RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

PERMIT TO RECEIVE, STORE, TREAT AND DISPOSE OF CERTAIN
NON-HAZARDOUS OIL AND GAS WASTES

Permit No. STF-049
Associated Permit Nos. P011793 and P011794
Effective Date May 12, 2017

HIGH ROLLER WELLS, LLC
1008 SOUTHVIEW CIRCLE
CENTER, TX 75935

Based on information contained in the original application received on June 5, 2012; the
supplemental information received on November 5, 2015; and subsequent information received
to date, you are hereby authorized to receive, store, handle, separate, and dispose of certain
nonhazardous oil and gas wastes subject to the jurisdiction of the Railroad Commission of Texas
(RRC) as specified below at the following facility:

Shelby County Commercial Oil and Gas Stationary Treatment Facility
E. Carzenava Survey, A-41996
Latitude, Longitude: 31.830278°, -94.204722°
Shelby County, Texas
RRC District 06, Kilgore

NARRATIVE DESCRIPTION OF PROCESS

Incoming oil and gas waste shall be processed and separated into liquid and solid fractions. The
waste shall be placed into a collecting pit and pumped to shaker screens. All solid waste that has
been removed from the collecting pit and washout pit shall be processed through the facility
using gravity separation. Separated solids shall then be placed into the roll-off boxes for
transportation and disposal at an authorized commercial disposal facility.

Incoming liquid waste from vacuum trucks and the pits is pumped through a series of tanks to
separate any oil fraction from the fluids. Residual oil is collected and stored in oil tanks to be
transferred to a refining facility. The remaining saltwater is transferred through another series of
tanks prior to injection into the on-site Class II disposal well.

Authority is granted to receive, store, handle, treat and dispose of oil and gas wastes in
accordance with 16 Texas Administrative Code (TAC) §3.8 (Statewide Rule 8) and is subject to
the following minimum conditions:
I. GENERAL PERMIT CONDITIONS

A. The authority granted by this permit is effective **May 12, 2017**, and will expire on **May 11, 2022**.

B. In accordance with 16 TAC §3.78, the permittee shall maintain financial security in the amount of $186,920.00 until the entire 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.

C. Technical Permitting in Austin and the appropriate 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 Kilgore District Office has inspected the completed facility and has verified that it is constructed in accordance with the application and this permit. If there are any changes to the facility design during construction, they must be included on the “as-built” drawing(s), to be filed with Technical Permitting in Austin upon completion.

D. The permittee may not begin receiving, storing, handling, or treating oil and gas waste at the facility until all necessary air permits (if any) or exemptions are obtained from the Texas Commission on Environmental Quality (TCEQ).

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

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

G. The permittee must post a sign at the facility entrance, which must show the facility name and permit number in letters and numerals at least three inches in height.

H. Any soil additives, bio-accelerators, or treatment chemicals must be approved by Technical Permitting prior to use at the facility. They must be stored in vessels designed for the safe storage of the particular compound, and these vessels shall be maintained in a leak free condition.

I. Safety Data Sheets must be submitted to Technical Permitting in Austin for any chemical or bio-accelerator proposed to be used in the treatment of waste at the facility. Use of the compound is contingent on RRC approval and must be used and stored according to the manufacturer’s recommendations.

J. All chemical laboratory analyses required to be performed in accordance with this permit must be performed using appropriate 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 ASTM International (ASTM) and certified by a Texas registered Professional Engineer.

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

L. An On-Site Sewage Facility (OSSF) may be constructed, operated, and maintained within the boundaries of the subject facility without an additional permit from the RRC 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 laws or requirements.

M. The permittee must make all records available for review and copying upon request of RRC personnel.

N. Prior to beginning operations, the facility shall have procedures in place to prevent unauthorized access. The entire facility shall be surrounded by a security fence. Access shall be maintained by a locked gate when the facility is unattended. Fencing shall be required unless terrain or vegetation prevents truck or livestock access except through entrances with lockable gates.

O. The permittee must submit a Quarterly Report containing the applicable information required in Permit Conditions II.C.3., IV.M., V.K., and VI.J.

The first Quarterly Report must cover the period beginning on the date the groundwater monitor wells are installed (as specified in Permit Condition VI) and ending on the next date that completes that quarter, March 31, June 30, September 30, or December 31, whichever comes first. The reporting periods must thenceforth 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.

