November 21, 2017

NMOCD District I Olivia Yu 1625 N French Dr Hobbs, New Mexico 88240

RE: Pure State Gathering Facility

Unit P Section 36 - T19S - R34E

API: 30-025-20096

Dear Ms. Yu,

NMOCD approves of the proposed delineation plan for 1RP-4859. For each sample location, laboratory analyses must depict permissible levels for at least 2 depths: depth obtained and depth maintained at least 5 ft. further in depth. Permissible chloride levels are 600 mg/kg.

By Olivia Yu at 2:30 pm, Dec 20, 2017

APPROVED

Tandem Energy would like to submit the following assessment and delineation proposal for **Pure State Gathering Facility**. The site is located in Unit P, Section 36, Township 19S, Range 34E in Lea County on State Land.

Summary of the release is as follows:

TABLE 1

| Well Name: | Pure State Gathering Facility |
|---------------------------------|-----------------------------------|
| Operator: | Tandem Endergy Corp |
| RP Number: | 1PR-4979 |
| API Number: | 30-025-20096 |
| GPS Location of release: | GPS of release is attached |
| Date of Release: | 10.19.2017 |
| Date Reported to NMOCD – Hobbs: | 10.20.2017 @ 1000hrs to Olivia Yu |
| Land Owner: | State of NM |
| Cause of Release: | Lightning Strike |
| Type of Release: | Oil and Water |
| Volume Released of Oil | 318bbls |
| Volume Recovered of Oil | 0 |
| Volume of Water Released | 56bbls |
| Volume of Water Recovered | 0 |
| Nearest Waterway | Greater than 1000' |
| Depth to Groudwater (estimated) | Less than 50' |
| Nearest Domestic Water Source: | Greater than 1000' |
| NMOCD Ranking: | 20 |

Background:

The tank battery was struck by lightning causing produced water and hydrocarbons to be released on an unlined production facility. The release affected the tank battery, location, road and pasture. The lightning strike caused the facility to catch fire and consumed all standing hydrocarbons. The facility was a total loss and there are current plans of rebuilding the facility upon completion of remedial activities.

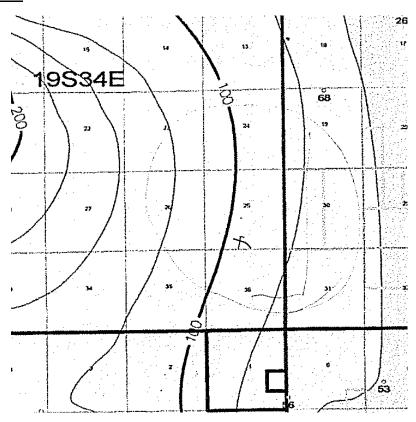
No active waterways are located within the area, nor domestic water sources. A search of the New Mexico State Engineer's Office (NMOSE) online water well database for water wells within the vicinity of the release, showed a total of four (4) wells. Locations are as follows:

TABLE 2:

| SEC 36-T19S-R34E | 1 well – Depth of well 100' (no water data) |
|------------------|---|
| SEC 25-T19S-R34E | 1 well – Average depth to water 28' |
| SEC 26-T19S-R34E | NO WELLS |
| SEC 35-T19S-R34E | NO WELLS |
| | |
| SEC 1-T20S-R34E | NO WELLS |
| SEC 2-T20S-R34E | NO WELLS |
| | |
| SEC 30-T19S-R35E | NO WELLS |
| SEC 31-T19S-R35E | NO WELLS |
| | |
| SEC 6-T20S-R35E | 2 WELLS – Average depth to water 64' |

The Chevron Trend map shows an average water depth of 75' to 100' bgs.

FIGURE 1:



Recommended Remediation Action Levels (RRALs):

The following is the site ranking according to the NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (1993). Below in Table 3 are the remediation standards and the site ranking for this location.

TABLE 3:

| SOIL REMEDIATION STATNDARDS | 0-9 | 10-19 | >19 |
|-----------------------------|---------|---------|--------|
| Benzene | 10ppm | 10ppm | 10ppm |
| BTEX | 50ppm | 50pm | 50ppm |
| ТРН | 5000ppm | 1000ppm | 100ppm |

| Depth to Groundwater | NMOCD Ranking | | | | |
|-----------------------------------|---------------|--|--|--|--|
| <50' = 20 | 20 | | | | |
| 50' to 99' = 10 | | | | | |
| >100' = 0 | | | | | |
| Distance to Nearest Surface Water | NMOCD Ranking | | | | |
| <200′ = 20 | | | | | |
| 200' – 1000' = 10 | | | | | |
| >1000′ = 0 | 0 | | | | |
| Well Head Protection | NMOCD Ranking | | | | |
| <1000' (<200' domestic) = 20 | | | | | |
| >1000′ = 0 | 0 | | | | |

