RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

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

AMENDED
Permit No. STF-082, R9 08-1501, P012136A,
P012136B, P012136C, P012136D, P012137A,
P012137B, P012137C, P012137D, P012135,
P012131, P012132, P012133, P012134,
P012126, P012127, P012128,
P012129 and P012130
Supersedes the Permit issued on
November 2, 2015

PETRO WASTE ENVIRONMENTAL, LP
153 TREELINE PARK, STE 100
SAN ANTONIO, TX 78209

Based on information contained in your applications received May 1, 2014, the amendment request received on February 17, 2016, and subsequent information received to date, you are hereby authorized to receive, store, handle, and treat certain non-hazardous oil and gas wastes as specified below at the following facility:

Howard County Treatment, Recovery and Disposal Facility (TRD) 144 acres
T. & P. R.R. Co., Block 34, A-532
Latitude, Longitude: 32.175082°, -101.665695°
Howard County, Texas
RRC District 08, Midland

NARRATIVE DESCRIPTION OF PROCESS:

Incoming waste is directed to either the Settling Basins (Collecting Pits), Receiving Pits, or the active Disposal Pit depending on the liquid content and composition of the waste. The Settling Basins and the Receiving Pits will passively separate solids, liquids, and oil.

Separated fluids from the Settling Basins will be pumped to a gun barrel fractionation tank for further separation and then stored in separate oil and water tanks. The recovered hydrocarbons will be stored in above ground tanks prior to being sold. The remaining fluids will be transported to an off-site Class II injection well for disposal. Solids collected from the Settling Basins will be disposed of directly into a Receiving Pit or the active Disposal Pit.
The Receiving Pits will be utilized to further separate and dry the solids before placement in the Disposal Pits. Solid wastes in the Receiving Pits which pass the paint filter test will be placed in an on-site Disposal Pit. Fluids from the Receiving Pits and contact storm water will be pumped or conveyed to the Collecting Pit then transported to a Railroad Commission of Texas (RRC) permitted off-site Class II injection well for disposal.

The Truck Wash Bays (Washout Pit/Trench) and Settling Basins (Collecting Pits) are designed as an interconnected system. The Washout Pit/Trench will convey washout water from the Truck Wash Area to the Settling Basins.

Authority is granted to receive, store, handle, or treat certain nonhazardous 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 TAC, Title 16 Part 1, Chapter 3.57 (Statewide Rule 57) and is subject to the following conditions:

I. GENERAL PERMIT CONDITIONS

A. The effective date of this permit is March 29, 2016 and expires on November 2, 2020.

B. The permittee may not receive, store, or handle, oil and gas wastes or fluids at the facility until financial security in the amount of $4,654,600 is provided and approved by the Commission for the referenced location. This amount provides financial security for all RRC permitted waste storage and treatment permits allocated for this facility.

C. The permittee shall maintain financial security in the amount of $4,654,600 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 a restrictive covenant is signed by a representative of the permittee, the landowner, and a representative of the RRC; and the signed document is filed in the Real Property Records of Howard County, Texas, and proof of filing with Howard County is submitted to and approved by the RRC.

E. No waste may be received at the referenced facility until the groundwater monitoring wells required by Condition X. of this permit have been completed. The documentation required by Condition X.A. and X.B. must be provided to and approved by Technical Permitting within 30 days after installation of the monitor wells.

F. No waste may be received at the referenced facility until, upon completion of facility construction, a Spill Prevention, Control and Countermeasure (SPCC) Plan is provided to Technical Permitting. A copy of the approved SPCC Plan must be maintained on-site and made available for review and inspection.

G. Technical Permitting in Austin and the Midland District Office must be notified in writing when construction of the facility is initiated.

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

J. 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: the OSSF waste is not commingled with any other oil and gas waste; 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 the construction, operation, and maintenance of the OSSF complies with all applicable local, county, and state requirements.

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

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

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

O. Safety Data Sheets (SDS) must be submitted to Technical Permitting in Austin for any chemical proposed to be used in the treatment of waste at the facility. Use of the compound is contingent upon Commission approval.

P. All chemical laboratory analyses required to be performed in accordance with this permit must be performed using appropriate EPA 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 registered Professional Engineer.

Q. This permit grants authority for the reclaiming of oil field related hydrocarbons and does not cover reclamation of any refined products. Commingling or blending of refined products with crude is not permitted unless written authority is granted by the RRC's Director of Field Operations after written requests for such blending by the reclamation plant operator. Any deliveries made containing products or crude blended with products must be clearly identified on the Commission Form R-2 as "Products" or "Crude Blended with Products." A copy of the submitted "APPLICATION FOR PERMIT TO OPERATE A RECLAMATION PLANT" (FORM R9) is included and incorporated into the permit as Permit Appendix A.

R. 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 Commission prior to such removal. A written request for such authorization must be sent to Technical Permitting in Austin, and must detail the location, description, estimated
volume, and specific origin of the material removed, as well as the name of the reclaimers and intended destination of the material.

S. 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 will indicate, in the appropriate monthly report, a corresponding delivery of the same material.

T. 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.

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

V. This permit is nontransferable without consent of the RRC. Any request for permit transfer must be filed with Technical Permitting in Austin at least 60 days before the permittee wishes the transfer to take place.

