July 25, 2019 Reference No. 082148

Mr. Brad Jones
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Dear Mr. Jones:

Re: Request to Modify Permit and Closure Plan
ETC Field Services, LLC
Jal No. 4 Landfarm
Lea County, New Mexico, Permit NM-02-019

On behalf of ETC Field Services LLC (ETC), GHD Services Inc. (GHD) is requesting the following clarifications and modifications to the existing Jal No. 4 Landfarm Permit and Closure and Post-Closure Plan.

The ETC Jal No. 4 (formerly Regency Field Services, LP) Landfarm is located in Lea County, New Mexico. The facility is located approximately 10 miles north of Jal, New Mexico to the south of Deep Wells Road and approximately 2 miles west of Highway 18 in Lea County. The area surrounding the Landfarm is used for cattle grazing and oil and gas production.

The Landfarm consists of 15 soil treatment cells, ranging in surface area from 0.35 acres to 4.92 acres. The total area of the Landfarm is over 40 acres. According to information provided in previous reports and correspondence, the initial load of impacted soil was delivered to the Landfarm in January 2002. The Landfarm is no longer accepting soil and is in the process of being closed. The last delivery of soil was received in June 2010.

Comment #1

1. Confirm approval of Environmental Protection Agency (EPA) Method 8015M and M/D for all landfarm monitoring and closure post-closure soil analysis for vadose and treatment zones

It was the intent of the prior April 2017 minor modification of permit and closure plan, that EPA Method 8015 be utilized for the analysis of TPH for all landfarm monitoring and closure post-closure soil analysis for both vadose and treatment zones. However, the approval letter for the modification from the NMOCD (October 2017) only specifies the approval of EPA Method 8015 for treatment zone monitoring. This follow up request is being made to confirm the approval of the use of EPA Method 8015 M and M/D for all aspects of monitoring and closure post-closure

GHD
6121 Indian School Road NE Suite 200 Albuquerque New Mexico 87110 USA
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analyses of TPH for both treatment and vadose zones. The confirmation of this request will allow for consistency in analytical methods for treatment and vadose zones.

2. Request NMOCD approval of EPA Method 7471 for the analysis of mercury for all landfarm monitoring and closure post-closure soil analysis

On August 15, 2018 an email request for the approval of EPA Method 7471 in place of EPA Method 6020 for analysis of mercury was submitted to Brad Jones and Jim Griswold of the NMOCD by GHD. On August 16, 2018 GHD received a phone call from Brad Jones noting that EPA Method 7471 was not an acceptable method for analysis of Mercury due to the potential for interference from chloride and sulfate. In follow up, GHD discussed both EPA Method 7471 and 6020 for the analysis of mercury with Hall Environmental Analysis Laboratory and provided the following information to the NMOCD on August 22, 2018.

In speaking with Hall Environmental Analysis Laboratory (NELAP Recognized/Accredited laboratory) it was noted that both EPA Methods 8620 and 7471 for analysis of mercury have the likelihood of interference from chloride and various other constituents as listed in the following language taken from the method procedures.

"Method 6020
9.7 To obtain analyte data of known quality, it is necessary to measure more than the analytes of interest in order to apply corrections or to determine whether interference corrections are necessary. For example, tungsten oxide moleculars can be very difficult to distinguish from mercury isotopes. If the concentrations of interference sources (such as C, Cl, Mo, Zr, W) are such that, at the correction factor, the analyte is less than the limit of quantification and the concentration of interferents are insignificant, then the data may go uncorrected. Note that monitoring the interference sources does not necessarily require monitoring the interferant itself, but that a molecular species may be monitored to indicate the presence of the interferent. When correction equations are used, all QC criteria must also be met. Extensive QC for interference corrections are required at all times. The monitored masses must include those elements whose hydrogen, oxygen, hydroxyl, chlorine, nitrogen, carbon and sulfur molecular ions could impact the analytes of interest. Unsuspected interferences may be detected by adding pure major matrix components to a sample to observe any impact on the analyte signals. When an interference source is present, the sample elements impacted must be flagged to indicate (a) the percentage interference correction applied to the data or (b) an uncorrected interference by virtue of the elemental equation used for quantitation. The isotope proportions for an element or molecular-ion cluster provide information useful for quality assurance."

"Method 7471
Potassium permanganate is added to eliminate possible interference from sulfide. Concentrations as high as 20 mg/Kg of sulfide, as sodium sulfide, do not interfere with the recovery of added inorganic mercury in reagent water.
4.3 Copper has also been reported to interfere; however, copper concentrations as high as 10 mg/Kg had no effect on recovery of mercury from spiked samples.
4.4 Samples high in chlorides require additional permanganate (as much as 25 mL) because, during the oxidation step, chlorides are converted to free chlorine, which also absorbs radiation of 254 nm. Care must therefore be taken to ensure that free chlorine is absent before the mercury is reduced and swept into the cell. This may be accomplished by using an excess of hydroxylamine sulfate reagent (25 mL). In addition, the dead air space in the BOD bottle must be purged before adding stannous sulfate. Alternatively, the sample may be allowed to stand for at least an hour under a hood (without active purging) to remove the chlorine."

Hall is accredited, having previously been audited, in the performance of EPA approved Method 7471. Provided that the method is followed, adequate procedures are implemented to eliminate issues of interference for any of the above listed constituents. EPA Method 7471 is the preferred method for analysis of mercury in soil and is the primary method utilized by Hall.

Additionally, during previous correspondence between the NMOCDETC, and GHD, analytical data collected by APEX during August 2014 was accepted as viable background data to be used for the determination of background levels calculated by ProUCL. In a letter from the NMOCD dated November 14, 2016 it states that, " The August 2014 background samples were analyzed for TPH, determined by 418.1; GRO and DRO, determined by EPA SW-846 Method 8015D; BTEX, determined by EPA SW-846 Method 8021B or 8260B; chlorides determined by EPA Method 300.1; and other constituents listed in Subsections A and B of 20.6.2.3103 NMAC, using approved EPA methods. Also, in an email from Jim Griswold dated April 11, 2017 in follow up to a meeting held between all parties on April 6, 2017, it is stated that ETC Field Services LLC, will "use background soil data reported by APEX in August of 2014 to the fullest extent possible" and that the only additional background sampling required would be for "GRO/DRO/MRO (C6 thru C36) via Method 8015".

The analytical method used to analyze for mercury in APEX's August 2014 data was EPA Method 7471. All of which returned results of non-detect, and have since been utilized for background calculations.

With the acceptance of these data sets by NMOCD and the progression of the project since the acceptance of the data, GHD and ETC would again like to request that EPA Method 7471 continued to be accepted as a viable method of analysis for mercury as opposed to EPA Method 6020 for permit NM2-019. The request is to continue to use EPA approved and accredited Method 7471 at Hall Environmental (or other accredited lab if necessary) for the duration of the project.

A form C-137A has been attached along with a copy of the Revised Landfarm Closure and Post-Closure Plan. If you have any questions or require additional information, please feel free to contact us at (505) 884-0672 or bernard.bockisch@ghd.com.

Sincerely,

GHD

Christine Mathews
Project Manager

Jeff Walker,
Senior Project Manager

CM /mk/01

Encl.

cc: Stacy Boultinghouse, Energy Transfer

Signed C-137A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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-137A
June 30, 2016

Submit 1 Copy to Santa Fe Office

APPLICATION FOR MINOR MODIFICATION TO SURFACE WASTE MANAGEMENT FACILITY

1. Operator: ETC Field Services LLC

Address: Approx 10 miles north of Jal, New Mexico to the south of Deep Wells Road and approx 2 miles west of Highway 18

Contact Person: Stacy Boultinghouse Phone: 281-740-0494

2. Location: SE /4 NW /4 Section 36 Township 23 South Range 36 East

3. Provide permit number NM2-019

4. Attach a description of the proposed minor modification(s) to the surface waste management facility.

5. If the Minor Modification involves changes to a treatment, remediation, or disposal method, 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.

6. If the Minor Modification will affect the closure and post-closure plan, attach an updated 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, and the environment (the closure and post closure plan shall comply with the requirements contained in 19.15.36.18 NMAC).

7. If the Minor Modification will affect the contingency plan, attach an updated 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).

8. If the Minor Modification will affect the control of run-on or run-off water at the site, attach an updated 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.

9. If the Minor Modification will affect the best management practice plan, attach a best management practice plan to ensure protection of fresh water, public health, and the environment.

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

11. 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: Stacy Boultinghouse Title: Environmental Manager

Signature: SBoultinghouse Date: 7.25.2019

E-mail Address: Stacy.Boultinghouse@energytransfer.com

Redline – Landfarm Closure and Post-Closure Care Plan – Revision 1 with Revision 2 Modifications

Landfarm Closure and Post-Closure Care Plan

Jal No. 4 Landfarm
Jal, New Mexico

ETC Field Services, LLC

GHD | 6121 Indian School Road NE Suite 200 Albuquerque New Mexico 87110 USA

082148| Report No 1 Rev 2 | ~~October 6, 2017~~July 25 2019

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1. Revisions to the Original Document

This Closure and Post-Closure Plan was originally dated July 11, 2014 and approved by the New Mexico Oil Conservation Division (NMOCD) on July 22, 2014. Since the original submittal of this document, the ownership of the property has changed from Regency Field Services to ETC Field Services, LLC (ETC). A subsequent revision to the Closure Post-Closure Plan was dated October 6, 2017 and approved by the NMOCD on October 17, 2017. Further r~~R~~evision of this document has been performed below to request the following minor modifications to the original Landfarm Closure and Post-Closure Plan:

- ~~Stop tilling in landfarm cells with the exception of cell 3.~~Confirm approval of Environmental Protection Agency (EPA) Method 8015M and M/D for all landfarm monitoring and closure post-closure soil analysis for vadose and treatment zones.
- ~~Remove the requirement to sample for major cations and anions with the exception of chloride and sulfate~~ Request NMOCD approval of EPA Method 7471 for the analysis of mercury for all landfarm monitoring and closure post-closure soil analysis fpr vadose and treatment zones.

The following sections incorporate changes to the Closure Post-Closure Plan pertaining to the above requested modifications. The requests are being made to ensure use of the most current EPA recognized analytical methods as well as keep the methods consistent for both treatment and vadose zones~~Landfarmed soils within each cell have been disked on a bi-weekly schedule in accordance with the existing permit and closure and post plan to promote the degradation of hydrocarbon concentrations. Analytical data for concentrations of total petroleum hydrocarbons (TPH) in the treatment zone as analyzed by both EPA Method 418.1 and EPA Method 8015 (extended range through C35) are presented in Table 1. The analytical data indicate that gasoline range organics/diesel range organics (GRO/DRO) combined fraction and TPH has not been detected above the closure standards since at least 2015 in all cells except for cell 3. Benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations in the vadose zone have also met the closure standard. In addition, TPH concentrations in cell 3 have fluctuated below the closure plan action levels during the past three years.~~

~~Based on the data, it is apparent that the continued tilling of soils in cells that are below closure plan levels (cells 1, 2, and 4 through 15) is not beneficial. Tilling of these cells will only contribute to soil erosion. By reducing the number of cells to till, ETC can focus efforts to bring the residual TPH (as analyzed by both EPA Method 418.1 and EPA Method 8015 (extended range through C35)) concentrations found in cells 3 to below closure standards.~~

~~The requirement to sample for the presence of cations and anions was included in the landfarm permit approval conditions dated March 18, 2002. The specific cations and anions consist of the following: sodium, calcium, magnesium, potassium, and alkalinity (carbonate, and bicarbonate). This requirement was also addressed in the Landfarm Closure Plan dated July 11, 2014 because of the landfarm permit approval conditions. ETC is requesting to modify both the permit and closure plan to remove this requirement for the following reasons:~~

- ~~Analysis for these cations and anions is not required under 19.15.36.15 NMAC.~~

- ~~The stated cations and anions do not have a regulatory standard under 20.6.2.3103 (A) or (B), with the exception of chloride and sulfate.~~

~~Based on this, other than the inclusion of this requirement into the landfarm permit approval conditions, there does not appear to be a regulatory requirement to sample for these analytes~~.

2. Background

Landfarm

The landfarm (permit number NM-02-0019) is located in the southeastern portion of Lea County, approximately 10 miles north- northwest of Jal, New Mexico (Figure 1), in the SE/4 of the NW/4 of Section 36, Township 23 South, Range 36 East (New Mexico Principal Meridian). The landfarm lies on the south side of Deep Wells Road, approximately 2 miles west of Highway 18. The land that the landfarm is situated on is owned by ETC Field Services, LLC formerly Regency Field Services, LLC. The area surrounding the landfarm is used for cattle grazing and oil and gas exploration.

Receiving its first soil in July 2001, the landfarm consists of 15 cells (Figure 2), ranging in surface area from 0.35 acres to 4.92 acres. Total area of the facility is nearly 40 acres. The facility is at or near capacity and last received soil in June 2010. ETC has no plans to place additional soil in any of the landfarm cells.

