MILESTONE ENVIRO SERVICES LLC
15721 PARK ROW STE 150
HOUSTON TX  77084

Based on information contained in the initial application by Milestone Enviro Services, LLC, received on January 23, 2018; the amendment request, received on August 1, 2019; the amendment request, received on January 24, 2020; and subsequent information received to date, you are hereby authorized to receive, store, handle, treat and dispose of certain oil and gas wastes as specified below at the following facility:

**Upton 349 South E&P Facility** (140) acres
Block 14, Section 14, HE&WT RR CO Survey, A-660
Latitude, Longitude: 31.499316°, -101.931524°
Upton County, Texas
RRC District 7C, San Angelo

**NARRATIVE DESCRIPTION OF PROCESS:**

Incoming oil and gas wastes are placed into one of the Collecting/Receiving Pits (P012628 and P012877), located at the Waste Separation Area and Truck Pad, where the waste is gravity separated. Rinsate from the washout of trucks and frac tanks are gravity fed to the Collecting/Receiving Pits at the Waste Separation Area and Truck Pad. The liquid fraction is decanted and conveyed to the tank battery, and separated liquids are disposed of at an authorized offsite Class II injection well.

The accumulated solids from the Collecting/Receiving Pits and incoming solid waste that does not pass a paint filter test are placed into one of the Collecting/Drying Pits (P012629, P012784A, P012784B, P012784C and P012878) for additional stabilization by gravity draining and evaporation. Solid waste requiring additional stabilization may also be placed in the Collecting/Staging Pit (P012764) before active mechanical and thermal stabilization. Oil and
gas wastes that have passed a paint filter test may be conveyed for final interment in the active Disposal Pit (P012630A, P012630B, P012630C, P012630D, P012630E, P012630F, P012631A and P012631B)

Authority is granted by the Railroad Commission of Texas (RRC) to receive, store, handle, treat and dispose of certain nonhazardous oil and gas wastes in accordance with 16 Texas Administrative Code (TAC) §3.8 (Statewide Rule 8) and Chapter 4, Subchapter B and is subject to the following conditions:

I. General Permit Conditions

   A. The effective date of this permit is **February 14, 2020** and expires on **April 4, 2024**.

   B. The permittee may not receive, store, handle, treat or dispose of oil and gas wastes at the facility until financial security in the amount of **$5,289,275.00** is provided for and approved by the RRC for the referenced location. This amount provides financial security for the RRC-permitted facility as specified in this permit.

   C. In accordance with 16 TAC § 3.78 the permittee must maintain financial security in the amount of **$5,289,275.00**, until this facility and all of the above-referenced Permit Nos. have been closed in accordance with this permit and all of the referenced equipment and storage tanks have been emptied and removed. Technical Permitting reserves the right to revise this amount, as necessary. Prior to any modification or expansion of this facility that would require increased financial security, an updated closure cost estimate must be submitted to Technical Permitting in Austin, and any additional financial security must be filed with and approved by the RRC prior to making that modification.

   D. No waste may be received at the referenced facility until a restrictive covenant is signed by a representative of the permittee, the landowner, and a representative of the RRC; and the signed document is filed in the Real Property Records Section of Upton County, Texas, and proof of the filing with Upton County is submitted to and approved by the RRC.

   E. A copy of the site-specific Spill Control Plan that details means and methods of waste management and containment in the event of a release or discharge must be maintained on-site and made available to RRC staff for review and inspection upon request.

   F. The facility’s Stormwater Management Plan must be maintained on-site and made available upon request of the RRC.

   G. This permit does not authorize the discharge from the facility of any oil and gas waste, including contaminated or contact stormwater.

   H. The permittee may not receive, store, handle, treat or dispose of oil and gas waste at the facility until all necessary air permits (if any) are obtained from the Texas Commission on Environmental Quality (TCEQ).

   I. Technical Permitting and the San Angelo District Office must be notified in writing upon final completion of construction of the facility. The permittee may not begin receiving, storing, handling, treating or disposing of oil and gas waste at the facility until the San Angelo District Office has performed its inspection of the completed facility and active
disposal pit construction and has verified that the facility and disposal pit is constructed in accordance with the application and this permit.

J. Technical Permitting in Austin and the San Angelo District Office must be notified in writing when construction of the facility is initiated and with the completion of the disposal pit.

K. Unless otherwise required by conditions of this permit, construction, use, and maintenance of the facility must be in accordance with the information represented in the permit application and attachments thereto. When construction of the facility is completed, submit the “as-built” plans to be incorporated as part of the permit application.

L. An On-Site Sewage Facility (OSSF) may be constructed, operated, and maintained within the boundaries of the subject facility without an additional permit from the Commission if: (1) the OSSF waste is not commingled with any other oil and gas waste; (2) the system is designed by a Texas registered Professional Engineer or a sewage system installer licensed in the state of Texas; and (3) the construction, operation, and maintenance of the OSSF complies with all applicable local, county, and state requirements.

M. Any deviation from this permit must be approved by amendment from Technical Permitting before implementation.

N. Any soil additives, bio-accelerators or treatment chemicals must be approved by Technical Permitting prior to use at the facility.

O. All chemical laboratory analyses required by this permit must be performed using appropriate Environmental Protection Agency (EPA) methods or Standard Methods by an independent, National Environmental Laboratory Accreditation Program (NELAP) certified laboratory neither owned nor operated by the permittee. Any sample collected for laboratory analysis must be collected and preserved in a manner appropriate for that analytical method as specified by 40 CFR, Part 136. All geotechnical testing is to be performed utilizing tests standardized by the American Society for Testing and Materials (ASTM) and certified by a Texas licensed Professional Engineer.

P. Safety Data Sheets (SDS) must be submitted to Technical Permitting for any chemical or compound proposed to be used in the treatment of waste at the facility. Use of the chemical is contingent upon RRC approval. All chemicals must be stored according to the manufacturer’s specifications.

Q. The permittee must make all records required by this permit available for review and copying during normal business hours upon request of RRC personnel.

R. This permit may be considered for administrative renewal upon review by the RRC. Any application for renewal should be received at least 60 days prior to the permit expiration date.

S. This permit is non-transferable without the consent of the RRC. Any request for transfer of this permit must be filed with Technical Permitting at least 60 days before the permittee wishes the transfer to take place.

T. The permittee must submit a Quarterly Report according to the following:

1. The report must contain applicable information as required in Permit Conditions III.H., IV.K., IV.L., IV.M., VII.E., VII.L. and XI.G.
2. The quarterly reporting periods must be January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31 of each year.

3. The reports must be submitted to Technical Permitting and the San Angelo District Office no later than the 30th day of the month following each reporting period, or each April 30th, July 30th, October 30th, and January 30th, respectively.

4. An Executive Summary must be included that describes facility operations and relevant activities that occurred during the specific quarter.

5. Data tables presenting volumes or amounts of treated waste must be included.

6. The laboratory analytical reports and the corresponding chain of custody must be provided for all chemical analyses performed.

U. Failure to comply with any provision of this permit shall be cause for modification, suspension, termination or cancellation of this permit if Technical Permitting determines that the permittee is in violation of Statewide Rule 8 (d)(6)(E).