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

1. The report shall contain applicable information as required in Conditions III.I, IV.J., V.Q., VI.M., VII.J., VII.O., VIII.B.9., X.C., and XII.G. of this permit.

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 shall 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 shall 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 shall be included.

6. Laboratory analytical results and chain of custody as specified in Conditions III.H.4., X.B., X.C and XI.I shall be included.

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

X. Failure to comply with any provision of this permit shall be cause for modification, suspension or termination of this permit. This permit may be canceled if Technical Permitting determines that the permittee is in violation of the conditions of this permit or if permittee’s operations pursuant to the permit are causing or allowing pollution of surface or subsurface water.
II. AUTHORIZED WASTES

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

1. Water based drilling fluids and associated cuttings;
2. Oil based drilling fluids and associated cuttings;
3. Iron sulfide, which has been fully oxidized; or it is (nonexempt)
4. Contaminated soils from crude oil spills, pipeline, condensate and saltwater spills;
5. Solid waste from gas dehydration and sweetening (spent filters and filter media, molecular sieves, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber sludge);
6. Tank bottoms from gas plants, crude oil reclamation plants, and crude oil production/separation facilities;
7. Waste material from produced water collecting pits;
8. Produced formation sand;
9. Non-injectable waste waters (too many solids to directly inject in an injection well without pretreatment for solids removal;
10. Spent activated carbon and other filtering and separation media; and
11. Inert wastes as defined by Statewide Rule 8 such as contaminated concrete or wood.

B. 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 Conditions III.

C. 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 (DSHS) to process or treat oil and gas NORM waste may be received at the facility.

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

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

F. The permittee shall not accept waste from a waste hauler unless the waste hauler has an RRC issued waste hauler permit and is authorized to deposit waste at this facility.

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 Radium-226 combined with Radium-228, and 150 picocuries per gram of any other radionuclide.

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

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

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

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

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosivity</td>
<td>No materials exhibiting the characteristic of corrosivity as defined by RCRA</td>
</tr>
<tr>
<td>Reactivity</td>
<td>No materials exhibiting the characteristic of reactivity as defined by RCRA</td>
</tr>
<tr>
<td>Ignitability</td>
<td>No materials exhibiting the characteristic of ignitability as defined by RCRA</td>
</tr>
<tr>
<td>Toxicity</td>
<td>No materials exhibiting the characteristic of toxicity as defined by RCRA</td>
</tr>
<tr>
<td>PARAMETER</td>
<td>LIMITATION</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Metals</td>
<td>Toxicity Characteristic Leaching Procedure (TCLP)EPA Method 1311/6010/6020/7471A</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</td>
<td>&lt; 0.5 mg/l</td>
</tr>
</tbody>
</table>

(TCLP EPA Method 1311/8021/8260B)

E. The operator of the reclamation plant 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.

F. The shakeout test shall be conducted in accordance with the most current American Petroleum Institute (API) or American Society for Testing Materials (ASTM) method.

G. Details of receipts, deliveries and stock on hand must be reported monthly on the Form R-2, Monthly Report for Reclaiming and Treating Plants. Submit the original of the Form R-2 report directly to Technical Permitting in Austin and a copy of the report to the Midland District Office by the 15th day of the calendar month following the month by the report. Form R-2 shall be completed in accordance with Statewide Rule 57.

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

1. Description of the site where the waste was generated, including:
   i. Generator name;
   ii. Lease name, lease number, or gas ID number, and well number or API well number;
   iii. County;
   iv. Waste hauler name;

2. Volume of waste material received (specify units);

3. Type and description of waste (e.g. oil-based drilling fluid, tank bottoms, etc.). For soils contaminated with produced water, crude oil or
condensate, indicate how it was determined that the waste is exempt from
RCRA, Subtitle C;

4. Copies of all laboratory analytical results and chain of custody required
by Conditions III.B., III.C. and III.D.

I. A report of all records required by Conditions III.E., III.F., and III.H., above, as well as
a summary of waste receipts including the cumulative volume of each type of material
received must be submitted to Technical Permitting in Austin as part of the Quarterly
Report required in Condition I.W. of this permit. If no waste was received during the
quarter a written statement indicating that no waste was received must be submitted to
Technical Permitting in Austin as part of the Quarterly Report.

IV. GENERAL FACILITY DESIGN/MAINTENANCE REQUIREMENTS

A. The general layout and arrangement of the facility shall be consistent with the “SITE
PLAN” (Sheet C1) received September 1, 2015, which is attached to and incorporated
as part of 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. No waste, treated or untreated, may be placed on the ground.

D. All reclaimed oil must be stored in above ground steel or fiberglass reinforced plastic
(FRP) tanks.

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

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

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

H. Berms or containment structures must be constructed around all waste management
units must be compacted or constructed of material that meets 95% Standard Proctor
(ASTM D698) or 90-92% Modified Proctor (ASTM D1557) density. 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 storm water within the waste management units. Refer to the stormwater
management requirements specified in Permit Condition IX.

I. The facility shall maintain security to prevent unauthorized access. Access shall be
secured by a 24-hour attendant or a six foot high security fence and locked gate when
unattended to prevent trucks or livestock access. Fencing shall be required unless
terrain or vegetation prevents truck or livestock access except through entrances with
lockable gates.
J. Each month an inspection of the entire facility must be performed on all concrete slabs, processing equipment, berms, and aboveground storage tanks for deterioration, leaks and spills. Records of each inspection must be kept on-site and submitted as part of the Quarterly Report required by Condition I.W. of this permit.

