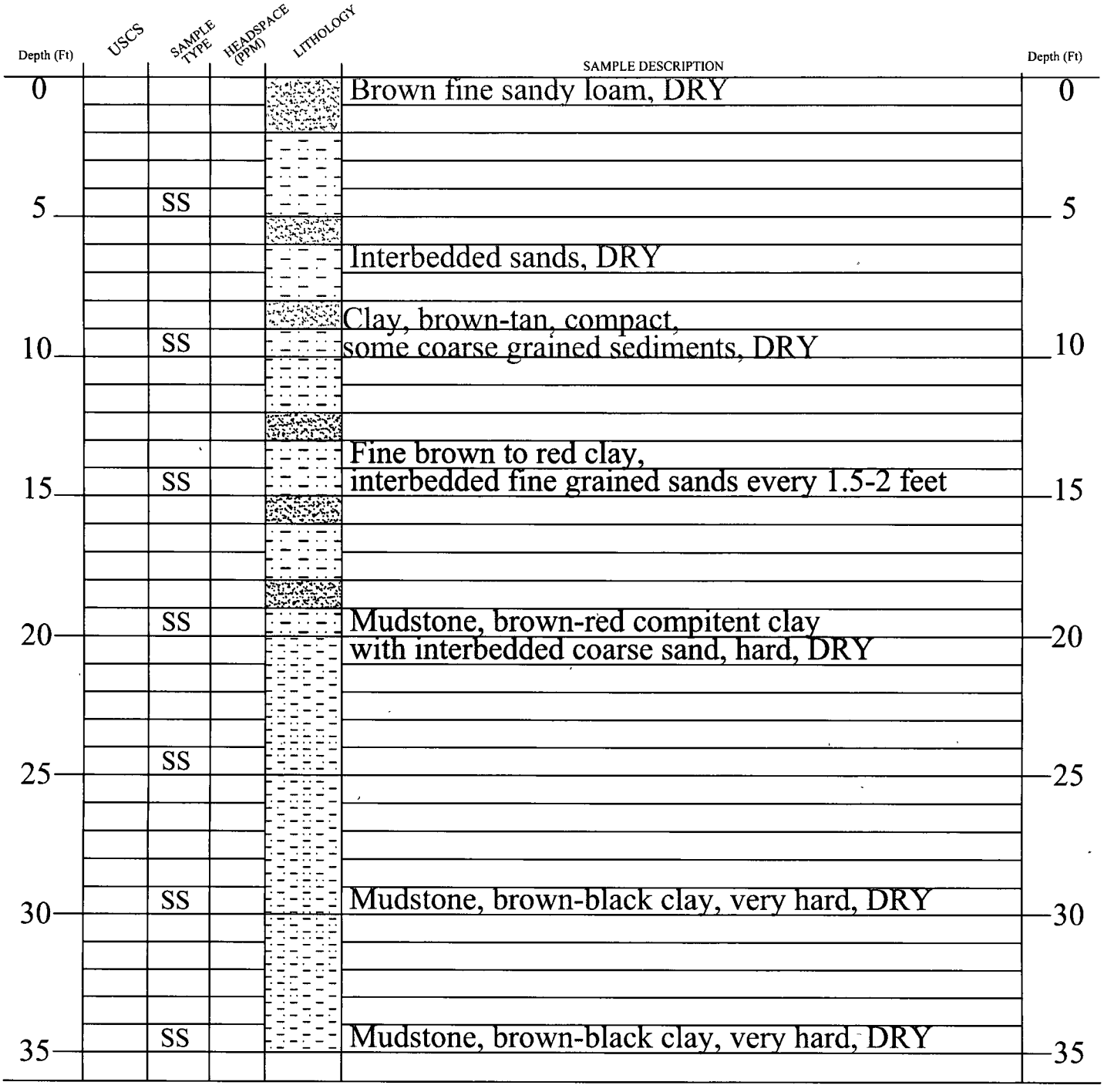
Drilling Narrative

On September 2, 2008, Envirotech personnel Morris Young, Kyle Kerr and Sherry Auckland were on-site with Mr. Brad Jones of the New Mexico Oil Conservation Division to complete a groundwater assessment for the proposed Envirotech Landfarm #4 expansion. On September 2, 2008, Envirotech driller Sam Mustache with helper Myron used a hollow stem auger to complete a boring to approximately forty (40) feet below ground surface. A split spoon was used to collect a sample every five (5) feet to assess the presence of groundwater and to record the subsurface lithology. Lithology was recorded on a field lithology sheet. Once forty (40) feet was reached with the hollow stem auger, the drillers switched over to an air rotary drilling system to complete the boring to the target depth of one hundred (100) feet below ground surface. A core from the boring was brought to the surface every ten (10) feet to record the subsurface lithology and to assess the presence of groundwater. All subsurface lithology was recorded on a field lithology log. No groundwater was encountered in this one hundred (100) foot boring. The boring was left open for 72 hours to determine if any groundwater would enter the boring. The boring was then backfilled with the dry cuttings removed from the boring itself.

On March 9, 2009, Envirotech Scientist James McDaniel was on-site with Mr. Brandon Powell of the New Mexico Oil Conservation Division to complete a groundwater assessment for the proposed Envirotech Landfarm #4 expansion. On March 9, 2009, Enviro-Drill was onsite to perform drilling activities. Driller Mike Stone with helper Louie Chavez used a hollow stem auger to complete a boring to approximately forty (40) feet below ground surface. A split spoon was used to collect a sample every five (5) feet to assess the presence of groundwater and to record the subsurface lithology. Lithology was recorded on a field lithology sheet. Once forty (40) feet was reached with the hollow stem auger, Enviro-Drill switched to an air rotary drilling system to complete the boring to the target depth of one hundred (100) feet below ground surface. A core from the boring was brought to the surface every ten (10) feet to record the subsurface lithology and to assess the presence of groundwater. All subsurface lithology was recorded on a field lithology log. The boring was completed to eighty (80) feet below ground surface before a broken bit halted drilling activities. Drilling activities continued on March 10, 2009, and the boring was completed the additional twenty (20) feet to the targeted depth of one hundred (100) feet below ground surface using an air rotary drilling method. All subsurface lithology was recorded on a field lithology sheet. No groundwater was encountered in this one hundred (100) foot boring. The boring was backfilled with the dry cuttings removed from the boring itself.

SOIL BORING
LITHOLOGY LOG

Location # SB-1



DRILLER: Sam
HELPER: Myron
DRILLING COMPANY: Envirotech
DRILLING METHOD: HSA/AIR

BIT SIZE: 7 3/4
TOTAL BORING DEPTH: 100'
DATE STARTED: 09 / 02 / 08
SAMPLER TYPE: SS

LOCATION: Landfarm Expansion
ELEVATION:
DATE COMPLETED 09 / 03 / 08
GEOLOGIST: Kyle Kerr

Landfarm Expansion
Hilltop, New Mexico

ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
FARMINGTON, NEW MEXICO 87401
(505) 632-0615

SB-1

REVISIONS
BY ___ DATE ___
BY ___ DATE ___

JOB # 03037-0006

DATE 04/06/09 DRAWN JPM
SCALE NTS APPROVED KPK

SOIL BORING
LITHOLOGY LOG

Location # SB-1

Depth (Ft)	USCS	SAMPLE TYPE	HEADSPACE (PPM)	LITHOLOGY	SAMPLE DESCRIPTION	Depth (Ft)
35						35
40		SS			Mudstone, brown-black clay, very hard, DRY	40
					Mudstone, red-grey clay, very hard, DRY	
45		AR			Sandstone, grey, poorly sorted, DRY, well cemented	45
50		AR			Mudstone, red-grey clay, very hard, DRY	50
55		AR			Mudstone, red-grey clay, very hard, DRY	55
					Sandstone, grey, poorly sorted, DRY, well cemented	
60		AR			Mudstone, brown-tan clay, very hard, DRY	60
					Mudstone, black, very hard, DRY	
65		AR			Mudstone, grey, very hard, DRY	65
70		AR			Sandstone, grey, poorly sorted, DRY, well cemented	70

DRILLER: Sam
HELPER: Myron
DRILLING COMPANY: Envirotech
DRILLING METHOD: HSA/AIR

BIT SIZE: 7 3/4
TOTAL BORING DEPTH: 100'
DATE STARTED: 09/02/08
SAMPLER TYPE: SS

LOCATION: Landfarm Expansion
ELEVATION:
DATE COMPLETED 09/03/08
GEOLOGIST: Kyle Kerr

Landfarm Expansion
Hilltop, New Mexico

ENVIROTECH INC.