II. Authorized Wastes

A. Only oil and gas wastes subject to the jurisdiction of the RRC that are exempt and non-hazardous according to Subtitle C (Resource Conservation and Recovery Act (RCRA)) may be received. You may receive, store, handle, treat and dispose of only the following oil and gas wastes:

1. Water-based drilling fluids and associated cuttings
2. Oil-based drilling fluids and associated cuttings
3. Tank bottoms from gas plants, crude oil Reclamation Plants, crude oil separation facilities, and crude oil production facilities, which do not exceed 7% in oil content as determined by Standard American Petroleum Institute (API) “shake out” test.
4. Hydraulic fracturing flow back water
5. Formation sands and other solids from saltwater storage tanks or vessels
6. Soils contaminated with produced water, crude oil, or condensate
7. Hydrocarbon, solids, sands and emulsion generated from separators, fluid treatment vessels, and production impoundments
8. Spent filters, filter media, and back wash from produced water
9. Liners from pits that contain exempt oil and gas waste
10. Fluids and associated solids including sand from flowback of oil and gas wells
11. Other non-hazardous wastes generated in association with the exploration, development and production of oil and gas resources subject to the jurisdiction of the RRC

B. No other waste may be accepted at this facility.

C. RCRA non-exempt wastes under the jurisdiction of the RRC may be accepted and processed at the facility if analytical results demonstrate that the waste is characteristically non-hazardous. See Permit Condition III.E.
D. No oil and gas Naturally Occurring Radioactive Material (NORM) waste, as defined in 16 TAC §4.603, or waste from a facility that is licensed by the Texas Department of State Health Services (DSHS) to process or treat oil and gas NORM waste may be received at this facility.

E. No asbestos-containing material regulated under the Clean Air Act or polychlorinated biphenyls (PCB) material regulated under the Toxic Substances Control Act may be accepted for processing at this facility.

F. All waste haulers received at the facility must be currently permitted RRC Oil and Gas Waste Haulers and must have the subject facility listed as an authorized disposal facility on their “Oil and Gas Waste Hauler’s Authority to use Approved Disposal/Injection System”, (Form WH-3).

III. Waste Testing and Record Keeping Requirements

A. For the purposes of this permit, a representative sample of incoming waste is defined as a composite sample composed of one grab sample from each 50 cubic yards of waste material from each job (e.g., from each well, pit, spill location).

B. Each load of incoming waste, other than water-based drilling fluids and associated cuttings, or oil-based drilling fluid and associated cuttings, must be scanned for the presence of NORM using a scintillation meter with a sodium iodide detector or other equivalent devices that complies with 25 TAC §289.259, Texas Regulations for Control of Radiation (TRCR Part 46). Manufacturer’s specifications must be submitted to Technical Permitting for equivalent devices used for NORM detection. Any load with a reading of 50 microroentgens per hour or greater may not be unloaded or processed at the facility unless further analysis of the waste demonstrates that the waste does not exceed 30 picocuries per gram of Radium-226 combined with Radium-228, or 150 picocuries per gram of any other radionuclide. Current calibration records of all NORM screening devices must be maintained on-site and made available to RRC personnel upon request.

C. All waste must pass a Paint Filter Test (EPA Method 9095) prior to interment into a disposal pit. Test results from each Paint Filter Test must be maintained and submitted to Technical Permitting upon request.

D. Prior to receipt at the site, representative samples of waste from commercial oil and gas facilities must be analyzed for either of the parameters listed below and may not exceed the limitation for the respective parameters:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Organic Halides (TOX)</td>
<td>100 mg/L</td>
</tr>
<tr>
<td>(EPA Method 9020B)</td>
<td></td>
</tr>
<tr>
<td>Extractable Organic Halides (EOX)</td>
<td></td>
</tr>
<tr>
<td>(EPA Method 9023)</td>
<td>100 mg/kg</td>
</tr>
</tbody>
</table>

OR

Special authorization for disposal of waste with a TOX/EOX > 100 parts per million may be considered. Authority must be obtained from Technical Permitting prior to receipt of waste.
E. Prior to receipt at the site, a representative sample of any RCRA non-exempt waste or any international waste must be analyzed and may not exceed the limit for the following parameters:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosivity</td>
<td>2.0 – 12.5 standard units (s.u.)</td>
</tr>
<tr>
<td>Reactivity</td>
<td>No materials exhibiting the characteristics of reactivity as defined by RCRA</td>
</tr>
<tr>
<td>Ignitability</td>
<td>Flash point &lt; 60° C or &lt;140° F</td>
</tr>
</tbody>
</table>

F. The permittee must maintain the following records on each load of waste received at the facility for a period of three (3) years from the date of receipt:

1. Description of the site where the waste was generated, including:
   a. Generator name
   b. Lease name and number and well number(s), or gas ID number(s), or API well number(s); or latitude and longitude coordinates in decimal degrees if waste was not generated on a lease
   c. County
2. Name and RRC permit number of the transporter
3. Volume of waste material received (specify units)
4. Detailed description of the type of waste, including any analysis required by Permit Conditions III.B, III.C., III.D. and III.E. above.
G. The permittee must maintain the following records on each load of waste removed from the facility for a period of three (3) years from the date of receipt:

1. Date waste is removed and hauled to a disposal facility
2. Name and RRC permit number of the transporter
3. Volume (specify units) of each shipment of waste hauled to a disposal facility
4. Type of waste (basic sediment, water, water-based mud, etc.)
5. Name and permit number of the facility to which the waste was hauled to for disposal

H. A report must be submitted to Technical Permitting in Austin and the San Angelo District Office as part of the Quarterly Report required in Permit Condition I.T. and must include the following information:

1. A table summarizing all incoming waste, including the following:
   a. Generator name
   b. Lease name and number and well number(s), or gas ID number(s), or American Petroleum Institute (API) well number(s); or latitude and longitude coordinates in decimal degrees if the waste was not generated on a lease
   c. County
   d. Name and RRC permit number(s) of the transporter(s)
   e. Description and total volume (specify units) of waste from each job (for which Permit Conditions III.F.1.a, III.F.1.b., and III.F.1.c are the same)
   f. The total volume of each type of waste material received during the quarter

2. A table summarizing all waste removed from the facility, including the following:
   a. Name and permit number of the disposal facility
   b. Name and RRC permit number(s) of the transporter(s)
   c. Description and total volume (specify units) of waste hauled to the disposal facility
   d. The total volume of each type of waste that leaves the facility for disposal or final disposition during the quarter

3. Copies of all analyses required by Permit Conditions III.B., III.D., and III.E. above

IV. General Facility Design and Maintenance Requirements

A. The general layout and arrangement of the facility must be consistent with the “Site Layout” (Drawing No. 1) and “Waste Management Units & Equipment” (Drawing No. 2) schematics, received on September 16, 2019, which are attached as Permit Appendix A.
B. A sign must be posted at each entrance to the facility. The sign must be readily visible and show the operator name, facility name, and permit number in letters and numerals at least three inches in height.

C. The entire facility must consist of, and is defined by, the following waste management unit designations:

1. Waste Separation Area:
   a. One (1) Unloading Area
   b. One (1) Wash Unit
   c. One (1) Collecting/Receiving Pit (P012628)
   d. One (1) Collecting/Drying Pit (P012629)
   e. Two (2) 500-bbl Oil Tanks
   f. One (1) 700-bbl Separation Tank
   g. One (1) 1000-bbl Separation Tank
   h. Three (3) 750-bbl Separation Tanks
   i. One (1) 750-bbl Fresh Water Tank
   j. One (1) 641-bbl Mud Tank
   k. One (1) 855-bbl Mud Tank

2. Mechanical Processing Unit:
   a. Collecting/Staging Pit (P012764)
   b. One (1) Thermal Desorption Unit
   c. One (1) Centrifuge
   d. Eight (8) Shakers
   e. Two (2) 500-bbl Shaker Tanks
   f. One (1) 30-bbl Effluent Tank
   g. One (1) 500-bbl Mix Tank
   h. One (1) 500-bbl Holding Tank
   i. Three (3) 180-bbl Roll-Off Containers

3. Truck Pad:
   a. One (1) Truck Wash Pad
   b. One (1) Collecting/Receiving Pit (P012877)
   c. One (1) Collecting/Drying Pit (P012878)

4. Four (4) 750-bbl Leachate Tanks

5. Three (3) Collecting/Drying Pits (P012784A, P012784B and P012784C)

D. No waste, treated or untreated, may be placed directly on the ground.

E. All storage tanks, equipment and roll-off boxes must be maintained in a leak-free condition. If inspection of a tank reveals deterioration or leaks, the tank must be repaired before resuming use of the tank.