K. The permittee must maintain the following records for a period of three (3) years from the date of the inspection required by Condition IV.1:

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

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

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

V. CONSTRUCTION AND OPERATION OF TRUCK WASHOUT BAYS AND SETTLING BASIN AREA

A. The general layout an arrangement of the Truck Wash and Settling Basins Area must be consistent with the schematic provided in “TRUCK WASH AREA AND SETTLING BASIN PLAN” (Figure 1), dated October 2015, which is attached to and into this permit as Permit Appendix C.

B. The Truck Washout Unloading Area shall consist of an above grade structure that will have eight washout bays that are approximately 20 feet wide by 50 feet long. The slab shall consist of reinforced concrete with a minimum thickness of 12 inches. The unloading bays are surrounded by a low permeability (cement stabilized roadbase) pavement that extends approximately 40-feet on the north and south sides and has a concrete curb that is 12-inches in height by three-feet wide.

C. Use of the washout trench is limited to the collection of wastewater from the washout of trucks. No other oil field fluids or oil and gas wastes may be stored or disposed of in the pit.

D. The floor of each bay shall have a minimum slope of 2% allowing for wash water to drain into the grated washout trench (P012135). The washout trench shall consist of two channels that are each three feet wide and extend the full length of the unloading bays and will drain into the settling basins.

E. The capacity of the washout trench must not exceed 350 barrels.

F. The Settling Basins P012136A, P012136B, P012136C, P012136D, P012137A, P012137B, P012137C, P012137D are an interconnected weir system used to passively separate the fluids from the Washout Area.

G. Settling Basins (P012136A, P012136B, P012137A, and P012137B) must be 61-feet long by 12-feet wide by six-feet deep. The pit must be lined with reinforced concrete with a minimum thickness of 12-inches. The usable capacity for each pit must not exceed 420 barrels.
H. Settling Basins (P012136C, P012136D, P012137C, and P012137D) must be 25-feet long by 12-feet wide by six-feet deep. The pit must be lined with reinforced concrete with a minimum thickness of 12-inches. The usable capacity for each pit must not exceed 320 barrels.

I. The total combined permitted capacity for all of the Settling basins shall not exceed 2,960 barrels.

J. Use of the pits is limited to the collection of wastewater rinsate from the washout of trucks. No other oil field fluids or oil and gas wastes may be stored or disposed of in the pit.

K. A sign shall be posted identifying the Washout Trench and permit number of each Settling Basin using letters at least three inches in height.

L. At least two foot of freeboard must be maintained between the fluid level in each of the pits and the top of the pit.

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

N. The 10-foot concrete apron surrounding the pits must be graded such that all surfaces slope away from the pit to prevent surface flow storm water from entering the pit.

O. The concrete tank pad shall consist of reinforced concrete with a minimum thickness of 12-inches. The following equipment shall be located on the pad and is associated with the Settling Basins:
   a. One 250-bbl gun barrel separator;
   b. One 500-bbl water tank;
   c. One 300-bbl water tank;
   d. One 500-bbl reclaimed oil tank.

P. The concrete tank pad shall be surrounded by a concrete block wall that is 2-feet 8-inches in height and eight-inches wide.

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

R. The concrete liner must be inspected whenever evidence of liner leakage arises. If inspection of the liner reveals a leak or other loss of liner integrity, the liner must be replaced or repaired and re-inspected by RRC personnel before resuming use of the pit.

S. No oil may be allowed to accumulate on top of the water or wastes stored in the pit. Any oil on top of the liquids must be skimmed off and handled in accordance with RRC rules. A Skim Oil/Condensate Report (Form P-18) must be filed for every month in which skim oil is recovered and then subsequently sold during the operation of this facility.

T. This permit does not authorize discharge of waste from the pits to the surface or surface water.
U. 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 for review.

V. 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.

VI. CONSTRUCTION AND OPERATION OF RECEIVING PITS

A. Receiving Pits P012132 (#1), P012133 (#2), P012134 (#3), may store untreated and partially treated waste and must be constructed and arranged as shown on the “RECEIVING PIT PLAN AND DETAILS” (Sheet C6), received February 17, 2016, which is attached to and incorporated into this permit as Permit Appendix D.

B. Use of the pits is limited to the collection of non-hazardous oil and gas wastes prior to disposal by injection in a Class II disposal well or placement in the on-site disposal pits. No other oil field fluids or oil and gas wastes may be stored or disposed of in the pit.

C. A sign shall be posted identifying each Receiving Pit and permit number using letters at least three inches in height.

D. Receiving Pit P012132 (#1) must have dimensions no greater than 510 feet by 195 feet by 8.6 feet. The usable capacity must not exceed 94,362 barrels or 19,624 cubic yards.

E. Receiving Pit P012133 (#2) must have dimensions no greater than 510 feet by 195 feet by 8.4 feet. The usable capacity must not exceed 97,533 barrels or 20,283 cubic yards.

F. Receiving Pit P012134 (#3) must have dimensions no greater than 510 feet by 195 feet by 8.2 feet. The usable capacity must not exceed 91,289 barrels or 18,983 cubic yards.

