PERMIT TO RECEIVE, STORE, HANDLE, TREAT, AND DISPOSE OF CERTAIN NONHAZARDOUS OIL AND GAS WASTES

AMENDED
Permit Nos. STF-0113, P012402A, P012402B, P012402C, P012403, P012404, P012405, P012406, P012407, P012408, P012409, P012410, and P012411
Supersedes Permit Dated June 14, 2019

R360 ENVIRONMENTAL SOLUTIONS OF TEXAS, LLC
3 WATERWAY SQUARE PLACE STE 550
THE WOODLANDS, TX 77380

Based on information contained in the original application received October 26, 2017 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:

Pecos Facility
Commercial Oil & Gas Waste Treatment and Disposal Facility
H&GN RR CO Survey, Section 86, A-4948
Latitude, Longitude: 31.268440°, -102.895300°
Pecos County, Texas
RRC District 08, Midland

NARRATIVE DESCRIPTION OF PROCESS:

Incoming oil and gas waste is offloaded at one of several areas of the facility depending on the liquid content and composition of the waste. Liquids will be collected and pumped to the Collecting Pit (P012403) for evaporation of water or to the tank battery for disposal by injection at the on-site RRC-permitted Class II injection well.

The Collecting/Staging Pits (P012404, P012405, and P012406) will also be used for receiving and separating wet wastes. The liquid component will be collected and conveyed to the injection well or transferred to the Collecting Pit. The Collecting/Treatment Pits (P012407, P012408, and P012409) will be used to receive incoming loads of solid wastes and accumulated solids, which require additional drying prior to placement into the active on-site Disposal Pits (P012402A, P012402B and P012402C).

The Truck Washout Area consists of eight wash bays and the Washout Pit Trench (P012410) that gravity drains to the Washout Pit Sump (P012411). The liquid wastes are pumped to the storage tanks prior to disposal at the on-site RRC-permitted Class II injection well.
Authority is granted by the Railroad Commission of Texas (RRC) to receive, store, handle, treat, recycle, and dispose of oil and gas wastes in accordance with Texas Administrative Code (TAC) Title 16, Part 1, Chapter 3.8 (Statewide Rule 8) and is subject to the following minimum conditions:

I. General Permit Conditions

A. This permit is effective **April 29, 2020** and expires **June 13, 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 **$12,145,430.00** is provided for and approved by the RRC for the referenced location. This amount provides financial security for the RRC-permitted Waste Storage and Treatment Units as specified in this permit.

C. In accordance with 16 TAC § 3.78 the permittee shall maintain financial security in the amount of **$12,145,430.00** until this facility and all of the referenced Permit Nos: STF-0113, P012402A, P012402B, P012402C, P012403, P012404, P012405, P012406, P012407, P012408, P012409, P012410, and P012411 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 facility until the groundwater monitoring wells required by Permit Condition X. of this permit have been completed, developed and sampled. The documentation required by Permit Conditions X.A. and X.C. must be provided to and approved by Technical Permitting within 30 days after installation of groundwater monitoring wells.

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 upon request of the RRC.

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

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

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

I. Technical Permitting in Austin and the Midland District Office must be notified in writing when construction of the facility is initiated and with the completion of each disposal cell.
J. 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.

K. An On-Site Sewage Facility (OSSF) may be constructed, operated, and maintained within the boundaries of this 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 Professional Engineer registered in the state of Texas 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.

L. Any deviation from this permit must be approved by amendment from Technical Permitting in Austin before implementation.

M. Any soil additives, stabilizers, bioaccelerators or treatment chemicals must be approved by Technical Permitting prior to use at the facility.

N. 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.

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

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

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

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

S. The permittee must submit a Quarterly Report in accordance with the following:

1. The report must contain applicable information required in Permit Conditions III.H., IV.K., IV.L., IV.M., VIII.F., VIII.L., X.D., and XII.G.

2. The quarterly reporting periods shall 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 in Austin and the appropriate 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 that describes facility operations and relevant activities that occurred during the specific quarter must be included.

5. Data tables presenting volumes or amounts of waste received, treated, and disposed of must be included.

6. Laboratory analytical reports, the corresponding chain of custody, and other relevant data must be included.

T. Failure to comply with any provision of this permit or any determination by the RRC that this permit is being abused will cause for enforcement action including, but not limiting to, modification, suspension, or termination of this permit in accordance with 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, process, 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. Production tank bottoms, which do not exceed 7% in oil content as determined by a Standard API Shakeout
4. Contaminated soils from crude oil and condensate spills, pipeline, and saltwater spills
5. Hydraulic fracturing flow-back water and associated solids including sand
6. Formation sands and other solids from saltwater storage tanks or vessels and saltwater pits
7. Waste solids resulting from crude oil reclamation
8. Solid waste from gas dehydration and sweetening (spent filters and filter media, molecular sieves, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber sludge)
9. Iron sulfide, which has been fully oxidized
10. Absorbent pads from crude oil spills
11. Liners from reserve pits and washout pits
12. Spent well completion, treatment, and stimulation fluids
13. Inert wastes as defined by Statewide Rule 8 such as uncontaminated concrete or wood
14. 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 disposed of at the facility without written authorization from the RRC.
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 to handle, 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 biphenyl (PCB)-containing material regulated under the Toxic Substances Control Act may be accepted for processing at the facility.