F. Any spill of waste, chemical, or any other material must be collected and cleaned up within 24 hours and processed or disposed of in an authorized manner.

G. Any chemical used in the treatment process must be stored in vessels designed for the safe storage of the particular chemical and these vessels must be maintained in a leak free condition.

H. Dikes or containment structures must be constructed around all waste management units. All earthen dikes surrounding pits and constructed as perimeter berms must be compacted or constructed of material that meets 95% Standard Proctor (ASTM D698) or 90-92% Modified Proctor (ASTM D1557) density and meet a permeability of $1 \times 10^{-7}$ cm/sec or less when compacted. During construction, successive lifts should not exceed nine inches in thickness, and the surface between lifts should be scarified to achieve a good seal. Each berm must maintain a slope no steeper than a one to three (vertical to horizontal) ratio, unless constructed of concrete or equivalent material (firewalls). These structures must be used to divert non-contact storm water around the waste management areas and contain and isolate contact storm water within the waste management units. Refer to the stormwater management requirements specified in Permit Condition IX.

I. The facility must maintain security to prevent unauthorized access. Access must be maintained by a 24-hour attendant or a six-foot-high security fence and locked gate when unattended. Fencing shall be required unless terrain or vegetation prevents vehicle or livestock access except through entrances with lockable gates.

J. No oil may be allowed to accumulate on top of the water or wastes stored in the pits. Any oil on top of any waste liquids must be skimmed off and handled in accordance with RRC rules. Any recovered oil must be recorded and filed as either a Skim Oil/Condensate Report (Form P-18) or a “Letter of Authority Request for Oil Movement” (Form T-1) Letter:

1. A Skim Oil/Condensate Report (Form P-18) must be filed with the RRC every month to record skim oil volumes recovered and sold during the operation of this facility. If no skim oil is recovered for a given month, a (Form P-18) should still be filed with the RRC.

2. An original signed “Letter of Authority Request for Oil Movement” (Form T-1) must initially be submitted on letterhead to Field Operations, Austin, TX, Oil and Gas Division, for every event in which sellable skim oil is recovered and intended to be sold during the operation of this facility. Filing frequency requirements may be redefined after the initial oil movement request has been processed. The request must include:
   a. The time period for which oil movement authority is requested.
   b. The name of the applicant requesting to move the oil.
   c. Volume (barrels) of oil to be moved.

OR
d. Name and location of the facility which oil will be moved.

e. Name, address, telephone and fax number of the facility buying the oil to be moved.

f. Contact person, T-1 permit number and P-5 Operator Number of the oil buyer.

g. A description of the source(s) of the oil at the facility.

K. Each month an inspection of the entire facility must be performed on all concrete slabs, processing equipment, containment berms, and aboveground storage tanks or vessels for deterioration, leaks and spills. The records of each inspection must be kept on-site and maintained for a period of three (3) years from the date of the inspection. The following must be included in the inspection report and submitted as part of the Quarterly Report required by Permit Condition I.T.:

1. The results of the monthly inspection of concrete slabs within the facility for evidence of deterioration, leakage, or storm water run-on, and a description of corrective action taken, if any.

2. The results of the monthly inspection of process equipment, tanks, and roll-off boxes for evidence of deterioration or leakage, and a description of corrective action taken, if any.

3. The results of the monthly inspection of waste levels within the storage areas, tanks, and roll-off boxes, and a description of corrective action taken, if any.

4. The results of the monthly inspections of the silt fencing/rock filter dams installed to control and modulate run-off to surface waters and indicate whether debris has been removed.

L. Any permitted pit or cell not equipped with a leak detection system (LDS) must be emptied and visually inspected annually for deterioration and leaks. A record of each inspection and photographs of the interior of each pit must be maintained for the life of the pit and must be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Permit Condition I.T. The San Angelo District Office must be notified by phone or email at least 48 hours before emptying the pit for inspection. The permittee must maintain a record of when each pit is inspected and the results of the inspection. This record must be maintained by the permittee for the life of the pit.

M. All pits equipped with a LDS must be monitored daily, and the highest volume removed from the LDS during the seven-day period must be reported. The permittee must maintain a record of when the liner, containment berm, and the LDS are inspected and the results of each inspection. Records of LDS monitoring must be submitted in table form within the Quarterly Report required in Permit Condition I.T. The physical record must be maintained by the permittee for the life of the pit. The physical record must be filed with the RRC upon request. The record must include:

1. The date of fluid level measuring

2. The fluid level or volume

3. The volume of fluid removed

4. The electrical conductivity

5. The chloride concentration of the fluids removed
N. The fluid removed from the LDS will be compared to the appropriate allowed volume for each pit, as noted in Permit Condition VII.M.1.

O. If the LDS indicates a liner system failure or if a crack or other failure is detected during inspection, no waste may be added to the pit. The affected component must be replaced or repaired and inspected by the appropriate RRC District Office before use of the pit is resumed.

P. The liner systems must be inspected whenever evidence of a liner leakage arises. If inspection of the liner reveals cracking, a leak or other loss of integrity, all waste must be immediately removed from the pit. No waste may be added to the affected pit until the liner has been replaced or repaired and re-inspected by RRC personnel before resuming use of the pit.

V. Collecting/Receiving Pit (P012628), Waste Separation Area, Unloading Area, Wash Unit, Collecting/Drying Pit (P012629), Mechanical Processing Unit, Collecting/Staging Pit (P012764), Truck Pad, Collecting/Receiving Pit (P012877), Collecting/Drying Pit (P012878) and Collecting/Drying Pits (P012784A, P012784B and P012784C) Construction and Operation

A. The construction of the Collecting/Receiving Pit (P012628), the Waste Separation Area, the Unloading Area, the Wash Unit, the Collecting/Drying Pit (P012629), the Mechanical Processing Unit, the Collecting/Staging Pit (P012764), the Truck Pad, the Collecting/Receiving Pit (P012877), the Collecting/Drying Pit (P012878) and the Collecting Drying Pits (P012784A, P012784B and P012784C) must be consistent with the “Waste Separation Facility Layout Plan” (Attachment 3.F.1) and “Mechanical Processing Unit Layout” (Attachment 3.G.1) schematics, received on October 26, 2018, and the “Truck Pad Details” (Drawing No. 39) and “Drying Pads” (Drawing No. 29) schematics, received on August 1, 2019, which are attached as Permit Appendix B.

B. A sign must be posted at each pit identifying each pit permit number in letters and numerals at least three inches in height.

C. Liquid waste accumulated within the pits must be removed as needed to maintain freeboard and disposed of in an authorized Class II injection well.

D. The ground surface surrounding the pits must be graded such that all surfaces slope away from the pit to prevent surface flow stormwater from entering.

E. The liner systems must be installed and maintained in accordance with best management and sound engineering practices.

F. Unless otherwise required by conditions of this permit, construction, use, and maintenance of each pit must be in accordance with the information represented on the applications (Form H-11’s) and attachments thereto.