Setting

According to the “Geology and Ground-Water Conditions in Southern Lea County, New Mexico” (New Mexico Institute of Mining and Technology-Groundwater, Report 6 -1961), the landfarm is located near the southern edge of the Eunice Plain physiologic subdivision. The Eunice Plain is underlain by a hard caliche surface and is almost entirely covered by reddish-brown dune sand. In some places the underling surface consists of alluvial sediments, most commonly calcareous silt, in buried or Quaternary lake basins. Annual precipitation over the landfarm is reported to be 9 to 10 inches. There are no major surface drainage features within 5 miles of the landfarm. The ground surface slopes very gently to the northwest.

Geology

The New Mexico Pit Rule Mapping Portal was accessed on the internet with the New Mexico Geology tab selected. The surface geology of the general area at and around the landfarm was labeled with the identifier “Qe/Qp” (Figure 3).

The following describes these surficial geology identifiers, according to the Geologic Map of New Mexico, 2003, New Mexico Bureau of Geology and Mineral Resources:

Qe Eolian deposits (Holocene to middle Pleistocene).

Qp Piedmont alluvial deposits (Holocene to middle Pleistocene) – includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. May locally include upper Pliocene deposits.

The drillers log (Appendix A) for a well (Permit No. Cp-634, approximately 1200 feet from the northwest corner of the landfarm) in the NW/4, NE/4, NW/4 of Section 36 and north of the landfarm (Figure 4), shows a layer of caliche and sand to a depth of 3 feet below ground surface (bgs) with a layer of caliche and sandstone to 15 feet bgs.

Sandy caliche was encountered from 15 to 42 feet bgs, followed by limestone to a depth of 47 feet bgs. A layer of sand and sandy shale was found from 47 to 78 feet bgs, followed by interlayered sandstone and limestone with sandy streaks to 95 feet bgs. From 95 to 135 feet bgs, the log showed sand and sandy shale, followed by sand and sandy limestone to 155 feet bgs. Water was first encountered at around 155 to 170 feet bgs in a layer of soft sand. Hard sand was encountered from 170 to 230 feet. From 230 to 252 feet a layer of water bearing soft sand was logged. The Red Bed and Red Shale formations were found at 252 feet bgs and extending to the total depth of the well at 260 feet bgs.

Groundwater

Based on existing water well data within 1200 feet of the landfarm, the depth to groundwater in the general area of the landfarm, ranges from 123 to 133 feet bgs.

The Pit Rule Mapping Portal with the New Mexico Office of State Engineer (OSE) and United States Geological Survey (USGS) well tab selected was reviewed for water wells in the area of the landfarm. Five wells with recorded depths were identified in section 36, surrounding the landfarm (Figure 4) with recorded water depths. The depth to groundwater in these wells is listed below:

Well	Section	Township	Range	Depth to Water (in feet)
CP 00651	36	23S	36E	123
CP 00512	36	23S	36E	126
CP 00634	36	23S	36E	125
CP 00621	36	23S	36E	127
CP 00497	36	23S	36E	133

Based on the above information, the average depth to groundwater in the area of the landfarm is approximately 127 feet bgs and the topographic change over Section 36, Township 23 South, Range 36 East is a maximum of 9 feet. The elevation change applies over the extent of the landfarm acreage and does not cause the depth to water to be less than 100 feet.

Background Soil Sample

A background soil sample was collected on April 11, 2001, in accordance with the landfarm Permit requirements at the time of permit approval. The soil sample was collected at a depth of approximately 2 feet below ground surface. The sample was analyzed for BTEX, TPH, Resource Conservation and Recovery Act (RCRA) metals, carbonate, bicarbonate, and anions/cations.

~~Background~~ The original permit background data collected from the site is summarized as follows:

Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl-Benzene (mg/Kg)	Xylenes (mg/Kg)	BTEX (mg/Kg)	TOTAL TPH C6-C35 (mg/Kg)

<0.025	<0.025	<0.025	<0.025	<0.025	134

Sodium (mg/kg)	Calcium (mg/Kg)	Magnesium (mg/Kg)	Potassium (mg/Kg)	Chloride (mg/Kg)	Sulfate (mg/Kg)	Carbonate (mg/Kg)	Bicarbonate (mg/Kg)
14.4	73.54	8.54	11.24	<10	35.2	<1.0	140

Silver (mg/kg)	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Mercury (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)
<0.1	0.923	47.92	0.3605	4.21	<0.1	<0.55	1.959

The l~~L~~aboratory analytical data was obtained from the ~~original~~ Application for Waste Management Facility for the landfarm (dated May 30, 2001). The reported background data was obtained from a single sample that was collected in accordance with the established procedure as provided in the New Mexico Oil Conservation Division (NMOCD) Permit 711 Approval document Dated March 18, 2002. The NMOCD considers the presence of TPH in the background soil to invalidate the background results.

Recollection of background samples was performed in August 2014. Resampling of background samples for TPH (C6 extended to C35) by EPA Method ~~8015~~8015M and M/D ~~is being performed~~was performed in May of 2017. ~~Once all of the data is collected,~~Using the August 2014 and May 2017 analytical data, ~~background sample~~ calculations ~~will be~~were performed using the most current version of ProUCL, an EPA-approved statistical analysis software program. The ProUCL calculations for determination of background concentrations were initially submitted to the NMOCD in April of 2018. Comments to the submittal were received from the NMOCD in June of 2018. Subsequently, a response to comments was submitted to the NMOCD in January of 2019. Further comment or approval from the NMOCD has not been received as of July 2019.

Treatment Zone Monitoring

The soil that makes up the Treatment Zone of each cell has been disked on a bi-weekly schedule to promote the degradation of hydrocarbon concentrations and volatile organic compounds (VOCs). Once hydrocarbon and VOC concentrations are below closure standards in the remaining cells for two consecutive sampling events, tilling will be halted. Notification of cessation of tilling will be provided to the NMOCD prior to halting tilling. As specified in 19.15.36.15 F, closure standards for petroleum hydrocarbons consist of the following:

- Benzene, as determined by EPA SW-846 ~~method~~Method 8021B or 8260B, shall not exceed 0.2 mg/kg.
- Total BTEX, as determined by EPA SW-846 ~~method~~Method 8021B or 8260B, shall not exceed 50 mg/kg.

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

mentioned, ETC will analyze TPH using EPA Method ~~8015~~8015M and M/D (C6 extended to C35). The Treatment Zone of each cell has been monitored periodically following the first time soil had been placed into a cell. Since 2009 the cells have been sampled bi-annually and the results reported to the NMOCD annually. Soil samples collected from the bi-annual sampling events were analyzed for GRO/DRO Combined, TPH (C6 extended to C35), TPH by EPA Method 418.1, benzene, total BTEX, and chloride. The most recent annual sampling report was submitted in May of 2019, covering the 2018 sampling events.

Vadose Zone Monitoring

The Vadose Zone has been monitored from the first time soil had been placed into a cell. Biannual sampling and annual reporting has been performed since 2009. The most recent annual sampling report was submitted in May 2019, covering the 2018 sampling events. Soil concentrations were compared to the laboratory practical quantitation limits (PQL). The results of the background sampling and analysis once approved by the NMOCD ~~that is currently being performed~~ will be used to assist with this comparison.

3. Landfarm Closure Plan

ETC is submitting this Closure Plan for NMOCD approval to close their Lea County, New Mexico landfarm permit number NM-02-0019.

This Closure Plan constitutes notification of cessation of operations in accordance with 19.15.36.18.A(1) NMAC. A copy of the closure schedule can be found in Section 5.0 of this document.

ETC will continue with quarterly monitoring of the vadose zone and semi-annual monitoring of the treatment zone. Monitoring will be performed in accordance with the permit approval conditions and the transitional provisions of 19.15.36.20 NMAC.

Treatment Zone: Section 19.15.36.15.D NMAC requires the collection and analysis of at least one composite soil sample, consisting of four discrete samples, from the treatment zone of each cell on a semi-annual basis. Samples are to be analyzed for TPH by EPA Method ~~8015~~8015M and M/D~~M~~ (C6 extended to C35) and chlorides by EPA Method 300.1.

Vadose Zone: the approved Facility Permit requires the collection and analysis of a minimum of one random discrete soil sample from the vadose zone on a quarterly basis. The vadose zone samples will be collected from soils not to exceed 3 feet below the cell's original ground surface. The samples will be analyzed for:

- TPH by EPA Method ~~8015~~8015M and M/D (C6 extended to C35) (quarterly).
- BTEX by EPA Method 8021B (quarterly).
- Chlorides by EPA Method 300.1 (semi-annually).
- WQCC metals EPA Method 6010B, mercury by EPA Method 7471, and sulfate by EPA Method 300.1 (annually).

3.1 Cells Meeting Closure Performance Standards

Treatment Zone data obtained from the semi-annual monitoring will be used to assess if cells are meeting closure performance standards in accordance with 19.15.36.15 NMAC. Cell concentrations will be monitored for the presence of TPH, and chlorides using the above reference methods during semi-annual monitoring. When the soil concentrations in a particular cell are below 500 mg/kg for DRO/GRO Combined by EPA Method 8015 and 1000 mg/kg for chlorides by EPA Method 300.1, closure sampling will be performed. The closure sampling will consist of collecting a minimum of one composite soil sample, consisting of four discrete samples from that cell. The landfarm cells will be sampled for closure twice (semi- annually), to confirm the cells meet NMOCD closure standards. The samples will be analyzed for:

- Benzene, as determined by EPA SW-846 ~~method~~Method 8021B shall not exceed 0.2 mg/kg.
- Total BTEX, as determined by EPA SW-846 ~~method~~Method 8021B shall not exceed 50 mg/kg.
- The gasoline range organics (GRO) and diesel range organics (DRO) combined fractions, as determined by EPA SW-846 M~~m~~ethod ~~8015M~~8015M and M/D, shall not exceed 500 mg/kg.
- TPH by EPA Method ~~8015~~8015M and M/D (C6 extended to C35) shall not exceed 2500 mg/kg.
- Chlorides, as determined by EPA M~~m~~ethod 300.1, shall not exceed 1000 mg/kg.
- In addition, the metals listed in Subsections A and B of 20.6.2.3103 NMAC will be analyzed utilizing EPA SW-846 M~~m~~ethods ~~6010C~~6010B or ~~6020A~~6020 and EPA Method 7471 for analysis of Mercury. The concentration of constituents will be compared with the practical quantitation limit (PQL) or the applicable representative background value. If the concentration of those constituents exceed the PQL or background concentration, ETC will either perform a site specific risk assessment using EPA 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 material pursuant to Paragraph (2) of Subsection G of 19.15.36.15 NMAC.

As soil from these cells meets these standards demonstrated through semi-annual sampling (collected 6 months apart, but within one year), ETC will submit a request for NMOCD approval to close these cells. The request will include the laboratory analytical data of the cell or cells which are requested to be closed. It will also include a comparison of the laboratory analytical data with the closure standards of 19.15.36.15.F NMAC.

If cell closure approval is received, sampling of those cells will be discontinued. ETC plans to leave the remediated soil from closed cells in place in accordance with 19.15.36.15.G(1) NMAC. Re-vegetation of closed cells will be performed in accordance with 19.15.36.18.A(6) NMAC as soon as closure is approved by the NMOCD. This will be performed to minimize erosion. Revegetation requirements are described in Section 3.3 of this document.

3.2 Cells Above Performance Closure Standards

ETC will continue to disk cells that show hydrocarbon and VOC concentrations above the closure standards on a bi-weekly basis. When a cell has met the the following for two consecutive sampling events, tilling will cease in that cell:

- Benzene, as determined by EPA SW-846 ~~method~~Method 8021B or 8260B, shall not exceed 0.2 mg/kg.
- Total BTEX, as determined by EPA SW-846 ~~method~~Method 8021B or 8260B, shall not exceed 50 mg/kg.
- The GRO/DRO combined fractions, as determined by EPA SW-846 ~~method~~Method ~~8015~~8015M and M/D~~M~~, shall not exceed 500 mg/kg. TPH, as determined by EPA ~~method~~Method 418.1 or other EPA method approved by the division, shall not exceed 2500 mg/kg.
    - As previously mentioned, ETC will analyze TPH using EPA Method ~~8015~~8015M and M/D (C6 extended to C35).

Notification of cessation of tilling will be provided to the NMOCD prior to halting tilling. The notification of tilling cessation will include a summary of results and laboratory analytical reports. Monitoring of the Treatment Zones and of the Vadose Zones will continue until closure performance standards have been met. The sampling results will be submitted to the NMOCD annually.

