



**FIELD ACTIVITIES SUMMARY AND
BELOW-GRADE TANK CLOSURE REQUEST**

**ETC FIELD SERVICES, LLC
West Boiler Sump
Lea County, New Mexico
UNIT LTR "L", Section 33, Township 24 South, Range 37 East, NMPM
Latitude 32.17374° North, Longitude 103.17375° West
NMOCD Reference No. GW-010**

Prepared For:

**ETC Field Services, LLC
800 East Sonterra
San Antonio, Texas 78258**

Prepared By:

**TRC Environmental Corporation
2057 Commerce
Midland, Texas 79703**

December 2017


Joel Lowry
Project Manager


Curt Stanley
Senior Project Manager

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INTRODUCTION AND BACKGROUND INFORMATION

TRC Environmental Corporation (TRC) has prepared the following *Field Activities Summary and Below-Grade Tank Closure Request* in reference to recent field activities conducted at the “West Boil Sump” below-grade tank (BGT) site at Energy Transfer Company’s (ETC) Jal #3 Gas Plant. The Jal #3 Gas Plant is located in Unit Letters “E & L” of Section 33, Township 24 South, Range 37 East in Lea County, New Mexico. The “West Boiler Sump”, is located in the south-central portion of the facility adjacent to a mechanical building and numerous above and below ground pipelines. The West Boiler Sump can be described as a fiberglass, 160- barrel (bbl) tank, utilized to contain waste water from the fresh water treatment system and steam boiler buildings. The BGT was removed from service, cleaned and the associated piping has been rerouted to the on-site above-ground wastewater storage tanks. A “Site Location Map” is provided as Figure 1. A “Site Diagram” is provided as Figure 2. A copy of the Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application (Form C-144) is provided in Appendix C.

On July 26, 2017, TRC, on behalf of ETC, submitted a *Proposed Closure Strategy - West Boiler Sump* to the NMOCD, proposing the following field activities designed to advance the West Boiler Sump Site toward an NMOCD-approved closure:

- Removal of the BGT’s contents and disposing of the contents at an NMOCD-permitted facility, followed by a thorough cleaning of the BGT to allow for a hydrostatic test and/or detailed inspection.
- Conducting a hydrostatic test and/or a detailed inspection of the floor and sidewalls of the BGT to determine if evidence of a release was present. In the event an inspection is required, the inspection will include checking for holes and/or evidence of failure in the floor and sidewalls of the BGT.
- In the event evidence of potential releases are discovered during the hydrostatic tests and/or inspections, the potential release would be investigated and reported as necessary.
- An alternative closure method may include utilizing a pneumatic saw to cut five (5) holes in the bottom of the fiberglass BGT to allow for the collection of a representative five-point composite soil sample to characterize soil beneath the BGT. The collected soil sample would be submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations, the results of which will be provided to the NMOCD and compared to the *Closure Criteria for Soils beneath BGTs, Drying Pads Associated with Closed-Loop Systems and Pits where Contents are Removed* for sites where the depth below the bottom of pit to groundwater is greater than 100 ft.
- In the event no evidence of releases are discovered during the hydrostatic test, detailed inspection and/or upon receiving laboratory analytical results, and upon receiving NMOCD permission, the tops of the BGT would be cut below the existing grade at approximately four (4) ft. bgs.

- Upon cutting the tops of the BGT to four (4) ft. bgs, the tank would be backfilled with locally-sourced, non-impacted material. The final soil cover would consist of engineered fill used throughout the plant. Upon backfilling and compacting the affected area, a permanent steel-marker would be placed to document the location of the closed BGT.

ETC maintained removing the West Boiler Sump from its current location posed a risk to human health and safety due to its proximity to the mechanical building and multiple above and below ground utilities, particularly the plant's main high pressure steam line, which is located on an adjacent pipe rack. A preliminary visual inspection of the floor and side of the tank from the surface and accounts from ETC personnel who have entered the BGT to conduct tank cleaning activities suggests the fiberglass BGT's integrity has not been compromised. A copy of the *Proposed Closure Strategy - West Boiler Sump* is provided as Appendix B.

NMOCD SITE CLASSIFICATION

Review of the New Mexico Water Rights Reporting System (NMWRRS) online database indicated depth to groundwater information is not available for Section 33, Township 24 South, Range 37 East. Review of a depth to groundwater gradient map utilized by the NMOCD indicates groundwater is estimated to be encountered at approximately 220 ft. below ground surface (bgs). Based on the NMOCD site classification system, zero (0) points will be assigned to the Release Site as a result of this criterion.