SB-1

REVISIONS
BY ___ DATE ___
BY ___ DATE ___

JOB # 03037-0006

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
FARMINGTON, NEW MEXICO 87401
(505) 632-0615

DATE 04/06/09 DRAWN JPM
SCALE NTS APPROVED KPK

SOIL BORING
LITHOLOGY LOG

Location # SB-1

Depth (Ft)	USCS	SAMPLE TYPE	HEADSPACE (PPM)	LITHOLOGY	SAMPLE DESCRIPTION	Depth (Ft)
70						70
75		AR			Mudstone, grey, very hard, DRY, consolidated	75
80		AR			Mudstone with coarse sand, grey, hard, DRY	80
					Mudstone, grey, soft, DRY, well sorted, interbedded	
85		AR			Mudstone, grey, soft, DRY, well sorted, interbedded	85
90		AR			Mudstone, grey, soft, DRY, well sorted, interbedded	90
95		AR			Mudstone, grey, soft, DRY, well sorted, interbedded	95
100		AR			Mudstone, grey, soft, DRY, well sorted, interbedded	100

DRILLER: Sam
HELPER: Myron
DRILLING COMPANY: Envirotech
DRILLING METHOD: HSA/AIR

BIT SIZE: 7 3/4
TOTAL BORING DEPTH: 100'
DATE STARTED: 09/02/08
SAMPLER TYPE: SS

LOCATION: Landfarm Expansion
ELEVATION:
DATE COMPLETED 09/03/08
GEOLOGIST: Kyle Kerr

Landfarm Expansion
Hilltop, New Mexico

ENVIROTECH INC.

SB-1

REVISIONS
BY ___ DATE ___
BY ___ DATE ___

JOB # 03037-0006

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
FARMINGTON, NEW MEXICO 87401
(505) 632-0615

DATE 04/06/09 DRAWN JPM
SCALE NTS APPROVED KPK

SOIL BORING
LITHOLOGY LOG

Location # SB-2

Depth (Ft)	USCS	SAMPLE TYPE	HEADSPACE (PPM)	LITHOLOGY	SAMPLE DESCRIPTION	Depth (Ft)
0						0
					Light-brown sandy-loam, loosely packed	
5		SS			fine grained-medium grained, DRY	5
					Light-brown sandy-loam, loosely packed	
					fine grained-medium grained, DRY	
10		SS			Dark brown hard rocky layer, DRY	10
					Light-brown sandy-loam, loosely packed	
					fine grained-medium grained, DRY	
15		SS			Dark-Grey, dense shale, hard, crumbly, DRY	15
		SS			Dark-Grey, dense shale, hard, crumbly, DRY	
20						20
					Dark-Grey, dense shale, hard, crumbly, DRY	
		SS				
25					Light-Grey sandstone, fine grained, DRY	25
					Dark-Grey, sandy shale, hard, DRY	
		SS			Light-Grey sandstone, fine grained, dense, DRY	
30						30
		SS			Light-Grey sandstone, fine grained, dense, DRY	
35						35

DRILLER: Mike Stone
HELPER: Louie Chavez
DRILLING COMPANY: Enviro-Drill
DRILLING METHOD: HSA/AIR

BIT SIZE: 8 1/4 OD
TOTAL BORING DEPTH: 100'
DATE STARTED: 03 / 09 / 09
SAMPLER TYPE: SS

LOCATION: Landfarm Expansion
ELEVATION:
DATE COMPLETED 03 / 09 / 09
GEOLOGIST: James McDaniel

Landfarm Expansion
Hilltop, New Mexico

ENVIROTECH INC.

SB-2

REVISIONS
BY ___ DATE ___
BY ___ DATE ___

JOB # 03037-0006

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
FARMINGTON, NEW MEXICO 87401
(505) 632-0615

DATE 04/06/09 DRAWN JPM
SCALE NTS APPROVED KPK

SOIL BORING
LITHOLOGY LOG

Location # SB-2

Depth (Ft)	USCS	Sample Type	Headspace (PPM)	Lithology	Sample Description	Depth (Ft)
35						35
40		SS			Dark-Grey, dense, hard, sandy shale, DRY	40
					Dark-Grey, dense, hard, sandy shale, DRY	
					Reddish-Brown sandy-shale, DRY, dense	
45		AR			with interbedded gray sandstone thoughout	45
					Reddish-Brown sandy-shale, DRY, dense	
50		AR			with interbedded gray sandstone thoughout	50
					Reddish-Brown sandy-shale, DRY, dense	
					with interbedded gray sandstone thoughout	
55		AR			Light-Grey, sandstone, fine-grained, DRY	55
60		AR			Light-Grey, sandstone, fine-grained, DRY	60
65		AR			Dark-Grey sandy shale, dense, hard, DRY	65
70		AR			Dark-Grey sandy shale, dense, hard, DRY	70

DRILLER: Mike Stone
HELPER: Louie Chavez
DRILLING COMPANY: Enviro-Drill
DRILLING METHOD: HSA/AIR
BIT SIZE: 8 1/4 OD
TOTAL BORING DEPTH: 100'
DATE STARTED: 03 / 09 / 09
SAMPLER TYPE: SS/Air Rotary
LOCATION: Landfarm Expansion
ELEVATION:
DATE COMPLETED 03 / 09 / 09
GEOLOGIST: James McDaniel

Landfarm Expansion
Hilltop, New Mexico

ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
FARMINGTON, NEW MEXICO 87401
(505) 632-0615

SB-2

REVISIONS
BY ___ DATE ___
BY ___ DATE ___

JOB # 03037-0006

DATE 04/06/09 DRAWN JPM
SCALE NTS APPROVED KPK

SOIL BORING
LITHOLOGY LOG

Location # SB-2

Depth (Ft)	USCS	SAMPLE TYPE	HEADSPACE (PPM)	LITHOLOGY	SAMPLE DESCRIPTION	Depth (Ft)
70						70
					Boring Dry	
75		AR			NO RECOVERY - BIT BROKEN	75
					Boring Dry	
80		AR			NO RECOVERY - BIT BROKEN	80
					Dark-Grey shale, interbedded light grey sandstone	
85		AR			dense, hard, DRY, very sandy	85
					Dark-Grey shale, interbedded light grey sandstone	
90		AR			dense, hard, DRY, very sandy	90
					Dark-Grey shale, interbedded light grey sandstone	
					dense, hard, DRY, very sandy	
					Interbedded, reddish-brown shale	
95		AR				95
100		AR				100

DRILLER: Mike Stone
HELPER: Louie Chavez
DRILLING COMPANY: Enviro-Drill
DRILLING METHOD: AIR

BIT SIZE: 8 1/4 OD
TOTAL BORING DEPTH: 100'
DATE STARTED: 03 / 09 / 09
SAMPLER TYPE: Air Rotary

LOCATION: Landfarm Expansion
ELEVATION:
DATE COMPLETED 03 / 10 / 09
GEOLOGIST: James McDaniel

Landfarm Expansion
Hilltop, New Mexico

ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS
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SB-2

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BY ___ DATE ___
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DATE 04/06/09 DRAWN JPM
SCALE NTS APPROVED KPK

PAGE 3 OF 3

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 00077		IND	SJ	3	1	2	26	27N	11W	233964	4049155*	6025	1102	550	552
SJ 01626		DOM	SJ		3	4	16	26N	11W	230607	4041673*	7607	255	200	55
SJ 00193		OFM	SJ		2	4	13	26N	10W	245500	4041657*	8278	2287	500	1787
SJ 02734		SAN	SJ	2	3	4	35	26N	11W	233750	4036858*	8536	275	165	110
SJ 00194		OFM	SJ		1	4	25	26N	10W	244996	4038454*	9429	2105	500	1605
SJ 00032		IND	SJ	3	2	2	08	27N	10W	239378	4053822*	9544	235	60	175
SJ 00033		IND	SJ	3	2	2	08	27N	10W	239378	4053822*	9544	204		
SJ 00034		IND	SJ	3	2	2	08	27N	10W	239378	4053822*	9544	235	170	65

Average Depth to Water: **306 feet**

Minimum Depth: **60 feet**

Maximum Depth: **550 feet**

Record Count: 8

UTMNAD83 Radius Search (in meters):

Easting (X): 237698.83 **Northing (Y):** 4044426.46 **Radius:** 10000

***UTM location was derived from PLSS - see Help**

30-045-21397

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit NE Sec. 7 Twp 25 Rng 10

Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #68

cps 953w

Elevation 6535' Completion Date 8/20/75 Total Depth 480' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used

N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 275'

RECEIVED
MAY 31 1991
OIL CON. DIV.