G. The Receiving Pits (P012132, P012133 and P012134) must be constructed in accordance with the liner installation methods included in the application and consist of 12-inches of subgrade, a Geosynthetic Clay Liner (GCL) secondary (bottom) liner and a 60-mil HPDE (top) liner.

H. The primary liner shall be covered with 12-inches of protective soil that is excavated from on-site.

I. At least two foot of freeboard must be maintained between the fluid level in each of the pits and the top of the pit.

J. Each Receiving Pit must be equipped with a sump that is 12-feet by 20-feet. Fluids that collect in the sump shall be transferred to the Collecting Pit for temporary storage by pump or vacuum truck.

K. Berms must be constructed to completely surround each pit to a height of one-foot and the width at the base approximately 38-feet. Slope of berm wall may not exceed 1:3 (height: width) ratio.

L. A concrete curb will surround each Receiving Pit and shall be 12-inches in height by two-feet wide. The concrete curb is in-between the pit berms and the low permeability pavement that extends approximately 30-feet and functions as an access road.

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

N. No oil may be allowed to accumulate on top of the water or wastes stored in the pit. Any oil on top of the liquids must be skimmed off and handled in accordance with RRC rules. A Skim Oil/Condensate Report (Form P-18) must be filed for every month in which skim oil is recovered and then subsequently sold during the operation of this facility.

O. This permit does not authorize discharge of waste from the pits to the surface or surface water.

P. 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 applications (Form H-11’s) and attachments thereto.

VII. CONSTRUCTION AND OPERATION OF COLLECTING PIT

A. Collecting Pit (P012131) may store untreated and partially treated waste and must be constructed and arranged as shown on the “COLLECTING PIT PLAN AND DETAILS” (Sheet C7), received September 1, 2015, which is attached to and incorporated into this permit as Permit Appendix E.

B. Use of the pit is limited to the collection of non-hazardous oil and gas wastes prior to disposal by injection in a Class II disposal well. No other oil field fluids or oil and gas wastes may be stored or disposed of in the pit.

C. A sign shall be posted identifying the Collecting Pit (P012131) using letters at least three inches in height.

D. The Collecting Pit (P012131) must have dimensions no greater than 510 feet by 255 feet by 6 feet. The capacity usable must not exceed 76,137 barrels.

E. At least two foot of freeboard must be maintained between the fluid level in the pit and the contact stormwater receiving culvert within the pit.

F. The pit must be constructed in accordance with the liner installation methods included in the application and consist of 12-inches of subgrade, a 60-mil high-density polyethylene (HPDE) secondary (bottom) liner and a 60-mil HPDE (top) liner.

G. The pit must be equipped with a leak detection system, which will consist of a HPDE drainage net with a thickness of at least 200 mils placed between the primary and secondary liners, along with a leak detection trench/sump and riser. Design and installation must be consistent with the details shown on Permit Appendix E.

H. The liners and the leak detection system must be installed in accordance with the liner manufacturer’s specifications and sound engineering practices.

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

J. The leak detection system must be monitored at least weekly and the permittee must maintain a record of when the liner and the leak detection system are inspected and the results of each inspection. This record shall include date of fluid level measuring, fluid
level, volume of fluid removed and electric conductivity and the chloride concentration of the fluids removed and submitted in table form within the Quarterly Report required in Condition I.W. of this permit. The physical record must be maintained by the permittee for the life of the pit. The physical record shall be filed with the Commission upon request.

K. If the leak detection system indicates a liner system containment failure, the Midland District Office must be notified of that fact by phone or email within 24 hours of 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 re-inspected by RRC personnel before resuming use of the pit. Liner system failure for Collecting Pit (P012131) is defined as any of the following:

1. A leak rate from the primary liner greater than the Action Leakage Rate (ALR) of 2,983 gallons per day or 994 gallons per acre per day (GPAD).
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 leak detection system indicates a possible failure, the liner system must be inspected for deterioration and leaks within five days of the detection of the failure. After inspection, the component must be replaced or repaired and re-inspected by RRC personnel before resuming use of the pit.

M. Berms must be constructed to completely surround each pit to a height of one-foot and the width at the base approximately 40-feet. The slope of the berm wall may not exceed a 1:3 (height: width) ratio.

N. A concrete curb will surround Collecting Pit (P012131) and shall be 12-inches in height by two-feet wide. The concrete curb is in-between the pit berms and the low permeability pavement that extends approximately 30-feet and function as an access roads.

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

P. No oil may be allowed to accumulate on top of the water or wastes stored in the pit. Any oil on top of the liquids must be skimmed off and handled in accordance with RRC rules. A Skim Oil/Condensate Report (Form P-18) must be filed for every month in which skim oil is recovered and then subsequently sold during the operation of this facility.

Q. This permit does not authorize discharge of waste from the pits to the surface or surface water.

R. 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.
VIII. CONSTRUCTION AND OPERATION OF DISPOSAL PITS

A. CONSTRUCTION

1. The Disposal Pits **P012126 (#1)**, **P012127 (#2)**, **P012128 (#3)**, **P012129 (#4)**, and **P012130 (#5)**, may store untreated and partially treated waste and must be constructed and arranged as shown on the “DISPOSAL CELLS PLAN AND DETAILS” (Sheet C3), received September 1, 2015, which is attached to and incorporated into this permit as Permit Appendix F.

