OIL AND GAS DIVISION

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


AMENDED/RENEWED/TRANSFERRED
Southwest Disposal Services, Inc (#806111) to Tervita LLC (#844072)

TERVITA LLC
10613 W SAM HOUSTON PKWY STE300
HOUSTON TX 77064

Based on information contained in your consolidation/transfer request applications received October 16, 2014 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:

Tervita Odessa Treatment, Recovery and Disposal Facility (TRD) 283 acres
T. & P. R.R. Co., Block 44, A-1215
Latitude, Longitude: 31.772270°, -102.542218°
Ector County, Texas
RRC District 08, Midland

NARRATIVE DESCRIPTION OF PROCESS:

Incoming waste is directed to either the water-based Collecting Pits (P011427, P011428, P011429, P011430, and P011431), or to the oil-based Collecting Pits (P011308D, P011426B, P011558, and P011563) where it is offloaded for processing and separation. The waste from the water-based pits is processed through shakers and centrifuges. The waste from the oil-based pits is separated by clarifiers, chemicals and heat treatments. The separated liquid wastes are conveyed to tanks (East and North Tank Batteries) or pumped to the Collecting Pits (P011308A, P011308B, and P011308C) for further separation and then piped to the evaporation/collecting ponds (P012315A, P012315B, and P012315C, and P012316A, P012316B, and P012316C) or piped to an off-site Class II injection well for disposal. Solids from the centrifuges are moved over to the Stabilization Pad (P011704) for solidification prior to disposal in permitted disposal pits P011501, P011801 and P012080 that are permitted separately. The hydrocarbons that are recovered are stored in above ground tanks prior to being sold.

Authority is granted to receive, store, handle, 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 is subject to the following conditions:
I. GENERAL PERMIT CONDITIONS

A. The effective date of this permit is July 1, 2015 and expires on July 1, 2020.

B. The permittee shall maintain financial security in the amount of $2,734,470 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 Railroad Commission (RRC) prior to making that modification.

C. 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.

D. 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.

E. This permit is not transferable without the consent of the RRC. Any request for transfer of this permit must be filed with Technical Permitting in Austin at least 60 days before the permittee wishes the transfer to take place.

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

G. 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.

H. 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.”

I. 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 reclamer and intended destination of the material.

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

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

L. 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.

M. 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.

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

O. Material Safety Data Sheets (MSDS) 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 chemical is contingent upon Commission approval.
P. An independent National Environmental Accreditation Program (NELAP) certified laboratory neither owned nor operated by the permittee must conduct any chemical analysis required by this permit using Environmental Protection Agency (EPA) methods or Standard Methods.

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

R. 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.H., V.J., VI.K., VII.M., X.I., X.O., and XI.C. 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. Analytical results as specified in Conditions III.H.4. and XI.B. shall be included.

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

S. Failure to comply with any provision of this permit will be cause for modification, suspension or termination of this permit.

II. AUTHORIZED WASTES

A. Only oil and gas wastes subject to the jurisdiction of the Railroad Commission of Texas 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. Tank bottoms from gas plants, crude oil reclamation plants, crude oil separation facilities, and crude oil production facilities;
4. Hydraulic fracturing flow back water.
5. Formation sands and other solids from saltwater storage tanks or vessels and ; and
6. Soils contaminated with produced water, crude oil, or condensate.
7. Pigging wastes from gathering lines;
8. Hydrocarbon, solids, sands and emulsion generated from separators, fluid treatment vessels, and production impoundments;
9. Spent filters, filter media, and back wash from produced water;
10. Liners from reserve and washout pits;
11. Fluids and associated solids including sand from flowback of oil and gas wells;
12. Other non-hazardous wastes generated in association with the exploration, development and production of oil and gas resources subject to the jurisdiction of the RRC.

B. 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. and III.D.

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

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 25TAC 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/kg</td>
</tr>
<tr>
<td>(EPA Method 9020B)</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>(EPA Method 9023)</td>
<td></td>
</tr>
</tbody>
</table>

Special authorization for disposal of waste with a TOX/EOX > 100 mg/kg 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</td>
</tr>
<tr>
<td></td>
<td>corrosivity as defined by RCRA</td>
</tr>
<tr>
<td>Reactivity</td>
<td>No materials exhibiting the characteristic of</td>
</tr>
<tr>
<td></td>
<td>reactivity as defined by RCRA</td>
</tr>
<tr>
<td>Ignitability</td>
<td>No materials exhibiting the characteristic of</td>
</tr>
<tr>
<td></td>
<td>ignitability as defined by RCRA</td>
</tr>
<tr>
<td>Toxicity</td>
<td>No materials exhibiting the characteristic of</td>
</tr>
<tr>
<td></td>
<td>toxicity as defined by RCRA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metals</td>
<td>Toxicity Characteristic Leaching Procedure (TCLP)</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>

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 appropriate 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 TAC, Title 16 Part 1, Chapter 3.57.