The Quarterly Report must be submitted to Technical Permitting in Austin no later than the 30th day of the month following each reporting period, or each January 30, April 30, July 30, and October 30, respectively.

P. This permit may be considered for administrative renewal upon request and subsequent review by the RRC. Any request for permit renewal must be received by Technical Permitting in Austin within 60 days of the expiration of this permit.

Q. This permit is not transferable without the consent of the RRC. Any request for permit transfer should be filed with Technical Permitting in Austin.

R. Unless otherwise specified by this permit, construction and operation of the facility must be as represented in the original application and subsequent information received to date by Technical Permitting in Austin. Any deviation from the permit must be approved by amendment from Technical Permitting in Austin before implementation.
S. Failure to comply with any condition of this permit or any determination by the RRC that this permit is being abused will be cause for enforcement action including, but not limited to, assessing an administrative penalty, and modification, suspension, or termination of this permit.

II. INCOMING WASTES

A. AUTHORIZED WASTES

1. Only wastes subject to the jurisdiction of the RRC and exempt from Subtitle C of the Resource Conservation and Recovery Act (RCRA), may be received, stored, treated, and disposed of at this facility, including, but not limited to:
   
   a. Water-based drilling fluids and associated cuttings.
   b. Oil-based drilling fluids and associated cuttings.
   c. Tank bottoms from gas plants, crude oil reclamation plants, and crude oil production/separation facilities.
   d. Waste material from produced water collecting pits.
   e. Produced formation sand.
   f. Soil contaminated with produced water, crude oil, or condensate.
   g. Solid waste from gas dehydration and sweetening.

2. Only RCRA non-exempt wastes subject to the jurisdiction of the RRC may be accepted and processed at the facility if the analytical requirements specified in Permit Condition II.B.2. and II.B.3. demonstrate that the waste is characteristically non-hazardous.

3. This permit does not authorize the active reclamation of crude oil from oil and gas waste. A request for authorization under 16 TAC §3.57 must be submitted to and approved by Technical Permitting in Austin prior to any reclamation activities at the referenced facility. No free oil may be disposed of at the facility.

4. No iron sulfide waste may be received or disposed of at the facility unless the waste has been fully oxidized.

5. 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.

6. No oil and gas Naturally Occurring Radioactive Material (NORM) waste as defined in 16 TAC §4.603 or waste from a facility that is licensed by the Texas Department of State Health Services (DSSH) to handle, process, or treat oil and gas NORM waste may be received at this facility.

7. No waste may be received or disposed of at the facility if it is not a waste under the jurisdiction of the RRC. No hazardous waste as defined by the EPA in
40 CFR Part 261 or industrial waste, other than inert waste as specified by Statewide Rule 8, may be received or disposed of at the facility.

B. TESTING REQUIREMENTS FOR INCOMING WASTES

1. For the purposes of this permit, other than for Total Organic Halides (TOX) or Extractable Organic Halides (EOX) analyses, 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, or spill location).

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

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOX, EPA Method 9020B and/or EOX, EPA Method 9023</td>
<td>100 mg/L 100 mg/kg</td>
</tr>
</tbody>
</table>

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

3. Prior to receipt at the site, representative samples of incoming RCRA non-exempt waste subject to the jurisdiction of the RRC 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>pH 2.0 – 12.5 standard units (s.u.)</td>
</tr>
<tr>
<td>Ignitability</td>
<td>Flash point &lt; 60°C</td>
</tr>
<tr>
<td>Reactivity</td>
<td>No materials exhibiting the characteristic of reactivity 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>Benzene (TCLP)</td>
<td>&lt; 0.5 mg/L</td>
</tr>
<tr>
<td>Metals (TCLP)</td>
<td>&lt; 5.0 mg/L  &lt; 100.0 mg/L</td>
</tr>
<tr>
<td>PARAMETER</td>
<td>LIMITATION</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</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>
</tbody>
</table>

4. Each load of incoming waste, other than water-based drilling fluid and the associated cuttings, or oil-based drilling fluid and the associated cuttings, must be scanned for the presence of NORM using a scintillation meter with a sodium iodide detector. Any load with a maximum reading of 50 microroentgens per hour or more 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.