ETC will evaluate the potential for the cells to meet closure performance standards if they are not achieved within 4 years from the date of approval of this Closure Plan. If this occurs, the data will be evaluated and ETC may:

- Submit a request for additional time to meet the standards.
- Arrange to have any non-compliant soils moved to a NMOCD approved landfill in accordance with 19.15.36.18.C(4)(c) NMAC.
- Request approval of an alternative closure standard from the division in accordance with 19.15.36.15.G(4) NMAC.

If treated soils are removed, the cell will be filled in with native soils and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC. Following closure approval for the landfarm cells, ETC will proceed with final closure activities under the approved Closure Plan.

3.3 Landfarm Closure

ETC currently plans to leave the remediated soil in place. The landfarm cells will be contoured to support re-vegetation. Facility berm material may be used to control potential erosion issues at the topographically low corner of the facility, landfarm cell berms will be contoured in. However, any berms left in place for erosion control will be seeded for vegetative growth.

Roads and fences

The access roads will be removed as a part of the re-contouring. Disturbed areas will be re-vegetated in accordance with 19.15.36.18(A)(6) NMAC.

Re-vegetation

The ground in and around the landfarm will be re-vegetated in accordance with 19.15.36.18(A)(6) NMAC. The re-vegetation will consist of establishing 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). The cover will consist of at least three native plant species, including at least one

grass, but not including noxious weeds. Maintenance of that cover, including the removal of noxious weeds, will be performed through two successive growing seasons.

Soil Sampling

Visibly stained areas will be sampled for the presence of TPH using EPA Method ~~8015~~8015M and M/D and chlorides using EPA Method 300.1. If these soils exceed 2,500 mg/kg of TPH and 1000 mg/kg chlorides, the soil will be excavated and removed from the site for disposal at a NMOCD approved landfill. The soil will be manifested under form C138.

During closure and post closure operations, ETC will maintain the landfarm to protect fresh water, public health, safety and the environment.

Closure Report

A report will be submitted upon completion of closure activities. The report will include a description of closure activities, soil sampling data of spills or releases (if applicable), and photographs of the site.

4. Post Closure Plan

Following clean closure of the landfarm, ETC will inspect and maintain the re- vegetated area of the landfarm on a biannual basis. Revegetation will be assessed according to Section 3.3, above. The post closure care period will be three years following receipt of landfarm closure approval in accordance with 19.15.36.18.E.

If there has been a release to the vadose zone or to ground water, then ETC will comply with the applicable requirements of 19.15.29 NMAC and 19.15.30 NMAC, release notification and remediation, respectively. A copy of these regulations can be found in Appendix B.

Landfarm Post Closure

At the end of the 3 year post-closure care period, ETC will send a Post Closure report to the NMOCD, demonstrating compliance with meeting Post Closure Requirements. The Landfarm Post Closure Report will include estimations of vegetative cover, types of plants growing at the site and photographs of the revegetated areas.

Release of Financial Assurance

With receipt of closure approval from the NMOCD, ETC will request release of financial assurance.

5. Closure Schedule

Closure will generally follow the following schedule.

- Achieving Landfarm Closure Performance Standards: Achieving closure performance standards for all cells is anticipated to occur within the next 2 years. Operational monitoring will continue to be performed on the current schedule. ETC will petition for closure as cells meet

performance standards. Cells will be removed from operational monitoring once they have been approved for closure. Closure requests will be submitted once the closure performance standards have been demonstrated though semi-annual monitoring. Soil sampling of identified stained soil will be performed.

- Closure Assessment: An assessment of the likelihood that the landfarm soils will meet closure performance standards will be included within each annual report. In the event that cells are not meeting closure performance standards within 5 years of the date of approval of this closure plan, a closure alternatives assessment will be performed. The alternatives assessment will evaluate closure options as discussed in Section 3.2, above. The alternatives assessment will be submitted to the NMOCD as part of the fourth year's annual report. In the event that it is determined that soil in a particular cell cannot be remediated, they may be removed in accordance with 19.15.36.18.C(4)(c) NMAC.
- Cell Closure: Grading and reseeding of individual cells will begin within 30 days of receipt of NMOCD closure approval. The purpose of this is to minimize erosion and begin vegetative growth on the cell as soon as possible.
- Landfarm Closure Activities: Once closure approval of all landfarm cells is received, grading of the berms and roads, and grading and reseeding of any unclosed landfarm cells will be performed. These activities will begin within 30 days following receipt of NMOCD closure approval.
- Post Closure Care: Post closure care of the entire former landfarm as described in Section 4.0 will be performed for a period of 3 years following receipt of final Landfarm Closure Report approval from the NMOCD.
- Post Closure Report: A post closure report will be submitted at the end of the Post Closure period. The Post Closure period will be deemed complete once 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. The post closure report will include the vegetative cover calculations and include photographs of the site.

Landfarm Closure and Post-Closure Care Plan
Revision 2

Landfarm Closure and Post-Closure Care Plan

Jal No. 4 Landfarm
Jal, New Mexico

ETC Field Services, LLC

GHD | 6121 Indian School Road NE Suite 200 Albuquerque New Mexico 87110 USA

082148| Report No 1 Rev 2 | July 25 2019

Table of Contents

Figure Index

Appendix Index

1. Revisions to the Original Document

This Closure and Post-Closure Plan was originally dated July 11, 2014 and approved by the New Mexico Oil Conservation Division (NMOCD) on July 22, 2014. Since the original submittal of this document, the ownership of the property has changed from Regency Field Services to ETC Field Services, LLC (ETC). A subsequent revision to the Closure Post-Closure Plan was dated October 6, 2017 and approved by the NMOCD on October 17, 2017. Further revision of this document has been performed below to request the following minor modifications to the original Landfarm Closure and Post-Closure Plan:

- Confirm approval of Environmental Protection Agency (EPA) Method 8015M and M/D for all landfarm monitoring and closure post-closure soil analysis for vadose and treatment zones.
- Request NMOCD approval of EPA Method 7471 for the analysis of mercury for all landfarm monitoring and closure post-closure soil analysis fpr vadose and treatment zones.

The following sections incorporate changes to the Closure Post-Closure Plan pertaining to the above requested modifications. The requests are being made to ensure use of the most current EPA recognized analytical methods as well as keep the methods consistent for both treatment and vadose zones.

2. Background

Landfarm

The landfarm (permit number NM-02-0019) is located in the southeastern portion of Lea County, approximately 10 miles north- northwest of Jal, New Mexico (Figure 1), in the SE/4 of the NW/4 of Section 36, Township 23 South, Range 36 East (New Mexico Principal Meridian). The landfarm lies on the south side of Deep Wells Road, approximately 2 miles west of Highway 18. The land that the landfarm is situated on is owned by ETC Field Services, LLC formerly Regency Field Services, LLC. The area surrounding the landfarm is used for cattle grazing and oil and gas exploration.

Receiving its first soil in July 2001, the landfarm consists of 15 cells (Figure 2), ranging in surface area from 0.35 acres to 4.92 acres. Total area of the facility is nearly 40 acres. The facility is at or near capacity and last received soil in June 2010. ETC has no plans to place additional soil in any of the landfarm cells.

Setting

According to the “Geology and Ground-Water Conditions in Southern Lea County, New Mexico” (New Mexico Institute of Mining and Technology-Groundwater, Report 6 -1961), the landfarm is located near the southern edge of the Eunice Plain physiologic subdivision. The Eunice Plain is underlain by a hard caliche surface and is almost entirely covered by reddish-brown dune sand. In some places the underling surface consists of alluvial sediments, most commonly calcareous silt, in buried or Quaternary lake basins. Annual precipitation over the landfarm is reported to be 9 to

10 inches. There are no major surface drainage features within 5 miles of the landfarm. The ground surface slopes very gently to the northwest.

Geology

The New Mexico Pit Rule Mapping Portal was accessed on the internet with the New Mexico Geology tab selected. The surface geology of the general area at and around the landfarm was labeled with the identifier “Qe/Qp” (Figure 3).

The following describes these surficial geology identifiers, according to the Geologic Map of New Mexico, 2003, New Mexico Bureau of Geology and Mineral Resources:

Qe Eolian deposits (Holocene to middle Pleistocene).

Qp Piedmont alluvial deposits (Holocene to middle Pleistocene) – includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. May locally include upper Pliocene deposits.

The drillers log (Appendix A) for a well (Permit No. Cp-634, approximately 1200 feet from the northwest corner of the landfarm) in the NW/4, NE/4, NW/4 of Section 36 and north of the landfarm (Figure 4), shows a layer of caliche and sand to a depth of 3 feet below ground surface (bgs) with a layer of caliche and sandstone to 15 feet bgs.

Sandy caliche was encountered from 15 to 42 feet bgs, followed by limestone to a depth of 47 feet bgs. A layer of sand and sandy shale was found from 47 to 78 feet bgs, followed by interlayered sandstone and limestone with sandy streaks to 95 feet bgs. From 95 to 135 feet bgs, the log showed sand and sandy shale, followed by sand and sandy limestone to 155 feet bgs. Water was first encountered at around 155 to 170 feet bgs in a layer of soft sand. Hard sand was encountered from 170 to 230 feet. From 230 to 252 feet a layer of water bearing soft sand was logged. The Red Bed and Red Shale formations were found at 252 feet bgs and extending to the total depth of the well at 260 feet bgs.

Groundwater

Based on existing water well data within 1200 feet of the landfarm, the depth to groundwater in the general area of the landfarm, ranges from 123 to 133 feet bgs.

The Pit Rule Mapping Portal with the New Mexico Office of State Engineer (OSE) and United States Geological Survey (USGS) well tab selected was reviewed for water wells in the area of the landfarm. Five wells with recorded depths were identified in section 36, surrounding the landfarm (Figure 4) with recorded water depths. The depth to groundwater in these wells is listed below:

Well	Section	Township	Range	Depth to Water (in feet)
CP 00651	36	23S	36E	123
CP 00512	36	23S	36E	126
CP 00634	36	23S	36E	125
CP 00621	36	23S	36E	127
CP 00497	36	23S	36E	133

Based on the above information, the average depth to groundwater in the area of the landfarm is approximately 127 feet bgs and the topographic change over Section 36, Township 23 South, Range 36 East is a maximum of 9 feet. The elevation change applies over the extent of the landfarm acreage and does not cause the depth to water to be less than 100 feet.

Background Soil Sample

A background soil sample was collected on April 11, 2001, in accordance with the landfarm Permit requirements at the time of permit approval. The soil sample was collected at a depth of approximately 2 feet below ground surface. The sample was analyzed for BTEX, TPH, Resource Conservation and Recovery Act (RCRA) metals, carbonate, bicarbonate, and anions/cations.

The original permit background data collected from the site is summarized as follows:

Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl-Benzene (mg/Kg)	Xylenes (mg/Kg)	BTEX (mg/Kg)	TOTAL TPH C6-C35 (mg/Kg)
<0.025	<0.025	<0.025	<0.025	<0.025	134

Sodium (mg/kg)	Calcium (mg/Kg)	Magnesium (mg/Kg)	Potassium (mg/Kg)	Chloride (mg/Kg)	Sulfate (mg/Kg)	Carbonate (mg/Kg)	Bicarbonate (mg/Kg)
14.4	73.54	8.54	11.24	<10	35.2	<1.0	140

Silver (mg/kg)	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Mercury (mg/Kg)	Lead (mg/Kg)	Selenium (mg/Kg)
<0.1	0.923	47.92	0.3605	4.21	<0.1	<0.55	1.959

The laboratory analytical data was obtained from the Application for Waste Management Facility for the landfarm (dated May 30, 2001). The reported background data was obtained from a single sample that was collected in accordance with the established procedure as provided in the New Mexico Oil Conservation Division (NMOCD) Permit 711 Approval document Dated March 18, 2002. The NMOCD considers the presence of TPH in the background soil to invalidate the background results.

Recollection of background samples was performed in August 2014. Resampling of background samples for TPH (C6 extended to C35) by EPA Method 8015M and M/D was performed in May of 2017. Using the August 2014 and May 2017 analytical data, calculations were performed using the most current version of ProUCL, an EPA-approved statistical analysis software program. The ProUCL calculations for determination of background concentrations were initially submitted to the NMOCD in April of 2018. Comments to the submittal were received from the NMOCD in June of 2018. Subsequently, a response to comments was submitted to the NMOCD in January of 2019. Further comment or approval from the NMOCD has not been received as of July 2019.

Treatment Zone Monitoring

The soil that makes up the Treatment Zone of each cell has been disked on a bi-weekly schedule to promote the degradation of hydrocarbon concentrations and volatile organic compounds (VOCs). Once hydrocarbon and VOC concentrations are below closure standards in the remaining cells for

two consecutive sampling events, tilling will be halted. Notification of cessation of tilling will be provided to the NMOCD prior to halting tilling. As specified in 19.15.36.15 F, closure standards for petroleum hydrocarbons consist of the following:

- Benzene, as determined by EPA SW-846 Method 8021B or 8260B, shall not exceed 0.2 mg/kg.
- Total BTEX, as determined by EPA SW-846 Method 8021B or 8260B, shall not exceed 50 mg/kg.