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. III.D. and III.E.

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.R. 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 “Facility Layout” (Figure 2) dated December 29, 2014, and “Site Plan” (Drawing 1) dated June 3, 2015, which is attached to and incorporated as part of this permit as Permit Appendix A.

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

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

D. 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.

E. 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.

F. 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.

G. 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. Fencing shall be required unless terrain or vegetation prevents truck access except through entrances with lockable gates.

H. 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.R. of this permit.

I. The permittee must maintain the following records for a period of three (3) years from the date of the inspection regarding the monthly facility inspection required by Condition IV.H:

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 WATER-BASED SEPARATION PROCESSING AREA

A. Collecting Pits P011427, P011428, P011429, P011430, and P011431 may store untreated and partially treated water-based waste and must be constructed and arranged as shown on the “Collecting Pits (Water Based Wastes) and East Tank Battery” (Figure 7) which is attached to and incorporated as part of this permit as Permit Appendix B.

B. A sign shall be posted identifying each Collecting Pit using letters at least three inches in height.

C. The Collecting Pits must have dimensions no greater than 62 feet by 16 feet by 5 feet. The pit must be lined with reinforced concrete with a minimum thickness of 8-inches. The capacity for each pit must not exceed 447 barrels or a combined capacity of 2,235 barrels.

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

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

F. The 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.

G. The concrete apron shall consist of reinforced concrete with a minimum thickness of 8-inches. The following equipment shall be located on the apron or is associated with the water-based collecting pits:
   a. One 400-bbl shaker tank;
   b. One centrifuge;
   c. Three 500-bbl produced water tanks (East Tank Battery);
   d. One 300-bbl fresh water tank;
   e. One 500-bbl fresh water tank;
   f. Two 1,200-gallon fuel tank.

H. All the storage tanks containing fluid waste or fuel shall be contained within dikes. Secondary containment of 120% capacity is recommended, however a minimum capacity consistent with the U.S. Environmental Protection Agency’s (EPA) rules governing Spill Prevention, Control, and Countermeasure (SPCC) Plans (40 CFR Part 112), that will capture 100% plus the 25 year/24-hour rainfall event is acceptable.

I. Earthen dikes around the storage tanks must be constructed to a height of two feet. Slope of the dike wall may not exceed a 1:3 (height: width) ratio.

J. 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.R. of this permit. The appropriate District Office must be notified by phone or email at least 48 hours before emptying the pit for inspection.

K. 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 reinspected by RRC personnel before resuming use of the pit.

L. 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.
M. This permit does not authorize discharge of waste from the pits to the surface or surface water. Waste may only be transferred to the stabilization pad (P011704) for further processing, or pumped to East Tank Battery to be piped to an off-site disposal well.

N. 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.

VI. CONSTRUCTION AND OPERATION OF OIL-BASED SEPARATION RECLAMATION AREA

A. Collecting Pits P011308D, P011426B, P011558, P011563, P011308A, P011308B, and P011308C may store untreated and partially treated oil-based waste and must be constructed arranged as shown on the “Collecting Pits (Oil-Based Wastes) and Equipment I” (Figure 3) which is attached to and incorporated as part of this permit as Permit Appendix C.

B. A sign shall be posted identifying each Collecting Pit using letters at least three inches in height.

C. Collecting Pits P011308A, P011308B, and P011308C must have dimensions no greater than 72 feet by 16 feet by 5 feet. The pit must be lined with reinforced concrete with a minimum thickness of 8-inches. The capacity for each pit must not exceed 492 barrels or a combined capacity of 1476 barrels.

D. Collecting Pit P011308D and must have dimensions no greater than 18 feet by 6 feet by 6 feet. The pit must be lined with reinforced concrete with a minimum thickness of 8-inches. The capacity for pit must not exceed 95 barrels.

E. Collecting Pit P011426B must have dimensions no greater than 15 feet by 10 feet by 5 feet. The pit must be lined with reinforced concrete with a minimum thickness of 8-inches. The capacity for pit must not exceed 107 barrels.