No water wells were observed within one-thousand (1,000) ft. of the Release Site. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

No surface water was observed within one thousand (1,000) ft. of the release. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

The NMOCD guidelines indicate the Site has a ranking score of zero (0). The *Closure Criteria for Soils beneath BGTs, Drying Pads Associated with Closed-Loop Systems and Pits where Contents are Removed* for sites where the depth below the bottom of pit to groundwater is greater than 100 ft. are as follows:

- Benzene – 10 mg/kg (ppm)
- BTEX – 50 mg/kg (ppm)
- Gasoline Range Organics (GRO) + Diesel Range Organics (DRO) – 1,000 mg/kg (ppm)
- TPH – 2,500 mg/kg (ppm)
- Chloride – 20,000 mg/kg (ppm)

SUMMARY OF ACTIVITIES

In May 2017, the last remaining piping was re-routed to the newly installed above grade horizontal overfill tank and the West Boiler Sump was removed from service. Liquids remaining within the West Boiler Sump were removed with a vacuum truck and disposed of at an NMOCD-permitted

disposal well. Upon removing any remaining liquids, the BGT was cleaned utilizing a steamer. A photographic log is provided as Appendix A.

In September 2017, a hydrostatic test was conducted on the BGT. During the hydrostatic test, the tank was filled with fresh water to its lowest gravity drain inlet and monitored for changes in water level. During the hydrostatic test, no notable decrease in water level was observed.

On November 15, 2017, representatives and contractors of ETC, conducted a visual inspection of the West Boiler Sump in an effort to determine if evidence of a release was present. The visual inspection included checking the floor, sides, seams and inlets for evidence of potential failures. During the visual inspection, the fiberglass tank appeared to be intact and no evidence of release were noted.

SITE CLOSURE REQUEST

Field activities were conducted in accordance with the NMOCD-approved *Proposed Closure Strategy – West Boiler Sump*. The contents of the BGT were removed and disposed of at an NMOCD-permitted facility and the tank was thoroughly cleaned. During the hydrostatic test and visual inspection, no evidence of a release was noted, suggesting the integrity of the fiberglass BGT had not been compromised. Based on field observations and field activities conducted to date, TRC recommends ETC provide copies of this *Remediation Summary and BGT Closure Request* to the NMOCD and request closure status of the West Boiler Sump Site.

ANTICIPATED ACTIONS

Upon receiving NMOCD approval, the top of the fiberglass BGT will be cut to approximately four (4) ft. bgs. Upon cutting the top of the BGT to four (4) ft. bgs, the tank will be backfilled to four (4) ft. bgs with locally sourced, non-impacted material. Upon backfilling the affected area, a 20-millimeter polyurethane liner (liner) will be installed over the BGT location. This engineering control is designed to shed moisture to the outside edges of the BGT in effort to prevent the accumulation of moisture within the BGT. During the installation of the liner, an approximate six (6) in. layer of pad sand will be installed above and below the liner to in an effort to maintain its integrity during backfilling activities. The final soil cover will consist of engineered fill used throughout the plant. Upon backfilling and compacting the affected area, a permanent steel-marker will be placed to document the location of the closed BGT, documentation of which will be provided to the NMOCD.

LIMITATIONS

TRC has prepared this *Field Activities Summary and BGT Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended.