The GRO and DRO combined fractions, as determined by EPA SW-846 Method 8015M and M/D, 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. As previously mentioned, ETC will analyze TPH using EPA Method 8015M and M/D (C6 extended to C35). The Treatment Zone of each cell has been monitored periodically following the first time soil had been placed into a cell. Since 2009 the cells have been sampled bi-annually and the results reported to the NMOCD annually. Soil samples collected from the bi-annual sampling events were analyzed for GRO/DRO Combined, TPH (C6 extended to C35), TPH by EPA Method 418.1, benzene, total BTEX, and chloride. The most recent annual sampling report was submitted in May of 2019, covering the 2018 sampling events.

Vadose Zone Monitoring

The Vadose Zone has been monitored from the first time soil had been placed into a cell. Biannual sampling and annual reporting has been performed since 2009. The most recent annual sampling report was submitted in May 2019, covering the 2018 sampling events. Soil concentrations were compared to the laboratory practical quantitation limits (PQL). The results of the background sampling and analysis once approved by the NMOCD will be used to assist with this comparison.

3. Landfarm Closure Plan

ETC is submitting this Closure Plan for NMOCD approval to close their Lea County, New Mexico landfarm permit number NM-02-0019.

This Closure Plan constitutes notification of cessation of operations in accordance with 19.15.36.18.A(1) NMAC. A copy of the closure schedule can be found in Section 5.0 of this document.

ETC will continue with quarterly monitoring of the vadose zone and semi-annual monitoring of the treatment zone. Monitoring will be performed in accordance with the permit approval conditions and the transitional provisions of 19.15.36.20 NMAC.

Treatment Zone: Section 19.15.36.15.D NMAC requires the collection and analysis of at least one composite soil sample, consisting of four discrete samples, from the treatment zone of each cell on a semi-annual basis. Samples are to be analyzed for TPH by EPA Method 8015M and M/D (C6 extended to C35) and chlorides by EPA Method 300.1.

Vadose Zone: the approved Facility Permit requires the collection and analysis of a minimum of one random discrete soil sample from the vadose zone on a quarterly basis. The vadose zone samples

will be collected from soils not to exceed 3 feet below the cell's original ground surface. The samples will be analyzed for:

- TPH by EPA Method 8015M and M/D (C6 extended to C35) (quarterly).
- BTEX by EPA Method 8021B (quarterly).
- Chlorides by EPA Method 300.1 (semi-annually).
- WQCC metals EPA Method 6010B, mercury by EPA Method 7471, and sulfate by EPA Method 300.1 (annually).

3.1 Cells Meeting Closure Performance Standards

Treatment Zone data obtained from the semi-annual monitoring will be used to assess if cells are meeting closure performance standards in accordance with 19.15.36.15 NMAC. Cell concentrations will be monitored for the presence of TPH, and chlorides using the above reference methods during semi-annual monitoring. When the soil concentrations in a particular cell are below 500 mg/kg for DRO/GRO Combined by EPA Method 8015 and 1000 mg/kg for chlorides by EPA Method 300.1, closure sampling will be performed. The closure sampling will consist of collecting a minimum of one composite soil sample, consisting of four discrete samples from that cell. The landfarm cells will be sampled for closure twice (semi- annually), to confirm the cells meet NMOCD closure standards. The samples will be analyzed for:

- Benzene, as determined by EPA SW-846 Method 8021B shall not exceed 0.2 mg/kg.
- Total BTEX, as determined by EPA SW-846 Method 8021B shall not exceed 50 mg/kg.
- The gasoline range organics (GRO) and diesel range organics (DRO) combined fractions, as determined by EPA SW-846 Method 8015M and M/D, shall not exceed 500 mg/kg.
- TPH by EPA Method 8015M and M/D (C6 extended to C35) shall not exceed 2500 mg/kg.
- Chlorides, as determined by EPA Method 300.1, shall not exceed 1000 mg/kg.
- In addition, the metals listed in Subsections A and B of 20.6.2.3103 NMAC will be analyzed utilizing EPA SW-846 Methods 6010B or 6020 and EPA Method 7471 for analysis of Mercury. The concentration of constituents will be compared with the practical quantitation limit (PQL) or the applicable representative background value. If the concentration of those constituents exceed the PQL or background concentration, ETC will either perform a site specific risk assessment using EPA 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 material pursuant to Paragraph (2) of Subsection G of 19.15.36.15 NMAC.

As soil from these cells meets these standards demonstrated through semi-annual sampling (collected 6 months apart, but within one year), ETC will submit a request for NMOCD approval to close these cells. The request will include the laboratory analytical data of the cell or cells which are requested to be closed. It will also include a comparison of the laboratory analytical data with the closure standards of 19.15.36.15.F NMAC.

If cell closure approval is received, sampling of those cells will be discontinued. ETC plans to leave the remediated soil from closed cells in place in accordance with 19.15.36.15.G(1) NMAC. Re-vegetation of closed cells will be performed in accordance with 19.15.36.18.A(6) NMAC as soon as closure is approved by the NMOCD. This will be performed to minimize erosion. Revegetation requirements are described in Section 3.3 of this document.

3.2 Cells Above Performance Closure Standards

ETC will continue to disk cells that show hydrocarbon and VOC concentrations above the closure standards on a bi-weekly basis. When a cell has met the the following for two consecutive sampling events, tilling will cease in that cell:

- Benzene, as determined by EPA SW-846 Method 8021B or 8260B, shall not exceed 0.2 mg/kg.
- Total BTEX, as determined by EPA SW-846 Method 8021B or 8260B, shall not exceed 50 mg/kg.
- The GRO/DRO combined fractions, as determined by EPA SW-846 Method 8015M and M/D, 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.
  - As previously mentioned, ETC will analyze TPH using EPA Method 8015M and M/D (C6 extended to C35).

Notification of cessation of tilling will be provided to the NMOCD prior to halting tilling. The notification of tilling cessation will include a summary of results and laboratory analytical reports. Monitoring of the Treatment Zones and of the Vadose Zones will continue until closure performance standards have been met. The sampling results will be submitted to the NMOCD annually.

ETC will evaluate the potential for the cells to meet closure performance standards if they are not achieved within 4 years from the date of approval of this Closure Plan. If this occurs, the data will be evaluated and ETC may:

- Submit a request for additional time to meet the standards.
- Arrange to have any non-compliant soils moved to a NMOCD approved landfill in accordance with 19.15.36.18.C(4)(c) NMAC.
- Request approval of an alternative closure standard from the division in accordance with 19.15.36.15.G(4) NMAC.

If treated soils are removed, the cell will be filled in with native soils and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC. Following closure approval for the landfarm cells, ETC will proceed with final closure activities under the approved Closure Plan.

3.3 Landfarm Closure

ETC currently plans to leave the remediated soil in place. The landfarm cells will be contoured to support re-vegetation. Facility berm material may be used to control potential erosion issues at the

topographically low corner of the facility, landfarm cell berms will be contoured in. However, any berms left in place for erosion control will be seeded for vegetative growth.

Roads and fences

The access roads will be removed as a part of the re-contouring. Disturbed areas will be re-vegetated in accordance with 19.15.36.18(A)(6) NMAC.

Re-vegetation

The ground in and around the landfarm will be re-vegetated in accordance with 19.15.36.18(A)(6) NMAC. The re-vegetation will consist of establishing 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). The cover will consist of at least three native plant species, including at least one grass, but not including noxious weeds. Maintenance of that cover, including the removal of noxious weeds, will be performed through two successive growing seasons.

Soil Sampling

Visibly stained areas will be sampled for the presence of TPH using EPA Method 8015M and M/D and chlorides using EPA Method 300.1. If these soils exceed 2,500 mg/kg of TPH and 1000 mg/kg chlorides, the soil will be excavated and removed from the site for disposal at a NMOCD approved landfill. The soil will be manifested under form C138.

During closure and post closure operations, ETC will maintain the landfarm to protect fresh water, public health, safety and the environment.

Closure Report

A report will be submitted upon completion of closure activities. The report will include a description of closure activities, soil sampling data of spills or releases (if applicable), and photographs of the site.

4. Post Closure Plan

Following clean closure of the landfarm, ETC will inspect and maintain the re- vegetated area of the landfarm on a biannual basis. Revegetation will be assessed according to Section 3.3, above. The post closure care period will be three years following receipt of landfarm closure approval in accordance with 19.15.36.18.E.

If there has been a release to the vadose zone or to ground water, then ETC will comply with the applicable requirements of 19.15.29 NMAC and 19.15.30 NMAC, release notification and remediation, respectively. A copy of these regulations can be found in Appendix B.

Landfarm Post Closure

At the end of the 3 year post-closure care period, ETC will send a Post Closure report to the NMOCD, demonstrating compliance with meeting Post Closure Requirements. The Landfarm Post

Closure Report will include estimations of vegetative cover, types of plants growing at the site and photographs of the revegetated areas.

Release of Financial Assurance

With receipt of closure approval from the NMOCD, ETC will request release of financial assurance.

5. Closure Schedule

Closure will generally follow the following schedule.

- Achieving Landfarm Closure Performance Standards: Achieving closure performance standards for all cells is anticipated to occur within the next 2 years. Operational monitoring will continue to be performed on the current schedule. ETC will petition for closure as cells meet performance standards. Cells will be removed from operational monitoring once they have been approved for closure. Closure requests will be submitted once the closure performance standards have been demonstrated though semi-annual monitoring. Soil sampling of identified stained soil will be performed.
- Closure Assessment: An assessment of the likelihood that the landfarm soils will meet closure performance standards will be included within each annual report. In the event that cells are not meeting closure performance standards within 5 years of the date of approval of this closure plan, a closure alternatives assessment will be performed. The alternatives assessment will evaluate closure options as discussed in Section 3.2, above. The alternatives assessment will be submitted to the NMOCD as part of the fourth year's annual report. In the event that it is determined that soil in a particular cell cannot be remediated, they may be removed in accordance with 19.15.36.18.C(4)(c) NMAC.
- Cell Closure: Grading and reseeding of individual cells will begin within 30 days of receipt of NMOCD closure approval. The purpose of this is to minimize erosion and begin vegetative growth on the cell as soon as possible.
- Landfarm Closure Activities: Once closure approval of all landfarm cells is received, grading of the berms and roads, and grading and reseeding of any unclosed landfarm cells will be performed. These activities will begin within 30 days following receipt of NMOCD closure approval.
- Post Closure Care: Post closure care of the entire former landfarm as described in Section 4.0 will be performed for a period of 3 years following receipt of final Landfarm Closure Report approval from the NMOCD.
- Post Closure Report: A post closure report will be submitted at the end of the Post Closure period. The Post Closure period will be deemed complete once 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. The post closure report will include the vegetative cover calculations and include photographs of the site.