2. Technical Permitting in Austin and the appropriate District Office must be notified in accordance with Permit Condition I.H. upon final completion of construction of a 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 permit.

3. A sign must be posted identifying each Disposal Pit using letters and numerals at least three inches in height.

4. Disposal Pit **P012126 (#1)** must have dimensions no greater than 1214 feet by 613 feet with 33 feet below ground surface (bgs) and 38 feet above grade. The capacity must not exceed 5,121,442 barrels or 1,064,992 cubic yards.

5. Disposal Pit **P012127 (#2)** must have dimensions no greater than 1064 feet by 751 feet with 31 feet below ground surface (bgs) and 41 feet above grade. The capacity must not exceed 6,379,749 barrels or 1,326,654 cubic yards.

6. Disposal Pit **P012128 (#3)** must have dimensions no greater than 1064 feet by 743 feet with 31 feet below ground surface (bgs) and 38 feet above grade. The capacity must not exceed 5,906,571 barrels or 1,228,258 cubic yards.

7. Disposal Pit **P012129 (#4)** must have dimensions no greater than 1064 feet by 796 feet with 30 feet below ground surface (bgs) and 43 feet above grade. The capacity must not exceed 6,670,670 barrels or 1,387,150 cubic yards.

8. Disposal Pit **P012130 (#5)** must have dimensions no greater than 1064 feet by 749 feet with 30 feet below ground surface (bgs) and 42 feet above grade. The capacity must not exceed 6,807,654 barrels or 1,415,636 cubic yards.

9. The total combined capacity for all of the Disposal Pits shall not exceed 30,886,086 barrels or 6,422,690 cubic yards.

10. The Disposal Pits must maintain a 4 foot horizontal freeboard between the crest of the dikes and the top of the waste.

11. Berms must be constructed and maintained on all sides of the Disposal Pits with a slope no steeper than a 1:3 (height to width) ratio.
12. The berms that separate the Disposal Pits from the non-contact storm water interior ditch must be 6 feet in height. Rip rap shall be installed to prevent erosion.

13. A liner anchor trench must be used to key the synthetic liner to the berm.

14. Once a Disposal Pit begins to accept waste above grade, the waste collected in that Disposal Pit must be maintained to prevent collapse of the structure and must not have a slope steeper than 1:4 (height to width) ratio.

15. The pit must be constructed in accordance with the liner installation methods included in the application and consist of 12-inches of subgrade, Geosynthetic Clay Liner (GCL), a 60-mil high-density polyethylene (HPDE) secondary (bottom) liner, 60-mil HPDE primary liner and 18-inches of protective soil layer that is not composed of waste.

16. The pit must be equipped with a leak detection system, including a HPDE drainage net with a thickness of at least 200 mils that covers the entire pit between the primary and secondary liners, to collect any leakage from the primary liner.

17. The Disposal Pits must be equipped with a leachate collection system. Leachate collected in the leachate collection sump must be removed through the leachate removal pipe and disposed of in an authorized manner.

18. The liners, leachate collection system and the leak detection system must be installed in accordance with the liner manufacturer's specifications and sound engineering practices.

19. The floor of the pit must have at least a 2 % slope to allow fluids to drain to the sump located at the low end of each cell.

20. A permanent boundary marker surrounding the disposal pit must be installed and maintained and must clearly identify the location of liner boundaries.

21. 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 applications (Form H-11's) and attachments thereto.

B. OPERATION

1. Only one Disposal Pit may be considered active and accept oil and gas waste at any time.

2. Before the Permittee may begin excavation of the second Disposal Pit, the first Disposal Pit must be filled to final grade, and the Permittee must have received approval from the Midland District Office. The second Disposal Pit may not begin accepting waste until (1) waste is no longer being accepted in the first Disposal Pit, (2) capping and closure of the first Disposal Pit has begun and (3)
the Permittee has received approval from the appropriate District Office to begin accepting waste in the second Disposal Pit. The sequenced construction of the pits, perimeter berms, intercell berms, ditches and the capping/closure of the successive Disposal Pits must be consistent with the diagrams “DISPOSAL CELL 1 PLAN” (Sheet C9), “DISPOSAL CELL 1 CAPPING PLAN AND DISPOSAL CELL 2 PLAN” (Sheet C10), “DISPOSAL CELL 2 CAPPING PLAN AND DISPOSAL CELL 3 PLAN” (Sheet C11), “DISPOSAL CELL 3 CAPPING PLAN AND DISPOSAL CELL 4 PLAN” (Sheet C12), “DISPOSAL CELL 4 CAPPING PLAN AND DISPOSAL CELL 5 PLAN” (Sheet C13), received September 1, 2015, which are attached to and incorporated as part of this permit as Permit Appendix G.

3. The permittee must not construct or use Disposal Pits in a manner that could exceed the financial security required by Condition I.B.

4. Once a Disposal Pit begins to accept waste above grade, the pit must be maintained with freeboard to contain a 25-year, 24-hour storm event.

5. All waste must pass the Paint Filter Test (EPA Method 9095) prior to disposal in a Disposal Pit and the permittee must maintain records of the results from each Paint Filter Test.