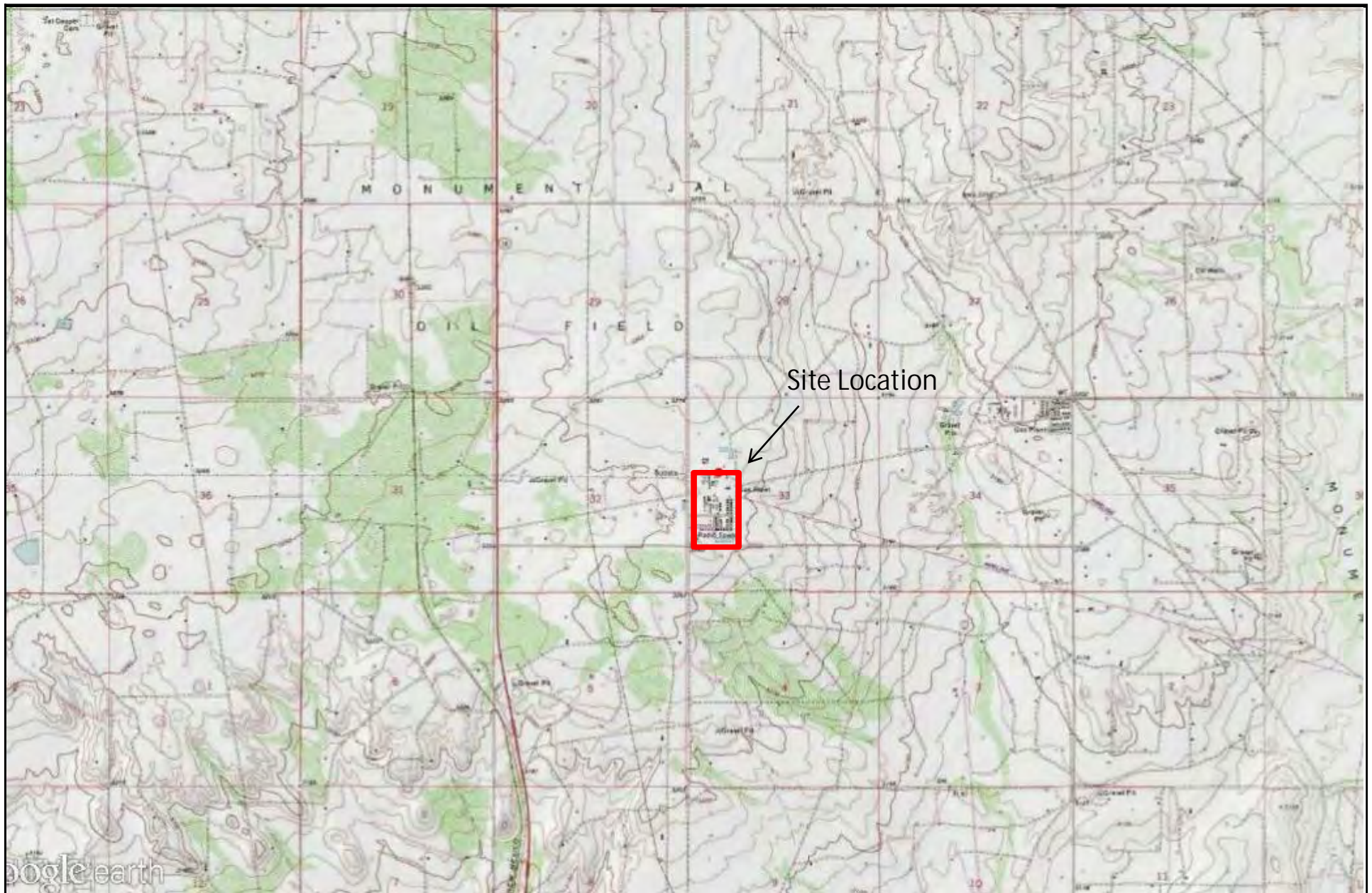
TRC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. TRC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. TRC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. TRC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of ETC Field Services, LLC. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of TRC and/or ETC Field Services, LLC.

DISTRIBUTION

- Copy 1: Bradford Billings
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
- Copy 2: Olivia Yu
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 French Drive
Hobbs, New Mexico 88240
- Copy 3: Rose Slade
ETC Field Services, LLC
800 East Sonterra
San Antonio, Texas 78258
- Copy 4: TRC Environmental Corporation
2057 Commerce Street
Midland, Texas 79703

FIGURES



SCALE:



Distance in Feet

Figure 1

Site Location Map
ETC Field Services, LLC
Jal #3 BGTs
Lea County, NM

Scale 1" = 4,000'

Drafted By: JL Checked By: CS

Draft: July 28, 2017

Lat. N 32.173676 Long. W102.173696

Sec. 33 T24S R37E

TRC Proj. Nos.: 284097



2057 Commerce Drive
Midland, Texas 79703
432.520.7720



LEGEND:



Below-Grade Tank
High-Pressure Steam Line

Figure 2

Site Diagram
ETC Field Services, LLC
Jal #3 BGTs
Lea County, NM

Scale 1" = 40'

Drafted By: JL Checked By: CS

Draft: July 28, 2017

Lat. N32.17367 Long. W102.17369

Sec. 33 T24S R37E

TRC Proj. Nos.: 284097



2057 Commerce Drive
Midland, Texas 79703
432.520.7720

APPENDICES

Appendix A
Photographic Log



Photo 1: View of the West Boiler Sump prior to cutting the top off, facing north.