Depths gas encountered: N/A

Type & amount of coke breeze used: 4600 lbs.

Depths anodes placed: 440', 430', 420', 410', 400', 390', 350', 340', 300', 290'

Depths vent pipes placed: N/A

Vent pipe perforations: 200'

Remarks: gb #1

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

#270 30-045-23836

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO

Operator Meridian Oil Co. Location: Unit N Sec. 07 Twp 26 Rng 10

Name of Well/Wells or Pipeline Serviced

Huerfano Unit #270

Elevation 6475 Completion Date 2-28-93 Total Depth 415 Land Type F

Casing Strings, Sizes, Types & Depths 2/245 set 98' of 8" PVC Casing.

No Gas, Water, or Boulders were Encountered During Casing.

If Casing Strings are cemented, show amounts & types used Cemented

with 20 sacks.

If Cement or Bentonite Plugs have been placed, show depths & amounts used

No

Depths & thickness of water zones with description of water: Fresh, Clear,

Salty, Sulphur, Etc. 140'

Depths gas encountered: No

Ground bed depth with type & amount of coke breeze used: 415'

56 sacks of Loresco type SW coke breeze.

Depths anodes placed: 402', 392', 383', 374', 365', 340', 330', 320', 310', 245', 220', 210', 190', 180', 170'

Depths vent pipes placed: 415'

Vent pipe perforations: Bottom 290'

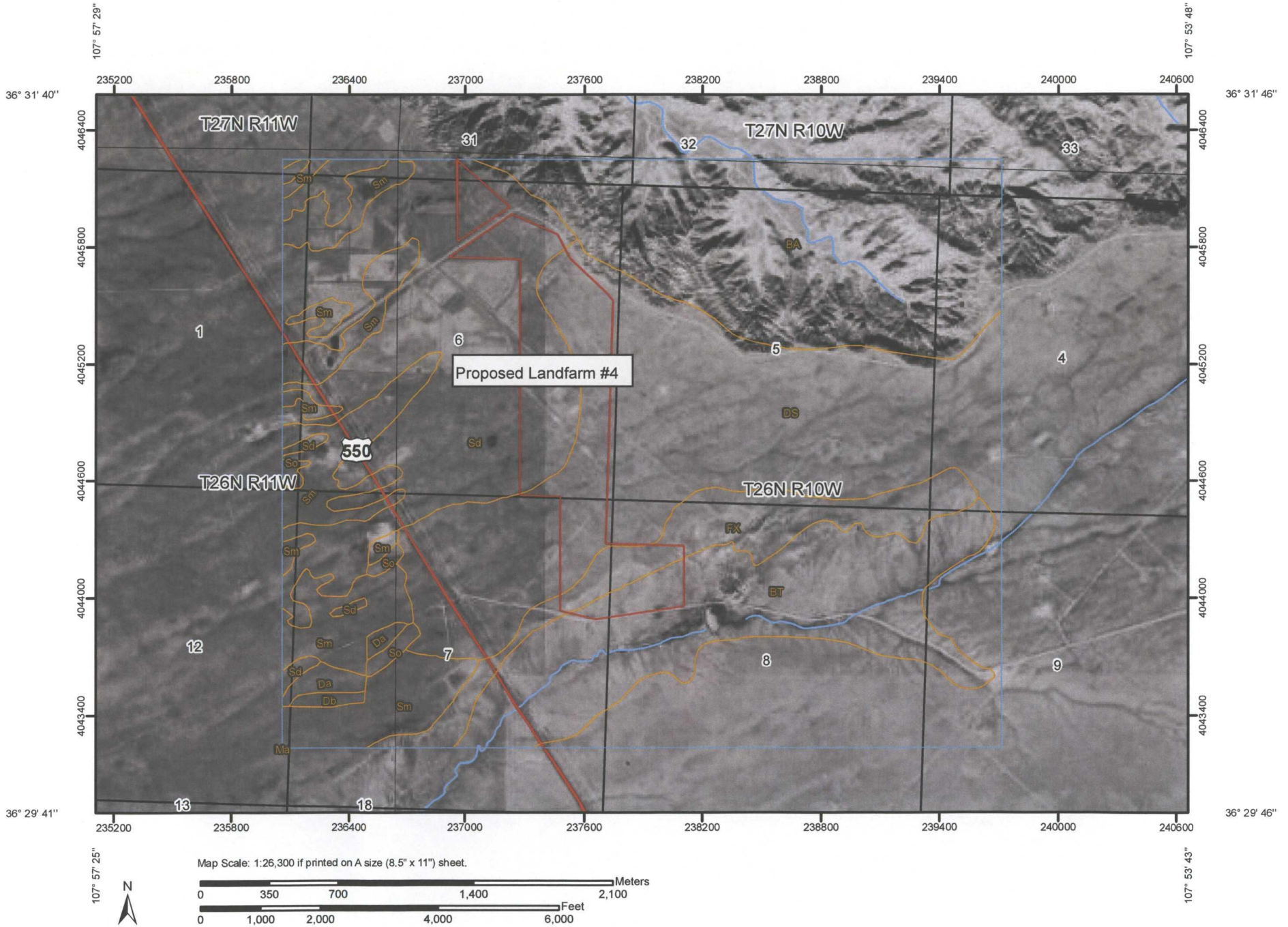
Remarks:

RECEIVED
JAN 31 1994
OIL CON. DIV.
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

Soil Map—San Juan County, New Mexico, Eastern Part



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities
- PLSS Township and Range
- PLSS Section

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads

MAP INFORMATION

Map Scale: 1:26,300 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:63,360.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 13N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Juan County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 20, 2009

Date(s) aerial images were photographed: 10/9/1997

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

San Juan County, New Mexico, Eastern Part (NM618)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
BA	Badland	474.4	17.4%
BT	Blancot-Notal association, gently sloping	343.1	12.6%
Da	Doak loam, 0 to 1 percent slopes	16.8	0.6%
Db	Doak loam, 1 to 3 percent slopes	6.0	0.2%
DS	Doak-Sheppard-Shiprock association, rolling	932.1	34.2%
FX	Fruitland-Persayo-Sheppard complex, hilly	144.1	5.3%
Ma	Mayqueen loamy fine sand	0.0	0.0%
Sd	Sheppard-Mayqueen-Shiprock complex, 0 to 8 percent slopes	521.4	19.1%
Sm	Shiprock fine sandy loam, 0 to 2 percent slopes	273.5	10.0%
So	Shiprock fine sandy loam, 2 to 5 percent slopes	13.6	0.5%
Totals for Area of Interest		**2,724.9**	**100.0%**

San Juan County, New Mexico, Eastern Part

DS—Doak-Sheppard-Shiprock association, rolling

Map Unit Setting

Elevation: 5,600 to 6,400 feet
Mean annual precipitation: 6 to 10 inches
Mean annual air temperature: 51 to 55 degrees F
Frost-free period: 140 to 160 days

Map Unit Composition

Doak and similar soils: 40 percent
Sheppard and similar soils: 30 percent
Shiprock and similar soils: 20 percent

Description of Doak

Setting

Landform: Fan remnants, mesas, stream terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Alluvium derived from sandstone and shale

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability (nonirrigated): 7e
Ecological site: Loamy (R035XB001NM)

Typical profile

0 to 3 inches: Loam
3 to 41 inches: Clay loam
41 to 60 inches: Loam

Description of Sheppard

Setting

Landform: Fan remnants, mesas, stream terraces, dunes

Landform position (three-dimensional): Side slope, tread, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Eolian deposits over mixed alluvium

Properties and qualities

Slope: 0 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability (nonirrigated): 7e
Ecological site: Deep Sand (R035XB007NM)

Typical profile

0 to 3 inches: Loamy fine sand
3 to 60 inches: Loamy fine sand

Description of Shiprock

Setting

Landform: Fan remnants, mesas, stream terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Eolian deposits over alluvium derived from sandstone

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability (nonirrigated): 7e
Ecological site: Sandy (R035XB002NM)