6. No free oil may be allowed to accumulate on top of the waste stored in the Disposal Pit. Any free oil on top of the waste must be skimmed off and handled in accordance with RRC rules. A Skim Oil/Condensate Report (Form P-18) must be filed for every month in which skim oil is recovered and then subsequently sold during the operation of this facility.

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

8. This permit does not authorize the discharge of any oil and gas waste from any Disposal Pit.

9. The leak detection system must be monitored at least weekly and the permittee must maintain a record of when the liner and the leak detection system are inspected and the results of each inspection. This record shall include the date of fluid level measurement, fluid level, the volume of fluid removed, the electric conductivity and the chloride concentration of the fluids removed and submitted in table form within the Quarterly Report required in Condition I.W. of this permit. The physical record must be maintained by the permittee for the life of the pit. The physical record shall be filed with the Commission upon request.

10. If the leak detection system indicates a liner system failure, the Midland District Office must be notified of that fact by phone or email within 24 hours of detection of the failure. No additional waste shall be added to the pit in the event of a liner system
failure. After inspection, the failed component must be replaced or repaired and re-inspected by RRC personnel before resuming use of the pit. Liner system failure is defined as any of the following:

a. If a leak occurs at a rate greater than 100 gallons per acre per day, or from the primary liner of any Disposal Pit.

b. Any failure in the leak detection system or any component thereof.

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

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Size in Acres</th>
<th>Action Leakage Rate (ALR) in gallons per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>P012126</td>
<td>17.28</td>
<td>1,728</td>
</tr>
<tr>
<td>P012127</td>
<td>18.55</td>
<td>1,855</td>
</tr>
<tr>
<td>P012128</td>
<td>18.40</td>
<td>1,840</td>
</tr>
<tr>
<td>P012129</td>
<td>19.70</td>
<td>1,970</td>
</tr>
<tr>
<td>P012130</td>
<td>18.55</td>
<td>1,855</td>
</tr>
</tbody>
</table>

11. If the leak detection system indicates a possible failure, the liner system must be inspected for deterioration and leaks within five days of the detection of the liner failure. After inspection, the liner must be replaced or repaired and re-inspected by RRC personnel before resuming use of the pit.

12. 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.

IX. STORMWATER CONTROL

A. A perimeter berm that surrounds the Receiving Pits, Collecting Pit, Disposal Pits and the storm water retention pond must be constructed and maintained to provide a physical barrier to prevent potential runoff. The perimeter berm must be constructed and arranged as shown on the “COLLECTING PIT PLAN AND DETAILS” (Sheet C7) which is attached to and incorporated into this permit as Permit Appendix E. The perimeter berm must be constructed to a minimum height of at least four feet with a minimum 1:3 slope (height to width) ratio. It must include a rip rap rock drainage swale in the perimeter ditch that extends at least two feet up the interior side of the perimeter berm and the access road to prevent erosion.

B. Berms and other containment structures must be constructed around all waste management units. These structures must be used to divert non-contact storm water
around the waste management areas, contain contact storm water within the waste management units. Slide gates must be installed on the three culverts that connect the interior ditch to the storm water retention pond. Spills and releases into the interior ditch must be cleaned up immediately to prevent contact with stormwater. Construction must be consistent with “STORMWATER AREAS” (Attachment B-1) and “STORMWATER MANAGEMENT SCHEMATIC DURING FACILITY OPERATION” (Attachment B-2), received September 1, 2015, which are attached to and incorporated into this permit as Permit Appendix H.

C. Contact storm water must be contained within the waste management units. Contact storm water must be removed and disposed of in an authorized manner.

D. Non-contact storm water within the facility must be conveyed away from the waste management units and directed to the Storm Water Retention Pond using a series of ditches, culverts and slide gates. The slide gates must be located at the entrance of the culverts that are used to convey non-contact storm water to the Storm Water Retention Pond. The Storm Water Retention Pond must be constructed to contain storm water from a 25-year, 24-hour storm event.

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

F. All above ground tanks must be diked. Dikes must be constructed and maintained to contain the largest tank’s maximum capacity, plus freeboard to contain a 25-year, 24-hour storm event.

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

X. GROUNDWATER MONITORING

A. Seven groundwater monitor wells must be installed as represented on “PROPOSED GROUNDWATER MONITORING WELL NETWORK” (Figure 1), which is attached and incorporated as Permit Appendix I.

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 to 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 lithological 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 detailing construction specifications for each well.
   c. A survey elevation for each well head reference point (top of casing) relative to a local benchmark or mean sea level.
   d. A potentiometric map showing static water levels and the estimated direction of groundwater flow and the calculated gradient.