Photo 2: View of the West Boiler Sump after cutting top off, facing southwest.



Photo 3: View of the West Boiler Sump and affected utilities and proximity to pipe rack, facing south.



Photo 4: View of the West Boiler Sump, affected utilities, proximity to pipe rack and mechanical building, facing east.



Photo 5: View of the West Boiler Sump and affected utilities and proximity to pipe rack support (east side), facing north.



Photo 6: View of affected pipe rack support and associated utilities, included the high pressure steam line, facing south.



Photo 7: View of the interior of the West Boiler Sump.



Photo 8: View of the interior of the West Boiler Sump.



Photo 9: View of the interior of the West Boiler Sump.

Photographic Documentation



Photo 10: View of the interior of the West Boiler Sump.

Photographic Documentation



Photo 11: View of the interior of the West Boiler Sump.



Photo 12: View of the interior of the West Boiler Sump.



Photo 13: View of the interior of the West Boiler Sump after cleaning activities.

Photographic Documentation



Photo 14: View of the interior of the West Boiler Sump after cleaning activities.

Appendix B

Proposed Closure Strategy – West Boiler Sump



2057 Commerce Drive
Midland, TX 79703

432.520.7720 PHONE
432.520.7701 FAX

www.trcsolutions.com

July 26, 2017

Dr. Tomas Oberding
New Mexico Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Proposed Closure Strategy – West Boiler Sump
Energy Transfer Company's Jal #3 Gas Plant
Section 33, Township 24 South, Range 37 East
Lea County, New Mexico

Dr. Oberding,

TRC Environmental Corporation (TRC) has prepared the following closure strategy in regard to the closure of the "West Boiler Sump" below-grade tank (BGT) at Energy Transfer Company's (ETC) Jal #3 Gas Plant. The Jal #3 Gas Plant is located in Unit Letter "E" of Section 33, Township 24 South, Range 37 East in Lea County, New Mexico. Review of the New Mexico Water Rights Reporting System (NMWRRS) online database indicated depth to groundwater information is not available for Section 33, Township 24 South, Range 37 East. Review of a depth to groundwater gradient map utilized by the NMOCD indicates groundwater is estimated to be encountered at approximately 220 feet below grade surface (bgs). A "Site Location Map" and "Site Diagram" are provided as Attachment #1 and Attachment #2, respectively. A "Photographic Log" of the subject BGT is provided as Attachment #3.

Background Information

On September 6, 2015, representatives of ETC, Terracon and environmental contractors began the process of removing and/or closing existing below-grade tanks (BGTs) at ETC's Jal #3 Gas Plant. Beginning September 29, 2015, the "North Sump", formerly used to contain produced water and residual hydrocarbons, was removed. Upon receiving New Mexico Oil Conservation Division (NMOCD) approval, the affected area was excavated to the maximum extent practicable before soil samples were collected and the excavation was backfilled with locally-sourced caliche. Beginning in May 2016, the "Contingency Tank", formerly used to contain cooling blow-down water and hydrocarbon contacted wastewater, was decommissioned, thoroughly cleaned and inspected. Upon receiving NMOCD permission, the top of BGT was cut below the existing grade, and the tank was filled with excess, non-impacted soil at the facility. In December 2016, the "Classifier Tanks", also formerly used to contain cooling blow-down water and hydrocarbon contacted wastewater, were thoroughly cleaned and inspected. During the inspection, several holes were identified and soil samples were

collected in an effort to determine if soil beneath the tanks had been affected above the NMOCD Recommended Remediation Action Levels (RRAL) for benzene, toluene, ethylbenzene, total xylenes (BTEX), total petroleum hydrocarbon (TPH) and chloride. Upon receiving laboratory analytical results and NMOCD approval, the BGTs were closed in place by cutting the tops of the BGTs below the existing grade, backfilling them in with approved soil exhibiting BTEX, TPH and chloride concentrations below the NMOCD RRAL and installing a 20-millimeter polyurethane liner at 4 feet (ft.) bgs over the tops of the BGTs in an effort to inhibit the accumulation of moisture.