Typical profile
0 to 3 inches: Fine sandy loam
3 to 60 inches: Fine sandy loam

Data Source Information

Soil Survey Area: San Juan County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 20, 2009

San Juan County, New Mexico, Eastern Part

Sd—Sheppard-Mayqueen-Shiprock complex, 0 to 8 percent slopes

Map Unit Setting

Elevation: 5,600 to 6,400 feet
Mean annual precipitation: 6 to 10 inches
Mean annual air temperature: 51 to 55 degrees F
Frost-free period: 140 to 160 days

Map Unit Composition

Sheppard and similar soils: 45 percent
Mayqueen and similar soils: 30 percent
Shiprock and similar soils: 20 percent

Description of Sheppard

Setting

Landform: Dunes
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Eolian deposits derived from sandstone

Properties and qualities

Slope: 5 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability (nonirrigated): 7e
Ecological site: Deep Sand (R035XB007NM)

Typical profile

0 to 6 inches: Loamy fine sand
6 to 60 inches: Loamy fine sand

Description of Mayqueen

Setting

Landform: Mesas, dunes
Landform position (three-dimensional): Side slope, talf
Down-slope shape: Convex
Across-slope shape: Convex

Parent material: Eolian deposits over slope alluvium derived from sandstone

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability (nonirrigated): 7e
Ecological site: Deep Sand (R035XB007NM)

Typical profile

0 to 3 inches: Loamy fine sand
3 to 12 inches: Fine sandy loam
12 to 60 inches: Loamy fine sand

Description of Shiprock

Setting

Landform: Mesas, dunes
Landform position (three-dimensional): Side slope, talf
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Eolian deposits derived from sandstone and shale

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Available water capacity: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability (nonirrigated): 7e
Ecological site: Sandy (R035XB002NM)

Typical profile

0 to 1 inches: Fine sandy loam

1 to 60 inches: Fine sandy loam

Data Source Information

Soil Survey Area: San Juan County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 20, 2009

San Juan County, New Mexico, Eastern Part

FX—Fruitland-Persayo-Sheppard complex, hilly

Map Unit Setting

Elevation: 4,800 to 6,400 feet
Mean annual precipitation: 6 to 10 inches
Mean annual air temperature: 51 to 55 degrees F
Frost-free period: 140 to 160 days

Map Unit Composition

Fruitland and similar soils: 40 percent
Persayo and similar soils: 30 percent
Sheppard and similar soils: 25 percent

Description of Fruitland

Setting

Landform: Alluvial fans, stream terraces
Landform position (three-dimensional): Riser, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium derived from sandstone and shale

Properties and qualities

Slope: 5 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability (nonirrigated): 7e
Ecological site: Sandy (R035XB002NM)

Typical profile

0 to 4 inches: Sandy loam
4 to 60 inches: Fine sandy loam

Description of Persayo

Setting

Landform: Breaks, hills, ridges

Landform position (two-dimensional): Backslope, footslope, shoulder, toeslope
Landform position (three-dimensional): Side slope, nose slope, head slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from shale

Properties and qualities

Slope: 5 to 30 percent
Depth to restrictive feature: 5 to 20 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Land capability (nonirrigated): 7e
Ecological site: Shale Hills (R035XA130NM)

Typical profile

0 to 18 inches: Clay loam
18 to 20 inches: Bedrock

Description of Sheppard

Setting

Landform: Dunes
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Eolian deposits over mixed alluvium

Properties and qualities

Slope: 5 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability (nonirrigated): 7e

Ecological site: Deep Sand (R035XB007NM)

Typical profile

0 to 4 inches: Loamy fine sand
4 to 60 inches: Loamy fine sand

Data Source Information

Soil Survey Area: San Juan County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 20, 2009

San Juan County, New Mexico, Eastern Part

BT—Blancot-Notal association, gently sloping

Map Unit Setting

Elevation: 5,600 to 6,400 feet
Mean annual precipitation: 6 to 10 inches
Mean annual air temperature: 51 to 55 degrees F
Frost-free period: 140 to 160 days

Map Unit Composition

Blancot and similar soils: 55 percent
Notal and similar soils: 25 percent

Description of Blancot

Setting

Landform: Fan remnants
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Fan alluvium derived from sandstone and shale

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: High (about 9.7 inches)

Interpretive groups

Land capability (nonirrigated): 6c
Ecological site: Loamy (R035XB001NM)

Typical profile

0 to 2 inches: Loam
2 to 15 inches: Sandy clay loam
15 to 60 inches: Clay loam

Description of Notal

Setting

Landform: Stream terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Stream alluvium derived from sandstone and shale

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 5 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability (nonirrigated): 7c
Ecological site: Salt Flats (R035XB005NM)

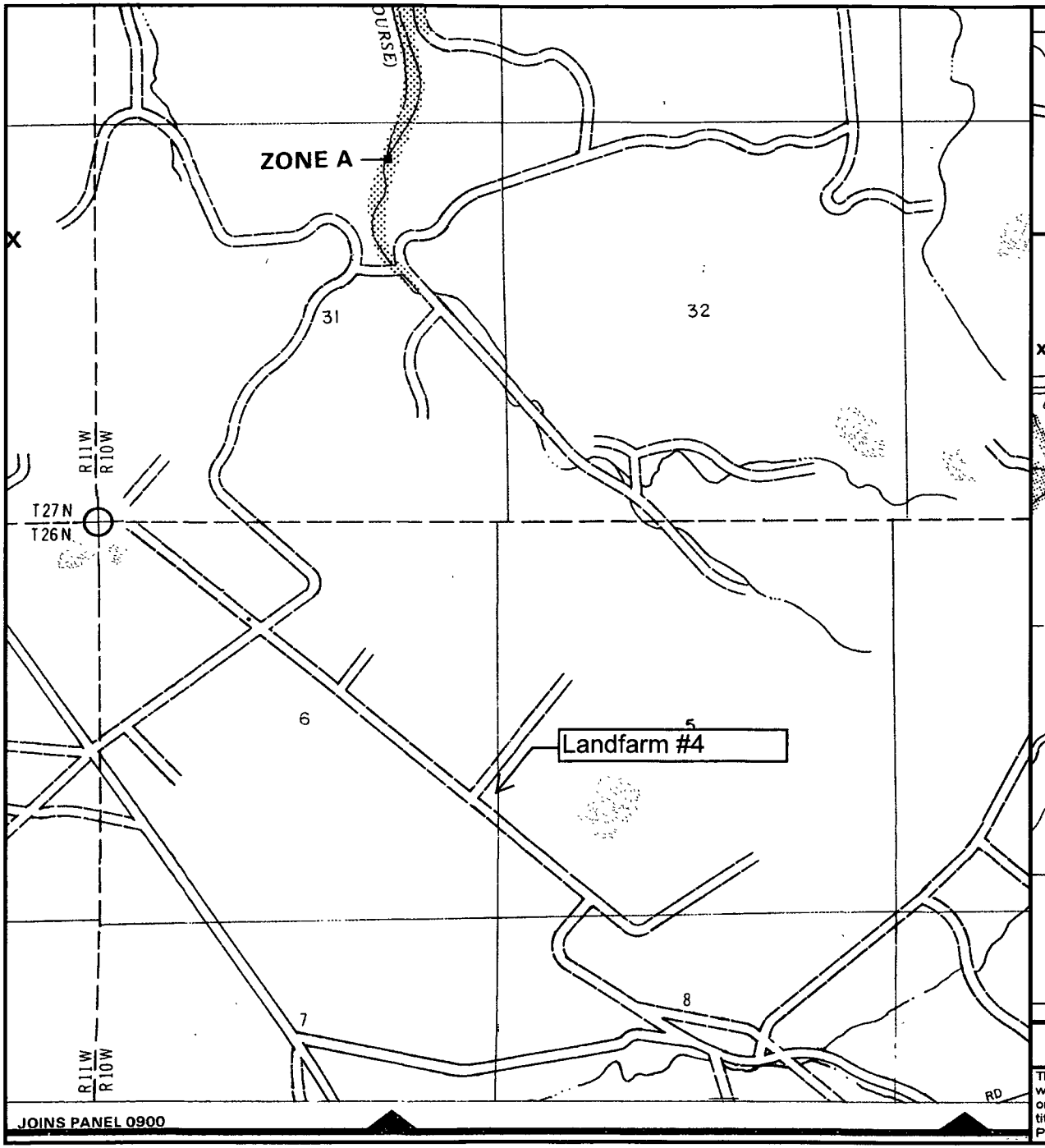
Typical profile

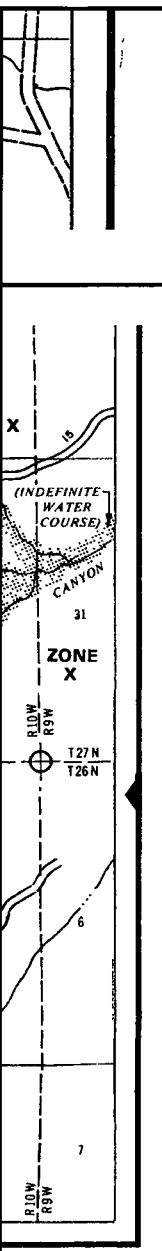
0 to 3 inches: Silty clay loam
3 to 60 inches: Clay