C. RECORDKEEPING REQUIREMENTS

1. 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:
   a. Description of the site where the waste was generated, including:
      i. Generator name.
      ii. Lease name and number and well number(s), or gas ID number(s), or American Petroleum Institute (API) well number(s); or latitude and longitude coordinates in decimal degrees if waste was not generated on a lease.
      iii. County.
   b. Name and RRC permit number of the transporter.
   c. Volume of waste material (specify units).
   d. Detailed description of the type of waste, including any analysis required by Permit Condition II.B.2., II.B.3., and II.B.4. above.

2. The permittee shall maintain the following records on each load of waste removed from the facility for a period of three years from the date of receipt:
   a. Date waste is removed and hauled to a disposal facility.
   b. Name and RRC permit number of the transporter.
   c. Volume of each shipment of waste hauled to a disposal facility.
   d. Type of waste (basic sediment, oil-based mud, etc.).
   e. Name and permit number of the facility to which the waste was hauled to for disposal.
3. 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.O. of this permit and shall include the following information:

   a. All records required by Permit Condition II.C.1. and II.C.2. above, as well as a summary of waste receipts.

   b. The total volume of each type of waste material received during the specific quarter.

   c. The total volume of each type of waste material that leaves the facility for disposal during the specific quarter.

III. GENERAL FACILITY DESIGN

A. Unless otherwise specified by this permit, the general layout and arrangement of the facility must be consistent with the “Facility Perimeter Berm (Sheet 11)” schematic received February 10, 2017, and the “Closure Cost Site Plan (Sheet 01)” schematic received November 5, 2015, which are attached to and incorporated into this permit as Permit Appendix A and Permit Appendix B, respectively.

B. The facility must consist of the following waste management units:

1. Off-loading Areas.

2. One Collecting Pit (P011793).

3. One Washout Pit (P011794).

4. Saltwater Storage Area.
   a. Five 500 barrel (bbl) Saltwater Storage Tanks.
   b. Two 1,710 bbl Saltwater Tanks.
   c. Two 400 bbl Oil Tanks.

5. One 1,275 bbl Mud Tank.

6. Three Shaker Screens.

7. Two 20-cubic yard Roll-off Boxes.

C. A sign must be posted at each entrance to the facility, which must show the Operator Name, Facility Name, and Stationary Treatment Facility permit number in letters and numerals at least three inches in height.

D. A perimeter berm (containment dike as describe in the application) must be constructed to surround the entire facility and must be designed to prevent non-contact storm water run-on from entering the site and prevent contact storm water runoff from exiting the site. The perimeter berm must be constructed to a minimum height of at least two feet above land surface with a slope no steeper than a one to three (vertical to horizontal) ratio.
E. Berms or containment structures must be constructed around all waste management units and must be compacted to 95% Standard Proctor (ASTM D698) or 90-92% Modified Proctor (ASTM D1557) density, unless constructed of concrete or equivalent material (firewalls), or must maintain a minimum permeability of $1 \times 10^{-7}$ cm/sec (ASTM D5856 or equivalent). Each berm shall maintain a slope no steeper than a one to three (vertical to horizontal) ratio. These structures must be used to divert non-contact storm water around the waste management areas and contain and isolate contact storm water within the waste management units. Refer to the stormwater management requirements specified in Permit Condition VII.

F. The secondary containment structure around the saltwater storage area shall be lined with eight-inch, steel reinforced concrete. Secondary containment consisting of 120% total storage capacity is recommended; however, a minimum capacity that will capture 100% of the largest tank volume plus a 25-year, 24-hour maximum rainfall event volume for Shelby County is acceptable.

G. Contact stormwater must be contained within the waste management units. Any accumulated contact storm water must be removed within 72 hours and disposed of in an authorized manner.

H. The perimeter of the property must be enclosed with a security fence suitable to keep out unauthorized access. The site is to be attended continuously or secured when unattended. Access gates must be closed and locked when not attended by facility personnel. Fencing shall be required unless terrain or vegetation prevents truck or livestock access except through entrances with lockable gates.

I. Any spill of waste, chemicals, or any other waste material must be collected and containerized within 24 hours of its release, and disposed of in an authorized manner.

J. 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 as either a Skim Oil/Condensate Report (Form P-18) or an “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 and permit number of the applicant requesting to move the oil.

c. Volume (barrels) of oil to be moved.

