RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

PERMIT TO RECEIVE, STORE, HANDLE AND TREAT CERTAIN NONHAZARDOUS OIL AND GAS WASTES AND RECLAIM OILFIELD RELATED HYDROCARBONS

Permian Separators LLC
1627 W University
Sarasota FL, 34243

Based on information contained in the original Application for Permit to Operate a Reclamation Plant (Form R-9) received March 26, 2010; the Waste Separation Facility and Pit Permits application received March 26, 2018; and subsequent information received to date, you are hereby authorized to receive, store, handle, treat, and reclaim certain nonhazardous oil and gas wastes subject to the jurisdiction of the Railroad Commission of Texas (RRC) as specified below at the following facility:

Martin County Oil and Gas Waste Separation and Reclamation Facility
Latitude/Longitude: 32.097117, -101.789354
Martin County, Texas
RRC District 08, Midland

NARRATIVE DESCRIPTION OF PROCESS:
Incoming oil and gas waste will be offloaded into above-ground holding tanks. Waste in the holding tanks will be heated and pumped over a shaker screen to separate fluids and small suspended solids. Larger solids are screened and transferred to a Collecting Pit (P012659 and P012660) prior to off-site disposal.

Fluid wastes are conveyed to a centrifuge for further separation of solids and liquids. The separated solid waste will be transferred to a Collecting Pit for off-site disposal. The separated fluids and hydrocarbons will be stored in on-site tanks. The recovered hydrocarbons will be sold and fluids will be hauled to an off-site RRC-permitted Class II Injection well for disposal.

The Collecting/Washout pit (P012658) consists of a concrete unloading pad and a washout pit. Washout material and water will flow into the washout pit and then will be pumped back into holding tanks for processing.
Authority is granted by the RRC to receive, store, handle, treat, and re-use oil and gas wastes and reclaim oilfield related hydrocarbons in accordance with Texas Administrative Code (TAC) Title 16, Part 1, Chapter 3.8 (Statewide Rule 8), and Chapter 3.57 (Statewide Rule 57), and is subject to the following minimum conditions:

I. GENERAL PERMIT CONDITIONS

A. This effective date of this permit is October 22, 2018 and expires on October 21, 2023.

B. The permittee may not receive, store, handle, treat or reclaim oil and gas wastes or fluids at the facility until financial security in the amount of $149,739.00 is provided and approved by the RRC for the referenced location. This amount provides financial security for all RRC permitted waste management and disposal pit permits allocated for this facility.

C. In accordance with 16 TAC § 3.78 the permittee shall maintain financial security in the amount of $149,739.00 until this facility has been closed in accordance with this permit. Technical Permitting reserves the right to revise this amount, as necessary. Prior to any modification 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 the groundwater monitoring wells required by Permit Condition IX. have been completed. The documentation required by Permit Condition IX. must be provided to Technical Permitting within 30 days after installation of the groundwater monitoring wells.

E. A copy of the site-specific Spill Prevention and 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 shall be maintained on-site and made available upon request of the RRC.

G. A discharge permit from the Environmental Protection Agency (EPA) may be required for non-contact stormwater discharges. If required, the permit form the EPA must be in place prior to commencement of discharge operations.

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

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

J. Technical Permitting and the appropriate District Office must be notified in writing upon final completion of construction of the facility, the receiving and washout pit area. The permittee may not begin receiving, storing, handling, treating or disposing of oil and gas waste at the facility until the appropriate District Office has performed its inspection of the completed facility.
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. The "Application for Permit to Operate a Reclamation Plant" (Form R-9), which is attached and incorporated into this permit as Permit Appendix A, grants authority for the active reclaiming of oil field related hydrocarbons and does not cover reclamation of any refined products. Commingling or blending of refined products with crude oil or condensate is not permitted unless written authority is granted by the RRC's Director of Field Operations following a formal written request for such blending by the Reclamation Plant operator. Any deliveries made containing products or crude blended with products must be clearly identified on the RRC Form R-2 as "Products" or "Crude Blended with Products."