Data Source Information

Soil Survey Area: San Juan County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 20, 2009

FEMA Flood Insurance Rate Map (FIRM)





N

APPROXIMATE SCALE

2000 0

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

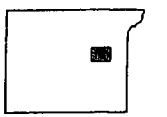
FLOOD INSURANCE RATE MAP

SAN JUAN COUNTY, NEW MEXICO

UNINCORPORATED AREAS

PANEL 725 OF 1450

(SEE MAP INDEX FOR PANELS NOT PRINTED)



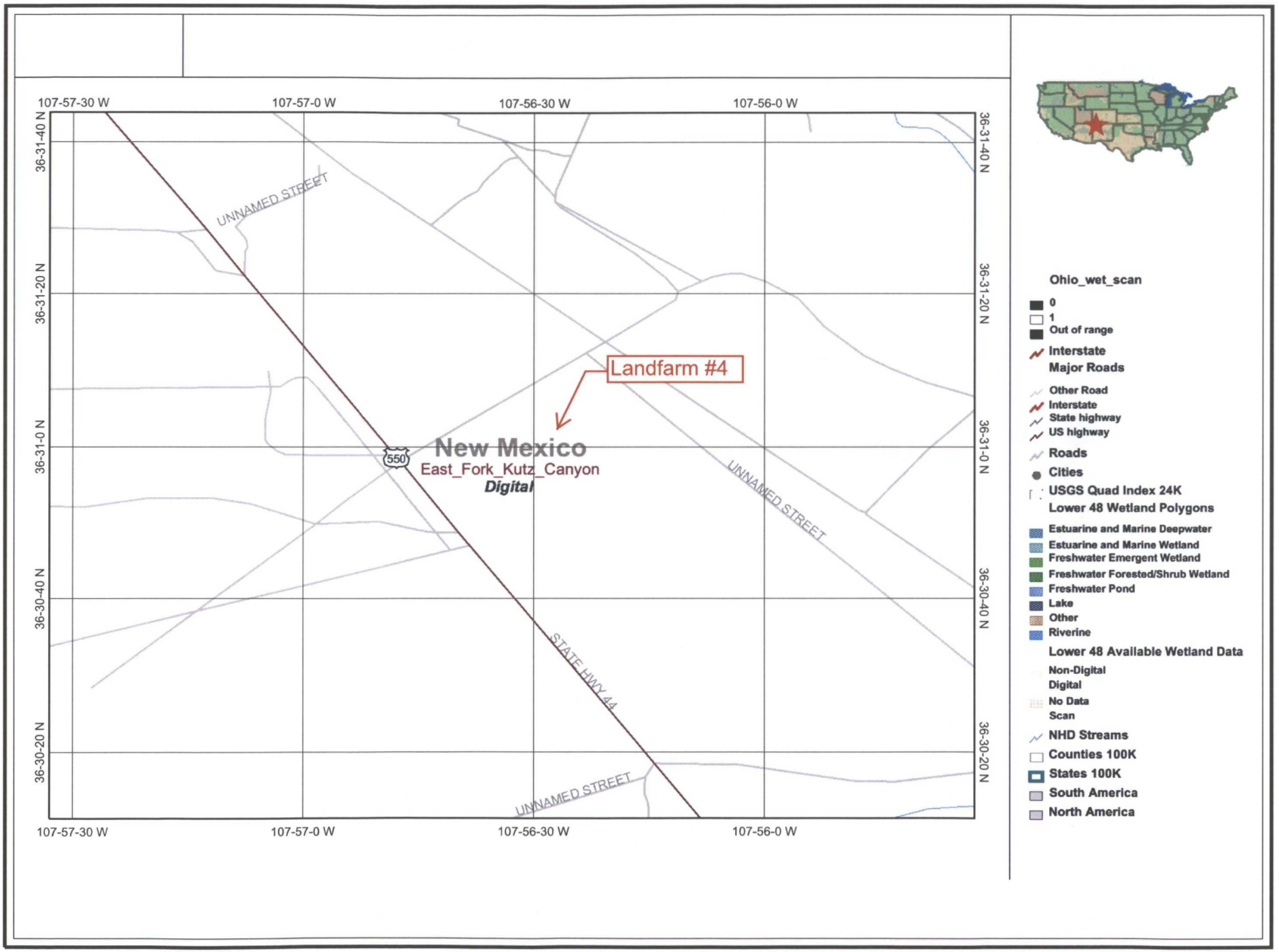
PANEL LOCATION

COMMUNITY-PANEL NUMBER
350064 0725 B

EFFECTIVE DATE:
AUGUST 4, 1988

Federal Emergency Management Agency

U.S. Fish and Wildlife Service, National Wetlands Inventory Map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107-57-0 W
107-56-30 W
107-56-0 W
36-31-40 N
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36-30-20 N
UNNAMED STREET
Landfarm #4
New Mexico
East_Fork_Kutz_Canyon
Digital
550
UNNAMED STREET
STATE HWY 44
UNNAMED STREET
Ohio_wet_scan
0
1
Out of range
Interstate
Major Roads
Other Road
Interstate
State highway
US highway
Roads
Cities
USGS Quad Index 24K
Lower 48 Wetland Polygons
Estuarine and Marine Deepwater
Estuarine and Marine Wetland
Freshwater Emergent Wetland
Freshwater Forested/Shrub Wetland
Freshwater Pond
Lake
Other
Riverine
Lower 48 Available Wetland Data
Non-Digital
Digital
No Data
Scan
NHD Streams
Counties 100K
States 100K
South America
North America

NM EMNRD Web Map

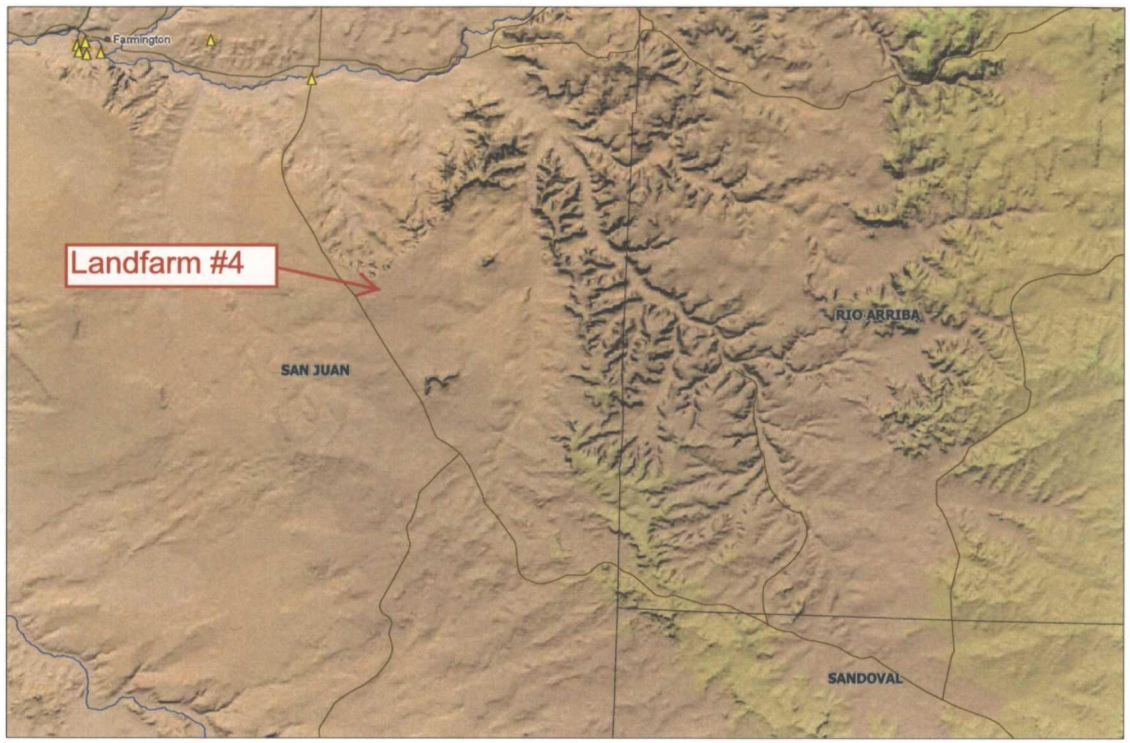
Landfarm #4 Mine Map

Mines, Mills & Quarries Commodity Groups

- Aggregate & Stone Mines
- Coal Mines
- Industrial Minerals Mines
- Industrial Minerals Mills
- Metal Mines and Mill Concentrate
- Potash Mines & Refineries
- Smelters & Refinery Ops.
- Uranium Mines
- Uranium Mills