F. Collecting Pit P011563 and must have dimensions no greater than 89.3 feet by 33.7 feet by 5 feet. The pit must be lined with reinforced concrete with a minimum thickness of 8-inches. The capacity for pit must not exceed 1065 barrels.

G. Collecting Pit P011558 and must have dimensions no greater than 79.3 feet by 23.6 feet by 5 feet. The pit must be lined with reinforced concrete with a minimum thickness of 8-inches. The capacity for pit must not exceed 645 barrels.

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

I. The concrete apron shall consist of reinforced concrete with a minimum thickness of 8-inches. The following equipment shall be located on the apron or is associated with the oil-based collecting pits and reclamation:
   a. Two 220-bbl clarifiers;
   b. One mixing tank;
   c. One heater;
   d. Two 500-bbl produced water tanks (wash out);

J. All the storage tanks containing fluid waste shall be contained within dikes. Secondary containment of 120% capacity is recommended, however a minimum capacity consistent with the U.S. EPA’s rules governing SPCC Plans (40 CFR Part 112), that will capture 100% plus the 25 year/24-hour rainfall event is acceptable.

K. 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 shall be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Condition I.R. of this
permit. The appropriate District Office must be notified by phone or email at least 48 hours before emptying the pit for inspection.

L. Earthen dikes around the storage tanks must be constructed to a height of two feet. Slope of the dike wall may not exceed a 1:3 (height: width) ratio.

M. 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.

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. Permit does not authorize discharge of waste from the pits to the surface or surface water. Waste may only be transferred to the stabilization pad (P011704) for further processing, pumped to either the North Tank Battery or the Reclamation Tank Battery, or be piped to an off-site disposal well.

P. 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.

VII. CONSTRUCTION AND OPERATION OF STABILIZATION PIT/PAD AREA

A. The Stabilization Pit (P011704) may store untreated waste and partially treated waste and must be constructed arranged as shown on the “Stabilization Pit #9/P011704” (Figure 6) which is attached to and incorporated as part of this permit as Permit Appendix D.

B. A sign shall be posted identifying the pit using letters at least three inches in height.

C. The Stabilization Pit must have dimensions no greater than 450 feet by 275 feet by 8.65 feet. The pit is a concrete slab that is 2.84 acres in size. The pit must be lined with reinforced concrete with a minimum thickness of 8-inches. The capacity of the pit must not exceed 54,950 barrels or 11,428 cubic yards.

D. A concrete wall with a minimum thickness of 8-inches and a minimum height of one foot must surround the pit on all sides. There are two earthen ramps, one on the west side and one on the east side that provide access to the pit.

E. The dikes must be maintained such that no surface flow stormwater runoff may enter or exit the pit. Any road(s) traversing the dikes may not compromise the integrity of the dikes’ ability to control stormwater. All stormwater must be disposed of in an authorized manner.

F. Stormwater at the pit shall not contain a visible oil sheen at any time.

G. The concrete slab must be graded on a 1% slope towards the north, accommodating surface drainage to the floor trench.

H. At least 10 feet must be maintained between the edge of the waste stored in the pit and the dikes surrounding the pit.

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

J. The following equipment shall be located at the stabilization pad or is associated with the processing:
   a. One 170-bbl mixing tank;
   b. Two centrifuges;
   c. One 300-bbl fresh water tank;
d. Two 500-bbl storage tanks.

K. All the storage tanks containing fluid waste shall be contained within dikes. Secondary containment of 120% capacity is recommended, however a minimum capacity consistent with the U.S. EPA's rules governing SPCC Plans (40 CFR Part 112), that will capture 100% plus the 25 year/24-hour rainfall event is acceptable.

L. Earthen dikes around the storage tanks must be constructed to a height of two feet. Slope of the dike wall may not exceed a 1:3 (height: width) ratio.

M. The pit must be 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.R. 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. 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 KRC personnel before resuming use of the pit.

O. Permit does not authorize discharge of waste from the pit to the surface or surface water. Waste may only be transferred to the on-site disposal pits or conveyed to an off-site disposal well.

P. 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.

VIII. RECLAMATION PLANT TANK BATTERY

A. The following equipment shall be located at the Reclamation Plant Tank Battery:
   a. Two 210-bbl crude oil tanks;
   b. One 1000-bbl storage tank;
   c. One 300-bbl storage tank;
   d. One 300-bbl crude oil tank;
   e. One 500-bbl storage tank;
   f. Five 500-bbl crude oil tanks.