M. The removal of tank bottoms or other hydrocarbon wastes from the facility for which monthly reports are not filed with the RRC must be authorized in writing by the RRC prior to such removal. A written request for such authorization must be sent to Technical Permitting, and must detail the location, description, estimated volume, and specific origin of the material removed, as well as the name of the reclaim and intended destination of the material.

N. The receipt of any tank bottoms or other hydrocarbon wastes from outside the State of Texas must be authorized in writing by the RRC prior to such receipt. Written approval from the RRC is not required if another regulatory agency indicated, in the appropriate monthly report, a corresponding delivery of the same material.

O. 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.

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

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

R. 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.

S. All chemical laboratory analyses required to be performed in accordance with 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.

T. The permit to operate a Stationary Treatment Facility (STF-0132) and associated pits 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. The permit to operate a Reclamation Plant (R9 08-3896) shall remain in effect until canceled at the request of the operator, the permitted facility has been inactive for 12 months, or there has been a violation, or a violation is threatened, of any provision of the permit, the conservation laws of the state, or rules or orders of Statewide Rule 57 (c)(7).

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

V. The permit to operate a Stationary Treatment Facility (STF-0132) is not 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. The Reclamation Plant permit is nontransferable by Statewide Rule 57 (c) (9). A new permit must be obtained by the new operator.

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

1. The report must contain applicable information as required in Permit Conditions III.I., IV.N., VI.J., VII.J., and IX.D.

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 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 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.

X. 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) or Statewide Rule 57 (c)(7).

II. AUTHORIZED WASTES

A. Only oil and gas wastes subject to the jurisdiction of the RRC that are non-hazardous according to Subtitle C (Resource Conservation and Recovery Act (RCRA)) may be received. You may receive, store, handle, treat, process, reclaim, 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. Contaminated soils from crude oil spills, pipeline and saltwater spills from production operations
4. Hydraulic fracturing flow-back water and associated solids including sand
5. Formation sands and other solids from saltwater storage tanks or vessels and saltwater pits
6. Spent well completion, treatment, and stimulation fluids
7. Waste solids from crude oil reclamation
8. Hydrocarbon storage tank bottoms
9. Other hydrocarbon wastes, as defined by Statewide Rule 57(b) (2)

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

C. RCRA non-exempt wastes subject to the jurisdiction of the RRC may only be accepted and processed at the facility if analytical results demonstrate that the waste is characteristically nonhazardous. See Permit Condition III.E.

D. No oil and gas Naturally Occurring Radioactive Material (NORM) waste as defined in 16 TAC §4.603 (Oil and Gas NORM) or waste from a facility that is licensed by the Texas Department of State Health Services 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 biphenyl (PCB)-containing material regulated under the Toxic Substances Control Act may be accepted for processing at the facility.

F. The receipt of any tank bottoms or other hydrocarbons wastes from outside the State of Texas must be authorized in writing by the RRC prior to such receipt. Written approval is not required if another regulatory entity with jurisdiction over the waste will indicate, in the appropriate monthly report, a corresponding delivery of the same material.

G. 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 four grab samples mixed to form one composite 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. The operator of the reclamation plant (R9 08-3896) must conduct a shakeout test on all tank bottoms or other hydrocarbon wastes upon removal from any producing lease tank, pipeline storage tank, or other production facility, to determine crude oil content and lease condensate thereof. The shakeout test must be conducted in accordance with the most current American Petroleum Institute (API) or ASTM International method.

D. Prior to receipt at the site, representative samples of waste from commercial oil and gas facilities and reclamation plants must be analyzed and may not exceed the limitation for the following parameter:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extractable Organic Halides (EOX)</td>
<td>100 mg/kg</td>
</tr>
<tr>
<td>(EPA Method 9023)</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Total Organic Halides (TOX)</td>
<td>100 mg/l</td>
</tr>
<tr>
<td>(EPA Method 9020B)</td>
<td></td>
</tr>
</tbody>
</table>

Special authorization for receipt of waste with a EOX/TOX > 100 parts per million may be considered. Authority must be obtained from Technical Permitting in Austin prior to receipt of waste.