Mines, Mills & Quarries Status

- Active Mining
- Active Mining, Active Reclamation
- Permanent Closure, Active Reclamation
- Permanent Closure, Reclaimed Awaiting Bond Release
- Temporary Suspension



SCALE 1 : 740,905

10 0 10 20 30

MILES

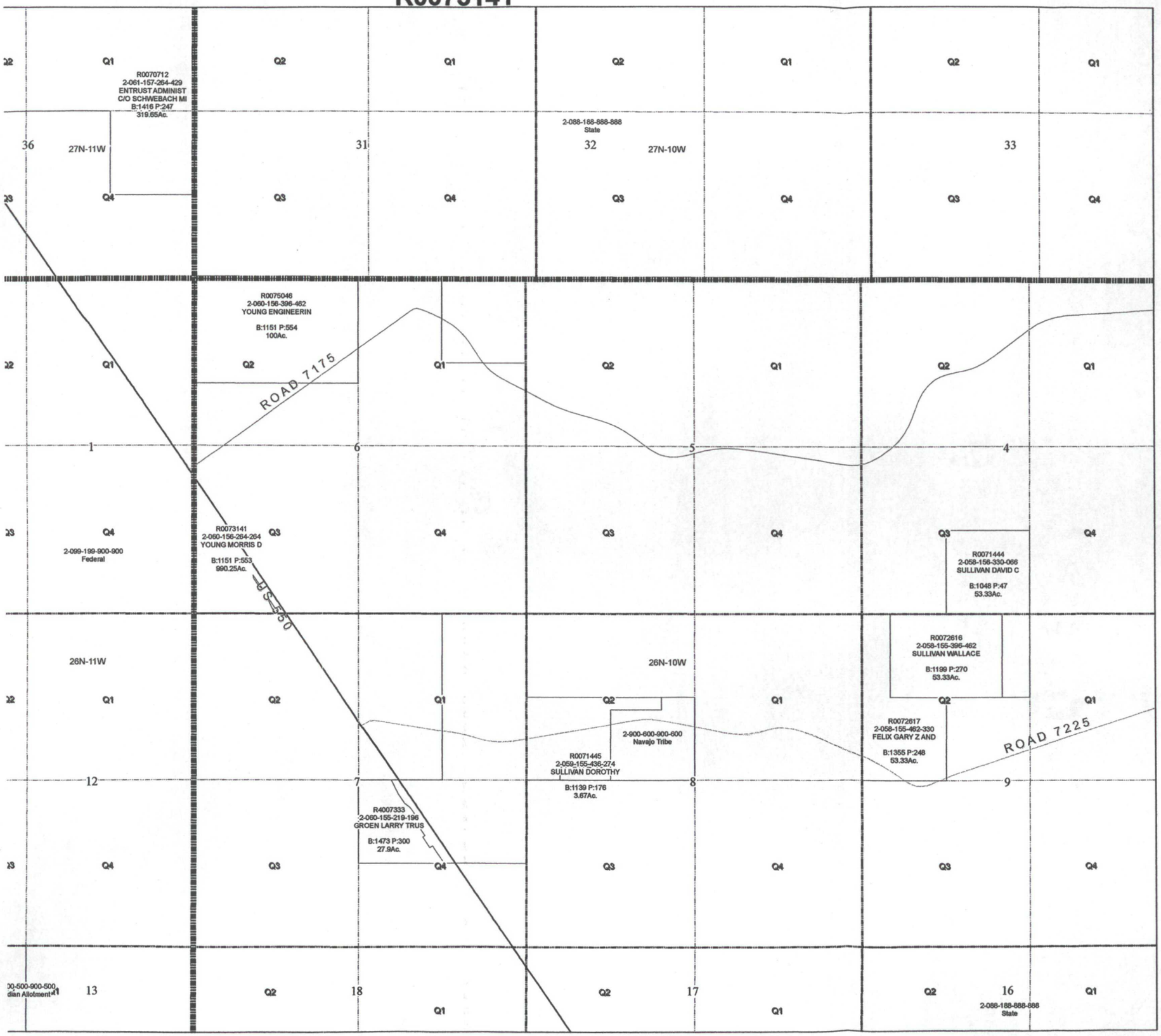
N

http://www.emnrd.state.nm.us/MMD/MMQonline/MMQonline-PUBLIC-PROD.mwf

Monday, October 20, 2008 4:12 PM

San Juan County Parcel Maps

R0073141



SAN JUAN COUNTY
NEW MEXICO
SINCE 1887

N
W E
S

Legend

- Parcels
- Condos
- Lots
- Subdivisions
- Township
- Sections
- Quarter Sections

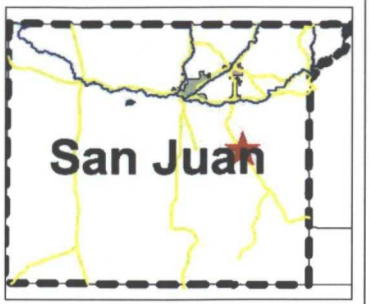
1 inch = 979 feet

As a service provided to the public, the Assessor's Office has compiled the following collection of available data. The San Juan County Assessor's Office assumes no liability for the accuracy of the information provided and it is not intended to be used as a survey.

The data contained herein was derived from the most current information available at the time of publishing. While the San Juan County Assessor's Office makes every effort to provide accurate and complete information, the data contained on this map is subject to change.

The San Juan County Assessor's Office provides no warranty, expressed or implied, as to the accuracy, reliability or completeness of furnished data