B. All the storage tanks containing fluid waste shall be contained within dikes. Secondary containment of 120% capacity is recommended, however a minimum capacity consistent with the U.S. EPA's rules SPCC Plans (40 CFR Part 112), that will capture 100% plus the 25 year/24-hour rainfall event is acceptable.

C. Earthen dikes around the storage tanks must be constructed to a height of two feet. Slope of the dike wall may not exceed a 1:3 (height: width) ratio.

IX. NORTH TANK BATTERY

A. The following equipment shall be located at the North Tank Battery:
   a. One 1,000-bbl gun barrel;
   b. One 700-bbl sand tank;
   c. Two 500-bbl fiberglass oil tanks;
   d. Two 500-bbl settling tanks.
B. All the storage tanks containing fluid waste shall be contained within dikes. Secondary containment of 120% capacity is recommended, however a minimum capacity consistent with the U.S. EPA’s rules governing SPCC Plans (40 CFR Part 112), that will capture 100% plus the 25 year/24-hour rainfall event is acceptable.

C. Earthen dikes around the storage tanks must be constructed to a height of two feet. Slope of the dike wall may not exceed a 1:3 (height: width) ratio.

X. EVAPORATION/COLLECTING PONDS (P012315A, P012315B, P012315C and P012316A, P012316B, P012316C)

A. The Midland District Office must be notified upon completion of construction of the ponds. The permittee may not begin using the ponds until the appropriate District Office has inspected the ponds and verified that the ponds have been constructed in accordance with the application and permit.

B. Use of the pits is limited to the collection of produced water that is generated from the separation and reclamation activities at the facility prior to disposal. No other oil field fluids or oil and gas wastes may be stored or disposed of in the pit. The ponds must be constructed and arranged as shown on the “10.2 Acre Evaporation Pond A Layout” (Drawing 2), “7.4 acre Evaporation Pond B Layout” (Drawing 3) and “Pond Sections (Drawing 4), which are attached to and incorporated as part of this permit as Permit Appendix E.

C. The capacities for each pond must not exceed the following volumes:

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Capacity in bbls</th>
<th>Size in Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>P012315A</td>
<td>154,272</td>
<td>3.6</td>
</tr>
<tr>
<td>P012315B</td>
<td>184,385</td>
<td>3.6</td>
</tr>
<tr>
<td>P012315C</td>
<td>171,060</td>
<td>3.0</td>
</tr>
<tr>
<td>P012316A</td>
<td>99,592</td>
<td>2.7</td>
</tr>
<tr>
<td>P012316B</td>
<td>62,573</td>
<td>2.8</td>
</tr>
<tr>
<td>P012316C</td>
<td>17,983</td>
<td>1.9</td>
</tr>
</tbody>
</table>

D. Dikes above the land surface must be maintained on all sides of the ponds. The slope of earthen dikes may not exceed 1:3 (height: width) ratio.

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

F. The land surface must be graded such that all surfaces slope away from the ponds so as to eliminate any surface flow stormwater from entering the pit.

G. The ponds must be constructed in accordance with the liner installation methods included in the applications dated June 4, 2015 and consist of a dual liner system that has a 40-mil high-density polyethylene (HPDE) secondary (bottom) liner and a 60-mil HPDE primary (top) liner.

H. The ponds must be equipped with a leak detection system, including 200 mil geonet that covers the entire pit between the primary and secondary liners, to collect any leakage from the primary liner.

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

J. A sign shall be posted at each pond that shows the permit number in numerals at least three inch in height.
K. 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.

L. 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.R. 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.

M. If the leak detection system indicates liner failure, the Midland District Office must be notified of that fact by phone or email within 24 hours of detection of liner failure. No additional waste shall be added to the pit in the event of a liner failure. After inspection, the liner 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 for each of the ponds:

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Action Leakage Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>P012315A</td>
<td>3,610 gallons/day</td>
</tr>
<tr>
<td>P012315B</td>
<td>3,600 gallons/day</td>
</tr>
<tr>
<td>P012315C</td>
<td>2,950 gallons/day</td>
</tr>
<tr>
<td>P012316A</td>
<td>2,740 gallons/day</td>
</tr>
<tr>
<td>P012316B</td>
<td>2,750 gallons/day</td>
</tr>
<tr>
<td>P012316C</td>
<td>1,880 gallons/day</td>
</tr>
</tbody>
</table>

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

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

N. If a liner system failure is detected, the affected component must be inspected for deterioration and leaks within 7 days of detection of liner failure. After inspection, the affected component must be replaced or repaired and re-inspected by RRC personnel before use of the ponds can resumed.