E. Prior to receipt at the site, representative samples of incoming RCRA non-exempt 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</td>
<td>2.0 – 12.5 standard units (s.u.)</td>
</tr>
<tr>
<td>EPA method 1110A, 9040C or equivalent</td>
<td></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 140°F</td>
</tr>
<tr>
<td>EPA method 1010A/1020B/1030A</td>
<td>No materials exhibiting the characteristics of toxicity as defined by RCRA</td>
</tr>
<tr>
<td>Toxicity</td>
<td>&lt; 0.5 mg/L</td>
</tr>
<tr>
<td>EPA Method 1311, Toxicity Characteristic Leaching Procedure (TCLP)</td>
<td></td>
</tr>
<tr>
<td>Benzene (TCLP)</td>
<td></td>
</tr>
<tr>
<td>EPA Method 1311/8260B/8021</td>
<td></td>
</tr>
</tbody>
</table>
PARAMETER | LIMITATION
---------- | ----------
Metals (TCLP) | 
EPA Method 1311/6010/6020/7471A | 
Arsenic | < 5.0 mg/L |
Barium | < 100.0 mg/L |
Cadmium | < 1.0 mg/L |
Chromium | < 5.0 mg/L |
Lead | < 5.0 mg/L |
Mercury | < 0.2 mg/L |
Selenium | < 1.0 mg/L |
Silver | < 5.0 mg/L |

F. Details of receipts of deliveries for incoming waste to be processed at the Reclamation Plant (R9 08-3896) and the stock on hand (available for re-sale) must be reported monthly on the Form R-2, “Monthly Report for Reclaiming and Treating Plants”. Submit the original Form R-2 directly to Technical Permitting in Austin and a copy of the report to the appropriate District Office by the 15th day of the calendar month following the month of the report. Form R-2 shall be completed in accordance with Statewide Rule 57.

G. 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 the 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)
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

H. The permittee must maintain the following records on each load of waste removed from the referenced facility to an authorized disposal facility for a period of three (3) years from the date of shipment:
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 disposal facility
I. A report must be submitted to Technical Permitting in Austin and the appropriate District Office as part of the Quarterly Report required in Permit Condition I.W. and shall include the following information:

1. All records required by Permit Conditions III.G. and III.H. above, as well as a summary of waste receipts
2. The total volume of each type of waste material received during the specific quarter
3. Total volume of each type of waste that leaves the facility for disposal or final disposition during the quarter

IV. GENERAL FACILITY DESIGN AND MAINTENANCE REQUIREMENTS

A. The general layout and arrangement of the facility must be consistent with the “Site & Grading Plan” (Drawing C3.0) schematic received July 20, 2018, and the “Permian Separators Groundwater Plan” schematic received May 29, 2018, which are attached and incorporated into this permit as Permit Appendix B.

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 facility shall consist of the following tanks, equipment, and waste management areas:

- Two (2) 400 bbl Process Tanks
- Three (3) 400 bbl Produced Water Tanks
- One (1) 400 bbl Emulsion Oil Tank
- Two (2) 400 bbl Oil Tanks
- Two (2) 300 bbl Feed Overflow Tanks
- One (1) 2,500 bbl Agitated Mix Feed Tank
- Three (3) 440 bbl Truck Wash Recycling / Feed Storage Frac Tanks
- One (1) 5 bbl Produced Water Break Tank
- One (1) 5 bbl Oil Break Tank
- One (1) 10 bbl Produced Water Tank
- Two (2) Centrifuges
- One (1) 228 bbl Steel Low-Sided Shale Bin
- One (1) 30 bbl Dual Shaker Tank
- One (1) 6 cubic yard Collecting Pit (P012659)
- One (1) 22.75 cubic yard Collecting Pit (P012660)
- One (1) 240 bbl Collecting/Washout Pit (P012658)

D. No waste, treated or untreated, may be 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 repaired or replaced before resuming use of the vessel.