Landfarm #4



Legend

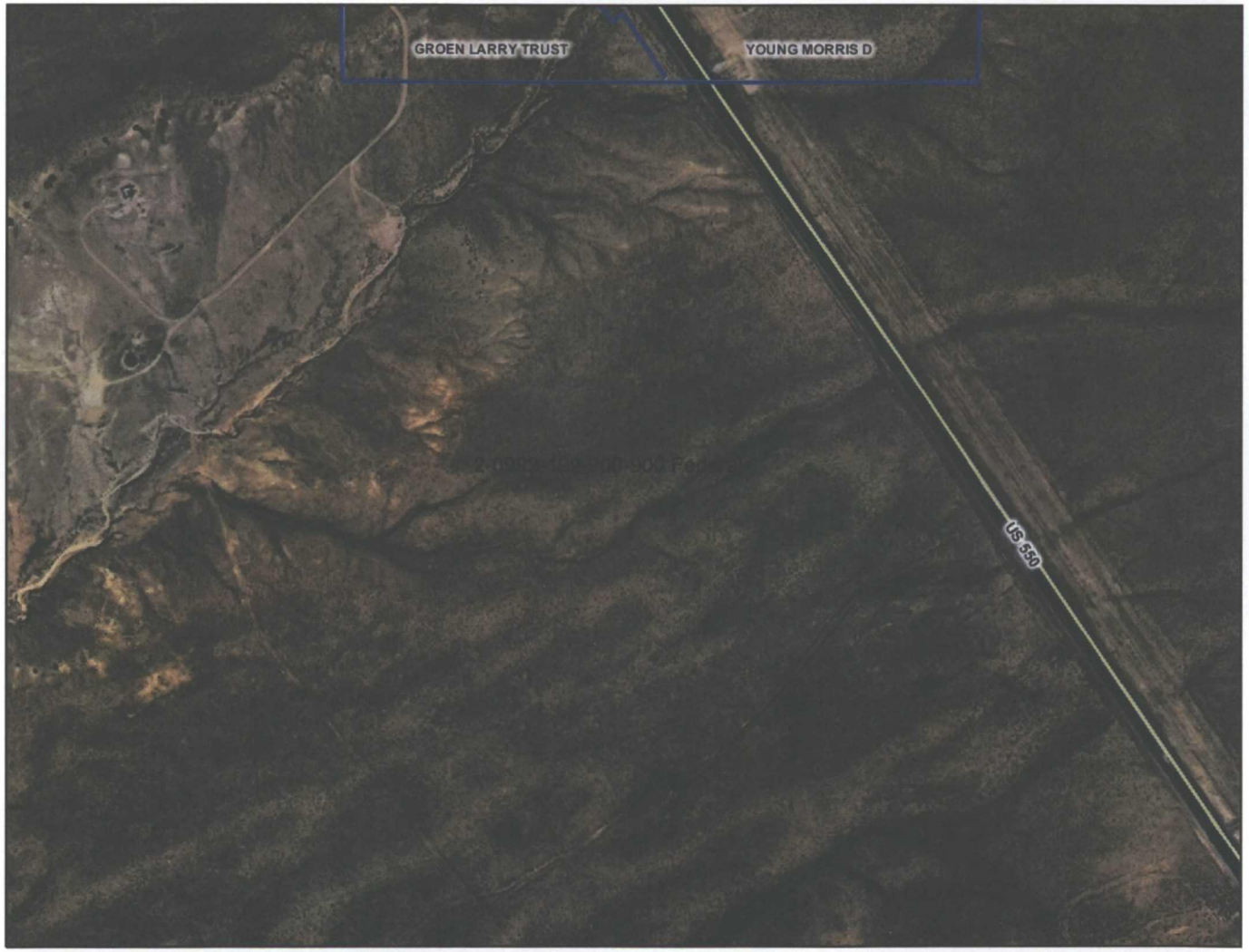
- RIVERS
- LAKES
- FARMINGTON CITY LIMITS
- SJC Road Status
- Major Roads
- Private
- County Maintained
- Limited County Maintained
- City
- Oil and Gas
- roads
- ROADS
- SAN JUAN COUNTY
- NAVAJO RESERVATION
- 2005_DOQQ

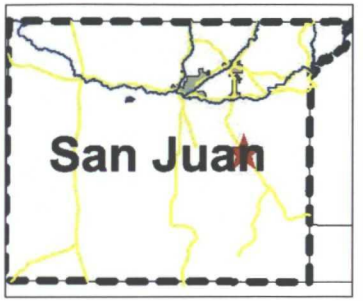
0 850 1700 2550 m.

Map center: 36° 31' 5" N, 107° 56' 26" W

Scale: 1:29,059

BLM Land South of Property





Legend

- RIVERS
- LAKES
- FARMINGTON CITY LIMITS
- SJC Road Status
- Major Roads
- Private
- County Maintained
- Limited County Maintained
- City
- Oil and Gas
- roads
- ROADS
- SAN JUAN COUNTY
- NAVAJO RESERVATION
- PARCELS
- 2005_DOQQ

0 250 500 750 m.

Map center: 36° 29' 40.2" N, 107° 56' 0.5" W

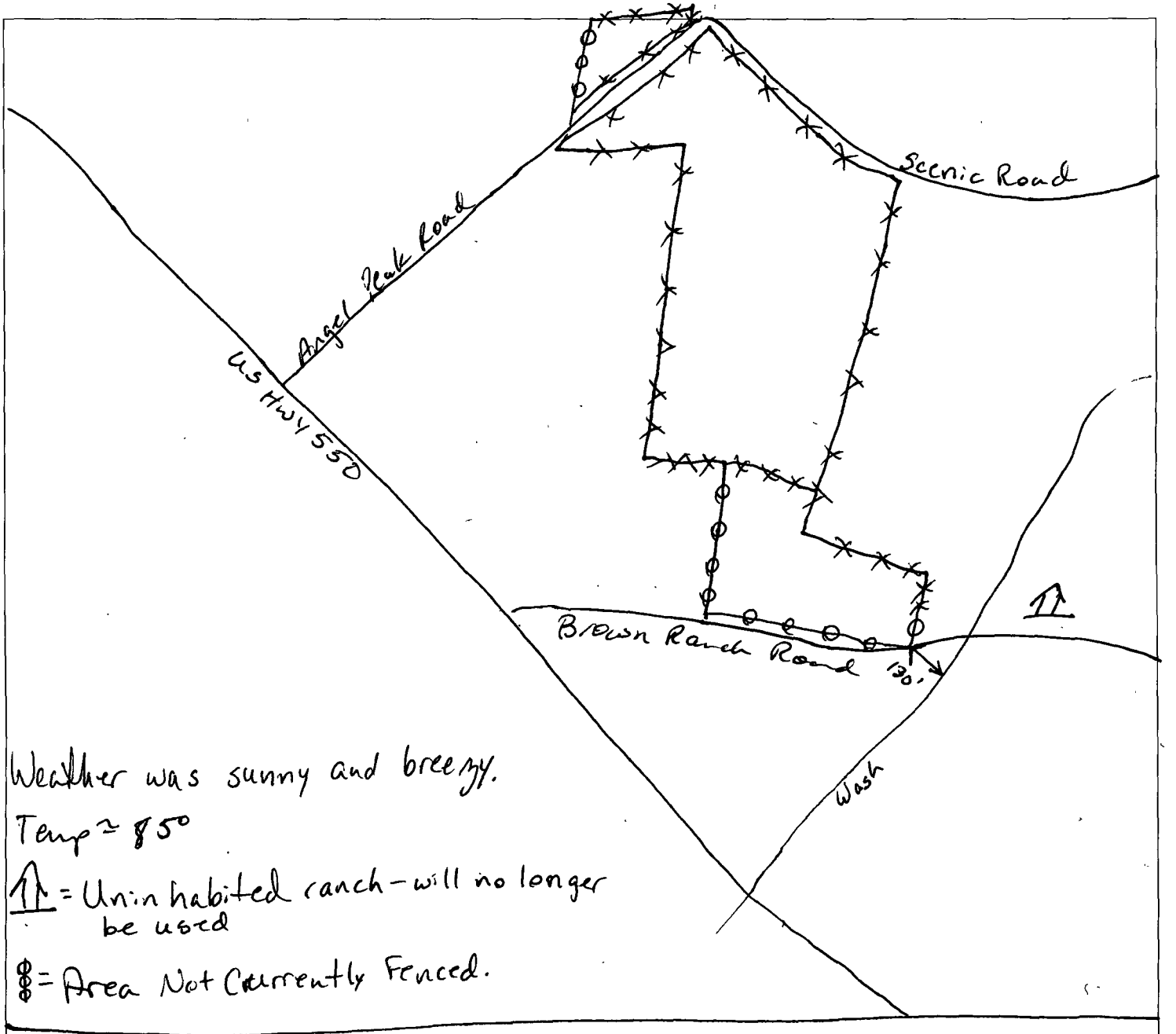
Scale: 1:8,419

Envirotech, Inc. Landfarm Facility Inspection Sheet and Photographs

Envirotech, Inc. Landfarm Facility Inspection Sheet

- Date: 8/21/09 Initials: SLa Time: Started: _____ Ended: _____
- Facility Name and/or Number: Landfarm #4
- Quarter/Quarter: _____ Section: 6, 7, 8 Township: 26 N Range: 10 W
- Lat: 36.51611 Long: -107.93750 GPS Point ID: _____

Schematic



Weather was sunny and breezy.

Temp ≈ 85°

= Uninhabited ranch - will no longer be used

= Area Not Currently Fenced.

Distance to Nearest Surface Water: North: >200' South: ≈130' East: >200' West: >200'

Distance to Nearest Water Well: North: >500' South: >500' East: >500' West: >500'

Distance to Nearest Permanent Residence, School, Hospital, Institution, or Church:
North: >500' South: >500' East: >500' West: >500'

Depth to Ground Water = >100 ft.