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

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static water level</td>
<td>Report</td>
</tr>
<tr>
<td>Feet Below Ground Surface (bgs)</td>
<td></td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbon (TPH) mg/L</td>
<td>Report</td>
</tr>
<tr>
<td>(EPA Method TX 1005)</td>
<td></td>
</tr>
<tr>
<td>Benzene mg/L</td>
<td>Report</td>
</tr>
<tr>
<td>(EPA Method 602 or equivalent)</td>
<td></td>
</tr>
<tr>
<td>Total Dissolved Solids (TDS) mg/L</td>
<td>Report</td>
</tr>
<tr>
<td>(EPA Method 2540C or equivalent)</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Report</td>
</tr>
<tr>
<td>Standard Units (S.U.)</td>
<td></td>
</tr>
<tr>
<td>(EPA Method 150.1, 150.2, or equivalent)</td>
<td></td>
</tr>
<tr>
<td>Soluble Cations: mg/L</td>
<td>Report</td>
</tr>
<tr>
<td>Calcium, Magnesium, Potassium, and Sodium</td>
<td></td>
</tr>
<tr>
<td>(EPA Method 6010)</td>
<td></td>
</tr>
<tr>
<td>Soluble Anions: mg/L Carbonates, Chlorides,</td>
<td>Report</td>
</tr>
<tr>
<td>Nitrate and Sulfates</td>
<td></td>
</tr>
<tr>
<td>(EPA Method 300.1 or 9056)</td>
<td></td>
</tr>
<tr>
<td>Total Depth</td>
<td>Report</td>
</tr>
<tr>
<td>Feet Below Ground Surface (bgs)</td>
<td></td>
</tr>
</tbody>
</table>
C. Copies of the results must be filed with Technical Permitting as part of the Quarterly Report required in Condition I.W. of this permit. The laboratory analytical reports and the corresponding chain of custody shall be provided for all chemical analyses performed.

XI. FACILITY CLOSURE

A. Technical Permitting and the Midland District Office must be notified in writing at least 45 days prior to commencement of 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 materials must be processed through the facility and removed from the facility for authorized reuse or disposed of in an authorized manner.

C. Processing equipment, aboveground storage tanks, and any other equipment and storage must be removed from the facility.

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

E. Excluding Disposal Pit areas, the entire facility must be backfilled as necessary, contoured to original grade and re-vegetated.

F. Closure of the Truck Wash and Settling Basins Area shall be as follows:

1. The concrete unloading bays shall be cleaned, demolished and the concrete rubble and washwater must be disposed of in an authorized manner.

2. All waste must be removed from the pits and disposed of in an authorized manner.

3. The concrete liners for the all of the settling basins shall be cleaned, demolished and the concrete rubble and washwater must be disposed of in an authorized manner.

4. All aboveground storage tanks and any other equipment must be removed from the settling basin area.

5. 12 inches of soil from beneath the concrete unloading bays, concrete liners and concrete aprons shall be excavated, removed and disposed of in an authorized manner.

6. After soil removal, four representative soil samples must be obtained from the truck unloading bays and four representative soil samples from the concrete apron area that surrounds the bays. These soil samples must be analyzed for the constituents listed in Condition XI.I. of this permit. Additional soil must be removed in any area where the constituent levels are exceeded.

7. After soil removal, eight representative soil samples must be obtained from the bottom of the Settling Basins and four representative soil samples from the concrete apron area and storage areas. These soil samples must be analyzed for the constituents listed in Condition
XI.I. of this permit. Additional soil must be removed in any area where the constituent levels are exceeded.

G. Closure of the Receiving Pits shall be as follows:

1. All waste must be removed from the pits and disposed of in an authorized manner.

2. The 12-inch protective layer and any visually stained or impaired portions of the compacted clay liner must be excavated and disposed of in an authorized manner.

3. After soil removal, four representative soil samples must be obtained from the bottom of each Receiving Pit. These soil samples must be analyzed for the constituents listed in Condition XI.I. of this permit. Additional soil must be removed in any area where the constituent levels are exceeded.

H. Closure of the Collecting Pit shall be as follows:

1. All waste must be removed from the pit and disposed of in an authorized manner.

2. The dual liner and the leak detection systems shall be cleaned and removed from the pit and all materials including the washwater must be disposed of in an authorized manner.

3. 12 inches of soil from beneath the dual liner and leak detection systems shall be excavated, removed and disposed of in an authorized manner.

4. After soil removal, four representative soil samples must be obtained from the bottom of the Collecting Pit. These soil samples must be analyzed for the constituents listed in Condition XI.I. of this permit. Additional soil must be removed in any area where the constituent levels are exceeded.

I. Soil samples required by Permit Conditions XI.F. XI.G and XI.H. must be analyzed for the following parameters and shall not exceed the specified limitations:

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

1 LDNR Lab Procedures for Extraction and Analysis of E&P Waste or equivalent

J. A summary of the soil sampling required by Permit Conditions XI.F, XI.G and XI.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.

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

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

M. Closure of the Disposal Pits must be as follows:

1. Once a Disposal Pit has reached its permitted capacity:
   a. Waste material in the Disposal Pit must be stabilized, so that the structure will not fail or erode;
   b. Waste material in the Disposal Pit must be graded so that rainwater will not collect on top of the pit; and
   c. The compacted waste must be covered with a cap that must consist of a an impermeable compacted clay liner that is 12-inches thick, overlain by a HPDE liner with a thickness of at least 60 mils, overlain
with a geocomposite layer, overlain by layer of soil that is 18-inches thick seeded with appropriate vegetation.

d. Unless otherwise required by conditions of this permit, final closure of Disposal Pits must be consistent with the details provided on “DISPOSAL CELL CAPPING PLAN AND DETAILS” (Sheet C8), received on September 1, 2015, which is attached to and incorporated as Permit Appendix J.