Figures

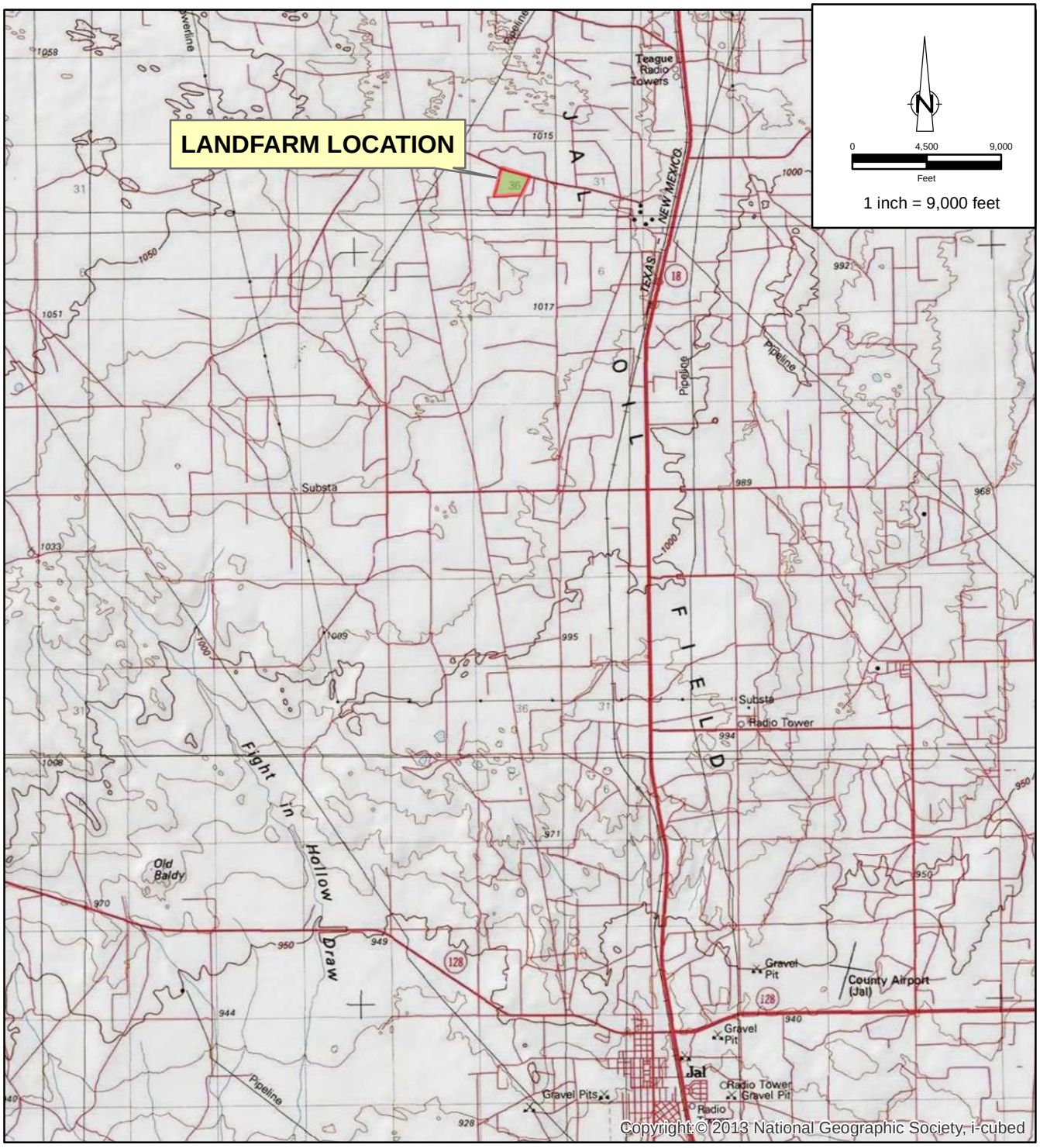


Figure 1

SITE LOCATION MAP
LEA COUNTY LANDFARM
SE/4 NW/4 OF SECTION 36
TOWNSHIP 23 SOUTH, RANGE 38 EAST
Regency Energy Field Services

082148-00(000)GIS-DL001_Topo MAY 22/2013

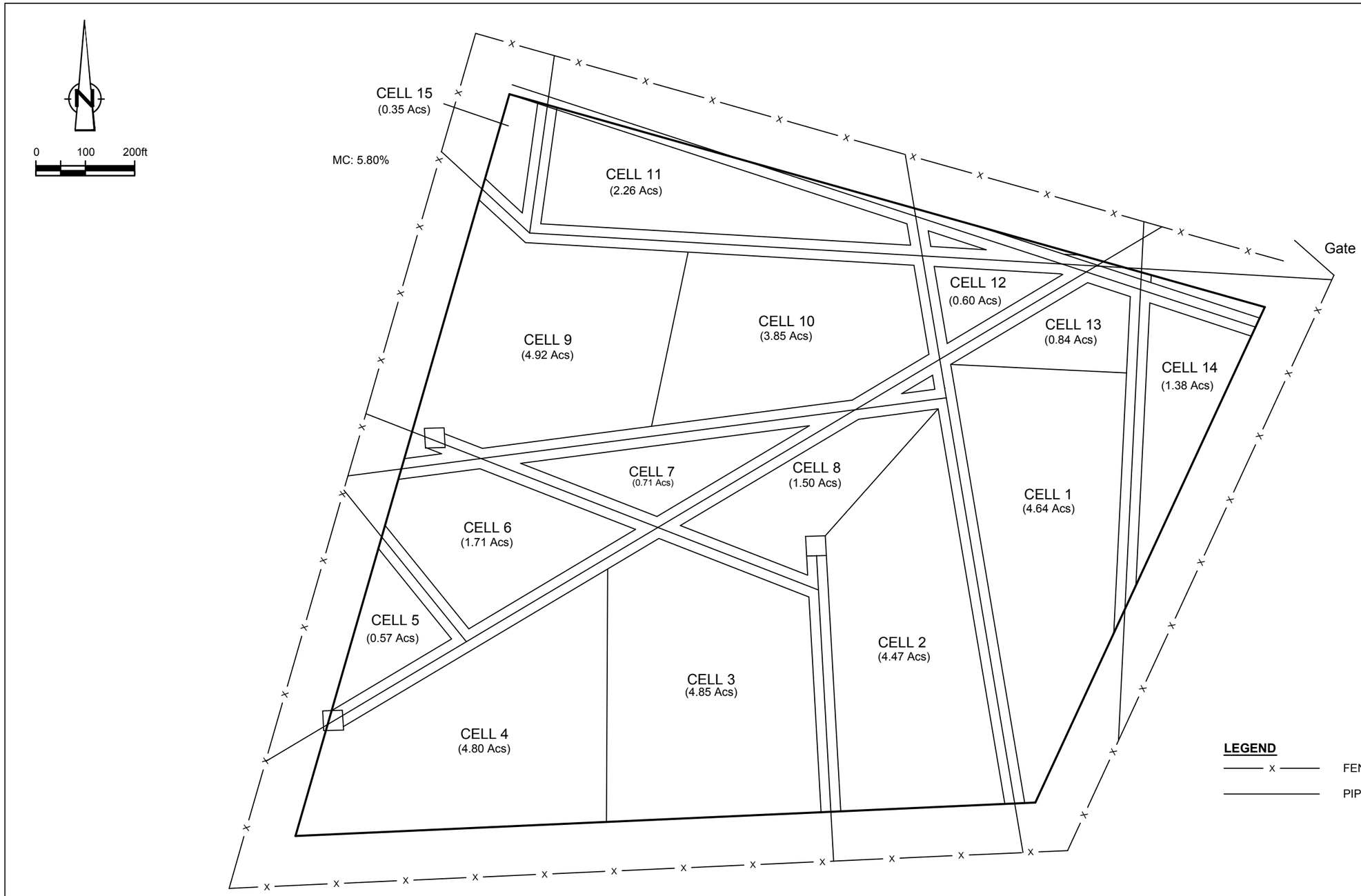
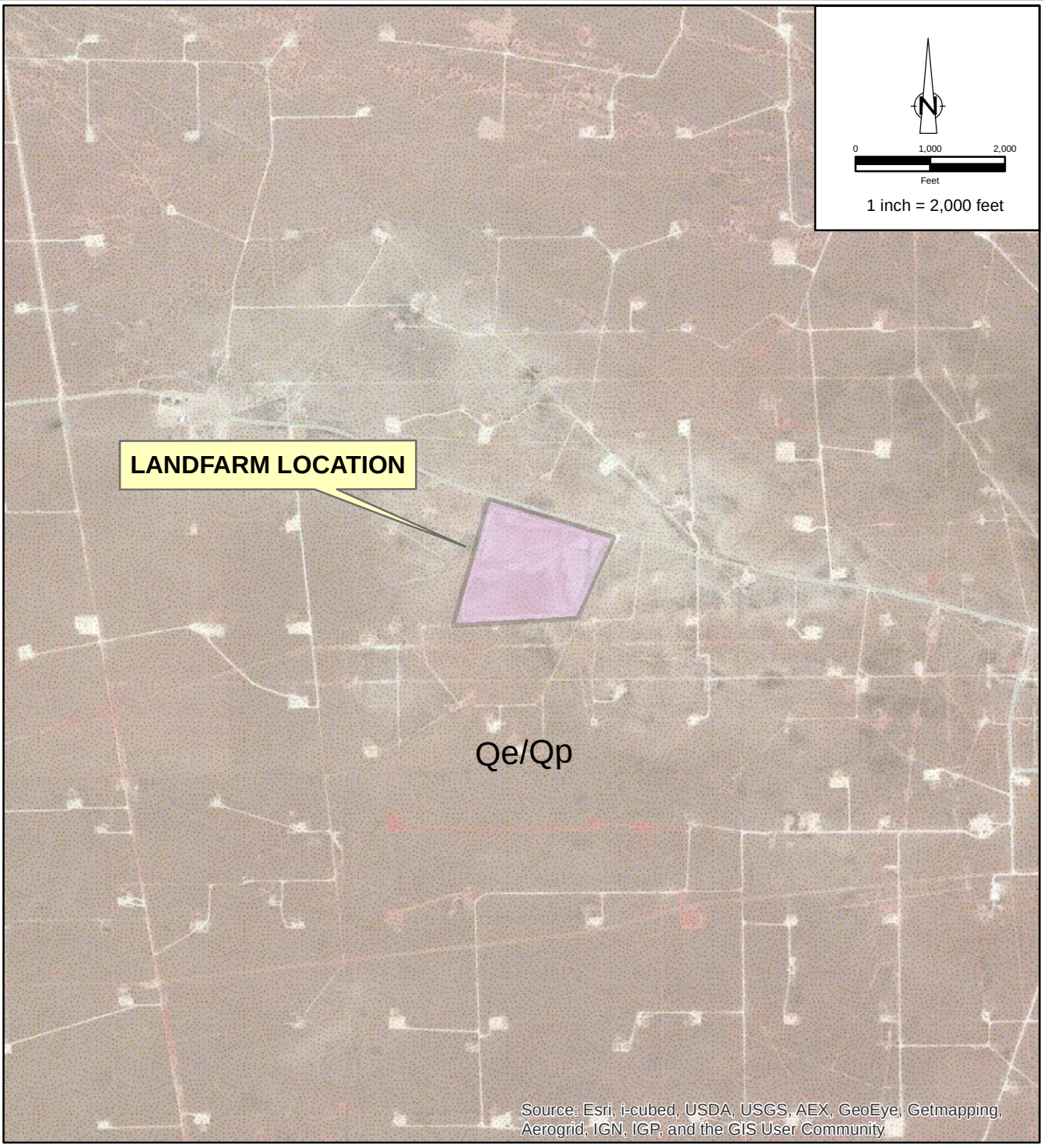


Figure 2

LANDFARM CELLS
SE/4 NW/4 OF SECTION 36
TOWNSHIP 23 SOUTH, RANGE 38 EAST
Energy Transfer

082148-00(000)GN-DL001 APR 21/2014



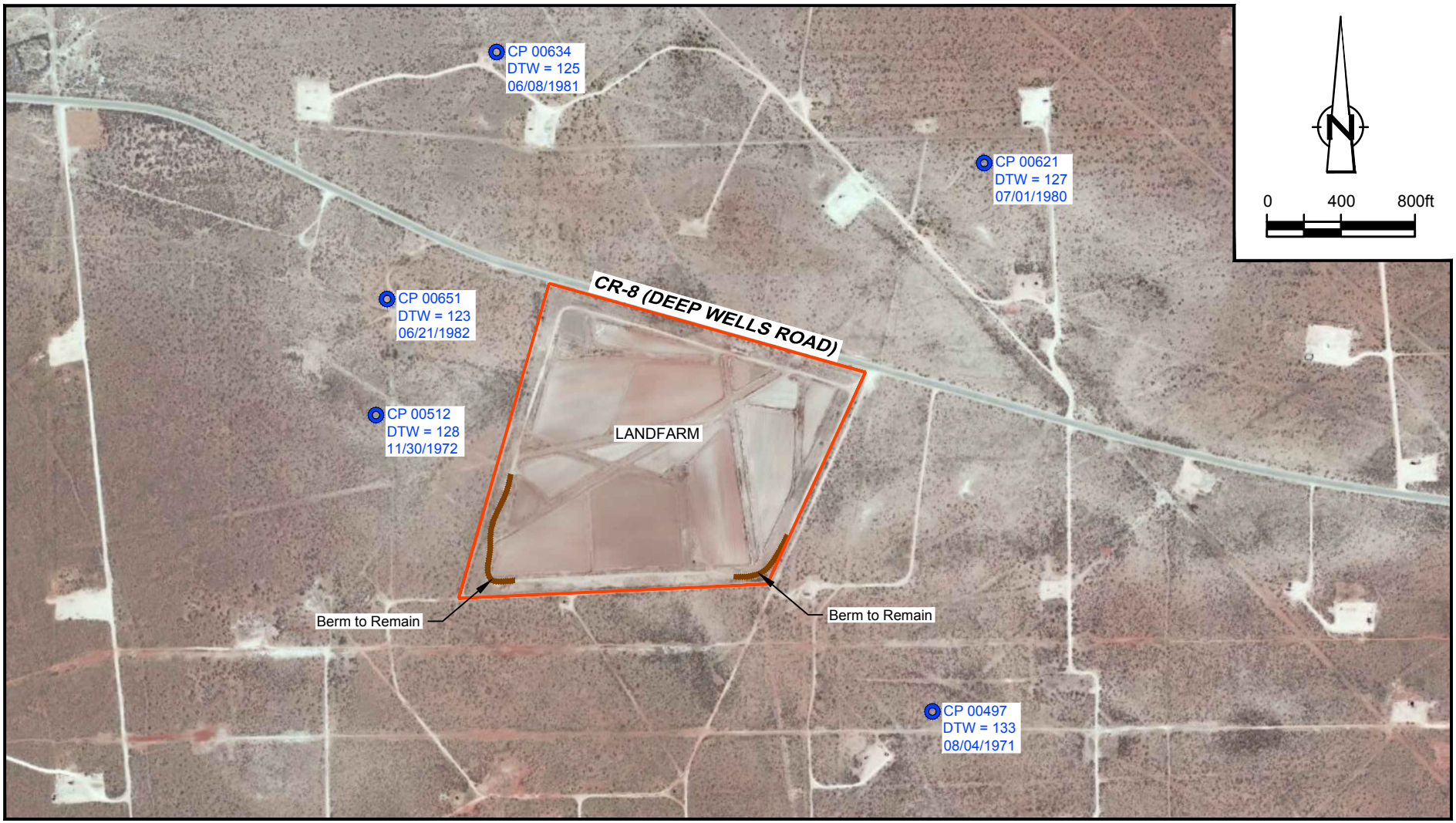
Legend

- Approximate Facility Boundary
- Qe/Qp Formation

Figure 3

SITE GEOLOGY MAP
LEA COUNTY LANDFARM
SE/4 NW/4 OF SECTION 36
TOWNSHIP 23 SOUTH, RANGE 38 EAST
Regency Energy Field Services