There are currently three (3) BGTs remaining in-situ at the Jal #3 Gas Plant. Two (2) of the BGTs, known as the “Field Scrubber Dump Tanks”, are located adjacent to one another just west of the facility. The Field Scrubber Dump Tanks can be described as steel, 210-bbl tanks utilized to contain pipeline liquids. The third BGT, known as the “West Boiler Sump”, is located in the south-central portion of the facility adjacent to a mechanical building and numerous above and below ground pipelines. The West Boiler Sump can be described as a fiberglass, 160-bbl tank, utilized to contain waste water from the fresh water treatment system and steam boiler buildings. Each of the remaining BGTs have been taken out of service and cleaned and the associated piping has been rerouted to the on-site injection well and/or above-ground wastewater storage tanks.

Proposed Closure Strategy

ETC proposes the following remediation strategies designed to advance the West Boiler Sump toward an NMOCD-approved closure:

- Removal of the BGT’s contents and disposing of the contents at an NMOCD-permitted facility, followed by a thorough cleaning to allow for a hydrostatic test and/or detailed inspection.
- Conducting a hydrostatic test and/or a detailed inspection of the floor and sidewalls of the BGT to determine if evidence of a release are present. In the event an inspection is required, it will include checking for holes and/or evidence of failure in the floor and sidewalls of the BGTs,
- In the event evidence of potential releases are discovered during the hydrostatic tests and/or inspections, the potential release would be investigated and reported as necessary.
- An alternative closure method may include utilizing a pneumatic saw to cut five (5) holes in the bottom of the fiberglass BGT to allow for the collection of a representative five-point composite soil sample to characterize soil beneath the BGT. The collected soil sample would be submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations, the results of which will be provided to the NMOCD and compared to the *Closure Criteria for Soils beneath BGTs, Drying Pads Associated with Closed-Loop Systems and Pits where Contents are Removed* for sites where the depth below the bottom of pit to groundwater is greater than 100 ft.
- In the event no evidence of releases are discovered during the hydrostatic test, detailed inspection and/or upon receiving laboratory analytical results, and upon receiving NMOCD permission, the tops of the BGT would be cut below the existing grade at approximately four (4) ft. bgs.

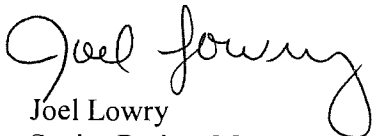
- Upon cutting the tops of the BGT to four (4) ft. bgs, the tank would be backfilled to with locally-sourced, non-impacted material. The final soil cover would consist of engineered fill used throughout the plant. Upon backfilling and compacting the affected area, a permanent steel-marker would be placed to document the location of the closed BGT.

ETC maintains removing the West Boiler Sump from its current location poses a risk to human health and safety due to its proximity to the mechanical building and multiple above and below ground utilities, particularly the plant's main high pressure steam line, which is located on an adjacent pipe rack. A preliminary visual inspection of the floor and side of the tank from the surface and accounts from ETC personnel who have entered the BGT to conduct tank cleaning activities suggest the fiberglass BGT's integrity has not been compromised. A hydrostatic test, detailed inspection and/or the collection of soil samples would be necessary to confirm these.

Upon receiving NMOCD permission and completion of the above-mentioned field activities, ETC will prepare and submit a Final C-144 and *Closure Report* detailing field activities and laboratory analytical results from confirmation soil samples.

If you have any questions, or if additional information is required, please feel free to call Rose Slade (ETC) at 210-403-6525 or myself at 432-520-7720 (office) or 432-466-4450 (cell).