F. All waste haulers received at the facility must be RRC permitted 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 comply 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 and Reclamation Plants 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) (EPA Method 9020B)</td>
<td>100 mg/L</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Extractable Organic Halides (EOX) (EPA Method 9023)</td>
<td>100 mg/kg</td>
</tr>
</tbody>
</table>
Special authorization for receipt of waste with an EOX/TOX >100 parts per million may be considered. Authority must be obtained from Technical Permitting in Austin prior to accepting the waste.

E. Prior to receipt at the site, representative samples of incoming RCRA non-exempt waste or international waste must be analyzed for the following parameters and may not exceed the specified limitations:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosivity (&lt;EPA method 1110A/9040C or equivalent&gt;)</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 (&lt;EPA method 1010A/1020B/1030A&gt;)</td>
<td>Flash point &lt; 60° C or 140°F</td>
</tr>
<tr>
<td>Toxicity (&lt;EPA Method 1311&gt;)</td>
<td>No materials exhibiting the characteristics of toxicity as defined by RCRA</td>
</tr>
<tr>
<td>Metals: Toxic Characteristic Leaching Procedure (TCLP) (&lt;EPA Method 1311/6010/6020/7147A&gt;)</td>
<td></td>
</tr>
<tr>
<td>Arsenic</td>
<td>&lt; 5.0 mg/L</td>
</tr>
<tr>
<td>Barium</td>
<td>&lt; 100.0 mg/L</td>
</tr>
<tr>
<td>Cadmium</td>
<td>&lt; 1.0 mg/L</td>
</tr>
<tr>
<td>Chromium</td>
<td>&lt; 5.0 mg/L</td>
</tr>
<tr>
<td>Lead</td>
<td>&lt; 5.0 mg/L</td>
</tr>
<tr>
<td>Mercury</td>
<td>&lt; 0.2 mg/L</td>
</tr>
<tr>
<td>Selenium</td>
<td>&lt; 1.0 mg/L</td>
</tr>
<tr>
<td>Silver</td>
<td>&lt; 5.0 mg/L</td>
</tr>
<tr>
<td>Benzene (&lt;EPA Method 1311/8260B/8021&gt;)</td>
<td>&lt; 0.5 mg/L</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 American Petroleum Institute (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 (specify units)
IV. General Facility Design and Maintenance Requirements

A. The general layout and arrangement of the facility must be consistent with the “Site Plan with Monitoring Wells” (Drawing 3) schematic received October 12, 2018, which is attached to and incorporated into this permit 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. Truck Washout Area:
      a. Eight (8) Wash Bays
      b. Washout Pit Trench (P012410) and Washout Pit Sump (P012411)
      c. One (1) 300-bbl Oil Tank
      d. Three (3) 300-bbl Water Tanks
      e. One (1) 500-bbl Gun Barrel
   2. Three (3) Collecting/Staging Pits (P012404, P012405, and P012406)
   3. Three (3) Collecting/Treatment Pits (P012407, P012408, and P012409)
   4. Collecting Pit (P012403)
   5. Disposal Pits (P012402A, P012402B and P012402C)
   6. Non-Contact Stormwater Retention Pond

D. No waste, treated or untreated, may be directly placed 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, roll-off box or storage vessel reveals deterioration or leaks, it must be replaced or repaired before resuming use of the vessel.

F. Any spill of waste, chemicals, or any other waste related material must be collected and containerized within 24 hours and conveyed through the treatment process 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 that particular compound 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 XI.

I. The facility must maintain security to prevent unauthorized access. Access must be secured by a 24-hour attendant or a six-foot-high security fence and locked gate when unattended. Fencing is required unless terrain or vegetation prevents truck 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 liquid waste must be skimmed off and handled in accordance with RRC
rules. Recovered oil must be reported on 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) must still be filed with the RRC.

OR

2. An original signed “Letter of Authority Request for Oil Movement” (Form T-1) must 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 the following:
   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
   d. Name and location of the facility which oil will be moved
   e. Name, address, telephone, and fax number of 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 integrity inspection of the entire facility must be performed on all concrete slabs, processing equipment, dikes, firewalls or berms, and aboveground storage tanks 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.S:

1. The results of the monthly inspection of concrete slabs within the facility for evidence of deterioration, leakage, or lack of structural integrity, 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 erosion structures 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.S. The Midland 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.S. 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 Conditions VI.K.1. and VIII.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. Truck Washout Area, Washout Pit Trench (P012410), Washout Pit Sump (P012411), Collecting/Staging Pits (P012404, P012405, and P012406) and Collecting/Treatment Pits (P012407, P12408, and P12409) Construction and Operation

A. The general layout and arrangement of the truck washout area, the Washout Pit Trench (P012410), the Washout Pit Sump (P012411), the Collecting/Staging Pits (P012404, P012405 and P012406) and the Collecting/Treatment Pits (P012407, P12408 and P12409) must be consistent with the schematic provided in Permit Appendix A.