O. Each pond 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.R. of this permit. The appropriate District Office must be notified by phone or email at least 48 hours before emptying the pit for inspection.

XI. MONITOR WELLS

A. Three groundwater monitor wells must be installed and numbered as represented on “Groundwater Elevations-February 2015” (Figure 4) map provided in Permit Appendix F.

1. The wells must be completed by a certified water well driller in accordance with 16 TAC Part 4, Chapter 76 (Water Well Drillers and Water Well Pump Installers).
2. The wells must be completed and penetrate the shallowest groundwater zone, and the completion must isolate that zone from any deeper groundwater zone.

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

4. Provisions 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 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.
   d. A potentiometric map showing static water levels and the estimated direction of groundwater flow and calculated gradient.

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

1. Static water level
2. Benzene
3. Total Petroleum Hydrocarbon (TPH)
4. Total Dissolved Solids (TDS)
5. Chlorides
6. Bromides
7. Sulfates
8. Nitrates
9. Carbonates
10. Calcium
11. Magnesium
12. Sodium
13. Potassium

C. Copies of the results must be filed with Technical Permitting as part of the Quarterly Report required in Condition I.R. of this permit.

XII. STORMWATER CONTROL

A. The facility must be designed and constructed to contain contact storm water and prevent run-on of non-contact storm water.

B. The non-contact stormwater must be managed at the facility as presented on the “Stormwater Drainage Plan” (Figure 1), which is attached to and incorporated as part of this permit as Permit Appendix G. The berms must have a minimum height of two feet and side slopes shall not exceed a 1:3 (height:width) ratio.

C. 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.

D. Stormwater collected in the treatment facility area must be disposed of in an authorized manner.
XIII. FACILITY CLOSURE

A. 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.

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

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

D. Closure of the Water-Based Separation Processing Area shall be as follows:
   1. All waste must be removed from the pits and disposed of in an authorized manner.
   2. The concrete liner shall be cleaned, demolished and the concrete rubble and washwater must be disposed of in an authorized manner.
   3. The concrete unloading pad shall be cleaned, demolished and the concrete rubble and washwater must be disposed of in an authorized manner.
   4. 18 inches of soil from beneath the concrete liner and concrete apron shall be excavated, removed and disposed of in an authorized manner.
   5. After soil removal, five representative soil samples must be obtained from the bottom of the Collecting Pits and five representative soil samples from the concrete apron area. These soil samples must be analyzed for the constituents listed in Condition XIII.I. of this permit. Additional soil must be removed in any area where the constituent levels are exceeded.

E. Closure of the Oil-Based Separation Reclamation Area shall be as follows:
   1. All waste must be removed from the pits and disposed of in an authorized manner.
   2. The concrete liner shall be cleaned, demolished and the concrete rubble and washwater must be disposed of in an authorized manner.
   3. The concrete unloading pad shall be cleaned, demolished and the concrete rubble and washwater must be disposed of in an authorized manner.
   4. 18 inches of soil from beneath the concrete liner and concrete apron shall be excavated, removed and disposed of in an authorized manner.
   5. After soil removal, nine representative soil samples must be obtained from the bottom of the Collecting Pits and three representative soil samples from the concrete apron area. These soil samples must be analyzed for the constituents listed in Condition XIII.I. of this permit. Additional soil must be removed in any area where the constituent levels are exceeded.

F. Closure of the Stabilization Pit/Pad Area shall be as follows:
   1. All waste must be removed from the pits and disposed of in an authorized manner.
   2. The concrete slab shall be cleaned, demolished and the concrete rubble and washwater must be disposed of in an authorized manner.
   3. 12 inches of soil from beneath the concrete slab shall be excavated, removed and disposed of in an authorized manner.
   4. After soil removal, 10 representative soil samples must be obtained from the bottom of the Stabilization Pad. These soil samples must be analyzed for the
constituents listed in Condition XIII.I. of this permit. Additional soil must be removed in any area where the constituent levels are exceeded.