F. No additional equipment may be added without prior written approval by Technical Permitting. A request for any additional equipment must be submitted in writing to Technical Permitting.

G. 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.

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

I. A perimeter berm must be constructed to surround the entire facility and must be designed to prevent storm water run-on and prevent storm water runoff from the site. The perimeter berm must be constructed to a minimum height of four feet above land surface with a slope no steeper than a three to one (horizontal to vertical) ratio on each side.

J. 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 shall 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.

K. All storage tanks containing fluid waste or fuel shall be contained within dikes. Secondary containment of 120% total storage capacity is recommended, however a firewall capacity that will capture 100% of the volume of the largest tank plus the volume of a 25-year, 24-hour rainfall event for Martin County is acceptable.

L. The facility shall maintain security to prevent unauthorized access. Access shall 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 truck or livestock access except through entrances with lockable gates.

M. No oil may be allowed to accumulate on top of the water or wastes stored in the pits. Any oil on top of the liquids must be collected and handled in accordance with RRC rules. Any recovered oil must be recorded and filed with the RRC 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) should still be filed with the RRC.

**OR**

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

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

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

   f. Contact person, T-1 permit number, and P-5 Operator

   g. Number of the oil buyer

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

N. 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. Records of each inspection must be submitted as part of the Quarterly Report required by Permit Condition I.W. The following records must be maintained on-site for a minimum of three years from the date of the inspections, and must be made available upon request of the RRC:

   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

V. CONSTRUCTION & OPERATION OF THE RECLAMATION PLANT (R9 08-3896) AREA

A. The general layout and arrangement of the Reclamation Plant (R9 08-3896) must be consistent with the "Permian Separators Groundwater Plan" schematic received May 29, 2018, which is attached and incorporated into this permit as Permit Appendix B.
B. Spills within the secondary containment berms shall be containerized immediately and contact stormwater must be managed as a waste.

VI. CONSTRUCTION & OPERATION OF COLLECTING PITS 1 and 2 (P012659 and P012660)

A. The construction of Collecting Pit 1 (P012659) and Collecting Pit 2 (P012660) shall be consistent with the “Details” (Drawing C1.1) schematic received July 20, 2018, which is attached and incorporated into this permit as Permit Appendix C.

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

C. A sign must be posted at each pit showing the pit permit number in letters and numerals at least three inches in height.

D. Collecting Pit 1 (P012659) must have dimensions of approximately 13.5 feet by 27.5 feet. It must be surrounded on three sides by concrete walls approximately three feet high, and on the fourth side by a compacted earthen berm approximately 10 inches high.

E. The usable permitted capacity of Collecting Pit 1 (P012659) may not exceed six (6) cubic yards.

F. Collecting Pit 2 (P012660) must have dimensions of approximately 14.5 feet by 27.5 feet. It must be surrounded on three sides by concrete walls approximately four feet high, and on the fourth side by a compacted earthen berm approximately 7.5 inches high.

G. The usable permitted capacity of Collecting Pit 2 (P012660) may not exceed 22.75 cubic yards.

H. At least a 2-foot buffer must be maintained between the toe of the staged waste and the entrance-side containment berms.

I. The Collecting Pits must be lined with reinforced concrete at least 12 inches thick. The concrete liner must be installed and maintained in accordance with the application, best management and sound engineering practices.

J. The pits 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 by the permittee and shall be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Permit Condition I.W. The appropriate District Office must be notified by phone or email at least 48 hours before emptying the pits for inspection.

K. The concrete liner must be inspected whenever evidence of liner leakage arises. If inspection of the concrete liner reveals cracking, a leak or other loss of integrity the pit, all waste must be immediately removed. No waste shall be added to the affected Collecting Pit(s) until the liner has been replaced or repaired and re-inspected by RRC personnel before resuming use of the pit(s).