B. A sign must be posted at each pit identifying each pit number in letters and numerals at least three (3) inches in height.

C. At least two (2) feet of freeboard must be maintained between the top of the waste in the pits and the top of the pit walls.

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

E. Unless otherwise required by conditions of this permit, construction, use, and maintenance of the pit must be in accordance with the information represented on the application (Form H-11) and attachments thereto.
F. TRUCK WASHOUT AREA, WASHOUT PIT TRENCH (P012410) AND WASHOUT PIT SUMP (P012411)

1. The general layout and arrangement of the truck washout area, the Washout Pit Trench (P012410), and the Washout Pit Sump (P012411) must be consistent with the “Truck Washout Plan” (Drawing 5), the “Tank Farm” (Drawing 5A), the “Truck Washout Cross Sections” (Drawing 6), and the “Truck Washout Cross Sections” (Drawing 6A) schematics received October 12, 2018, which are attached and incorporated into this permit as Permit Appendix B.

2. Use of the pits is limited to the collection of non-hazardous oil and gas waste as specified in Permit Condition II and the collection of rinsate and residual solids generated 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 pits.

3. The Washout Pit Trench (P012410) must have dimensions of approximately 174 feet by 8 feet by 4 feet deep. The useable capacity for the pit must not exceed 383 bbl or 80 cubic yards.

4. The Washout Pit Sump (P012411) must have dimensions of approximately 20 feet by 9 feet by 5 feet deep. The useable capacity for the pit must not exceed 128 bbl or 27 cubic yards.

5. The truck wash area and pits 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 Washout Pit Trench must be sloped to allow fluids to drain to the Washout Pit Sump.

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

G. COLLECTING/STAGING PITS (P012404, P012405, AND P012406)

1. The general layout and arrangement of the Collecting/Staging Pits (P012404, P012405 and P012406) must be consistent with the “Staging Cells Plan” (Drawing 7) schematic received October 12, 2018; and the “Staging Cells Sections and Details” (Drawing 8) and “Staging Cells Sections and Details” (Drawing 8A) schematics received April 24, 2019, which are attached to and incorporated into this permit as Permit Appendix C.

2. Use of the pits is limited to the collection of non-hazardous oil and gas waste as specified in Permit Condition II. No other oil field fluids or oil and gas wastes may be stored or staged in the pits.

3. The pits must each have dimensions of approximately 300 feet by 95 feet by 9 feet deep. The useable capacity for each pit must not exceed 22,847 bbl or 4,750 cubic yards.

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 with six (6) inches of reinforced concrete, overlain with a ½-inch mild steel liner.

5. The floor of the pit must be sloped to allow fluids to drain to the sump.
6. Solid waste that accumulates at the bottom of the pit shall be removed regularly to maintain freeboard.

H. COLLECTING/TREATMENT PITS (P012407, P012408, AND P012409)

1. The general layout and arrangement of the Collecting/Treatment Pits (P012407, P012408, and P012409) must be consistent with the “Treatment Cells Plan” (Drawing 9), the “Treatment Cells Cross Sections” (Drawing 10), and the “Treatment Cells Cross Sections” (Drawing 10A) schematics received October 12, 2018, which are attached to and incorporated as part of this permit as Permit Appendix D.

2. Use of the pits is limited to the collection of non-hazardous oil and gas waste as specified in Permit Condition II. No other oil field fluids or oil and gas wastes may be stored or staged in the pits.

3. The pits must be contained within berms above grade and have dimensions of approximately 392 feet long by 232 feet wide each.

4. Each pit must be surrounded by an earthen berm at least four (4) feet in height that meets the requirements outlined in Permit Condition IV.H.

5. At least two (2) feet of horizontal freeboard must always be maintained between the edge of waste in the treatment cell and the toe of the pit dikes.

6. A maximum two-foot layer of waste material with a maximum volume of 35,826 bbl or 7,450 cubic yards, may be placed in each pit. This waste material will be dried and then removed for disposal or further processing prior to the placement of any additional waste to the pit.

7. 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 60-mil HDPE liner, overlain with at least three (3) feet of protective cover. The protective layer will be soils, free of debris, or select wastes that have been dewatered, dried, and stabilized.

8. The floor of the pits must be sloped to collect fluids at the low point of the pit. Accumulation of free liquids in the pits is not authorized. Free liquids must be removed within 24 hours and disposed of in an authorized manner.

9. The waste material in the pits must be aerated at least once each week to promote drying.

10. Waste must not be applied to the pits during periods of rainfall.

I. Liquid waste accumulated within the pits shall be removed, as needed, to maintain freeboard. Liquid waste shall be transferred to the Collecting Pit (P012403) for further processing or disposed of in an authorized Class II injection well.