082148-00(000)GIS-DL003_Geo MAY 23/2013



LAT/LONG: 32.261° NORTH, 103.220° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

LEGEND

WATER WELL WITH WELL ID, DEPTH TO WATER IN FEET AND INSTALL DATE

Figure 4

WATER WELLS MAP (DEPTH TO GROUNDWATER)
LEA COUNTY LANDFARM
SE/4 NW/4 OF SECTION 36
TOWNSHIP 23 SOUTH, RANGE 38 EAST
Regency Energy Field Services

082148-00(000)GN-DL004_WW JUN 4/2014

Appendices

Appendix A
Water Well Log

STATE ENGINEER OFFICE

WELL RECORD

FIELD ENGR. LOG

Section 1. GENERAL INFORMATION

(A) Owner of well El Paso Natural Gas Company Owner's Well No. 16
Street or Post Office Address P. O. Box 1492
City and State El Paso, Texas 79978

Well was drilled under Permit No. CP-634 and is located in the:

a. NW ¼ NE ¼ NW ¼ ¼ of Section 36 Township 23S Range 36E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Spruill Bros. Drilling Co. License No. WD 803

Address Box 6129, Odessa, Texas 79762

Drilling Began June 8, 1981 Completed June 15, 1981 Type tools Rotary Size of hole 17½ in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 260 ft.

Completed well is [X] shallow [ ] artesian. Depth to water upon completion of well 125 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
130	260	130	Sand	80

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
10-3/4	40.48		±2 Ft.	160	162		0	0
10-3/4	40.48	Screen	160 Ft.	260	100		160	260

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
0	40	17½		100	Gravity

Section 5. PLUGGING RECORD

Plugging Contractor _____
Address _____
Plugging Method _____
Date Well Plugged _____
Plugging approved by:

_____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received August 5, 1981

Quad _____ FWL _____ FSL _____

File No. CP-634 Exploratory Use SUPP. Location No. 23.36.36.12141
tained as supplemental well CP-37-Combined-S-5

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	3		Caliche & Sand
3	15		Caliche & Sandstone
15	42		Sandy Caliche
42	47		Limestone
47	78		Sand & Sandy Shale
78	95		Sandstone, Limestone & Sand Streaks
95	135		Sand & Sandy Shale
135	155		Sand & Sandy Limestone (Damp)
155	170		Sand Soft (Water)
170	230		Sand Hard (Water?)
230	252		Sand Soft (Water)
252	260		Red Shale

STATE ENGINEER ROSWELL, NM
Aug 5 8 25 AM '01

Section 7. REMARKS AND ADDITIONAL INFORMATION

Aug 12 8 29 AM '01
STATE ENGINEER ROSWELL, NM

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Thomas Sparrill
Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All questions except Section 5 shall be answered as completely and accurately as possible.

Appendix B
19.15.29 NMAC and 19.15.30 NMAC Regulations

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 29 RELEASE NOTIFICATION

19.15.29.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.29.1 NMAC - N, 12/1/08]

19.15.29.2 SCOPE: 19.15.29 NMAC applies to persons engaged in oil and gas development and production within New Mexico.
[19.15.29.2 NMAC - N, 12/1/08]

19.15.29.3 STATUTORY AUTHORITY: 19.15.29 NMAC is adopted pursuant to the Oil and Gas Act, NMSA 1978, Section 70-2-6, Section 70-2-11 and Section 70-2-12.
[19.15.29.3 NMAC - N, 12/1/08]

19.15.29.4 DURATION: Permanent.
[19.15.29.4 NMAC - N, 12/1/08]

19.15.29.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
[19.15.29.5 NMAC - N, 12/1/08]

19.15.29.6 OBJECTIVE: To require persons who operate or control the release or the location of the release to report the unauthorized release of oil, gases, produced water, condensate or oil field waste including regulated NORM, or other oil field related chemicals, contaminants or mixtures of those chemicals or contaminants that occur during drilling, producing, storing, disposing, injecting, transporting, servicing or processing and to establish reporting procedures.
[19.15.29.6 NMAC - N, 12/1/08]

19.15.29.7 DEFINITIONS:

A. "Major release" means:

(1) an unauthorized release of a volume, excluding gases, in excess of 25 barrels;

(2) 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;

(3) an unauthorized release of gases in excess of 500 MCF; or

(4) 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.

B. "Minor release" means an unauthorized release of a volume, greater than five barrels but not more than 25 barrels; or greater than 50 MCF but less than 500 MCF of gases.
[19.15.29.7 NMAC - Rp, 19.15.3.116 NMAC, 12/1/08]

19.15.29.8 RELEASE NOTIFICATION:

A. The person operating or controlling either the release or the location of the release shall notify the division of unauthorized release occurring during the drilling, producing, storing, disposing, injecting, transporting, servicing or processing of oil, gases, produced water, condensate or oil field waste including regulated NORM, or other oil field related chemicals, contaminants or mixture of the chemicals or contaminants, in accordance with the requirements of 19.15.29 NMAC.

B. The person operating or controlling either the release or the location of the release shall notify the division in accordance with 19.15.29 NMAC with respect to a release from a facility of oil or other water contaminant, in such quantity as 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.
[19.15.29.8 NMAC - Rp, 19.15.3.116 NMAC, 12/1/08]

19.15.29.9 REPORTING REQUIREMENTS: The person operating or controlling either the release or the location of the release shall provide notification of releases in 19.15.29.8 NMAC as follows.

A. The person shall report a major release by giving both immediate verbal notice and timely written notice pursuant to Subsections A and B of 19.15.29.10 NMAC.

B. The person shall report a minor release by giving timely written notice pursuant to Subsection B of 19.15.29.10 NMAC.
[19.15.29.9 NMAC - Rp, 19.15.3.116 NMAC, 12/1/08]

19.15.29.10 CONTENTS OF NOTIFICATION:

A. The person operating or controlling either the release or the location of the release shall provide immediate verbal notification within 24 hours of discovery to the division district office for the area within which the release takes place. In addition, the person shall 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 to the division's environmental bureau chief. The notification shall provide the information required on form C-141.

B. The person operating or controlling either the release or the location of the release shall provide timely written notification within 15 days to the division district office for the area within which the release occurs by completing and filing form C-141. In addition, the person shall 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 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.

[19.15.29.10 NMAC - Rp, 19.15.3.116 NMAC, 12/1/08]

19.15.29.11 CORRECTIVE ACTION: The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.

[19.15.29.11 NMAC - Rp, 19.15.3.116 NMAC, 12/1/08]

HISTORY of 19.15.29 NMAC:

History of Repealed Material: 19.15.3 NMAC, Drilling (filed 10/29/2001) repealed 12/1/08.

NMAC History:

That applicable portion of 19.15.3 NMAC, Drilling (Section 116) (filed 10/29/2001) was replaced by 19.15.29 NMAC, Release Notification, effective 12/1/08.

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 30 REMEDIATION

19.15.30.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.30.1 NMAC - N, 12/1/08]

19.15.30.2 SCOPE: 19.15.30 NMAC applies to persons engaged in oil and gas development and production within New Mexico.
[19.15.30.2 NMAC - N, 12/1/08]

19.15.30.3 STATUTORY AUTHORITY: 19.15.30 NMAC is adopted pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-6, 70-2-11 and 70-2-12.
[19.15.30.3 NMAC - N, 12/1/08]

19.15.30.4 DURATION: Permanent.
[19.15.30.4 NMAC - N, 12/1/08]

19.15.30.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
[19.15.30.5 NMAC - N, 12/1/08]

19.15.30.6 OBJECTIVE: To abate pollution of subsurface water so that ground water of the state that has a background concentration of 10,000 mg/l or less TDS is either remediated or protected for use as domestic, industrial and agricultural water supply, and to remediate or protect those segments of surface waters that are gaining because of subsurface-water inflow for uses designated in the water quality standards for interstate and intrastate surface waters in New Mexico, 20.6.4 NMAC; and abate surface-water pollution so that surface waters of the state are remediated or protected for designated or attainable uses as defined in the water quality standards for interstate and intrastate surface waters in New Mexico, 20.6.4 NMAC.
[19.15.30.6 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.7 DEFINITIONS: [RESERVED]
[See 19.15.2.7 NMAC for definitions.]

19.15.30.8 PREVENTION AND ABATEMENT OF WATER POLLUTION:

A. If the background concentration of a water contaminant exceeds the standard or requirement of Subsections A, B or C of 19.15.30.9 NMAC, the responsible person shall abate the pollution to the background concentration.

B. The standards and requirements set forth in of Subsections A, B or C of 19.15.30.9 NMAC are not intended as maximum ranges and concentrations for use, and nothing contained in 19.15.30.9 NMAC limits the use of waters containing higher ranges and concentrations.
[19.15.30.8 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.9 ABATEMENT STANDARDS AND REQUIREMENTS:

A. The responsible person shall abate the vadose zone so that water contaminants in the vadose zone will not with reasonable probability contaminate ground water or surface water, in excess of the standards in Subsections B and C of 19.15.30.9 NMAC, through leaching, percolation or other transport mechanisms, or as the water table elevation fluctuates.

B. The responsible person shall abate ground-water pollution at a place of withdrawal for present or reasonably foreseeable future use, where the TDS concentration is 10,000 mg/l or less, to conform to the following standards:

(1) toxic pollutants as defined in 20.6.2.7 NMAC shall not be present; and

(2) the standards of 20.6.2.3103 NMAC shall be met.

C. The responsible person shall abate surface-water pollution to conform to the water quality standards for interstate and intrastate surface waters in New Mexico, 20.6.4 NMAC.

D. The division shall not consider subsurface-water and surface-water abatement complete until eight consecutive quarterly samples, or an alternate lesser number of samples the director approves, from the compliance sampling stations the director approved meet the abatement standards in Subsections A, B and C of 19.15.30.9 NMAC. The division shall consider abatement of water contaminants measured in solid-matrix samples of the vadose zone complete after one-time sampling from compliance stations the director approves.

E. Technical infeasibility.

(1) If a responsible person is unable to meet the abatement standards set forth in Subsections A and B of 19.15.30.9 NMAC using commercially accepted abatement technology pursuant to an approved abatement plan, the responsible person may propose that abatement standards compliance is technically infeasible.

(a) The director may consider technical infeasibility proposals involving the use of experimental abatement technology.

(b) The responsible person may demonstrate technical infeasibility by a statistically valid extrapolation of the decrease in concentrations of a water contaminant over the remainder of a 20 year period, such that projected future reductions during that time would be less than 20 percent of the concentration at the time the responsible person proposes technical infeasibility. A statistically valid decrease cannot be demonstrated by fewer than eight consecutive quarters.

(c) The technical infeasibility proposal shall include a substitute abatement standard for those contaminants that is technically feasible. The responsible person shall meet abatement standards for other water contaminants not demonstrated to be technically infeasible.

(2) The director shall not approve a proposed technical infeasibility demonstration for a water contaminant if its concentration is greater than 200 percent of the abatement standard for the contaminant.

(3) If the director cannot approve any or all portions of a proposed technical infeasibility demonstration because the water contaminant concentration is greater than 300 percent of the abatement standard for each contaminant, the responsible person may further pursue the issue of technical infeasibility by filing a petition with the division seeking approval of alternate abatement standards pursuant to Subsection F of 19.15.30.9 NMAC.