Delineation Proposal:

Based on initial site assessment, the heaviest impact is located around the remains of the facility. The area affected outside the facility was mainly burnt pasture land. The total affected area including burned grassland is approximately 43,248 sq ft. The facility area will be delineated hozinontally and vertically to determine the total depth and width of impact with depth intervals not to exceed five (5) feet. The area outside of the facility area will be sampled on a grid pattern to determine if any environmental impact exists. Once the area has been thoroughly delientaed, a corrective action plan will be submitted to the NMOCD for considertion and approval.

Tandem will incorporate the Mohr Titration Method to delineate the impacted area for chlorides. Field delineation data will be submitted with the corrective action plan. Additionally, laboratory analytical data will be submitted on all bottom hole samples for chlorides, BTEX and TPH C6-C36 (GRO, DRO, and MRO) per NMOCD COA's.

Request:

Tandem Energy hereby requests approval to begin delineation activies.

Sincerely,

Tony Tucker

ATTACHMENTS:

- 1. GPS MAP OF AFFECTED AREA
- 2. TOPOGRAPHICAL MAP
- 3. SURFACE AREA MAP
- 4. NM OSE WATER DATA
- 5. NMOCD C-141

1. Affected Area:



Polygon: Pol-1

Area: 43,248 sq ft Perimeter: 860.9 ft

| Point | Latitude | Longitude | Distance to next | Azimuth | Angle | Altitude |
|-------|-------------|---------------|------------------|---------|--------|----------|
| n. 0 | 32.61251385 | -103.50673223 | 199.9 ft | | | n.d. |
| n. 1 | 32.61265333 | -103.50610442 | 170.3 ft | 75.2° | 91.5° | n.d. |
| n. 2 | 32.61310890 | -103.50623161 | 102.7 ft | 346.8° | 132.1° | n.d. |
| n. 3 | 32.61324484 | -103.50652403 | 92.9 ft | 298.9° | 168.8° | n.d. |
| n. 4 | 32.61332209 | -103.50681155 | 295.1 ft | 287.7° | 67.6° | n.d. |
| n. 5 | 32.61251385 | -103.50673223 | | 175.3° | | n.d. |

2. Topographical Map with affected area overlay:



3. Map of Area with Wells Desiginated:



4. OSE Water Data:



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced. O=orphaned, C=the file is

(quarters are 1-NW 2-NE 3-SW 4-SE)

(quarters are smallest to largest) (NADB3 UTM in meters)

(In feet)

POD

000 Sub-POD Number basin County 64 16 4 Sec Tws Rng L 04157 L LE L 14097 POD1

closed)

3 3 06 29S 35E 1 3 3 06 20S 35E

х DepthWellDepthWater Column 640483 3607561* 3718500 638740

61

Average Depth to Water:

32 feet 0 feet

Water

61

Minimum Depth: Maximum Death:

64 feet

Record Count: 2

PLSS Search:

Township: 20S

Range: 35E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data

11/8/17 3:40 PM

WATER COLUMN/ AVERAGE DEPTH TO

Page 1 of 1



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned. C-the file is

(quarters are 1-NW 2-NE 3-SW 4-SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

· (In feet)

POD

CP

Sub-

closed)

QQQbasin County 64 16 4 See Tws Rng 3 3 4 25 19\$ 34E

639530 3610685* 🕰

638736

DepthWellDepthWater Column 120

CP 00683 PODI CP 01672 POD I

POD Number

CP 1 3 | 36 19S 34E

3610009 🕰 Average Depth to Water.

28 feet

Minimum Depth:

28 feet

Maximum Death:

28 fect

Record Count: 2

Section(s): 26, 25, 35, 36 Township: 19S

Range: 34E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no ventranties, expressed or implied, concerning the occuracy, completeness, reliability, usability, or suitability for any particular purpose of the data

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WATER COLUMN AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 30, 31

Township: 19S

Range: - 35E

The data is furnished by the NMOSE/ISC and is accepted by the recipions with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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WATER COLUMN/ AVERAGE DEPTH TO WATER

Page 1 of 1



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 1, 2

Township: 20S

Range: 34E

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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WATER COLUMN AVERAGE DEPTH TO WATER

5. <u>C-141</u>

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District II
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