J. 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.

K. The liner systems must be installed and maintained in accordance with best management and sound engineering practices.
**VI. Collecting Pit (P-1: P012403) Construction and Operation**

A. The general layout and arrangement of the Collecting Pit (\textbf{P012403}) must be consistent with the “\textit{Disposal Cell & Water Management Pit Details}” (Drawing 20), the “\textit{Water Management Pit Plan}” (Drawing 21) and the “\textit{Water Management Pit Sections}” (Drawing 22) schematics received October 12, 2018, which are attached to and incorporated into this permit as \textbf{Permit Appendix E}.

B. Use of the pit is limited to the collection of non-hazardous oil and gas wastes as specified in Permit Condition II and contact stormwater. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.

C. A sign must be posted identifying the pit by name and permit number in letters and numerals at least three (3) inches in height.

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

E. The pit must have dimensions of approximately 855 feet by 379 feet by 16 feet deep. The useable capacity of the pit must not exceed \textbf{863,968 bbl} or 179,660 cubic yards.

F. The pit must be surrounded by an earthen berm at least four (4) feet in height that meets the requirements outlined in Permit Condition IV.H.

G. The pit 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, a 60-mil HDPE primary liner and a 60-mil secondary liner. A liner anchor trench must be used to key the liner system into the berm.

H. The pit must be equipped with a Leak Detection System (LDS), including a HDPE drainage layer with a thickness of at least 200-mil that extends over the entire pit between the primary and secondary liners to collect any leakage from the primary liner.

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

J. The floor of the pit must have at least a 1% slope to allow fluids to drain to the leak detection sump.

K. The LDS must be monitored as required by Permit Condition IV.M. The \textbf{RRC District Office must be notified by phone or email within 24 hours of the initial detection of the failure.} No additional waste shall be added to the pit in the event of a failure. After inspection, the identified failed component must be replaced or repaired and reinspected by RRC personnel before resuming use of the pit. A liner system failure is defined as any of the following:

1. A volume withdrawn from the LDS that is greater than the calculated ALR of \textbf{7,440 gallons per day}.

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.

L. If the volume withdrawn from the leak detection system exceeds the volume stated in Permit Condition VI.K. for 15 consecutive days or the weekly reported volume exceeds the volume stated in Permit Condition VI.K. at least once a month for three consecutive months, the appropriate District Office and Technical Permitting in Austin must be notified by phone or email within 24 hours of detection of the liner system failure. The
VII. Disposal Pit (P012402A, P012402B and P012402C) Construction

A. The general layout and arrangement of the Disposal Pits must be consistent with the “Disposal Cell & Water Management Pit Details” (Drawing 20) schematic in Permit Appendix E, and the “Disposal Cell 1 Excavation Plan” (Drawing 11), the “Disposal Cell 1 Cross Section” (Drawing 13), the “Disposal Cells 1 & 2 Excavation Plan” (Drawing 14), the “Disposal Cells 1 & 2 Cross Section” (Drawing 16), the “Disposal Cells Excavation Plan” (Drawing 17), the “Disposal Cells Final Cover Plan” (Drawing 18), and the “Disposal Cells Cross Section” (Drawing 19) schematics received October 12, 2018, which are attached to and incorporated as part of this permit as Permit Appendix F.

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

C. A sign must be posted identifying the Disposal Pit by name and permit number using letters and numerals at least three inches in height.

D. Earthen berms must be constructed to a minimum height of three (3) feet surrounding each disposal pit that meets the requirements outlined in Permit Condition IV.H.

E. The dimensions and the total capacities for each Disposal Pit must not exceed the following:

<table>
<thead>
<tr>
<th>Pit No.</th>
<th>Total Volume (bbl)</th>
<th>Total Volume (cu yd)</th>
<th>Length (ft)</th>
<th>Width (ft)</th>
<th>Depth Below Grade (ft)</th>
<th>Height Above Grade (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P012402A</td>
<td>4,473,032</td>
<td>930,156</td>
<td>1,850</td>
<td>395</td>
<td>19</td>
<td>112</td>
</tr>
<tr>
<td>P012402B</td>
<td>11,652,070</td>
<td>2,426,020</td>
<td>1,854</td>
<td>395</td>
<td>20</td>
<td>136</td>
</tr>
<tr>
<td>P012402C</td>
<td>13,516,690</td>
<td>2,810,762</td>
<td>1,855</td>
<td>374</td>
<td>20</td>
<td>113</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,166,938</strong></td>
<td><strong>1,150,941</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F. LINER, LEAK DETECTION, LEACHATE COLLECTION, AND UNDERDRAIN SYSTEMS FOR DISPOSAL PITS (P012402A, P012402B and P012402C)

1. The Disposal Pit 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 with a geosynthetic clay liner (GCL), overlain with a 60-mil HDPE studded secondary liner, overlain with a 60-mil HDPE primary liner, overlain with 12 inches of a protective soil layer that is **not** composed of waste.
2. Each pit must be equipped with a Leachate Collection System (LCS), including a HDPE drainage net with a thickness of at least 200 mils that covers the entire pit area on top of the primary liner, to collect any rainwater that falls within the pit footprint and leachate that percolates through the waste contained therein.