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

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

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

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

IV. TRUCK WASHOUT PIT (PIT PERMIT NOS. P011794)

A. The general layout and arrangement of the Truck Washout Area shall be consistent with the Form H-11 received April 1, 2016, the “Closure Cost Site Plan (Sheet 01)” schematic available in Appendix B, and the “Washout Pit Cross-Sections (Sheet 06)” schematic received June 5, 2012, which is attached to and incorporated into this permit as Permit Appendix C.

B. Only oil and gas wastes subject to the jurisdiction of the RRC that are non-hazardous or exempt from the Resource Conservation and Recovery Act (RCRA), Subtitle C may be received.

C. Use of the washout pit is limited to collection of waste water 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 permitted capacity of the washout pit may not exceed 361 barrels.

E. The pit must be lined with steel-reinforced concrete at least eight inches thick and underlain with an 18-inch thick clay liner compacted to 95% Standard Proctor or 92% Modified Proctor density.

F. Fluids from the washout pit shall be transferred to the saltwater tanks for separation and storage prior to injection into the on-site Class II disposal well. Any residual solids accumulated in the washout pit must be transferred to the solid waste separation area.

G. At least two feet of freeboard must be maintained between the fluid level of each pit and the top of the pit dikes.

H. A sign must be posted at each pit that must show the pit permit number in numerals at least three inches in height.

I. Dikes must be constructed to a width of 12 inches and a minimum height of one foot above land surface. Dikes shall be maintained on all sides of the pit and meet requirements specified in Permit Condition III.E.

J. Each pit must be constructed and the concrete liners installed in accordance with the material manufacturer’s specifications and best management practices.
K. Each pit must be emptied and visually inspected annually for deterioration and leaks. A record of all inspections and photographs of the interior of each pit must be maintained on-site and made available upon request of the RRC. The appropriate RRC District Office must be notified by phone or email at least 48 hours before emptying a pit for inspection.

L. If a crack or liner failure is detected during inspection, no waste shall be added to the pit. The affected component must be replaced or repaired and re-inspected by the appropriate RRC District Office before use of the pit is resumed.

M. The permittee must maintain a record of when each pit is inspected and the results of all inspections. This record must be maintained by the permittee for the life of the pit. Results of all inspections performed during a specific quarter shall be submitted to Technical Permitting in Austin and to the appropriate District Office as part of the Quarterly Report required in Permit Condition I(O).

N. Upon final cessation of the use of the Truck Washout Pit (P011794), the site must be closed in accordance with Permit Condition IX. Any request to modify the closure plan must be filed with Technical Permitting. Technical Permitting in Austin and the appropriate District Office shall be notified in writing at least 45 days prior to commencement of closure activities.

V. COLLECTING PIT (PIT PERMIT NOS. P011793)

A. The general layout and arrangement of the collecting pit shall be consistent with the Form H-11 received April 1, 2016, the “Closure Cost Site Plan (Sheet 01)” schematic available in Appendix B, and the “Washout Pit Cross-Sections (Sheet 08)” and “Collecting Pit Cross-Sections (Sheet 07)” diagrams received June 5, 2012, which are attached to and incorporated into this permit as Permit Appendix C and Permit Appendix D, respectively.

B. Only oil and gas wastes subject to the jurisdiction of the RRC that are non-hazardous or exempt from the Resource Conservation and Recovery Act (RCRA), Subtitle C may be received. Use of the pit is limited to the collection of oil and gas waste from vacuum trucks, roll-off boxes, and/or end dump trucks prior to separation and injection into the on-site disposal well. No other oil field fluids or oil and gas wastes may be stored or disposed of in the pit.

C. The usable capacity of each pit may not exceed 712 barrels.

D. The pit shall be lined with steel-reinforced concrete at least eight inches thick and underlain by an 18-inch thick compacted clay liner.

E. At least two feet of freeboard must be maintained between the fluid level in the pit and the top of the pit dikes.

F. A sign must be posted at the collecting pit that displays the pit permit number in numerals at least three inches in height.
G. Dikes must be constructed to a width of 12 inches and a minimum height of one foot above land surface. Dikes shall be maintained on all sides of the pit and meet requirements specified in Permit Condition III.E.

H. The collecting pit must be constructed and the concrete liners must be installed in accordance with the material manufacturer's specifications and best management practices.

I. The collecting pit must be emptied and visually inspected annually for deterioration and leaks. A record of these inspections and photographs of the interior of the pit must be maintained and made available upon request of the RRC. The appropriate RRC District Office must be notified by phone or email at least 48 hours before emptying a pit for inspection.