F. Alternative abatement standards.

(1) At any time during or after the stage 2 abatement plan's submission, the responsible person may file a petition seeking approval of alternative abatement standards for the standards set forth in Subsections A and B of 19.15.30.9 NMAC. The division may approve alternative abatement standards if the petitioner demonstrates that:

(a) either compliance with the abatement standards is not feasible, by the maximum use of technology within the responsible person's economic capability; or there is no reasonable relationship between the economic and social costs and benefits, including attainment of the standards set forth in 19.15.30.9 NMAC to be obtained;

(b) the proposed alternative abatement standards are technically achievable and cost-benefit justifiable; and

(c) compliance with the proposed alternative abatement standard will not create a present or future hazard to public health or undue damage to property.

(2) The responsible person shall file a written petition with the division's environmental bureau chief. The petition may include a transport, fate and risk assessment in accordance with accepted methods, and other information as the petitioner deems necessary to support the petition. The petition shall:

(a) state the petitioner's name and address;

(b) state the date of the petition;

(c) describe the facility or activity for which the petitioner seeks the alternate abatement standards;

(d) state the address or description of the property upon which the facility is located;

(e) describe the water body or watercourse the release affected;

(f) identify the abatement standard from which petitioner wishes to vary;

(g) state why the petitioner believes that compliance with 19.15.30 NMAC will impose an unreasonable burden upon the petitioner's activity;

(h) identify the water contaminant for which the petitioner proposes the alternative standard;

(i) state the alternative standard the petitioner proposes;

(j) identify the three-dimensional body of water pollution for which the petitioner seeks approval; and

(k) state the extent to which the abatement standards set forth in 19.15.30.9 NMAC are now, and will in the future be, violated.

(3) The division's environmental bureau chief shall review the petition and, within 60 days after receiving the petition, submit a written recommendation to the director to approve, approve subject to conditions or disapprove any or all of the proposed alternative abatement standards. The recommendation shall include the reasons for the division's environmental bureau chief's recommendation. The division's environmental bureau chief shall submit a copy of the recommendation to the petitioner by certified mail.

(4) If the division's environmental bureau chief recommends approval, or approval subject to conditions, of any or all of the proposed alternative abatement standards, the division shall hold a public hearing on those standards. If the division's environmental bureau chief recommends disapproval of any or all of the proposed alternative abatement standards, the petitioner may submit a request to the director, within 15 days after the recommendation's receipt, for a public hearing on those standards. If the petitioner does not submit a timely request for hearing, the recommended disapproval shall become a final decision of the director and shall not be subject to review.

(5) If the director grants a public hearing, the division shall conduct the hearing in accordance with division hearing procedures.

(6) Based on the record of the public hearing, the division shall approve, approve subject to condition or disapprove any or all of the proposed alternative abatement standards. The division shall notify the petitioner by certified mail of its decision and the reasons for the decision.

[19.15.30.9 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.10 MODIFICATION OF ABATEMENT STANDARDS: If applicable abatement standards are modified

after the division approves the abatement measures, the abatement standards that are in effect at the time that the division approved the abatement measures shall be the abatement standards for the duration of the abatement action, unless the director determines that compliance with those standards may with reasonable probability create a present or future hazard to public health or the environment. In an appeal of the director's determination that additional actions are necessary, the director shall have the burden of proof.
[19.15.30.10 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.11 ABATEMENT PLAN REQUIRED:

A. Unless otherwise provided by 19.15.30 NMAC responsible persons who are abating, or who are required to abate, water pollution in excess of the standards and requirements set forth in 19.15.30.9 NMAC shall do so pursuant to an abatement plan the director approves. When the director has approved an abatement plan, the responsible person's actions leading to and including abatement shall be consistent with the abatement plan's terms and conditions.

B. In the event of a transfer of the ownership, control or possession of a facility for which an abatement plan is required or approved, where the transferor is a responsible person, the transferee also shall be considered a responsible person for the abatement plan's duration, and may jointly share the responsibility to conduct the actions 19.15.30 NMAC requires with other responsible persons.

(1) The transferor shall notify the transferee in writing at least 30 days prior to the transfer that the division has required or approved an abatement plan for the facility, and shall deliver or send by certified mail to the director a copy of the notification together with a certificate or other proof that the transferee has received the notification.

(2) The transferor and transferee may agree to a designated responsible person who shall assume the responsibility to conduct the actions 19.15.30 NMAC requires. The responsible persons shall notify the director in writing if a designated responsible person is agreed upon.

(3) If the director determines that the designated responsible person has failed to conduct the actions 19.15.30 NMAC requires, the director shall notify all responsible persons of this failure in writing and allow them 30 days, or longer for good cause shown, to conduct the required actions before setting a show cause hearing requiring those responsible persons to appear and show cause why they should not be ordered to comply, a penalty should not be assessed, a civil action should not be commenced in district court or the division should not take other appropriate action.

C. If the source of the water pollution to be abated is a facility that operated under a discharge plan, the director may require the responsible person to submit a financial assurance plan that covers the estimated costs to conduct the actions the abatement plan requires. Such a financial assurance plan shall be consistent with financial assurance requirements the division adopts.
[19.15.30.11 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.12 EXEMPTIONS FROM ABATEMENT PLAN REQUIREMENT:

A. Except as provided in Subsection B of 19.15.30.12 NMAC, 19.15.30.11 NMAC and 19.15.30.13 NMAC do not apply to a person who is abating water pollution:

(1) from an underground storage tank, under the authority of the New Mexico environmental improvement board's underground storage tank rules, 20.5 NMAC, or in accordance with the Ground Water Protection Act, NMSA 1978, Section 74-6B-1 *et seq.*;

(2) under the EPA's authority pursuant to either the Federal Comprehensive Environmental Response, Compensation and Liability Act, and amendments, or RCRA;

(3) pursuant to the New Mexico environmental improvement board's hazardous waste management rule, 20.4.1 NMAC;

(4) under the authority of the United States nuclear regulatory commission or the United States department of energy pursuant to the Atomic Energy Act;

(5) under the authority of a ground-water discharge plan the director approved, provided that such abatement is consistent with the requirements and provisions of 19.15.30.8 NMAC, 19.15.30.9 NMAC, Subsections C and D of 19.15.30.13 NMAC, 19.15.30.14 NMAC and 19.15.30.19 NMAC;

(6) under the authority of a letter of understanding, settlement agreement or administrative order on consent or other agreement signed by the director or director's designee prior to March 15, 1997, provided that abatement is being performed in compliance with the terms of the letter of understanding, settlement agreement or administrative order or other agreement on consent; and

(7) on an emergency basis, or while abatement plan approval is pending, or in a manner that will likely result in compliance with the standards and requirements set forth in 19.15.30.9 NMAC within one year after notice is required to be given pursuant to 19.15.29.9 NMAC provided that the division does not object to the abatement action.

B. If the director determines that abatement of water pollution subject to Subsection A of 19.15.30.12 NMAC will not met the standards of Subsections B and C of 19.15.30.9 NMAC, or that additional action is necessary to protect health, welfare, environment or property, the director may notify a responsible person, by certified mail, to submit an abatement plan pursuant to 19.15.30.11 NMAC and Subsection A of 19.15.30.14 NMAC. The notification shall state the reasons for the director's determination. In an appeal of the director's determination under Subsection B of 19.15.30.12 NMAC, the director shall have the burden of proof.

[19.15.30.12 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.13 ABATEMENT PLAN PROPOSAL:

A. Except as provided for in 19.15.30.12 NMAC a responsible person shall, within 60 days of receipt of the director's written notice that the division requires an abatement plan, submit an abatement plan proposal to the director for approval. The responsible person may submit stage 1 and stage 2 abatement plan proposals together. For good cause shown, the director may allow for a total of 120 days to prepare and submit the abatement plan proposal.

B. Voluntary abatement.

(1) A person wishing to abate water pollution in excess of the standards and requirements set forth in 19.15.30.9 NMAC may submit a stage 1 abatement plan proposal to the director for approval. Following the director's approval of a final site investigation report prepared pursuant to stage 1 of an abatement plan, a person may submit a stage 2 abatement plan proposal to the director for approval.

(2) Following approval of a stage 1 or stage 2 abatement plan proposal under Paragraph (1) of Subsection B of 19.15.30.13 NMAC the person submitting the approved plan shall be a responsible person under 19.15.30 NMAC for the purpose of performing the approved stage 1 or stage 2 abatement plan. Nothing in 19.15.30 NMAC precludes the director from applying 19.15.29.11 NMAC to a responsible person if applicable.

C. Stage 1 abatement plan. The stage 1 of the abatement plan's purpose is to design and conduct a site investigation that adequately defines site conditions, and provide the data necessary to select and design an effective abatement option. Stage 1 of the abatement plan may include the following information depending on the media affected, and as needed to select and implement an expeditious abatement option:

(1) descriptions of the site, including a site map, and of site history including the nature of the release that caused the water pollution, and a summary of previous investigations;

(2) site investigation work plan that defines:

(a) site geology and hydrogeology; the vertical and horizontal extent and magnitude of vadose-zone and ground-water contamination; subsurface hydraulic conductivity; transmissivity, storativity and rate and direction of contaminant migration; inventory of water wells inside and within one mile from the perimeter of the three-dimensional body where the standards set forth in Subsection C of 19.15.30.9 NMAC are exceeded; and location and number of wells the pollution actually or potentially affects; and

(b) surface water hydrology, seasonal stream flow characteristics, ground water/surface water relationships, the vertical and horizontal extent and magnitude of contamination and impacts to surface water and stream sediments; the magnitude of contamination and impacts on surface water may be, in part, defined by conducting a biological assessment of fish, benthic macro invertebrates and other wildlife populations; seasonal variations should be accounted for when conducting these assessments;

(3) monitoring program, including sampling stations and frequencies, for the abatement plan's duration that may be modified, after the director's approval, as the responsible person creates additional sampling stations;

(4) quality assurance plan, consistent with the sampling and analytical techniques listed in Subsection B of 20.6.2.3107 NMAC and with 20.6.4.14 NMAC of the water quality standards for interstate and intrastate surface waters in New Mexico, for all work to be conducted pursuant to the abatement plan;

(5) a schedule for stage 1 abatement plan activities, including the submission of summary quarterly progress reports, and the submission, for the director's approval, of a detailed final site investigation report; and

(6) additional information that may be required to design and perform an adequate site investigation.

D. Stage 2 abatement plan.

(1) A responsible person shall submit a stage 2 abatement plan proposal to the director for approval within 60 days, or up to 120 days for good cause shown, after the director's approval of the final site investigation report prepared pursuant to stage 1 of the abatement plan. The responsible person may submit a stage 1 and 2 abatement plan proposal together. Stage 2 of the abatement plan's purpose is to select and design, if necessary, an abatement option that, when implemented, results in attainment of the abatement standards and requirements set forth in 19.15.30.9 NMAC, including post-closure maintenance activities.

(2) Stage 2 of the abatement plan should include, at a minimum, the following information:

(a) a brief description of the current situation at the site;

(b) development and assessment of abatement options;

(c) a description, justification and design, if necessary, of the preferred abatement option;

(d) modification, if necessary, of the monitoring program the director approved pursuant to stage 1 of the abatement plan, including the designation of pre- and post-abatement-completion sampling stations and sampling frequencies to be used to demonstrate compliance with the standards and requirements set forth in 19.15.30.9 NMAC;

(e) site maintenance activities, if needed, the responsible person proposes to perform after abatement activities terminate;

(f) a schedule for the duration of abatement activities, including the submission of summary quarterly progress reports;

(g) a public notification proposal designed to satisfy the requirements of Subsections B and C of 19.15.30.15 NMAC; and

(h) additional information that may be reasonably required to select, describe, justify and design an effective abatement option.
[19.15.30.13 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.14 OTHER REQUIREMENTS:

A. A responsible person shall allow the director's authorized representative upon presentation of proper credentials and with reasonable prior notice to:

(1) enter the facility at reasonable times;

(2) inspect and copy records an abatement plan requires;

(3) inspect treatment works, monitoring and analytical equipment;

(4) sample wastes, ground water, surface water, stream sediment, plants, animals or vadose-zone material including vadose-zone vapor;

(5) use monitoring systems and wells under the responsible person's control in order to collect samples of media listed in Paragraph (4) of Subsection A of 19.15.30.14 NMAC; and

(6) gain access to off-site property the responsible person does not own or control, but is accessible to the responsible person through a third-party access agreement, provided that the agreement allows it.

B. A responsible person shall provide the director, or director's representative, with at least four working days advance notice of sampling to be performed pursuant to an abatement plan, or a well plugging, abandonment or destruction at a facility where the division has required an abatement plan.