3. Each pit must be equipped with a Leak Detection System (LDS), which will consist of a HDPE drainage layer with a thickness of at least 200 mils that extends over the entire pit between the primary and secondary liners to collect any leakage from the primary liner.

4. Each pit must be equipped with a groundwater collection underdrain system including an 8-inch perforated pipe surrounded by crushed rock and wrapped in geotextile fabric to collect any seepage of groundwater underneath the secondary liner and GCL, as shown on the “Disposal Cells Excavation Plan” (Drawing 17) schematic in Permit Appendix F. The water collected beneath the pit must be tested to determine its source, as leakage water or groundwater. After testing, any leakage water must be managed as waste. If determined to be groundwater, the water may be pumped to an internal drainage ditch or to the non-contact stormwater pond.

5. The liners, LCS, LDS, and underdrain system 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 central collection trench and then flow to the sump at the low end of each cell.

G. A liner anchor trench must be used to key the synthetic liners for each cell to their respective berms. The liners must be welded together to create a continuous liner system when the next disposal pit is constructed.

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. 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.

VIII. Disposal Pit (P012402A, P012402B and P012402C) 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 the Disposal Pit in a manner that could exceed the financial security required by Permit Condition I.B.

C. All waste must pass a Paint Filter Test (EPA Method 9095) prior to placement in any disposal pit. The waste to be tested must be a representative sample of each load taken to the Disposal Pit.

D. Before the Permittee may begin excavation of the next Disposal Pit Cell in the sequence, the previous Disposal Pit Phase must be filled with waste to almost final grade height, and the exposed side abutting the next pit in the construction sequence must be properly graded and prepared to receive waste. Interim cover must be installed over the final outside slopes of each disposal cell as the next cell is opened. Interim cover must
consist of 12 inches of compacted clay 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, and must be graded to prevent ponding on top of the cover and inhibit infiltration of liquids into the wastes below.

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

F. 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.S. The physical record must be maintained by the permittee for the life of the pit.

G. The Permittee must contact the Midland District Office to proceed with construction of each Disposal Pit Cell in the sequence and may not begin accepting waste until;
   1. The Permittee has received approval from the District Office to begin accepting waste in the next Disposal Pit Cell in the sequence.
   2. Waste is no longer being accepted in the previous Disposal Pit Cell and the intermediate cover is almost completed.

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

I. Prior to the 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.

J. Once the 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 Pecos County.

K. No freestanding fluids may accumulate in any Disposal Pit. Any fluids must be removed within 72 hours of discovery and disposed of in an authorized manner.

L. The Leak Detection System (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.S. 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 RRC 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 Disposal Pit 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. A liner system failure is defined as any of the following:
   1. A volume withdrawn from the LDS that is greater than an Action Leakage Rate (ALR) of 100 gallons per acre day (GPAD), or 1,670 gallons per day (GPD) for each Disposal Pit.
   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 Midland 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 on the applications (Form H-11’s) and attachments thereto.

IX. Disposal Pit (P012402A, P012402B and P012402C) Closure and Capping

A. Final closure and capping for the Disposal Pit must be consistent with the application details and the “Disposal Cell 1 Cross Section” (Drawing 13), the “Disposal Cells 1 & 2 Cross Section” (Drawing 16), the “Disposal Cells Final Cover Plan” (Drawing 18), and the “Disposal Cells Cross Section” (Drawing 19) schematics in Permit Appendix F.

B. Once all 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 a minimum of a two-foot thick compacted clay layer placed on top of the compacted waste. The compacted clay layer must have a documented hydraulic conductivity of $1.0 \times 10^{-7}$ cm/sec or less. A HDPE liner with a thickness of at least 40 mils must be placed on top of the compacted clay layer. A 200-mil double sided geocomposite layer and 18 inches of on-site fill material that is compacted to at least 95% Standard Proctor (ASTM D698) or 90-92% Modified Proctor (ASTM D1557) density, overlain by 6 inches of top soil seeded with appropriate vegetation for the geologic region must be placed on top of the geocomposite.

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 Pits must be submitted and approved by Technical Permitting prior to the modification occurring.

X. Groundwater Monitoring

A. At least seven (7) monitor wells must be installed at the facility prior to receiving waste deliveries. The monitor wells are to be installed at the locations designated on the “Site Plan with Monitoring Wells” (Drawing 3) schematic included in Permit Appendix A.
1. The wells must be completed by a certified water well driller in accordance with 16 TAC Part 4, Chapter 76 (Water Well Drillers and Water Well Pump Installers).

2. The wells must be completed and penetrate the shallowest groundwater zone, and the completion must isolate that zone from any deeper groundwater zone.