L. The area surrounding the pits must be graded such that all surfaces slope away from the pits to prevent surface flow stormwater from entering the pits.
M. This permit does not authorize the discharge of waste from any pit to the ground surface or to surface water.

N. Unless otherwise required by conditions of this permit, construction, use, and maintenance of the pits must be in accordance with the information represented on the application (Form H-11) and attachments thereto.

VII. CONSTRUCTION & OPERATION OF THE COLLECTING/WASHOUT PIT (P012658)

A. The construction of the Collecting/Washout Pit shall be consistent with the “Details” (Drawing C1.0) schematic received July 20, 2018, which is attached and incorporated into this permit as Permit Appendix D.

B. Use of the Collecting/Washout Pit (P012658) is limited to the collection of wastewater, 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 pit.

C. A sign must be posted at the pit showing the pit permit number in letters and numerals at least three inches in height.

D. The Collecting/Washout Pit consists of a concrete unloading pad approximately 46 feet by 64 feet, which drains into a sump with dimensions of approximately 23 feet by 64 feet by 4 feet deep.

E. The Collecting/Washout Pit must be surrounded on each side by either a one-foot concrete wall, or a rollover curb at least six (6) inches high and must be designed to prevent stormwater from entering the pit.

F. The usable permitted capacity of the pit may not exceed 240 barrels.

G. At least two feet of freeboard must be maintained between the fluid level of the pit and the ground surface.

H. The Collecting/Washout Pit (P012658) and unloading pad must be surrounded by rollover curbs at least 6 inches in height and the unloading pad must drain directly into the Collecting/Washout Pit. No waste may be allowed to accumulate on the unloading pad area.

I. The Collecting/Washout Pit and unloading pad must be lined with concrete at least 12 inches thick. The concrete liner must be installed in accordance with the material manufacturer's specifications and best management practices.

J. The pit must be emptied and visually inspected annually for deterioration and leaks. A record of each inspection and photographs of the interior of the pit must be maintained by the permittee and shall be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Permit Condition I.W. The appropriate District Office must be notified by phone or email at least 48 hours before emptying the pits for inspection.

K. The concrete liner must be inspected whenever evidence of liner leakage arises. If inspection of the concrete liner reveals cracking, a leak or other loss of integrity the pit, all of the waste must be immediately removed. No waste shall 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.

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

M. The concrete liner must be inspected whenever evidence of liner leakage arises. If inspection of the concrete liner reveals cracking, a leak or other loss of integrity the pit must have all the waste immediately removed. No waste shall 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.

N. This permit does not authorize the discharge of waste from any pit to the ground surface or to surface water.

O. Unless otherwise required by conditions of this permit, construction, use, and maintenance of the pits must be in accordance with the information represented on the application (Form H-11) and attachments thereto.

VIII. 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 & Grading Plan” (Drawing C3.0) schematic attached as Permit Appendix B.

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 aboveground 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 Martin 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. 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.

IX. GROUNDWATER MONITORING

A. At least three (3) 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 “Permian Separators Groundwater Plan” schematic included in Permit Appendix B.

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 water tight at the surface and fitted with a lockable water tight 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 that correlate with future site development.

C. The groundwater monitor wells must be sampled and 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>EPA Method 150.1, 150.2, or equivalent</td>
<td></td>
</tr>
<tr>
<td>Total Dissolved Solids (TDS)</td>
<td>mg/L</td>
</tr>
<tr>
<td>Standard Method 160.1 or equivalent</td>
<td></td>
</tr>
</tbody>
</table>
**PARAMETER**  

<table>
<thead>
<tr>
<th>TPH</th>
<th><strong>UNIT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Method TX1005</td>
<td>mg/L</td>
</tr>
</tbody>
</table>

**Benzene**  
*EPA Method 8260/8021B or equivalent*  
mg/L

**Soluble Cations:**  
Calcium, Magnesium, Potassium, and Sodium  
*EPA Method 6010/6020 or equivalent*  
mg/L

**Soluble Anions:**  
Bromides, Carbonates, Chlorides, Nitrates, and Sulfates  
*EPA Method 300/9056 or equivalent*  
mg/L

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D. The groundwater quality sampling results specified in Permit Condition IX.C. must be filed with Technical Permitting as part of the Quarterly Report required in Permit Condition I.W. The laboratory analytical reports and the corresponding chain of custody shall be provided for all chemical analyses performed.