C. A responsible person wishing to plug, abandon or destroy a monitoring or water supply well within the perimeter of the three-dimensional body where the standards set forth in Subsection B of 19.15.30.9 NMAC are exceeded, at a facility where the division has required an abatement plan, shall propose such action by certified mail to the director for approval, unless the state engineer's approval is required. The responsible person shall design the proposed action to prevent water pollution that could result from water contaminants migrating through the well or bore hole. The proposed action shall not take place without the director's written approval, unless the responsible person does not receive written approval or disapproval within 30 days after the date the director receives the proposal.
[19.15.30.14 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.15 PUBLIC NOTICE AND PARTICIPATION:

A. Prior to public notice, the applicant shall give written notice, as approved by the division, of stage 1 and stage 2 abatement plans to the following persons:

(1) surface owners of record within one mile of the perimeter of the geographic area where the standards and requirements set forth in 19.15.30.9 NMAC are exceeded;

(2) the county commission where the geographic area where the standards and requirements set forth in 19.15.30.9 NMAC are exceeded is located;

(3) the appropriate city officials if the geographic area where the standards and requirements set forth in 19.15.30.9 NMAC are exceeded is located or is partially located within city limits or within one mile of the city limits;

(4) those persons, the director identifies, who have requested notification, who shall be notified by mail;

(5) the New Mexico trustee for natural resources, and other local, state or federal governmental agencies affected, as the director identifies, which shall be notified by certified mail;

(6) the governor or president of a tribe, pueblo or nation if the geographic area where the standards and requirements set forth in 19.15.30.9 NMAC are exceeded is located or is partially located within tribal boundaries or within one mile of the tribal boundaries, who shall be notified by certified mail;

(7) the director may extend the distance requirements for notice if the director determines the proposed abatement plan has the potential to adversely impact public health or the environment at a distance greater than one mile. The director may require additional notice as needed. The applicant shall furnish a copy and proof of the notice to the division.

B. Within 15 days after the division determines that a stage 1 abatement plan or a stage 2 abatement plan is administratively complete, the responsible person shall issue public notice in a division-approved form in a newspaper of general circulation in the county in which the release occurred, and in a newspaper of general circulation in the state. For the purposes of Subsection B of 19.15.30.15 NMAC, an administratively complete stage 1 abatement plan is a document that satisfies the requirements of Subsection C of 19.15.30.13 NMAC and an administratively complete stage 2 abatement plan is a document that satisfies the requirements of Paragraph (2) of Subsection D of 19.15.30.13 NMAC. The public notice shall include, as approved in advance by the director:

(1) the responsible person's name and address;

(2) the location of the proposed abatement;

(3) a brief description of the source, extent and estimated volume of release; whether the release occurred into the vadose zone, ground water or surface water; and a description of the proposed stage 1 or stage 2 abatement plan;

(4) a brief description of the procedures the director followed in making a final determination;

(5) a statement that the public may view a copy of the abatement plan at the division's Santa Fe office or at the division's district office for the area in which the release occurred, and a statement describing how the public can access the

abatement plan electronically from a division-maintained site if such access is available;

(6) a statement that the division will accept the following comments and requests for consideration if the director receives them within 30 days after the date of publication of the public notice:

(a) written comments on the abatement plan; and

(b) for a stage 2 abatement plan, written requests for a public hearing that include reasons why a hearing should be held; and

(7) an address and phone number at which interested persons may obtain further information.

C. A person seeking to comment on a stage 1 abatement plan, or to comment or request a public hearing on a stage 2 abatement plan, shall file written comments or hearing requests with the division within 30 days after the date of public notice, or within 30 days after the director receives a proposed significant modification of a stage 2 abatement plan. Requests for a public hearing shall set forth the reasons why a hearing should be held. The division shall hold a public hearing if the director determines that there is significant public interest or that the request has technical merit.

D. The division shall distribute notice of an abatement plan's filing with the next division and commission hearing docket following the plan's receipt.

[19.15.30.15 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.16 DIRECTOR APPROVAL OR NOTICE OF DEFICIENCY OF SUBMITTALS:

A. The director shall, within 60 days after receiving an administratively complete stage 1 abatement plan, a site investigation report, a technical infeasibility demonstration or an abatement completion report approve the document, or notify the responsible person of the document's deficiency, based upon the information available.

B. If the division does not hold a public hearing pursuant to Subsection C of 19.15.30.15 NMAC then the director shall, within 90 days after receiving a stage 2 abatement plan proposal, approve the plan, or notify the responsible person of the plan's deficiency, based upon the information available.

C. If the division holds a public hearing pursuant to Subsection C of 19.15.30.15 NMAC then the director shall, within 60 days after receiving the required information, approve stage 2 of the abatement plan proposal, or notify the responsible person of the plan's deficiency, based upon the information contained in the plan and the information submitted at the hearing.

D. If the director notifies a responsible person of a deficiency in a site investigation report, or in a stage 1 or stage 2 abatement plan proposal, the responsible person shall submit a modified document to cure the deficiencies the director specifies within 30 days after receiving the notice of deficiency. The responsible person is in violation of 19.15.30 NMAC if the responsible person fails to submit a modified document within the required time, or if the responsible person does not in the modified document make a good faith effort to cure the deficiencies the director specified.

E. Provided that the responsible person meets the other requirements of 19.15.30 NMAC and provided further that stage 2 of the abatement plan, if implemented, shall result in the standards and requirements set forth in 19.15.30.9 NMAC being met within a schedule that is reasonable given the site's particular circumstances, the director shall approve the plan.

[19.15.30.16 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.17 INVESTIGATION AND ABATEMENT: A responsible person who receives the division's approval for stage 1 or stage 2 of an abatement plan shall conduct investigation, abatement, monitoring and reporting activities in compliance with 19.15.30 NMAC and according to the terms and schedules contained in the approved abatement plans.

[19.15.30.17 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.18 ABATEMENT PLAN MODIFICATION:

A. The division may modify an approved abatement plan at the responsible person's written request in accordance with 19.15.30 NMAC with the director's written approval.

B. If data the responsible person submitted pursuant to monitoring requirements specified in the approved abatement plan or other information available to the director indicates that the abatement action is ineffective, or is creating unreasonable injury to or interference with health, welfare, environment or property, the director may require a responsible person to modify an abatement plan within the shortest reasonable time so as to effectively abate water pollution that exceeds the standards and requirements set forth in 19.15.30.9 NMAC, and to abate and prevent unreasonable injury to or interference with health, welfare, environment or property.

[19.15.30.18 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.19 COMPLETION AND TERMINATION:

A. The division shall consider abatement complete when the responsible person meets the standards and requirements set forth in 19.15.30.9 NMAC. At that time, the responsible person shall submit an abatement completion report, documenting compliance with the standards and requirements set forth in 19.15.30.9 NMAC, to the director for approval. The abatement completion report also shall propose changes to long-term monitoring and site maintenance activities, if needed, to be performed after the abatement plan's termination.

B. Provided that the responsible person meets the other requirements of 19.15.30 NMAC and provided

further that the responsible person has met the standards and requirements set forth in 19.15.30.9 NMAC, the director shall approve the abatement completion report. When the director approves the abatement completion report, the director shall also notify the responsible person in writing that the abatement plan is terminated.
[19.15.30.19 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.20 DISPUTE RESOLUTION: In the event of a technical dispute regarding the requirements of 19.15.29 NMAC, 19.15.30.9 NMAC, 19.15.30.12 NMAC, 19.15.30.13 NMAC, 19.15.30.18 NMAC or 19.15.30.19 NMAC, including notices of deficiency, the responsible person may notify the director by certified mail that a dispute has arisen, and the responsible person desires to invoke the dispute resolution provisions of 19.15.30.20 NMAC provided that the responsible person shall send the notification within 30 days after the responsible person receives the director's decision that causes the dispute. Upon the notification, the deadlines affected by the technical dispute shall be extended for a 30 day negotiation period, or for a maximum of 60 days if approved by the director for good cause shown. During this negotiation period, the director or the director's designee and the responsible person shall meet at least once. A mutually agreed upon third part may facilitate the meeting, but the third party shall assume no power or authority granted or delegated to the director by the Oil and Gas Act or by the division or commission. If the dispute remains unresolved after the negotiation period, the director's decision shall be final.
[19.15.30.20 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

19.15.30.21 APPEALS FROM DIRECTOR'S AND DIVISION'S DECISIONS:

A. If the director

(1) determines that an abatement plan is required pursuant to 19.15.29.11 NMAC;

(2) approves or provides notice of deficiency of a proposed abatement plan, technical infeasibility demonstration or abatement completion report; or

(3) modifies or terminates an approved abatement plan

the director shall provide written notice of the action by certified mail to the responsible person and other persons who participated in the action.

B. A person who participated in the action before the director and that the action listed in Subsection A of 19.15.30.21 NMAC adversely affects may file a petition requesting a hearing before a division examiner.

C. The person shall make the petition in writing and file it with the division within 30 days after receiving notice of the director's action. The petition shall specify the portions of the action to which the petitioner objects, certify that the person has mailed or hand-delivered a copy of the petition to the director and to the applicant or permittee if the petitioner is not the applicant or permittee and have attached a copy of the action for which the person seeks review. Unless a person makes a timely petition for hearing, the director's action is final.

D. The hearing before the division shall be conducted in the same manner as other division hearings.

E. The petitioner shall pay the cost of the court reporter for the hearing.

F. A party adversely affected by a division order pursuant to a hearing held by a division examiner, shall have a right to have the matter heard de novo before the commission.

G. The appeal provisions do not relieve the owner, operator or responsible person of their obligations to comply with federal or state laws including regulations or rules.
[19.15.30.21 NMAC - Rp, 19.15.1.19 NMAC, 12/1/08]

HISTORY of 19.15.30 NMAC:

History of Repealed Material: 19.15.1 NMAC, General Provisions and Definitions (filed 04/27/2001) repealed 12/1/08.

NMAC History:
That applicable portion of 19.15.1 NMAC, General Provisions and Definitions (Section 19) (filed 04/27/2001) was replaced by 19.15.30 NMAC, Remediation, effective 12/1/08.

State of New Mexico
Energy, Minerals and Natural Resources Department

November 29, 2021

Stacey Boultinghouse
ETC Field Services LLC
8111 Westchester Dr., Suite 600
Dallas, Texas 75225

Re: Approval of Permit Minor Modification and Exception Requests
ETC Field Services LLC
Permit NM2-019
Location: Unit F of Section 36, Township 23 South, Range 36 East, NMPM,
Lea County, New Mexico

Ms. Boultinghouse:

The Oil Conservation Division (OCD) has completed its review of ETC Field Services LLC's (ETC) permit minor modification and exception request, dated June 25, 2019, for the commercial surface waste management facility *permit*, NM2-019 and exception request regarding compliance to the transitional provisions of 19.15.36.20 NMAC.

ETC has requested the following minor modification and exception:

- ETC requests to utilize EPA Method 8015M and M/D for TPH to conduct all future vadose zone and treatment zone monitoring for closure and post-closure soil analysis; and

- ETC requests to utilize EPA Method 7471 for mercury to conduct all future vadose zone and treatment zone monitoring for closure and post-closure soil analysis.

OCD hereby grants ETC approval of the minor modification requests to permit NM2-019 and the exception request regarding compliance to the transitional provisions of 19.15.36.20 NMAC recognized above, with the following conditions:

1. ETC shall comply with all applicable requirements of the Oil and Gas Act (Chapter 70, Article 2 NMSA 1978), the existing permit NM1-019 as modified, the transitional provisions of 19.15.36.20 NMAC, and all conditions specified in this approval;

2. Analysis of total petroleum hydrocarbons (TPH) shall be represented as the sum of the hydrocarbon chains from C_6 through C_{36} by EPA Method 8015M and M/D, in lieu of TPH by EPA Method 418.1;

3. Mercury shall be analyzed by EPA Method 7471, in lieu of EPA Methods 6010B or 6020; and

4. ETC shall obtain written approval from OCD prior to implementing any changes to this approval.

Please be advised that approval of this request does not relieve ETC of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve ETC of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to email me at brad.a.jones@state.nm.us.

Respectfully,

Brad A. Jones
Environmental Specialist

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Tuesday, November 30, 2021 1:32 PM
To: Boultinghouse, Stacy
Subject: Minor modification and exception request approval
Attachments: 2021 1129 NM2-019 ETC Minor Modification and Exception Request approval.pdf

Stacy,

Please see the attached minor modification and exception request approval. You will also be receiving an email later today from OCD E Permitting, once I upload this approval email to your request. If you have any questions regarding this mater, please do not hesitate to contact me.

Sincerely,

Brad Jones

Brad A. Jones ● Environmental Scientist Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
1220 S. Saint Francis Drive | Santa Fe, New Mexico 87505
(505) 469-7486 | brad.a.jones@state.nm.us
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: ETC Texas Pipeline Ltd., Limited Partnership 8111 Westchester Drive Dallas, TX 75225	OGRID: 328923
	Action Number: 753
	Action Type: [C-137] SWMF Minor Modification (C-137A)

CONDITIONS

Created By	Condition	Condition Date
bjones	Please review the attached OCD Response for the conditonas of approval. If you have any questions regarding this, please do not hesitate to contact me.	11/30/2021