Respectfully submitted,



Joel Lowry
Senior Project Manager
TRC Environmental Corporation

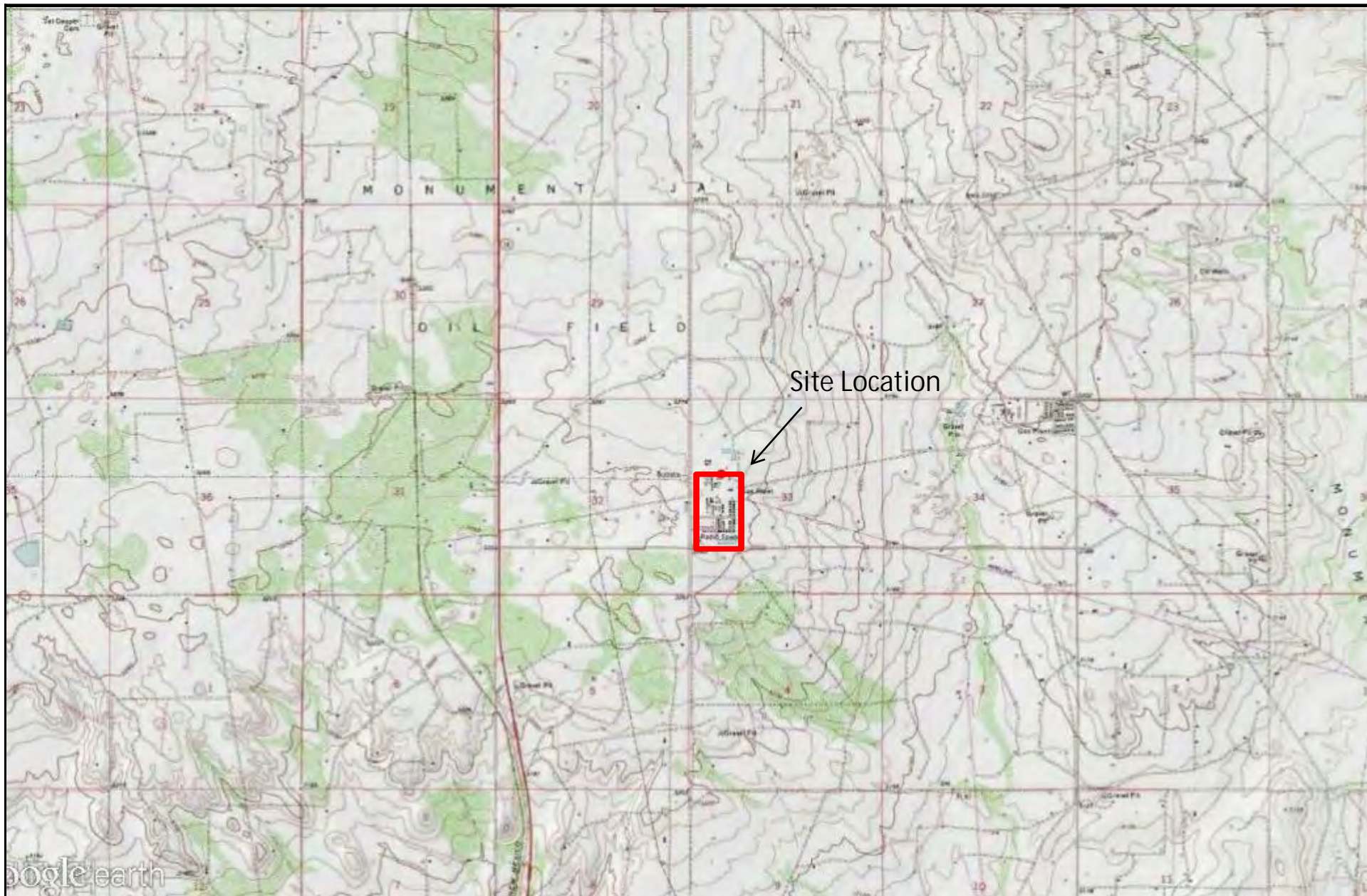


Jeffrey Kindley, PG
Senior Project Manager
TRC Environmental Corporation

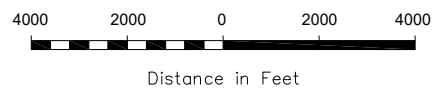
Attachments:

Attachment #1 - Site Location Map
Attachment #2 – Site Diagram
Attachment #3 – Photographic Log

cc: File



LEGEND:



Attachement #1

Site Location Map
ETC Field Services, LLC
Jal #3 BGTs
Lea County, NM

Scale 1" = 4,000'

Drafted By: JL Checked By: CS

Draft: July 28, 2017

Lat. N 32.173676 Long. W102.173696

Sec. 33 T24S R37E

TRC Proj. Nos.: 283490, 284097



2057 Commerce Drive
Midland, Texas 79703
432.520.7720



LEGEND:



Below-Grade Tank
High-Pressure Steam Line

Attachement #2

Site Diagram
ETC Field Services, LLC
Jal #3 BGTs
Lea County, NM

Scale 1" = 40'	
Drafted By: JL	Checked By: CS
Draft: July 28, 2017	
Lat. N 32.173676 Long. W102.173696	
Sec. 33 T24S R37E	
TRC Proj. Nos.: 283490	





Photo 1: View of the West Boiler Sump prior to cutting the top off, facing north.