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

K. The permittee must maintain a record of when the pit is inspected and the results of the inspection. This record must be maintained by the permittee for the life of the pit. Results of all inspections performed during a specific quarter shall be submitted to Technical Permitting in Austin and to the appropriate District Office as part of the Quarterly Report required in Permit Condition I.O.

L. Upon final cessation of the use of the Collecting Pit, the site must be closed in accordance with Permit Condition IX. Any request to modify the closure plan must be filed with Technical Permitting. Technical Permitting in Austin and the appropriate District Office shall be notified in writing at least 45 days prior to commencement of closure activities.

VI. GROUNDWATER MONITORING

A. Three groundwater monitoring wells must be installed and numbered in the locations consistent with the “Facility Perimeter Berm (Sheet 11)” schematic attached as Permit Appendix A.

B. The groundwater monitoring wells must be completed in accordance with 16 TAC Part 4, Chapter 76 (Water Well Drillers and Water Well Pump Installers).

C. The groundwater monitoring wells must be completed in the shallowest groundwater zone and the completion must isolate that zone from any deeper groundwater zone.

D. The screened interval of the wells must be designed to intercept at least five feet of groundwater from the first groundwater-bearing unit.

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

F. The groundwater monitoring wells must be maintained in good condition with a lockable water-tight expansion cap that prohibits unauthorized access.
G. The groundwater monitoring wells must be able to provide a representative sample of groundwater underlying the site for the duration of facility operations. If a groundwater monitoring 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 Technical Permitting.

H. The following information must be submitted after the wells are completed:

1. A soil boring lithological log for each well, with the soils described using the Unified Soil Classification System (equivalent to ASTM D2487 and ASTM D2488). The log must also include the method of drilling, total depth, and the top of the first encountered water or saturated soils.

2. A well installation diagram 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.

3. A survey elevation for each well head reference point (top of casing) relative to a real or arbitrary bench mark and mean sea level.

4. A potentiometric surface map showing static water levels, the estimated groundwater flow direction and the calculated groundwater flow gradient.

I. 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>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>Benzene</td>
<td>mg/L</td>
</tr>
<tr>
<td><em>EPA Method 8260/8021B</em></td>
<td></td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbon (TPH)</td>
<td>mg/L</td>
</tr>
<tr>
<td><em>Method TX1005</em></td>
<td></td>
</tr>
<tr>
<td>Total Dissolved Solids (TDS)</td>
<td>mg/L</td>
</tr>
<tr>
<td><em>Standard Method 160.1 or equivalent</em></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>s.u.</td>
</tr>
<tr>
<td><em>EPA Method 150.1 or equivalent</em></td>
<td></td>
</tr>
<tr>
<td>Solubilized Cations:</td>
<td>mg/L</td>
</tr>
<tr>
<td>Calcium, Magnesium, Potassium, and Sodium</td>
<td></td>
</tr>
<tr>
<td><em>EPA Method 6020</em></td>
<td></td>
</tr>
<tr>
<td>Solubilized Anions:</td>
<td>mg/L</td>
</tr>
<tr>
<td>Bromides, Carbonates, Chlorides, Nitrates, and</td>
<td></td>
</tr>
<tr>
<td>Sulfates</td>
<td></td>
</tr>
<tr>
<td><em>EPA Method 300</em></td>
<td></td>
</tr>
</tbody>
</table>

J. A Quarterly Report, as specified by Permit Condition I.O., must be submitted to Technical Permitting consisting of all groundwater monitoring well data, results of
the parameters tested in Permit Condition VII.I., laboratory analytical reports, Chain of Custody, an analytical results summary table, and an executive summary detailing pertinent data as required by Permit Condition VI.

VII. STORMWATER MANAGEMENT

A. The facility must be designed and constructed to contain contact stormwater and prevent run-on of non-contact stormwater. A continuous perimeter berm must be installed as shown on the “Facility Perimeter Berm (Sheet 11)” schematic attached as Permit Appendix A.

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

C. Non-contact stormwater shall be prevented from entering the waste processing and storage areas and shall be diverted to a swale located within the perimeter berm. Areas outside of bermed waste processing and storage areas shall be sloped to prevent non-contact stormwater from contacting waste.

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

E. This permit does not authorize the discharge or release of any oil and gas waste or any stormwater that has come into contact with oil and gas waste.