G. WASTE SEPARATION AREA: COLLECTING/RECEIVING PIT (P012628), UNLOADING AREA AND WASH UNIT

1. The construction of the Unloading Area, the Wash Unit and the Collecting/Receiving Pit (P012628) must be consistent with the “Waste Separation Facility Layout Plan” (Attachment 3.F.1) schematic provided in Permit Appendix B and the “Waste Separation Facility Cross Sections” (Attachment 3.F.2) and “Waste
Separation Facility Cross Sections” (Attachment 3.F.3) schematics, received on October 26, 2019, which are attached as Permit Appendix C.

2. Use of the pit is limited to the collection of non-hazardous oil and gas wastes as specified in Permit Condition II and rinsate and residual solids from the washout of trucks and frac tanks. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.

3. At least two (2) feet of freeboard must be maintained between the fluid level in the pit and the top of the pit walls.

4. The pit must be no greater than 79 feet by 35 feet by 15.5 feet deep with a permitted usable capacity not to exceed 7,496 bbl of waste.

5. The pit must be constructed in accordance with the liner system installation methods included in the application and consist of reinforced concrete at least eight (8) inches thick.

6. The floor of the pit must have at least a 1.9% slope to drain fluids to the sump.

7. Solid waste that accumulates at the bottom of the pit must be removed regularly to maintain freeboard.

8. Use of the Unloading Area is limited to the unloading of waste and rinsate from the washout of trucks and frac tanks to a central collection trench that gravity feeds to the pit. No oil and gas wastes may be stored or staged directly on the Unloading Area.

9. The Unloading Area must consist of seven (7) unloading bays that are approximately 73 feet by 17 feet and sloped to convey waste to the central collection trench that must be no greater than 129 feet by two (2) feet by four (4) feet deep.

10. Use of the Wash Unit is limited to the unloading of waste and rinsate from the washout of trucks and frac tanks. No oil and gas wastes may be stored or staged directly on the Wash Unit.

11. The Wash Unit must be approximately 53 feet by 25 feet and have at least a 0.9% slope to gravity feed directly into the pit.

12. The Unloading Area and Wash Unit must be constructed in accordance with the liner system installation methods included in the application and consist of reinforced concrete at least eight (8) inches thick.

H. WASTE SEPARATION AREA: COLLECTING/DRYING PIT (P012629)

1. The construction of the Collecting/Receiving Pit (P012629) must be consistent with the “Waste Separation Facility Layout Plan” (Attachment 3.F.1) schematic provided in Permit Appendix B and the schematics provided in Permit Appendix C.

2. Use of the pit is limited to the collection of non-hazardous oil and gas wastes as specified in Permit Condition II for the processing and stabilization of solid wastes prior to interment in the active disposal cell. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.

3. The pit is an “L” shaped structure and must be no greater than 68 feet by 68 feet with retaining walls at least two (2) feet in height and a permitted usable capacity
not to exceed 513 bbl of waste. Waste must not be staged greater than one (1) foot in height.

4. The pit must be constructed in accordance with the liner system installation methods included in the application and consist of reinforced concrete at least eight (8) inches thick.

5. A buffer of two (2) feet must be maintained between the bottom edge of the staged waste in the pit and the pit walls.

6. Any standing or pooled liquids in the pit must be removed within 24 hours of access and disposed of in an authorized manner.

7. The pit must be sloped to drain fluids to the Collecting/Receiving Pit (P012628).

I. MECHANICAL PROCESSING UNIT: COLLECTING/STAGING PIT (P012764)

1. The construction of the Collecting/Staging Pit (P012764) must be consistent with the “Mechanical Processing Unit Layout” (Attachment 3.G.1) schematic provided in Permit Appendix B and the “Mechanical Processing Unit Cross Sections” (Attachment 3.G.2) schematic, received on March 28, 2019, which is attached as Permit Appendix D.

2. Use of the pit is limited to the collection of non-hazardous oil and gas waste as specified in Permit Condition II for processing and stabilization prior to interment in the active disposal pit. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.

3. The pit must be approximately 60 feet by 52 feet with retaining walls at least 1.5 feet in height. The pit is divided into two (2) equal sections with a combined usable capacity not to exceed 534 bbl of waste. Waste must not be staged greater than one (1) foot in height.

4. The pit must be constructed in accordance with the liner system installation methods included in the application and consist of reinforced concrete at least eight (8) inches thick.

5. A buffer of two (2) feet must be maintained between the bottom edge of the staged waste in the pit and the containment walls surrounding the pit.

6. Any standing or pooled liquids in the pit must be removed within 24 hours of access and disposed of in an authorized manner.

7. The pit must be sloped to drain fluids to the low point of the pit.

J. TRUCK PAD: TRUCK WASH PAD AND COLLECTING/RECEIVING PIT (P012877)

1. The construction of the Truck Wash Pad and the Collecting/Receiving Pit (P012877) must be consistent with the “Truck Pad Details” (Drawing No. 39) schematic provided in Permit Appendix B and the “Truck Pad Details (2)” (Drawing No. 40) schematic, received on August 1, 2019, which is attached as Permit Appendix E.

2. Use of the pit is limited to the collection of non-hazardous oil and gas waste as specified in Permit Condition II and rinsate and residual solids from the washout of trucks and frac tanks. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.
3. At least two (2) feet of freeboard must be maintained between the fluid level in the pit and the top of the pit walls.

4. The pit must be approximately 48 feet by 46 feet by 10.5 feet deep with a permitted usable capacity not to exceed 2,615 bbl of waste.

5. The pit must be constructed in accordance with the liner system installation methods included in the application and consist of reinforced concrete at least eight (8) inches thick.

6. Solid waste that accumulates at the bottom of the pit must be removed regularly to maintain freeboard.

K. TRUCK PAD: COLLECTING/DRYING PIT (P012878)

1. The construction of the Collecting/Drying Pit (P012878) must be consistent with the “Truck Pad Details” (Drawing No. 39) schematic provided in Permit Appendix B and the schematics provided in Permit Appendix E.

2. Use of the pit is limited to the collection of non-hazardous oil and gas wastes as specified in Permit Condition II for the processing and stabilization of solid wastes prior to interment in the active disposal cell. No other oil field fluids or oil and gas wastes maybe stored or staged in the pit.

3. The pit must be no greater than 149 feet by 75 feet with retaining walls at least four (4) feet in height and have a permitted usable capacity not to exceed 1,995 bbl of waste.

4. The pit must be constructed in accordance with the liner system installation methods included in the application and consist of reinforced concrete at least eight (8) inches thick.

5. A buffer of two (2) feet must be maintained between the bottom edge of the staged waste in the pit and the pit walls.

6. Any standing or pooled liquids in the pit must be removed within 24 hours of access and disposed of in an authorized manner.

7. The pit must be sloped to drain fluids to the low point of the pit.

L. COLLECTING/DRYING PITS (P012784A, P012784B AND P012784C)

1. The construction of the Collecting/Drying Pits (P012784A, P012784B AND P012784C) must be consistent with the “Drying Pads” (Drawing No. 29) schematic provided in Permit Appendix B and the “Drying Pads S-S’ X-Section” (Drawing No. 30), the “Drying Pads T-T’ X-Section” (Drawing No. 31) and the “Access Road, Final Cover & Drying Pad Details” (Drawing No. 35) schematics, received on August 1, 2019, which are attached as Permit Appendix F.

2. Use of the pits is limited to the collection of non-hazardous oil and gas wastes as specified in Permit Condition II for the processing and stabilization of solid wastes prior to interment in the active disposal cell. No other oil field fluids or oil and gas wastes maybe stored or staged in the pits.

3. Each of the pits must be no greater than 340 feet by 160 feet by five (5) feet deep and have a permitted usable capacity not to exceed 7,930 bbl of waste.
4. The pits must be constructed in accordance with the liner system installation methods included in the application and consist of (from bottom-to-top) a prepared subgrade, overlain by a geosynthetic clay liner (GCL), overlain by a sacrificial soil layer at least three (3) feet thick that is not composed of waste.