ENVIROTECH, INC.
LANDFARM #4
NEAR HILLTOP, NEW MEXICO

Photo 1: Adjacent Property South of Landfarm (View 1)

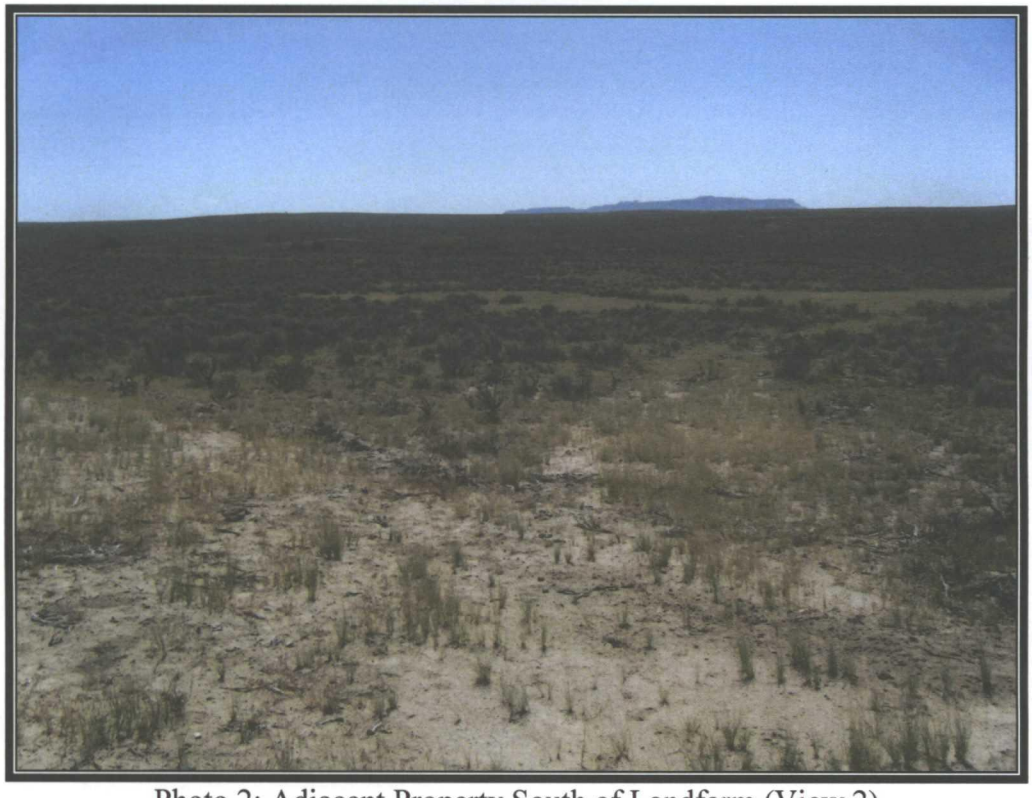


Photo 2: Adjacent Property South of Landfarm (View 2)

ENVIROTECH, INC.
LANDFARM #4
NEAR HILLTOP, NEW MEXICO

Photo 3: Adjacent Property East of Landfarm (View 1)

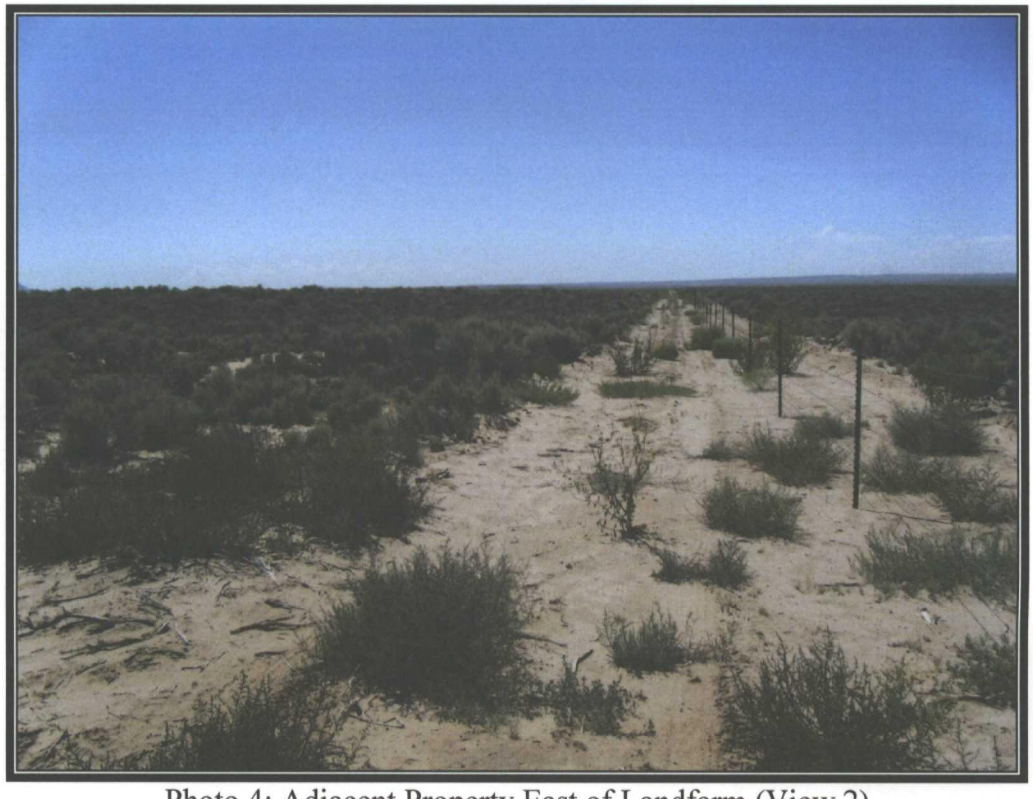


Photo 4: Adjacent Property East of Landfarm (View 2)

ENVIROTECH, INC.
LANDFARM #4
NEAR HILLTOP, NEW MEXICO

Photo 5: Adjacent Property North of Landfarm (View 1)

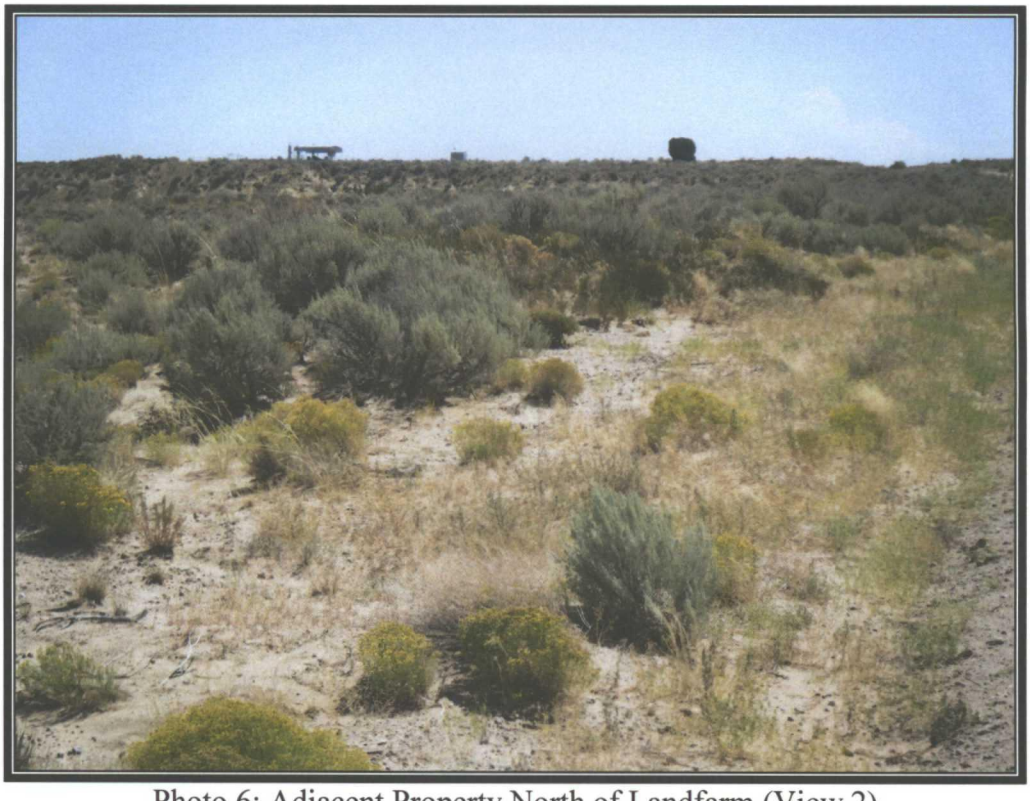


Photo 6: Adjacent Property North of Landfarm (View 2)