G. Closure of the East, North and Reclamation Plant Tank Battery Areas shall be as follows:

1. All earthen berms shall be leveled and contoured.
2. 18 inches of soil from beneath the storage tanks and frac tanks shall be excavated, removed and disposed of in an authorized manner.
3. After soil removal, representative soil samples must be obtained from the bottom of the tank batteries. These soil samples must be analyzed for the constituents listed in Condition XIII.I. of this permit. Additional soil must be removed in any area where the constituent levels are exceeded.


4. All earthen berms shall be leveled and contoured.
5. The dual liner system will be removed and disposed of in authorized manner.
6. After the liner system removal, representative soil samples must be obtained from the bottom of the tank batteries. These soil samples must be analyzed for the constituents listed in Condition XIII.I. of this permit. Additional soil must be removed in any area where the constituent levels are exceeded.

I. Soil samples required by Condition XIII. D. XIII.E, XIII.F, XIII.G and XIII.H. must be analyzed for the following parameters and shall not exceed the following limitations:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6 to 10 standard units</td>
</tr>
<tr>
<td>Electrical Conductivity (EC)</td>
<td>≤ 4.0 mmhos/cm</td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbons (TPH)</td>
<td>≤ 10,000 mg/kg or 1% by weight</td>
</tr>
<tr>
<td>Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEx)</td>
<td>≤ 30 mg/kg</td>
</tr>
<tr>
<td>Metals (Total)</td>
<td></td>
</tr>
<tr>
<td>Arsenic</td>
<td>≤ 10 mg/kg</td>
</tr>
<tr>
<td>Barium</td>
<td>≤ 10,000 mg/kg</td>
</tr>
<tr>
<td>Cadmium</td>
<td>≤ 10 mg/kg</td>
</tr>
<tr>
<td>Chromium</td>
<td>≤ 100 mg/kg</td>
</tr>
<tr>
<td>Lead</td>
<td>≤ 200 mg/kg</td>
</tr>
<tr>
<td>Mercury</td>
<td>≤ 10 mg/kg</td>
</tr>
<tr>
<td>Selenium</td>
<td>≤ 10 mg/kg</td>
</tr>
<tr>
<td>Silver</td>
<td>≤ 200 mg/kg</td>
</tr>
</tbody>
</table>
J. A summary of the soil sampling required by Condition XIII. must include:
   a. A map and coordinates of the sampling locations;
   b. A table indicating the results of the parameters sampled;
   c. The date of sampling;
   d. The approximate depth of the sample below land surface;
   e. Copies of the laboratory analytical reports and chain of custody.

K. Any soil sample that exceeds the parameter limitations in Condition XIII. 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. All monitoring wells must remain operational, and monitoring requirements must continue as specified in Condition XI.B. until written approval from Technical Permitting in Austin is granted for plugging the wells.

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

APPROVED AND ISSUED ON July 1, 2015

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

cc:
RRC- Midland/08
RRC Reporting Log in Austin
Notes;

1. All of the permits listed in the consolidation STF-089 were transferred from Southwest Disposal Services, Inc (#806111) to Tervita LLC (#844072).

2. All of the permits listed were amended by including permit expiration and adding the additional closure requirements listed in Condition XIII.H., XIII.I., XIII.J and XIII.K.

3. Permit P0110704 was also renewed.

4. Additional incoming waste added to Permit Condition II.A.

5. Groundwater monitoring wells were installed at the facility. Quarterly sampling, analyses and reports were added for all the wells.

6. Financial security for the facility was increased from $1,250,867 to $2,734,470.

7. Permit No. P011426 was changed to P011426B. The pit permit number was changed because the original pit was backfilled and re-located, and the capacity was increased without filing for permit amendment. This correction is for mainframe tracking.
Permit Appendix A

“Facility Layout” (Figure 2) and

“Site Plan (Drawing 1)
Permit Appendix B

“Collecting Pits (Water-Based Wastes) and East Tank Battery” (Figure 7)
Permit Appendix C

“Collecting Pits (Oil-Based Wastes) and Equipment 1”
(Figure 3)
Permit Appendix D

“Stabilization Pit #9/P011704” (Figure 6)
Permit Appendix E

“10.2 Acre Evaporation Pond A Layout” (Drawing 2),

“7.4 acre Evaporation Pond B Layout” (Drawing 3)

and “Pond Sections (Drawing 4)"
Permit Appendix F

“Groundwater Elevations-February 2015” (Figure 4)
Permit Appendix G

“Stormwater Drainage Plan” (Figure 1)