5. The earthen berms surrounding the pits must be at least two (2) feet in height and meet the criteria specified in Permit Condition IV.H.

6. A buffer of two (2) feet must be maintained between the bottom edge of the staged waste in the pit and the pit walls.

7. Any standing or pooled liquids in the pit must be removed within 24 hours of access and disposed of in an authorized manner.

8. The pit must have at least a 1% slope to drain fluids to the low point of the pit.

VI. Disposal Pit (P012630A, P012630B, P012630C, P012630D, P012630E, P012630F, P012631A and P012631B) Construction

A. The construction of the Disposal Pits (P012630A, P012630B, P012630C, P012630D, P012630E, P012630F, P012631A and P012631B) must be consistent with the “Cell 1A” (Drawing No. 8), the “Cell 1A A-A’ & B-B’ Profiles” (Drawing No. 9), the “Cell 1B” (Drawing No. 10), the “Cell 1B C-C’ & D-D’ X-Sections” (Drawing No. 11), the “Cell 2” (Drawing No. 12), the “Cell 2 E-E’ X-Section” (Drawing No. 13), the “Cell 2 F-F’ X-Section” (Drawing No 14), the “Cell 3” (Drawing No. 15), the “Cell 3 G-G’ & H-H’ X-Sections” (Drawing No. 16), the “Cell 4” (Drawing No. 17), the “Cell 4 I-I’ X-Section” (Drawing No. 18), the “Cell 4 J-J’ X-Section” (Drawing No. 19), the “Cell 5” (Drawing No. 20), the “Cell 5 K-K’ & L-L’ X-Sections” (Drawing No. 21), the “Cell 6” (Drawing No. 22), the “Cell 6 M-M’ X-Section” (Drawing No. 23), the “Cell 6 N-N’ X-Section” (Drawing No. 24), the “Cell 7” (Drawing No. 25), the “Cell 7 O-O’ & P-P’ X-Sections” (Drawing No. 26), the “Cell 8” (Drawing No. 27) and the “Cell 8 Q-Q’ & R-R’ X-Sections” (Drawing No. 28) schematics, received on August 1, 2019, which are attached as Permit Appendix G.

B. Technical Permitting and the San Angelo District Office must be notified upon final completion of construction of each disposal pit. The permittee may not begin using the disposal pit until the San Angelo District Office has completed an inspection of the pit and provided verification that the pit is constructed in accordance with the application and permit.

C. A sign must be posted identifying each disposal pit by name and permit number using letters and numerals at least three inches in height.

D. Berms must be constructed and maintained on all sides of the disposal pits that meet the criteria specified in Permit Condition IV.H.

E. The capacity and dimensions of the disposal pits may not exceed the following:

<table>
<thead>
<tr>
<th>PERMIT NO.</th>
<th>PHASE NAME</th>
<th>TOTAL VOLUME (BBL)</th>
<th>TOTAL VOLUME (CU YD)</th>
<th>LENGTH (FT)</th>
<th>WIDTH (FT)</th>
<th>DEPTH (FT)</th>
<th>HEIGHT ABOVE GRADE (FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P012630A</td>
<td>Cell 1</td>
<td>23,090,652</td>
<td>5,692,150</td>
<td>1,208</td>
<td>991</td>
<td>51</td>
<td>92</td>
</tr>
</tbody>
</table>
F. LINER, LEAK DETECTION AND LEACHATE COLLECTION SYSTEMS FOR DISPOSAL PITS

1. The disposal pits must be constructed in accordance with the liner system installation methods included in the application and consist of (from bottom-to-top) two (2) feet of compacted clay or a GCL, overlain with a 60-mil HDPE secondary liner, overlain with a 60-mil HDPE primary liner, overlain with two (2) feet of a protective soil layer not composed of waste.

2. The pit must be equipped with a Leachate Collection System (LCS), including 200-mil HDPE drainage layer that covers the entire pit area on top of the primary liner.

3. The pit must be equipped with a LDS, including a 200-mil HDPE drainage layer that extends over the entire pit between the primary and secondary liners.

4. The liner system, the LCS and the LDS must be consistent with the “Landfill Sump Details” (Drawing No. 32), the “Landfill Sump Details (2)” (Drawing No. 33) and the “Facility Berm and Drainage Details” (Drawing No. 34) schematics, received on June 12, 2019, which are attached as Permit Appendix H.

5. The liners, the LCS and the LDS must be installed in accordance with the application, the material manufacturer’s specifications and sound engineering practices.

6. The floor of each disposal pit must have at least a 1% slope to allow fluids to drain to the sump located at the low end of the pit.

G. A liner anchor trench must be used to key the synthetic liners for each pit to their respective berms. The liners must be welded together to create a continuous liner system when the next disposal pit is constructed. The tie-ins and anchor trenches must be consistent with schematics provided in Permit Appendix H.

H. A permanent liner boundary marker must be installed and maintained on all four sides of the pit that clearly identifies the subsurface liner system weld locations at the land surface.

I. The area surrounding the pits must be graded such that all surfaces slope away from the pits, to prevent surface flow storm water from entering the pits.
J. Unless otherwise required by the conditions of this permit, construction, use, maintenance, and closure of the disposal pits must be in accordance with the information represented on the permit application and the attachments thereto.

VII. Disposal Pit (P012630A, P012630B, P012630C, P012630D, P012630E, P012630F, P012631A and P012631B) Operation

A. Only one disposal pit may be considered active and accept oil and gas waste at any time.

B. The permittee must not construct or use a disposal pit in a manner that could exceed the financial security required by Permit Condition I.C.

C. The Permittee must contact the San Angelo District Office and may not begin accepting waste in the disposal pit until the Permittee has received approval from the San Angelo District Office.

D. Intermediate cover must be installed over sections of the disposal pit that have achieved final grade. Interim cover must consist of 12 inches of compacted cover soil that meets a hydraulic conductivity of $1 \times 10^{-7}$ centimeters per second or less and has been compacted to 95% Standard Proctor (ASTM D698) or 90-92% Modified Proctor (ASTM D1557) density. The intermediate cover must be graded to prevent ponding on top of the cover and inhibit infiltration of liquids into the wastes below.

E. After the intermediate cover has been constructed it must be inspected every quarter for erosion, slope stability, and thickness of the cover. The results of each inspection must be submitted as part of the Quarterly Report required in Permit Condition I.T. The physical record must be maintained by the permittee for the life of the pit.

F. The intermediate cover must be inspected after each storm event and re-compacted as needed to meet the requirements specified in Permit Condition VII.E.

G. At least two (2) feet of horizontal freeboard must be maintained between the edge of the waste in the active disposal pit and the top of the pit dikes.

H. Prior to each disposal pit accepting waste above grade, the waste collected below grade must be stabilized, compacted and maintained to prevent collapse of the structure and must not have side slopes steeper than a one-to-three (vertical-to-horizontal) ratio.

I. Once each disposal pit begins to accept waste above grade, the pit freeboard (buffer) must be constructed and maintained to contain all contact stormwater that may be generated during a 25-year, 24-hour storm event for Upton County.

J. Once the waste height exceeds 50 feet, the side slopes may not exceed a one-to-four (vertical-to-horizontal) ratio.

K. No freestanding fluids may accumulate in any disposal pit with the exception of areas designed to contain contact stormwater. Any fluids must be removed within 72 hours of discovery and disposed of in an authorized manner.

L. The LDS must be monitored as required by Permit Condition IV.M. Records of leak detection system monitoring must be submitted in table form within the Quarterly Report required in Permit Condition I.T. The physical record must be maintained by
the permittee for the life of the pit. The physical record must be filed with the RRC upon request.