Photo 2: View of the West Boiler Sump after cutting top off, facing southwest.



Photo 3: View of the interior of the West Boiler Sump after limited cleaning activities.



Photo 4: View of the interior of the West Boiler Sump after limited cleaning activities.



Photo 5: View of the West Boiler Sump and affected utilities and proximity to pipe rack, facing south.



Photo 6: View of the West Boiler Sump, affected utilities, proximity to pipe rack and mechanical building, facing east.



Photo 7: View of the West Boiler Sump and affected utilities and proximity to pipe rack support (east side), facing north.



Photo 8: View of affected pipe rack support and associated utilities, included the high pressure steam line, facing south.

Lowry, Joel

From: Lowry, Joel
Sent: Friday, November 10, 2017 2:08 PM
To: Slade, Rose
Subject: FW: ETC Jal #3 West Boiler Sump

From: Oberding, Tomas, EMNRD [mailto:Tomas.Oberding@state.nm.us]
Sent: Wednesday, August 16, 2017 1:39 PM
To: Slade, Rose <Rose.Slade@energytransfer.com>
Cc: Lowry, Joel <JLowry@trcsolutions.com>
Subject: RE: ETC Jal #3 West Boiler Sump

Aloha Rose and Joel,

Thank you for the update on this site.
The OCD approves the plan of action as outlined.
Please stay safe and keep me informed.
Mahalo
-Doc

Tomáš 'Doc' Oberding PhD
Hydrologist, Adv-District 1
Oil Conservation Division, EMNRD
(505) 476-3403
E-Mail: tomas.oberding@state.nm.us
一期一会

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Slade, Rose [mailto:Rose.Slade@energytransfer.com]
Sent: Thursday, August 3, 2017 2:18 PM
To: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>
Cc: Lowry, Joel <JLowry@trcsolutions.com>
Subject: ETC Jal #3 West Boiler Sump

Good afternoon sir,

I hope you have been doing well today sir.

Please find attached the Proposed Closure Strategy Report for the ETC's Jal #3 West Boiler Sump. This sir is one of the last three (3) BGT's left to be closed at our ETC Jal #3 Plant in Lea County NM. The West Boiler Sump is best described as a fiberglass, 160 bbl. tank, utilized to contain wastewater from the fresh water treatment system and from the steam boiler buildings.

This BGT is located in the south-central portion of the plant in a highly congested area as you will see on the attachment #2 site diagram. The removal of the West Boiler Sump from its current location poses a risk to human health and safety due to its proximity to the mechanical building and the multiple above and underground utilities pipelines surrounding the BGT. One of our biggest concerns is the plants high pressure steam line, which is located on an adjacent pipe rack directly above the BGT. If this high pressure steam line was to be impacted it could cause serious injuries and possible death to anyone in the vicinity of that area due to not only the high pressure of the steam-line but also from the heat associated with the steam-line.

ETC is requesting approval from the Oil Conservation Division, EMNRD to leave the BGT in place and remove at the time of abandonment. ETC proposes the following remediation strategies designed to advance the West Boiler Sump toward an NMOCD-approved closure.

1. Removal of all the contents from the BGT and disposing of the contents at an NMOCD-permitted facility, followed by a thorough cleaning to allow for hydrostatic test and/or detailed inspection.
2. Conducting a hydrostatic test and/or detailed inspection of the floor and sidewalls of the BGT to determine if evidence of a release is present. In the event of an inspection it will include checking for holes and/or evidence of failure in the floor and sidewalls of the BGT.
3. In the event there is an indication of a potential release that is discovered during the hydrostatic test and/or inspection the potential release would be investigated and reported as necessary.
4. An alternative closure method may include utilizing a pneumatic saw to cut five (5) holes in the bottom of the fiberglass BGT. The collected samples would be submitted to the laboratory for analysis for BTEX, TPH, and chloride concentrations, the results of which would be provided to the NMOCD.
5. In the event no evidence of a release(s) are discovered during the hydrostatic test, detailed inspection and/or upon receiving laboratory analytical results, and upon receiving NMOCD permission, the tops of the BGT would be cut below the existing grade at approximately four (4) ft. bgs. Upon cutting the tops of the BGT to four (4) ft. bgs, the tank would be backfilled to with locally-sourced, non-impacted material. The final soil cover would consist of engineered fill used throughout the plant.
6. Upon backfilling and compacting the affected area, a permanent steel-marker would be placed to document the location of the closed BGT.
7. Upon receiving NMOCD permission and completion of the above mentioned field activities, ETC will prepare and submit a Final C-144 and Closure Report detailing field activities and laboratory analytical results from confirmation soil samples.