3. The screened interval of the wells must be designed to intercept at least five feet of groundwater.

4. Provision must be made to protect the well heads from damage by vehicles and heavy equipment.

5. The wells must be watertight at the surface and fitted with a lockable watertight expansion cap.

6. The following information must be submitted after the wells are completed:
   a. A soil boring lithologic log for the well, with the soils described using the Unified Soil Classification System (equivalent to ASTM D 2487 and 2488). The log must also include the method of drilling, well specifications, slot size, riser and screen length, bentonite and cement intervals, total depth, and the top of the first encountered water or saturated soils. The sand pack size should be compatible with well screen and slot size, as well as the local lithology.
   b. A well installation diagram for each well detailing construction specifications for each well, including riser and screen length, screen slot size, bentonite, and cement intervals. The sand pack size should be compatible with the well screen slot size and the local lithology.
   c. A survey elevation for each well head reference point (top of casing) relative to a real or arbitrary on-site benchmark and relative to mean sea level.
   d. A potentiometric contour map showing static water levels and the estimated direction of groundwater flow and the calculated gradient.

B. The groundwater monitor wells must be able to provide a sample that is representative of the groundwater underlying the site for the duration of facility operations. If a monitor well is not capable of providing a representative sample, the permittee must notify Technical Permitting in Austin and install a replacement monitor well that is acceptable to the RRC. Additional groundwater monitoring wells may be required with future site development.

C. The groundwater monitor wells must be sampled or monitored for the following parameters after installation and quarterly thereafter:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static Water Level</td>
<td>Feet (ft)</td>
</tr>
<tr>
<td>Total Depth</td>
<td>ft</td>
</tr>
<tr>
<td>pH</td>
<td>s.u.</td>
</tr>
<tr>
<td><strong>EPA Method 150.1, 150.2, or equivalent</strong></td>
<td></td>
</tr>
<tr>
<td>Total Dissolved Solids (TDS)</td>
<td>mg/L</td>
</tr>
<tr>
<td><strong>Standard Method 160.1 or equivalent</strong></td>
<td></td>
</tr>
<tr>
<td>TPH</td>
<td>mg/L</td>
</tr>
<tr>
<td><strong>Method TX1005</strong></td>
<td></td>
</tr>
</tbody>
</table>
XI. Stormwater Management

A. The facility must be designed and constructed to capture, contain, and isolate contact stormwater, and prevent run-on of non-contact stormwater. A continuous perimeter berm must be installed as shown on the “Site Plan with Monitoring Wells” (Drawing 3) schematic included in Permit Appendix A. The perimeter berm must be constructed to a minimum height of at least two feet above grade and meet the requirements outlined in Permit Condition IV.H.

B. 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.

C. All storage tanks containing fluid waste or fuel 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 Pecos County.

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

E. Contact stormwater must be prevented from migrating outside of the waste processing and storage areas. The facility must be sloped to facilitate the separation of contact and non-contact stormwater.

F. Contact stormwater must be collected within 24 hours of accessibility and disposed of in an authorized manner.

G. If contact stormwater 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 stormwater must be removed and disposed of in an authorized manner.

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>mg/L</td>
</tr>
<tr>
<td><em>EPA Method 8260/8021B or equivalent</em></td>
<td></td>
</tr>
<tr>
<td>Soluble Cations: Calcium, Magnesium, Potassium, and Sodium</td>
<td>mg/L</td>
</tr>
<tr>
<td><em>EPA Method 6010/6020 or equivalent</em></td>
<td></td>
</tr>
<tr>
<td>Soluble Anions: Bromides, Carbonates, Chlorides, Nitrates, and Sulfates</td>
<td>mg/L</td>
</tr>
<tr>
<td><em>EPA Method 300/9056 or equivalent</em></td>
<td></td>
</tr>
</tbody>
</table>

D. Copies of the monitoring-well gauging and sampling event data must be filed quarterly with Technical Permitting and the Midland District Office as part of the Quarterly Report required in Permit Condition I.S. The laboratory analytical reports and the corresponding chain of custody must be provided for all chemical analyses performed.

E. If any of the parameters listed in Permit Condition X.C. shows potential impacts from operations at the facility, or if a liner system failure as defined under Permit Conditions VI.K and VIII.M. occurs, Technical Permitting reserves the authority to initiate an appropriate sampling frequency.
H. This permit does not authorize the discharge from the facility of any oil and gas waste, including contaminated or contact stormwater.

I. 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.

XII. Facility Closure

A. Technical Permitting and the appropriate 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. The facility must be closed and graded as shown on the “Disposal Cells 1 & 2 Cross Section” (Drawing 16), the “Disposal Cells Final Cover Plan” (Drawing 18), and the “Disposal Cells Cross Section” (Drawing 19) schematics in Permit Appendix F.

C. Unless otherwise specified by this permit, all waste, chemicals, and waste-related materials must be processed and removed from the facility and disposed of in an authorized manner.

D. 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.

E. All concrete pads must be steam cleaned and demolished and the rubble and wash water disposed of in an authorized manner.