M. If the LDS indicates a possible liner system failure, the liner system must be inspected for deterioration and leaks within five days of the detection of the failure. The San Angelo District Office must be notified by phone or email within 24 hours of detection of the failure. No additional waste may be added to the affected Disposal Pit(s) in the event of a failure. After inspection, the identified failed component must be replaced or repaired and re-inspected by RRC personnel before resuming use of the pit(s). A liner system failure is defined as any of the following:

1. A volume withdrawn from the LDS that is greater than:

<table>
<thead>
<tr>
<th>PERMIT NO.</th>
<th>PHASE NAME</th>
<th>AREA (ACRES)</th>
<th>VOLUME (GPD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P012630A</td>
<td>Cell 1</td>
<td>25.50</td>
<td>2,550</td>
</tr>
<tr>
<td>P012630B</td>
<td>Cell 2</td>
<td>10.30</td>
<td>1,030</td>
</tr>
<tr>
<td>P012630C</td>
<td>Cell 3</td>
<td>9.90</td>
<td>990</td>
</tr>
<tr>
<td>P012630D</td>
<td>Cell 4</td>
<td>10.90</td>
<td>1,090</td>
</tr>
<tr>
<td>P012630E</td>
<td>Cell 5</td>
<td>5.10</td>
<td>510</td>
</tr>
<tr>
<td>P012630F</td>
<td>Cell 6</td>
<td>11.00</td>
<td>1,100</td>
</tr>
<tr>
<td>P012631A</td>
<td>Cell 7</td>
<td>10.10</td>
<td>1,010</td>
</tr>
<tr>
<td>P012631B</td>
<td>Cell 8</td>
<td>6.50</td>
<td>650</td>
</tr>
</tbody>
</table>

2. Any failure in the leak detection and return system or any component thereof.

3. Any detected damage to or leakage from the secondary liner.

N. Leachate collected in the leachate collection sump must be removed through the leachate removal pipe and disposed of in an authorized manner.

O. The RRC reserves the right to require necessary design modifications prior to capping and closure to ensure that the waste is stabilized above grade. Prior to receiving waste at 50-foot intervals above grade, a stabilization geotextile may be required to provide increased tensile strength to stabilize the compacted waste.

P. The permittee must notify the San Angelo District Office and Technical permitting in Austin each time the waste height exceeds the 50-foot interval above grade.

Q. Unless otherwise required by conditions of this permit, construction, use, and maintenance of each pit must be in accordance with the information represented in the permit application and attachments thereto.

VIII. Disposal Pit (P012686) Closure and Capping

A. Final closure and capping for the Disposal Pit must be consistent with the application details, the schematics provided in Permit Appendix F, Permit Appendix G, Permit Appendix H and the “Final Cover” (Drawing No. 2), the “Final Cover N-S X-Sections” (Drawing No. 4), the “Final Cover W-E X-Sections” (Drawing No. 5), the “Final Cover N2-S2 X-Sections” (Drawing No. 6), the “Final Cover W2-E2 X-Sections” (Drawing No. 7) schematics, received on August 1 2019, which are attached as Permit Appendix I.
B. After the disposal pits have reached the permitted capacity:
   1. Waste material in the disposal pit must be compacted and stabilized so that the structure will not fail, slump or erode. The RRC reserves the right to require necessary design modifications to increase tensile strength prior to capping and closure to ensure that the waste is stabilized above grade.
   2. Waste material in the disposal pit must be graded, stabilized, compacted and contoured so that rainwater will not collect on top of the pit.
   3. The final cap must consist of (from bottom-to-top) 6-inches of intermediate cover, overlain by 12-inches of compacted clay, overlain by a 40-mil LLDPE liner, overlain by a 200-mil drainage layer, overlain by 18 inches of soil cover seeded with appropriate vegetation for the region.

C. Unless otherwise required by conditions of this permit, final closure of the disposal pits must be consistent with the details as presented in the application. Any modification to the closure or final capping for the Disposal Pit must be submitted and approved by Technical Permitting prior to the modification occurring.

IX. Stormwater Management

A. The construction of the stormwater management structures must be consistent with the "Waste Management Units & Equipment" (Drawing No. 2) schematic provided in Permit Appendix A and the "Facility Berm and Drainage Details" (Drawing No. 34) schematic provided in Permit Appendix H.

B. All above-ground storage tanks must be contained within dikes. Dikes must be constructed and maintained at a minimum to contain the largest tank’s maximum capacity, plus freeboard to contain a 25-year, 24-hour storm event volume for Upton County.

C. Contact stormwater must be contained within each active waste management unit. All contact stormwater must be removed and disposed of in an authorized manner.

D. Berms and other containment structures must be constructed around all waste management units and storage areas. These structures must be used to divert non-contact stormwater around the waste management areas, and isolate and contain contact stormwater within the waste management units.

E. If contact storm water enters a Non-Contact Stormwater Retention Pond the permittee must submit a written report detailing the event to Technical Permitting in Austin before disposing of the contents of the pond. Contact storm water must be removed and disposed of in an authorized manner.

F. A discharge permit from the EPA may be required for non-contact stormwater discharges. If required, the permit from the EPA must be in place prior to commencement of discharge operations.
X. Facility Closure

A. Technical Permitting and the San Angelo District Office must be notified in writing at least 45 days prior to commencement of all facility closure activities. Technical Permitting must be notified if any changes will be made to the closure plan.

B. At facility closure, all waste, chemicals, and waste-related materials must be processed and removed from the facility for authorized reuse or disposed of in an authorized manner.

C. All processing equipment, above-ground storage tanks, and any other non-maintenance related equipment must be cleaned and removed from the facility. The contents of all tanks, vessels, pits, or other containers must be disposed of in an authorized manner.

D. Provisions must be taken to prevent erosion both during and following site closure.

E. Excluding the Disposal Pits and the Non-Contact Stormwater Retention Pond, the entire facility must be backfilled as necessary, contoured to original grade and re-vegetated as appropriate for the geographic region.

F. Closure of the Waste Separation Area, Unloading Area, Wash Unit, Collecting/Receiving Pit (*P012628*), Collecting/Drying Pit (*P012629*), Mechanical Processing Unit, Collecting/Staging Pit (*P012764*), Truck Pad, Collecting/Receiving Pit (*P012877*), Collecting/Drying Pit (*P012878*) and Collecting/Drying Pits (*P012784A, P012784B and P012784C*) must be as follows:

1. The pits must be dewatered, emptied, demolished, backfilled, compacted, and properly closed. All wastes, including clay or synthetic liners, must be removed and disposed of in an authorized manner.

2. The concrete areas, pits, concrete pads, washout bays and access roads must be cleaned and demolished, and the concrete rubble and wash-water must be disposed of in an authorized manner. All visually contaminated soils must be excavated and removed. The contaminated soil must be disposed of in an authorized manner.

3. Once waste removal is completed, a soil sampling plan must be submitted to Technical Permitting to characterize the scope of contamination (if any) at the facility. After the removal of wastes, composite soil samples must be taken comprised of a minimum of four representative soil samples per former pit location, and five representative soil samples per acre. Samples must be taken from around and underneath the Waste Separation Area, the Unloading Area, the Wash Unit, the Collecting/Receiving Pits, the Collecting/Drying Pits, the Mechanical Processing Unit, the Collecting/Staging Pit, and the Truck Pad.

4. Soil samples must be analyzed for the parameters listed in Permit Condition X.G., and the specified limitations must not be exceeded.