If you have any questions, or if additional information is required, please feel free to call Joel or myself.

Respectfully,

Rose Slade



Rose L. Slade

Senior Environmental Specialist,
Waste, Water, Remediation
Energy Transfer Partners

O: 210.403.6525

C: 432.940.5147

Appendix C

Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

(Form C-144)

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

Form C-144
Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

- Type of action: ☐ Below grade tank registration
☐ Permit of a pit or proposed alternative method
☒ Closure of a pit, below-grade tank, or proposed alternative method
☐ Modification to an existing permit/or registration
☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

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

1.
Operator: ETC Field Services, LLC OGRID #: _____
Address: 800 East Sonterra, San Antonio, TX, 78258
Facility or well name: Sal #3 gas plant - West Boiler Sump
API Number: _____ OCD Permit Number: _____
U/L or Qtr/Qtr E Section 33 Township 24S Range 37E County: Lea
Center of Proposed Design: Latitude 32.17374 Longitude -103.17376 NAD83
Surface Owner: ☐ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

3.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 160 bbl Type of fluid: Waste Water from Freshwater treatment and steam boiler
Tank Construction material: Fiberglass
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness _____ mil ☐ HDPE ☐ PVC ☐ Other _____

4.
☒ **Alternative Method:** Proposed Closure Strategy - West Boiler Sump July 26, 2017
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)
☐ Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
☐ Alternate. Please specify _____

6.

Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- ☐ Screen ☐ Netting ☐ Other _____
- ☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

- ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

- ☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

General siting

Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.

- ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells

☐ Yes ☒ No
☐ NA

Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No
☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (**Does not apply to below grade tanks**)

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within the area overlying a subsurface mine. (**Does not apply to below grade tanks**)

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area. (**Does not apply to below grade tanks**)

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain. (**Does not apply to below grade tanks**)

- FEMA map

☐ Yes ☐ No

Below Grade Tanks

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

<p>Within 100 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><u>Temporary Pit Non-low chloride drilling fluid</u></p>	
<p>Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</p> <ul style="list-style-type: none"> - Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <ul style="list-style-type: none"> - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;</p> <ul style="list-style-type: none"> - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 300 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><u>Permanent Pit or Multi-Well Fluid Management Pit</u></p>	
<p>Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</p> <ul style="list-style-type: none"> - Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <ul style="list-style-type: none"> - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.</p> <ul style="list-style-type: none"> - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 500 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ A List of wells with approved application for permit to drill associated with the pit.
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Climatological Factors Assessment
☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Quality Control/Quality Assurance Construction and Installation Plan
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan
☐ Emergency Response Plan
☐ Oil Field Waste Stream Characterization
☐ Monitoring and Inspection Plan
☐ Erosion Control Plan
☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.

Proposed Closure: 19.15.17.13 NMAC

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☒ Below-grade Tank ☐ Multi-well Fluid Management Pit
☒ Alternative

Proposed Closure Method: ☐ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☒ Alternative Closure Method *closed in accordance Proposed Closure Strategy July 2014*

14.

Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- ☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.
Operator Application 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 (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

18.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

19.
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ Closure Completion Date: 11/15/17

20.
Closure Method:

- ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☒ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
- ☐ If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Proof of Closure Notice (surface owner and division)
- ☐ Proof of Deed Notice (required for on-site closure for private land only)
- ☐ Plot Plan (for on-site closures and temporary pits)
- ☐ Confirmation Sampling Analytical Results (if applicable)
- ☐ Waste Material Sampling Analytical Results (required for on-site closure)
- ☐ Disposal Facility Name and Permit Number
- ☐ Soil Backfilling and Cover Installation
- ☐ Re-vegetation Application Rates and Seeding Technique
- ☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Rose L. SladeTitle: Sr. Environmental SpecialistSignature: Date: 12/20/17e-mail address: Rose.Slade@energytransfer.comTelephone: 210-403-6525