VIII. SPILL PREVENTION AND CONTROL

A. A copy of a site-specific Spill Prevention Plan (SPP) must be maintained on-site and made available to RRC staff for review and inspection upon request. The SPP must detail actions or protocols to be applied in the event of a spill or release of waste or waste related compounds. All storage tanks containing fluid waste shall be contained within dikes. Secondary containment structures consisting of 120% total capacity is recommended, however, a minimum capacity that will capture 100% capacity of the largest tank plus the 25-year / 24-hour rainfall event volume for Shelby County is acceptable.

B. Any soil, media, or other debris contaminated by a spill of waste or any other waste related materials at the facility must be containerized immediately and processed through the facility or disposed of in an authorized manner.

C. Each month an inspection of the entire facility must be performed on all concrete slabs, processing equipment, firewalls, berms, and aboveground storage tanks for deterioration, leaks and spills. Records of each inspection must be kept on-site and maintained by the permittee, and made available upon request of the RRC. The permittee must maintain the following records for a period of three years from the date of the inspections:
a. The results of the monthly integrity inspections of the facility for evidence of deterioration, leakage, or waste containment failures, and a description of corrective action taken, if any.

b. 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.

c. 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.

IX. CLOSURE OF THE SITE

A. All waste from waste storage areas, tanks, and pits must be removed or processed through the facility and disposed of in an authorized manner.

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

C. 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.

D. All affected or contaminated soils must be removed and disposed of in an authorized manner.

E. Once waste removal is completed, a soil sampling plan must be submitted to Technical Permitting to characterize the scope of contamination (if any) at the facility. After the removal of wastes, composite soil samples must be taken comprised of a minimum of four representative soil samples per acre. Samples must be taken from around and underneath the Truck Washout Pit Area, Collecting Pit Area, Saltwater Storage Area, and Injection Well Area.

F. Soil samples must be analyzed for the parameters listed in Permit Condition IX.G., 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.

G. 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><strong>pH</strong></td>
<td>6 to 10 standard units</td>
</tr>
<tr>
<td><em>EPA Method 9045C or equivalent</em></td>
<td></td>
</tr>
<tr>
<td><strong>Electrical Conductivity (EC)</strong></td>
<td>≤ 4.0 mmhos/cm</td>
</tr>
</tbody>
</table>

1 Louisiana Department of Natural Resources (LDNR) Lab Procedures for Extraction and Analysis of Exploration and Production (E&P) Waste or equivalent
PARAMETER

TPH
*EPA Method 5035A/TX1005*

Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)
*EPA Method 5035A/8021/8260B*

Metals (Total)
*EPA Method 6010/6020/7471A*

- Arsenic ≤ 10 mg/kg
- Barium ≤ 10,000 mg/kg
- Cadmium ≤ 10 mg/kg
- Chromium ≤ 100 mg/kg
- Lead ≤ 200 mg/kg
- Mercury ≤ 10 mg/kg
- Selenium ≤ 10 mg/kg
- Silver ≤ 200 mg/kg

LIMITATION

≤ 10,000 mg/kg or 1 % by weight

≤ 30 mg/kg

H. A summary of the soil sampling required by Permit Conditions IX.E. must include:

1. A map drawn to scale with coordinates of the sampling locations.
2. A table indicating the results of the parameters sampled.
3. The date of sampling.
4. The approximate depth of the sample below land surface.
5. Copies of the laboratory analytical reports and chain of custody.

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

J. When acceptable constituent levels have been verified in writing by Technical Permitting, the washout pit and the collecting pit 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 for the geographic region.

K. Upon approval of final closure of the site by the RRC, the Quarterly Report requirements in Permit Condition I.O. will be fulfilled.

L. 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 waste storage area locations after closure.
This authorization is granted subject to review and cancellation should investigation show that such authorization is being abused.

APPROVED AND ISSUED ON May 12, 2017

Grant Chambless, P.G., Manager
Environmental Permits & Support
Technical Permitting

Attachments: Permit Appendices A, B, C, and D

cc: RRC – Kilgore / 06
    RRC – Austin, Production Audit
    RRC – Austin, EPS Reporting Log
PERMIT APPENDIX A

Facility Perimeter Berm (Sheet 11)
PERMIT APPENDIX C

Washout Pit Cross-Sections (Sheet 06)
PERMIT APPENDIX D

Collecting Pit Cross-Sections (Sheet 07)