5. Any soil sample that exceeds the parameter limitations specified in Permit Condition X.G. is considered waste and must be disposed of at an authorized disposal facility.
G. Soil samples must be analyzed for the following parameters and not exceed the corresponding constituent limitations:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6 to 10 standard units</td>
</tr>
<tr>
<td>EPA Method 9045C</td>
<td></td>
</tr>
<tr>
<td>Electrical Conductivity (EC)</td>
<td>≤ 4.0 mmhos/cm or background, if established</td>
</tr>
<tr>
<td>Louisiana Dept. of Natural Resources Lab Procedures for Analysis of Exploration &amp; Production Waste or equivalent</td>
<td></td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbon (TPH)</td>
<td>&lt; 10,000 mg/kg or 1% by weight</td>
</tr>
<tr>
<td>Method 5035A/TX1005</td>
<td></td>
</tr>
<tr>
<td>Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)</td>
<td>≤ 30 mg/kg</td>
</tr>
<tr>
<td>EPA Method 5035A/8021/8260B</td>
<td></td>
</tr>
<tr>
<td>Metals (Total)</td>
<td></td>
</tr>
<tr>
<td>EPA Method 6010/6020/7471A</td>
<td></td>
</tr>
<tr>
<td>Arsenic</td>
<td>≤ 10 mg/kg</td>
</tr>
<tr>
<td>Barium</td>
<td>≤ 10,000 mg/kg</td>
</tr>
<tr>
<td>Cadmium</td>
<td>≤ 10 mg/kg</td>
</tr>
<tr>
<td>Chromium</td>
<td>≤ 100 mg/kg</td>
</tr>
<tr>
<td>Lead</td>
<td>≤ 200 mg/kg</td>
</tr>
<tr>
<td>Mercury</td>
<td>≤ 10 mg/kg</td>
</tr>
<tr>
<td>Selenium</td>
<td>≤ 10 mg/kg</td>
</tr>
<tr>
<td>Silver</td>
<td>≤ 200 mg/kg</td>
</tr>
</tbody>
</table>

H. A summary of the soil sampling required by Permit Condition X.F.3. must include:
1. A map drawn to scale with coordinates of the sampling locations
2. A table indicating the results of the parameters sampled
3. The date of sampling
4. The approximate depth of the sample below land surface
5. Copies of the laboratory analytical reports and chain of custody

I. Once the results of the closure activities have been approved by the RRC, all pits, excluding the Disposal Pits, must be dewatered, emptied, demolished, backfilled and compacted within 120 days of final cessation of use of each pit. Final surface grading of the pits and the storage tank battery areas must be accomplished in such a manner that rainfall will not collect at these former locations. Upon final closure, the San Angelo District Office and Technical Permitting in Austin must be notified in writing.

XI. Post-Closure Care and Monitoring

A. In accordance with 16 TAC § 3.78 the permittee must maintain financial security in the amount of $2,321,669.00 after the facility has stopped receiving waste and met all specified closure requirements. Technical Permitting reserves the right to revise this
amount, as necessary. Prior to closure, an updated post-closure cost estimate must be submitted to Technical Permitting in Austin, and any additional financial security must be filed with and approved by the RRC before the operating financial security referenced in Permit Condition I.C. will be released.

B. The site will be monitored for a period of no less than five years after closure of the facility.

C. Any areas showing signs of erosion or instability must be repaired, contoured, backfilled, and reseeded as necessary.

D. Once the facility is no longer in operation, the stormwater must be handled in a manner that is consistent with the information submitted with the application.

E. Post-closure care must include quarterly inspections of the entire facility by a Texas registered Professional Engineer for signs of deterioration and erosion.

F. The LDS and the leachate collection system for the Disposal Pits must be maintained and monitored at least quarterly. Any leachate detected must be removed and disposed of in an authorized manner.

G. A summary of the results of the post-closure monitoring activities must be submitted to Technical Permitting in Austin as part of a Quarterly Report required in Permit Condition I.T.

H. The permittee must request in writing permission to cease post-closure monitoring. Post-closure monitoring requirements may be extended by Technical Permitting based on the monitoring results.

This authorization is granted subject to review and cancellation should investigation show that such authorization is being abused.

APPROVED AND ISSUED ON February 14, 2020

Tiffany Humberson, Manager
Environmental Permits & Support
Technical Permitting
Notes:

1. Amended the Disposal Pit capacities

cc: RRC – District 7C, San Angelo
    RRC – Production Audit, Austin
PERMIT APPENDIX A

SITE LAYOUT
(Drawing No. 1)

WASTE MANAGEMENT UNITS & EQUIPMENT
(Drawing No. 2)
I 750 bbl CONTACT WATER TANK FARM
(SEE DETAIL DWG 24)

PROPOSED GATE
30' FACILITY ACCESS ROAD

4' WIDE FLAT-BOTTOM
STORMWATER DRAINAGE CHANNEL

COLLECTING / RECEIVING PIT
CN-012628
DRYING SLAB
CN-012628

WASH UNIT

24" CMP W/ END SECTIONS

24' TRUCK PAD
(SEE DETAIL DWG 21)

LEGEND
Existing 5' Contours
Existing 1' Contours
Cell Boundaries
Lease Boundary
Facility Area
Proposed 5' Top of Subgrade Contours
Proposed 1' Top of Subgrade Contours
Existing Buildings
Existing Lease Roads
Underground Polyline
Overhead Powerline
Water Well
Gas Well
Proposed Pipe and Units
Radii

EXISTING ACCESS ROAD

PROPOSED SCALE HOUSE

30' FACILITY ACCESS ROAD

4' WIDE FLAT-BOTTOM
STORMWATER DRAINAGE CHANNEL

MAN CAMP

NON-CONTACT STORMWATER POND

LIQUID WASTE SEPARATION UNIT
MECHANICAL PROCESSING UNIT
PERMIT APPENDIX B

WASTE SEPARATION FACILITY LAYOUT PLAN
(Attachment 3.F.1)

MECHANICAL PROCESSING UNIT LAYOUT
(Attachment 3.G.1)

TRUCK PAD DETAILS
(Drawing No. 39)

DRYING PADS
(Drawing No. 29)
MECHANICAL PROCESSING AREA TANK/PIT/EQUIPMENT TABLE

<table>
<thead>
<tr>
<th>TANK/PIT ID</th>
<th>USE</th>
<th>CAPACITY (BARRELS)</th>
<th>CONTENTS</th>
<th>MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAGING AREA 1</td>
<td>STORAGE</td>
<td>267</td>
<td>E&amp;P OIL, AND GAS WASTE SOLIDS</td>
<td>CONCRETE</td>
</tr>
<tr>
<td>STAGING AREA 2</td>
<td>STORAGE</td>
<td>267</td>
<td>E&amp;P OIL, AND GAS WASTE SOLIDS</td>
<td>CONCRETE</td>
</tr>
<tr>
<td>THERMAL DESORPTION UNIT</td>
<td>PROCESSING</td>
<td>487</td>
<td>E&amp;P OIL, AND GAS WASTE SOLIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>EFFLUENT TANK 1</td>
<td>STORAGE</td>
<td>39</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>MILKING TANK 1</td>
<td>STORAGE</td>
<td>500</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>HOLDING TANK 1</td>
<td>STORAGE</td>
<td>500</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>SHAKER TANK 1</td>
<td>STORAGE</td>
<td>500</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>SHAKER TANK 2</td>
<td>STORAGE</td>
<td>500</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>SHAKER 1</td>
<td>PROCESSING</td>
<td>9</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>SHAKER 2</td>
<td>PROCESSING</td>
<td>9</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>SHAKER 3</td>
<td>PROCESSING</td>
<td>9</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>SHAKER 4</td>
<td>PROCESSING</td>
<td>9</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>SHAKER 5</td>
<td>PROCESSING</td>
<td>9</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>SHAKER 6</td>
<td>PROCESSING</td>
<td>9</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
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<tr>
<td>SHAKER 7</td>
<td>PROCESSING</td>
<td>9</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>SHAKER 8</td>
<td>PROCESSING</td>
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<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
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<tr>
<td>CENTRIFUGE 1</td>
<td>PROCESSING</td>
<td>1</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>ROLLOFF CONTAINER 1</td>
<td>STORAGE</td>
<td>150</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>ROLLOFF CONTAINER 2</td>
<td>STORAGE</td>
<td>150</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>ROLLOFF CONTAINER 3</td>
<td>STORAGE</td>
<td>150</td>
<td>E&amp;P OIL, AND GAS WASTE FLUIDS</td>
<td>STEEL</td>
</tr>
<tr>
<td>CONFLUX 1</td>
<td>STORAGE</td>
<td>11.4</td>
<td>CONTACT STORM WATER</td>
<td>CONCRETE</td>
</tr>
<tr>
<td>CONFLUX 2</td>
<td>STORAGE</td>
<td>11.4</td>
<td>CONTACT STORM WATER</td>
<td>CONCRETE</td>
</tr>
</tbody>
</table>