XII. POST-CLOSURE CARE AND MONITORING

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

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

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

D. Once the facility is no longer in operation the stormwater must be handled in manner that is consistent with “STORMWATER MANAGEMENT SCHEMATIC POST FACILITY CLOSURE” (Attachment B-3), received on September 1, 2015, which are attached to and incorporated into this permit as Permit Appendix K.

E. All monitoring wells must remain operational, and monitoring requirements must continue as specified in Condition X.B. until written approval from Technical Permitting in Austin is granted for plugging the wells.

F. The leak detection system and the leachate collection system for the Disposal Pits must be maintained and monitored quarterly. Any leachate detected must be pumped out 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 a Quarterly Report required in Condition I.W. 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 March 29, 2016

[Signature]

Grant Champless, P.G.
Manager
Environmental Permits & Support
Technical Permitting
cc:
RRC- Midland/08
RRC Reporting Log in Austin
RRC Production Audit Austin

Notes:
1. Amended Permit Condition VI.G. to change the compacted clay liner to a GCL.
2. Amended Permit Condition I.P to include the American Society for Testing and Materials (ASTM).
3. Added Permit Condition IV.H. for the berm specifications.
Permit Appendix A

“APPLICATION FOR PERMIT TO OPERATE A RECLAMATION PLANT” (FORM R9)
RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

APPLICATION FOR PERMIT TO OPERATE
A RECLAMATION PLANT

R-9
DRAFT
2/7/90

Initial R9-08-1501

1. OPERATOR NAME, exactly as shown on P.S. Organization Report
Petro Waste Environmental, LP

2. OPERATOR P-S No.
694407

3. RRC DISTRICT NO.
08

4. COUNTY OF PLANT LOCATION
Howard

5. OPERATOR ADDRESS, including city, state, and zip code
153 Treeline Park, Suite 100
San Antonio, Texas 78209

6. PURPOSE OF FACILITY
☐ New permit for new facility. Estimated completion date:____________
☐ New permit for existing facility. Name of previous operator:____________
☐ One-time renewal of existing permit. Serial/registration (R-Z) no.:____________

7. TYPE OF FACILITY
☒ Permanent
☐ Portable

8. Driving directions from the nearest town (desirable town).
The proposed facility is located off Highway 20 in Howard County, TX, approximately 10 mi southwest of Big Spring.

Waste materials with high liquid content will be accepted at the facility. Waste will be pumped from transport trucks and processed through solid separators, centrifuges, and holding tanks to separate the solids, water, and oil. Solids and oil will be removed and transported off-site and water will be recycled in the facility or disposed of appropriately.

10. Material transported to plant (see Inst. No. 4)
☒ vehicles owned by applicant
☐ for-hire vehicles
☐ both applicant's and for-hire vehicles

11. Identify all oil and/or gas-related facilities located within 1000 yards of facility, including well, pipeline, saltwater disposal facility, tank battery, etc.

TYPE OF FACILITY
Saltwater disposal well- on site

OPERATOR
Petro Waste Environmental, LP

12. 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 me 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
George J. Wommack

DATE
1-14-15

Chief Executive Officer

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 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 extended in effect until its conditions have been met or released is discontinued by the Commission. The facility schematic diagram is to be kept with this permit.

Serial/registration no. R9-08-1501

RECEIVED
RRC OF TEXAS
JAN 29 2015
O & G
AUSTIN, TX

ALL WASTES GENERATED BY RECLAMING OPERATIONS SHALL BE DISPOSED OF IN ACCORDANCE WITH STATEWIDE RULES, 8, 8, AND 46 (RELATING TO WATER PROTECTION, DISPOSAL WELLS, AND FLUID INJECTION)
Permit Appendix B

“SITE PLAN” (Sheet C1)
Permit Appendix C

“TRUCK WASH AREA AND SETTLING BASIN PLAN” (Figure 1)
Permit Appendix D

"RECEIVING PIT PLAN AND DETAILS"
(Sheet C6)
Permit Appendix E

"COLLECTING PIT PLAN AND DETAILS"

(Sheet C7)
Permit Appendix F

"DISPOSAL CELLS PLAN AND DETAILS"

(Sheet C3)
Permit Appendix G

“DISPOSAL CELL 1 PLAN” (Sheet C9),
“DISPOSAL CELL 1 CAPPING PLAN AND DISPOSAL CELL 2 PLAN” (Sheet C10),
“DISPOSAL CELL 2 CAPPING PLAN AND DISPOSAL CELL 3 PLAN” (Sheet C11),
“DISPOSAL CELL 3 CAPPING PLAN AND DISPOSAL CELL 4 PLAN” (Sheet C12),
“DISPOSAL CELL 4 CAPPING PLAN AND DISPOSAL CELL 5 PLAN” (Sheet C13)
Permit Appendix H

“STORMWATER AREAS” (Attachment B-1)
and

“STORMWATER MANAGEMENT SCHEMATIC DURING FACILITY OPERATION” (Attachment B-2)
Permit Appendix I

"PROPOSED GROUNDWATER MONITORING WELL NETWORK" (Figure 1)
Permit Appendix J

“DISPOSAL CELL CAPPING PLAN AND DETAILS” (Sheet C8)
Permit Appendix K

“STORMWATER MANAGEMENT SCHEMATIC POST FACILITY CLOSURE”

(Attachment B-3)