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

| Release Notification and Corrective Action | | | | | | | | | | | |
|---|---|--------------------------------|----------------------------------|----------------------|---------------------------|-----------------|---------------------|---|---------------|---------|------------------|
| | | | OPERA' | FOR | Initial Report ☐ I | | | Final Report | | | |
| | | | | Contact Tony Tucker | | | | | / | | |
| Address | | 1494 Blue | Stem L | oco Hills NM | | | No. 575-703-8 | | | | |
| Facility Name Pure State Gathering Facility | | | Facility Type Gathering Facility | | | | | | | | |
| Surface Ow | ner State | of New Mexico | | Mineral C | wner | State of New M | lexico | API No. | 30-025-2009 | 98 | |
| LOCATION OF RELEASE | | | | | | | | | | | |
| Unit Letter | Section | Township | Range | Feet from the | North | South Line | Feet from the | East/West Line | County | | |
| P | 36 | 198 | 34E | 660 | Sou | uth | 330 | East | Lea | | |
| | | | Latitud | le | L | ongitude | | NAD83 | | | |
| | | | | NAT | TIRE | OF REL | EASE | | | | |
| Type of Rele | ase Olaw | ater | | NA. | OKE | | Release 318 BO 5 | 58 BW Volume R | ecovered 0 | | |
| Source of Re | lease Storag | e Tanks | | | | | | ce 10:30 PMDate and I | lour of Disc | overy | 12:00AM 10-20-17 |
| Was Immedia | ate Notice (| | | lar Elaran | | If YES, To | | | | | |
| | | | <u> </u> | No Not Re | quared | | u ES NMOC | | | | |
| By Whom? Was a Water | | Fire Dept. Tand | tem Rep Tony | Tucker | | Date and F | lour 10am 10-2 | the Watercourse | | | |
| was a water | course read | | Yes 🗔 |] No | | 11 1123, 40 | nume impacing t | inc watercounter | | | - 1 |
| If a Watercon | irse was Im | pacted, Descr | ibe Fully. | | | | | | | | |
| | | p, = | | | | | | | | | |
| | | | | | | | | | | | |
| | Describe Cause of Problem and Remedial Action Taken.* It appears as though either the Gun Barrel, Water Tank or Oil Tank was hit by a lightening strike the explosion that followed ignited the remainder of tanks and seperators at the facility. The fire | | | | | | | | | | |
| Describe Cau | isc of Probl | em and Reme | dial Action | n Taken.* It app | ears | as though | either the Gui | n Barrel, Water | Tank or C | Dil Ta | nk was |
| that oneu | intening s | strike the e | xpiosion | that followed | ignite vdroc: | a the rema | under of tanks | s and seperator e tanks. Theref | s at the ta | em w | as unable to |
| recover at | | is to nave | Consum | eu an or me n | yuroca | albolis lele | ased from the | a tarika. Trierer | ore rande | 5111 44 | as unable to |
| | · | and Cleanup | Action Tak | cen.* | | | | | | | |
| | | | | | No a | ction take | as of comple | etion of this writ | ten notific | ation | |
| | | delineatio | | | 140 6 | otion take | r as or comple | outer of this write | CII IIOUIIC | , uuo | " |
| | • | | • | | | | | | | | |
| I hereby certi | fy that the | information g | iven above | is true and comp | lete to t | he best of my | knowledge and u | inderstand that purs | uant to NMO | OCD r | ules and |
| regulations a | ll operators | are required t | o report ar | nd/or file certain r | elease n | otifications a | nd perform correc | ctive actions for rele teport" does not reli | ases which | may er | ndanger |
| should their | or the envi | ronment. The save failed to | acceptant adequately | investigate and r | emediat | te contaminati | ion that pose a thr | reat to ground water, | , surface wat | ter, hu | man health |
| or the enviro | nment. In a | ddition, NMC | OCD accep | stance of a C-141 | report d | loes not reliev | e the operator of | responsibility for co | mpliance w | ith any | other |
| federal, state | or local la | ws and/or reg | ulations. | | | | 017 0027 | ATT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | B.TT.11010 | | |
| | | | | | OIL CONSERVATION DIVISION | | | | | | |
| Signature: | | | | | | | - | | | | , |
| Approved by Environmental Specialist: | | | | | | | | | | | |
| Printed Name | C: | | | | | | | | | | |
| Title: | | | | | | Approval Da | te: | Expiration I | Date: | | |
| E-mail Addre | ess: | | | | | Conditions o | f Approval: | | | | |
| | | | 45-4 | | | | | | Attached | Ш | |
| Date: | | | Phone | | | | | | | | |