WASTE REDECK STAGING AREA
PRODUCED SOLIDS STORAGE BULK
CENTRIFUGE STAND
CENTRIFUGE

NOTE: GENERALIZED LAYOUT BASED ON PROFORMA EQUIVALENT, LAYOUT MAY CHANGE TO ACCOMMODATE CONFIGURATION OF ACTUAL SELECTED EQUIPMENT.

MECHANICAL PROCESSING UNIT LAYOUT
MILESTONE ENVIRONMENTAL SERVICES, LLC.
349 SOUTH E&P DISPOSAL FACILITY
RANKIN, UPTON COUNTY, TEXAS

HANSON NO. 16018MA ATTACHMENT 3G.1
Notes:
1. Contraction joints are spaced at 17' 6" centers on the floors.
2. Wall Details represent interior and exterior walls.
3. Floor of Collection Pits have 0% grade.
PERMIT APPENDIX C

WASTE SEPARATION FACILITY CROSS SECTIONS
(Attachment 3.F.2)

WASTE SEPARATION FACILITY CROSS SECTIONS
(Attachment 3.F.3)
PERMIT APPENDIX D

MECHANICAL PROCESSING UNIT CROSS SECTIONS
(Attachment 3.G.2)
PERMIT APPENDIX E

TRUCK PAD DETAILS (2)
(Drawing No. 40)
PERMIT APPENDIX F

DRYING PADS S-S' X-SECTION
(Drawing No. 30)

DRYING PADS T-T' X-SECTION
(Drawing No. 31)

ACCESS ROAD, FINAL COVER & DRYING PAD DETAILS
(Drawing No. 35)
S-S' Profile

Station

Elevation (FT)

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00

2770
2760
2750
2740

EXISTING GROUND
SEGMENTATION BERM
SEGMENTATION BERM
TOP OF SACRIFICIAL SOIL LAYER

SCALE: 1"=100'

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CELL 1A
(Drawing No. 8)

CELL 1A A-A' & B-B' PROFILES
(Drawing No. 9)

CELL 1B
(Drawing No. 10)

CELL 1B C-C' & D-D' X-SECTIONS
(Drawing No. 11)

CELL 2
(Drawing No. 12)

CELL 2 E-E' X-SECTION
(Drawing No. 13)

CELL 2 F-F' X-SECTION
(Drawing No. 14)

CELL 3
(Drawing No. 15)

CELL 3 G-G' & H-H' X-SECTIONS
(Drawing No. 16)
CELL 4
(Drawing No. 17)

CELL 4 I-I' X-SECTION
(Drawing No. 18)

CELL 4 J-J' X-SECTION
(Drawing No. 19)

CELL 5
(Drawing No. 20)

CELL 5 K-K' & L-L' X-SECTIONS
(Drawing No. 21)

CELL 6
(Drawing No. 22)

CELL 6 M-M' X-SECTION
(Drawing No. 23)

CELL 6 N-N' X-SECTION
(Drawing No. 24)

CELL 7
(Drawing No. 25)

CELL 7 O-O' & P-P' X-SECTIONS
(Drawing No. 26)

CELL 8
(Drawing No. 27)

CELL 8 Q-Q' & R-R' X-SECTIONS
(Drawing No. 28)
PERMIT APPENDIX H

LANDFILL SUMP DETAILS
(Drawing No. 32)

LANDFILL SUMP DETAILS (2)
(Drawing No. 33)

FACILITY BERM AND DRAINAGE DETAILS
(Drawing No. 34)
**LANDFILL LINER SYSTEM (TYP.)**

**GEOCOMPOSITE 60-MIL. HOPE (TEXTURED)**

802. FABRIC 2' PROTECTIVE SOIL LAYER

SDR11 12" HOPE PIPE

8 OZ. FABRIC

60-MIL. HOPE (TEXTURED)

GEOSYNTHETIC CLAY LINER (NON-WOVEN SIDE UP)

DISPOSAL CELL SUMP

NOTES:
1. SUMP PUMPS WILL BE AVAILABLE TO EVACUATE LEAK IN SUMPS.
2. WHERE GEONET MEETS 8 OZ. FABRIC IN SUMP BOTTOM, OVERLAP GEONET A MINIMUM OF 2' ON TOP OF 8 OZ. FABRIC.
3. INSIDE OF SUMP RISER PIPE TO BE DEBEADED

**GEOCOMPOSITE 60-MIL. HOPE (TEXTURED)**

12" ADS OBLONG PERFORATED LEAK COLLECTION PIPE

DISPOSAL CELL COLLECTION PIPE

PERFORATED PIPE

NOT TO SCALE

NOTES:
1. HOLE DIAMETER IS 0.5 INCH.
2. APPLY TO SDR11 12" HOPE & 6" HOPE PERFORATED PIPE

**L scheme**

60-MIL HOPE GASKET

GEOMEMBRANE RUB SHEET

60-MIL HOPE BOOT

EXTRUSION WELD (TYP.)

CLOSED CELL NEOPRENE FOAM Gasket WITH GLUED TAPERED BUTT BEAM

GEOCOMPOSITE 60-MIL HOPE (TEXTURED)

60-MIL HOPE (TEXTURED)

LINER BOOT SECTION

NOT TO SCALE

NOTES:
1. LINER PIPE BOOT TO BE INSTALLED AT EDGE OF LANDFILL WHERE LEAK DETECTION PIPE PENETRATES PRIMARY LINER LAYER WHERE LINER MEETS THE CELL CRESTM PION TO THE ANCHOR TRENCH.

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2019
CROSS SECTION BB-BB'

NOT TO SCALE

NOTE:
1. SEE MANUFACTURER'S RECOMMENDATION

CROSS SECTION CC-CC'

NOT TO SCALE

NOTE:
1. MOUNT CONTROL PANEL USING MANUFACTURER'S RECOMMENDATION.
During construction of adjacent cell, pull back soil and expose plywood, remove plywood and cut away any damaged liner, weld new cell liner system to existing liner system. Begin new geomembrane layer to be tied into in next completed cell.

Disposal Cell Separation Berm

Disposal Cell Stormwater Berm

Stormwater Drainage Channel

S 19

T 19

U 19

NOT TO SCALE
PERMIT APPENDIX I

FINAL COVER
(Drawing No. 2)

FINAL COVER N-S X-SECTIONS
(Drawing No. 4)

FINAL COVER W-E X-SECTIONS
(Drawing No. 5)

FINAL COVER N2-S2 X-SECTIONS
(Drawing No. 6)

FINAL COVER W2-E2 X-SECTIONS
(Drawing No. 7)