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**X. FACILITY CLOSURE**

A. Technical Permitting and the District Office must be notified in writing at least 45 days prior to commencement of final closure activities. The permittee must submit a closure plan to Technical Permitting in Austin to be reviewed and approved prior to beginning closure activities.

B. At facility closure, all waste, chemicals, and waste related materials must be processed through the facility and/or removed from the facility for authorized reuse or disposal.

C. All waste processing equipment, aboveground storage tanks, and any other non-maintenance related equipment must be emptied, cleaned, and removed from the facility.

D. All equipment must be dismantled, removed, salvaged, or disposed of in an authorized manner.

E. All liners, pads, tanks, and vaults must be steam-cleaned and demolished, and the generated rubble and waste water must be disposed of in an authorized manner.

F. All affected or contaminated soils 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. 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 comprising of a minimum of four representative soil samples per acre. Samples must be taken from around and underneath the Collecting/Washout Pit and unloading pad, Collecting Pits, and tank battery area.

I. Soil samples must be analyzed for the parameters listed in Permit Condition X.I., and those limitations shall not be exceeded. If soil parameter limitations are exceeded, the identified waste must be removed and disposed of in an authorized manner, and the area
must be resampled. The process shall be repeated until the soil samples meet the closure criteria.

J. Soil samples must be acquired and analyzed for the following parameters and the specified limitations shall not be exceeded:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (EPA Method 9045C or equivalent)</td>
<td>6 to 10 standard units</td>
</tr>
<tr>
<td>Electrical Conductivity (EC)</td>
<td>≤ 4.0 mhmhos/cm</td>
</tr>
<tr>
<td>TPH (EPA Method 5035A/TX1005)</td>
<td>≤ 10,000 mg/kg or 1 % by weight</td>
</tr>
<tr>
<td>Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method 5035A/8021/8260B)</td>
<td>≤ 30 mg/kg</td>
</tr>
<tr>
<td>Metals (Total) (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>

K. A summary of the soil sampling required by Permit Conditions X.H. 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.

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

M. When acceptable constituent levels have been verified in writing by Technical Permitting, the pits must be dewatered, emptied, demolished, backfilled, compacted, and properly closed. All wastes, including the liners, must be removed and disposed of in an authorized manner. All berms must be leveled, and the site must be backfilled with clean fill and restored to natural grade. Topsoil must be contoured and seeded with appropriate vegetation.

N. Final grading of the site must be accomplished in such a manner that rainfall will not collect at former pit areas, waste processing areas, and storage area locations after closure.

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1 LDNR Lab Procedures for Extraction and Analysis of E&P Waste or equivalent.
PERMIAN SEPARATORS LLC  
Permit No. STF-0132, R9 08-3896, P012658, P012659, and P012660  
Page 17 of 17

O. All groundwater monitoring wells must remain operational, and monitoring requirements must continue as specified in Permit Condition IX.C. until written approval from Technical Permitting in Austin is granted for plugging and abandoning the wells.

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

APPROVED AND ISSUED ON October 22, 2018

Tiffany Humberson, Manager  
Environmental Permits and Support  
Technical Permitting

Notes - This permit incorporates Reclamation Plant Permit No. R9 08-3896, which was originally permitted on October 29, 2010.