F. Affected soils underlying the concrete pads must be removed and disposed of in an authorized manner.

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

H. Excluding the Disposal Pits and non-contact stormwater retention pond, the entire facility must be backfilled as necessary, contoured to original grade, and re-vegetated with ground cover appropriate for the geographic region.

I. Closure of the Truck Washout Area and Washout Pits (P012410 and P012411), Collecting/Staging Pits (P012404, P012405, and P012406), Collecting/Treatment Pits (P012407, P12408, and P12409), and Collecting Pit (P012403) 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 shall be cleaned and demolished, and the concrete rubble and wash-water must be disposed of in an authorized manner. All visually contaminated soils shall 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 Truck Washout Area and Washout Pits, Collecting/Staging Pits, Collecting/Treatment Pits, and Collecting Pit areas.

4. Soil samples must be analyzed for the parameters listed Permit Condition XII.J. and the specified limitations must not be exceeded.

5. Any soil sample that exceeds the parameter limitations specified in Permit Condition XII.J. is considered waste and must be disposed of at an authorized disposal facility.

J. Soil samples must be analyzed for the following parameters and may not exceed the specified 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><strong>EPA Method 9045C</strong></td>
<td></td>
</tr>
<tr>
<td>Electrical Conductivity (EC)</td>
<td>≤ 4.0 mmhos/cm</td>
</tr>
<tr>
<td><strong>Louisiana Dept. of Natural Resources Lab Procedures for Analysis of Exploration &amp; Production Waste or equivalent</strong></td>
<td></td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbons (TPH)</td>
<td>≤ 10,000 mg/kg or 1% by weight</td>
</tr>
<tr>
<td><strong>Method 5035A / TX1005</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) | ≤ 30 mg/kg  
| **EPA Method 5035A / 8021/8260B** |                             |
| Metals (Total)                   |                             |
| **EPA Method 6010/6020/7471A**   |                             |
| Arsenic                          | ≤ 10 mg/kg                  |
| Barium                           | ≤ 10,000 mg/kg              |
| Cadmium                          | ≤ 10 mg/kg                  |
| Chromium                         | ≤ 100 mg/kg                 |
| Lead                             | ≤ 200 mg/kg                 |
| Mercury                          | ≤ 10 mg/kg                  |
| Selenium                         | ≤ 10 mg/kg                  |
| Silver                           | ≤ 200 mg/kg                 |

K. A summary of all closure and soil sampling activity must be submitted to Technical Permitting and the District Office and 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; and
5. Copies of the laboratory analytical reports and chain of custody.

L. Once the results of the closure activities have been approved by the RRC, all non-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 appropriate District Office and Technical Permitting in Austin must be notified in writing.

XIII. Post-Closure Care and Monitoring

A. In accordance with 16 TAC § 3.78 the permittee must maintain financial security in the amount of $12,145,430.00 after the facility has stopped receiving waste, met all specified closure requirements and all the disposal pits have been properly capped for the post-closure monitoring period in accordance with this permit. 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 prior to the operating financial security referenced in Permit Condition I.B. will be released.

B. The site must be monitored for a period of no less than five years after closure of the facility and the disposal pits.

C. Any areas showing signs of deterioration, erosion, or instability must be contoured, backfilled, repaired, 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 the quarterly inspections of the entire facility by a registered Professional Engineer currently licensed in the state of Texas to identify signs of deterioration, erosion, or failure.

F. The leak detection systems and the leachate collection systems must be maintained and monitored at least quarterly. Any leachate detected must be collected and disposed of in an authorized manner.

G. A summary of the results of the post-closure monitoring activity must be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Condition I.S. of this permit.

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 **April 29, 2020**

[Signature]
Tiffany Humberson, Manager
Environmental Permits & Support
Technical Permitting

Attachments: Appendix A through F
Notes:

1. Financial security requirement increased from $7,671,330.00 to $12,145,430.00.
2. Removed requirement for a Restrictive Covenant for soil used for closure.
3. Changed liner requirement for the Collecting/Treatment Pits (P012407, P12408, and P12409) from 3 feet of compacted clay to 3 feet of protective cover. (Incorporates Letter of Clarification dated August 16, 2019.)
4. Updated quarterly reporting requirements for consistency with current permits.
5. Other formatting and language changes for consistency with current permits.
APPENDIX A

Site Plan With Monitoring Wells (Drawing 3)
NOTES:
1. EXISTING CONTOURS AND ELEVATIONS DEVELOPED BY SEDWELL COMPANY FROM AERIAL PHOTOGRAPHY FLOWN JULY 2015.
2. EXISTING PINW-6 WILL BE CONVERTED TO MW-1.
APPENDIX B

Truck Washout Plan (Drawing 5)
Tank Farm (Drawing 5A)
Truck Washout Cross Sections (Drawing 6)
Truck Washout Cross Sections (Drawing 6A)
NOTES:

1. THE SECONDARY CONTAINMENT BERM WILL BE CONSTRUCTED FROM CLEAN NATIVE SOILS COMPACTED IN LIFTS, PROVIDING A LOW PERMEABILITY BARRIER.

2. TANKS WILL BE PLACED DIRECTLY ON THE GROUND SURFACE, WHICH WILL BE PREPPED THE SAME AS THE TANK BERM.
NOTES:
1. THE SECONDARY CONTAINMENT BERM WILL BE CONSTRUCTED FROM CLEAN NATIVE SOILS COMPACTED IN LIFTS PROVIDING A LOW PERMEABILITY BARRIER.
2. TANKS WILL BE PLACED DIRECTLY ON THE GROUND SURFACE WHICH WILL BE PREP THE SAME AS THE TANK BERM.
APPENDIX C

Staging Cells Plan (Drawing 7)
Staging Cells Sections and Details (Drawing 8)
Staging Cells Sections and Details (Drawing 8A)
NOTES:
1. A minimum freeboard of 2 feet will be provided between the top of perimeter berm/edge and the maximum allowable level of waste.
**Concrete Notes:**

- A minimum of 2' of soil underlying liner system to be compacted to a minimum of 95% of standard proctor.
- Frost susceptible soils may not be used.

**Concrete:**
- Minimum 28-day compressive strength of 4000 psi.
- Float finish with sealant.
- 5%-be air entrainment.

**Preparation:**
- 6" thick concrete to be reinforced with 2 mats of #5 rebar at 12" O.C. each way.
- Reinforcing to be ASTM A615 deformed grade 60 steel.

**Notes:**
1. Existing contours and elevations developed by Senell Company from actual photography flown July 10, 2019.
2. Subsurface preparation will be in accordance with the liner construction quality assurance plan in Appendix H: Construction Quality Assurance, documentation for the as-built liner system will be maintained in the facility's site operating record.
NOTES:
1. EXISTING CONTOURS AND ELEVATIONS DEVELOPED BY SWENSON COMPANY FROM AERIAL PHOTOGRAPHY FLOWN JULY 18, 2019.

2. SUBGRADE PREPARATION WILL BE IN ACCORDANCE WITH THE LINER CONSTRUCTION QUALITY ASSURANCE PLAN IN APPENDIX H, CONSTRUCTION QUALITY ASSURANCE. DOCUMENTATION FOR THE AS-BUILT LINER SYSTEM WILL BE MAINTAINED IN THE FACILITY'S SITE OPERATING RECORD.

RECEIVED
RRC OF TEXAS
APR 24 2019
AUSTIN, TX

O & G
PECOS FACILITY
PECOS COUNTY, TEXAS

WEAVER CONSULTANTS GROUP
TEPE REGISTRATION NO. P-3777
WWW.WCGRP.COM
DRAWING 8A
APPENDIX D

Treatment Cells Plan (Drawing 9)
Treatment Cells Cross Sections (Drawing 10)
Treatment Cells Cross Sections (Drawing 10A)
APPENDIX E

Disposal Cell & Water Management Pit Details (Drawing 20)
Water Management Pit Plan (Drawing 21)
Water Management Pit Sections (Drawing 22)
1. Sump pumps will be available to evacuate leak in sumps.
2. Where geonet meets 8 oz fabric in sump bottom, overlap geocomposite a minimum of 2" on top of 8 oz fabric.
3. Inside of sump riser pipe to be deburred.

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 deburred.

WATER MANAGEMENT POND LEAK DETECTION PIPE DETAIL

Notes:

1. All geocomposite will be 200-mil thick geonet with two #8 geofabrics.

DISPOSAL CELL SUMP SECTION

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 deburred.

WATER MANAGEMENT PIT SUMP SECTION

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 deburred.

DISPOSAL CELL LEACHATE COLLECTION LEAK DETECTION PIPE DETAIL

Notes:

1. All geocomposite will be 200-mil thick geonet with two #8 geofabrics.
NOTES:
1. EXISTING CONTOURS AND ELEVATIONS DEVELOPED BY DEMPSEY COMPANY FROM AERIAL PHOTOGRAPHY FLOWN JULY 2015.
APPENDIX F

Disposal Cell 1 Excavation Plan (Drawing 11)
Disposal Cell 1 Cross Section (Drawing 13)
Disposal Cells 1 & 2 Excavation Plan (Drawing 14)
Disposal Cells 1 & 2 Cross Section (Drawing 16)
Disposal Cells Excavation Plan (Drawing 17)
Disposal Cells Final Cover Plan (Drawing 18)
Disposal Cells Cross Section (Drawing 19)
NOTES:
1. EXISTING CONTOURS AND ELEVATIONS DEVELOPED BY SOWELL COMPANY FROM AERIAL PHOTOGRAPHY FLOWN JULY 2015.
3. CONFINEMENT SYSTEM DESIGN IS PROVIDED IN APPENDIX C.
4. LAYER CONSTRUCTION QUALITY ASSURANCE PLAN IS PROVIDED IN APPENDIX H.

A REVIEWER OF THIS DRAWING IS REQUIRED TO INITIAL THE DRAWING IN THE SPACE PROVIDED.

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DRAWING 17