CC:  RRC Midland, District 08  
RRC Production Audit – Austin
Permit Appendix A

Application for Permit to Operate a Reclamation Plant (Form R-9)
## RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

### APPLICATION FOR PERMIT TO OPERATE
A RECLAMATION PLANT

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator Name</td>
<td>Permian Separators, LLC</td>
</tr>
<tr>
<td>Operator P-5 No.</td>
<td>155937</td>
</tr>
<tr>
<td>RRC District No.</td>
<td>8</td>
</tr>
<tr>
<td>County of Plant Location</td>
<td>Martin</td>
</tr>
<tr>
<td>Type of Facility</td>
<td>Permanent</td>
</tr>
</tbody>
</table>

**Brief description of process:**
Taking T ank Bottoms and oil related waste. Removing all solids, separating water from oil mechanically. Water is off site for disposal as well as solids. Recovered oil is sold.

**Certification:**
I certify under penalties prescribed in Sec. 81.143, Texas Natural Resources Code, that I am authorized to make this report, that it was prepared by or under my supervision and direction, and that the data and facts stated herein are true, correct, and complete to the best of my knowledge.

**Signature:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wayne K. W. Jr.</td>
<td>Managing Partner</td>
<td>831-703-7398</td>
</tr>
</tbody>
</table>

**TO BE COMPLETED BY RAILROAD COMMISSION PERSONNEL**

This permit is valid until cancellation under either of the following conditions:

1. The above named operator requests cancellation in writing.
2. The commission cancels the permit after notice and opportunity for a public hearing because:
   a. the permit facility has been inactive for 12 months or
   b. there has been a violation or a violation is threatened of any provision of the permit, the conservation laws of the state, or rules or orders of the Commission.

This permit is non-transferable. The financial assurance filed in support of this application shall be renewed and continued in effect until its conditions have been met or released is authorized by the Commission. The facility schematic diagram is to be kept with this permit. Permit and diagram are to be kept at facility.

**Serial/registration no.:** R9 08-3896

**Date:** October 29, 2010

**Signature of RRC representative:**

**ALL WASTES GENERATED BY RECLAIMING OPERATIONS SHALL BE DISPOSED OF IN ACCORDANCE WITH STATEWIDE RULES, 8, 9, AND 48 (RELATING TO WATER PROTECTION, DISPOSAL WELLS, AND FLUID INJECTION).**
Permit Appendix B

Site & Grading Plan (Drawing C3.0)

Permian Separators Groundwater Plan
NOTES:

1. THE LOCATIONS AND ELEVATIONS OF THE EXISTING UTILITIES SHOWN
   HEREBIN ARE APPROXIMATE. THEY HAVE BEEN PLOTTED FROM AVAILABLE
   SURVEYS AND/OR BORING. THE CONTRACTOR IS RESPONSIBLE FOR
   FIELD VERIFICATIONS LOCATION AND ELEVATION TO ENSURE THAT ANY
   EXISTING UTILITIES (SHOWN OR NOT SHOWN) ARE NOT DAMAGED DURING
   CONSTRUCTION.

2. ALL EXCESS OR WASTE MATERIAL GENERATED AS PART OF CONSTRUCTION
   SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE
   WITH STATE AND LOCAL REQUIREMENTS.

3. TESS STATE ONE CALL DAMAGE PREVENTION SYSTEM FOR BURIED
   UTILITIES. 1-800-258-0808.

PROJECT INFORMATION

25 YR/24 HR STORM EVENT 5.30 IN.
AREA WITHIN BERM 43,560 SF (1.0 ACRE)
TOP OF BERM ELEVATION 2662.0
25 YR STORM EVENT VOLUME WITHIN BERM 19,239 CF
25 YR STORM EVENT HIGH WATER LEVEL 2661.40
TOTAL STORAGE PROVIDED WITHIN BERM 47,650 CF
Construction Materials:
Tanks 1-14: Steel
Solids Bin 1,2 and Washout Pit: Concrete
Washout Staging Pad: Concrete

Permit Separators Groundwater Plan

Proposed Location for Groundwater Monitoring Wells

Restricted Covenant
Soil Borrow Area
100' x 150'

Edge of Pavement
Compacted Berm
2' high, 4:1 Slope
Gravel Edge

Scale in Feet

75 50 25 0 75 150
Permit Appendix C

Details (Drawing C1.1)
Permit Appendix D

Details (Drawing C1.0)